



2007 Report to the Legislature:

**Progress on Watershed Planning
and Setting Instream Flows**



June 2008
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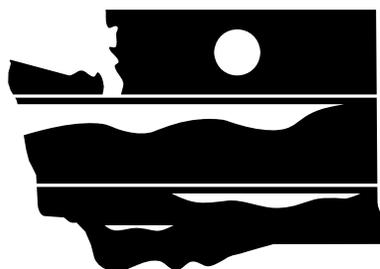
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Jeff Bash; A Pacific Tree Frog, Cascade Creek, Moran State Park, Orcas Island.

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WASHINGTON STATE
DEPARTMENT OF
E C O L O G Y

2007 Report to the Legislature:

Progress on Watershed Planning and Setting Instream Flows

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Executive Summary

The Department of Ecology (Ecology) is required under RCW 90.82.043(5)(a) and (b) and RCW 90.82.080(6) to prepare and deliver to the Legislature an annual progress report on implementing the Watershed Planning Act (Chapter 90.82 RCW) described below. This report fulfills these requirements and also has information on water banking initiatives.

90.82.043 Implementation plan — Report to the legislature

(5)(a) By December 1, 2003, and by December 1st of each subsequent year, the director of the department shall report to the appropriate legislative standing committees regarding statutory changes necessary to enable state agency approval or permit decision making needed to implement a plan approved under this chapter.

(5)(b) Beginning with the December 1, 2007, report, and then every two years thereafter, the director shall include in each report the extent to which reclaimed water has been identified in the watershed plans as potential sources or strategies to meet future water needs, and provisions in any watershed implementation plans that discuss barriers to implementation of the water reuse elements of those plans. The department's report shall include an estimate of the potential cost of reclaimed water facilities and identification of potential sources of funding for them.

90.82.080 Instream flow component — Rules — Report.

(6) The department shall report annually to the appropriate legislative standing committees on the progress of instream flows being set under this chapter, as well as progress toward setting instream flows in those watersheds not being planned under this chapter. The report shall be made by December 1, 2003, and by December 1st of each subsequent year.

This report includes detailed information on:

- Specific progress and highlights in calendar year 2007.
- Overall watershed planning and implementation progress from 1998 through 2007.
- Legislative funding from the Operating and Capital budgets.
- Recommended changes from planning units on water resource laws, rules or policies.
- Statewide instream flow rule-making and rule adoption progress.
- Water banking as tools to implement plans and meet future needs.
- Detailed watershed plan development and implementation status for all statewide Water Resource Inventory Areas (WRIAs).
- Projected spending from both Operating and Capital appropriations for plan development and implementation projects.

Watershed Planning Act Progress

Nine years after the Watershed Planning Act (WPA) was adopted by the 1998 Legislature and local planning units formed to work on basin-wide water quantity issues, and in most cases, water quality, instream flows, fish habitat and water storage issues:

- 40 planning units representing 47 WRIsAs started work under the WPA.
- 34 planning units are active in 40 WRIsAs, or 64% of the state's WRIsAs.
- 28 watershed plans have been written and approved by planning units.
- 26 plans covering 32 WRIsAs have been approved by one or more county boards of commissioners. This is an 18% increase in approved plans since December 2006.
- 21 planning units are using ECY grants for plan implementation work. This is a 20% increase from the number of units implementing their plans at the end of 2006.
- 11 Detailed Implementation Plans have been completed, an increase of 57% from 2006.
- Four watershed plans are in the process of being written by planning units. Planning unit approval and county board adoption is expected between June 2009 and June 2011.

Specific watershed planning and implementation details for all watersheds are in Sections 1 and 6 of this report. Sections 2, 3, 4 and 5 address related topics in a more general format.

Watershed Planning Act Funding and Projected Spending

The 2007 Legislature appropriated \$13.1 million from the Operating Budget for watershed planning and implementation, and \$20.2 million from the Capital Budget for statewide water resource management projects, both for the current biennium.

Operating and Capital Budget allocations within Ecology are shown in tables and charts in Section 1. Current projected spending details for each watershed and for specific statewide water resources projects can be seen in Section 6 and Appendices C and D of this report.

Instream Flow Setting Progress

Twenty-seven planning units chose to examine instream flows as part of their plan development. There is a broad range of progress within these watersheds, varying from preliminary scientific studies to rule adoption and implementation. Specific information about instream flow studies and rule-making for all state WRIsAs is in Section 6.

During 2007, Ecology successfully adopted instream flow rule amendments for the Walla Walla and Wenatchee watersheds. Ecology is working with local planning units from the Cowlitz, Elwha-Dungeness, Grays-Elochoman/Cowlitz, Lewis, Salmon-Washougal, and Quilcene-Snow on rule-making and adoption processes. Field data was collected on hundreds

of streams and rivers statewide. Several planning units recommended specific instream flows in their final plans.

Since instream flow setting and rule-making is not limited to basins using the WPA, Ecology is also working with other high priority basins on instream flow rule-making and implementation. Detailed instream flow setting progress information is in Sections 3 and 6.

Water Banking

Water banking can solve water supply and demand problems and help meet instream flow targets. Water banking is currently being used only in the Yakima River Basin under RCW 90.42.100 which was adopted by the 2003 Legislature.

Twelve watershed planning units are also looking at water acquisition and banking tools to meet out-of-stream demands and instream flow needs. The methods and approaches vary depending on the unique circumstances in each watershed.

When the 2006 Legislature adopted the Columbia River Basin Water Management Program (Chapter 90.90 RCW) it provided a framework for water purchases and transfers along the Columbia River corridor. This program is also expected to function like a water bank.

More complete information on water banking opportunities and challenges for watershed planning is in Section 4 of this report.

Reclaimed Water

Reclaimed water is another useful tool to address current and future water availability and supply needs. Reclaimed water or water reuse was identified as a future water supply strategy in 25 of 31 (80%) completed watershed plans. On the ground reclaimed water or water reuse capital projects are in eight watersheds where watershed planning has occurred. Watershed plans were not always directly instrumental the development of these projects, but awareness and identification of this tool has been part of the watershed planning process in a large majority or finished plans.

Section 5 of this report meets the requirements of RCW 90.82.043(5)(b). This information is based on another report to the Legislature, titled *Implementation of Reclaimed Water Use: 2007 Report to the Governor and State Legislature* in fulfillment of Chapter 90.46 RCW - Reclaimed Water Use. This report is at <http://www.ecy.wa.gov/biblio/0710098.html>

Watershed Plan Implementation

With the emphasis changing from less planning statewide to more plan implementation, looking ahead to address long term funding needs, meet new challenges and integrate planning actions or outcomes with environmental management initiatives is key. This section of the report examines and discusses these topics.

The full 2007 Annual Report to the Legislature on watershed planning, implementation and instream flow setting begins on the next page.

2007 Report to the Legislature: Progress on Watershed Planning and Setting Instream Flows

Introduction

This annual report outlines progress on implementation of the Watershed Planning Act (RCW 90.82) and setting instream flows by rule in Washington state. An annual report from the Department of Ecology (Ecology) is required under state law (Chapters 90.82.043(5) and 90.82.080(6) RCW). This report includes information on:

- Watershed planning and implementation progress from 1998 through 2007.
- Legislative funding from the Operating and Capital budgets.
- Recommended changes from planning units on water resource laws, rules or policies.
- Statewide instream flow rule-making and rule adoption progress.
- Water banking as tools to implement plans and meet future needs.
- Detailed watershed plan development and implementation status for all statewide Water Resource Inventory Areas (WRIAs).
- Projected spending from both Operating and Capital appropriations for plan development and implementation projects.

Overview

The Watershed Planning Act (WPA) was passed by the Legislature in 1998. The WPA gives local citizens the opportunity to work with local, state and tribal governments to write watershed plans for their community's present and future water needs. Ecology provides grants, from the state's Operating and Capital Budget appropriations, to lead agencies for plan development and implementation.

Watershed planning starts when planning units are formed and managed by a local lead agency. Each unit must address water quantity issues in their plans. Planning units may also include instream flows, water quality, storage and fish habitat needs.

All plans must describe strategies and recommend actions that will provide reliable water supplies to meet future instream and out-of-stream needs. When instream flows, water quality, storage and habitat issues are identified by a planning unit, clear strategies and actions to address these issues must also be included in watershed plans.

A planning unit's goal is to write a plan they can approve and send to their local county board of commissioners for a public hearing and adoption. When a watershed boundary includes two or more county jurisdictional boundaries, county boards must coordinate their public hearing and plan adoption processes.

Once a watershed plan is approved at the county level, the lead agency is eligible to receive additional Ecology grant money. These grants are known as Phase 4 funds and are used for continued plan management and administrative support, writing a *Detailed Implementation Plan*, and implementing high priority on-the-ground projects.

Section 1: Watershed Planning Progress

Watershed planning is carried out in four phases:

- Phase 1: Planning Unit Organization and Formation
- Phase 2: Watershed Assessment and Characterization
- Phase 3: Plan Development
- Phase 4: Plan Implementation

2007 Highlights

Key watershed plan development and plan implementation activities moved forward for 26 planning units during 2007.

Phase 4: Plan Implementation

- Four *Detailed Implementation Plans* (DIPs) were finished by planning units for five watersheds: the Nisqually, Nooksack, Quilcene-Snow and Lower Yakima/Naches.¹ Each lead agency for these watersheds was eligible to receive additional implementation grants in 2007.
- Seven watershed planning units were awarded additional Phase 4 grants in 2007 to begin work on their DIPs. These units represent ten watersheds: the Grays-Elochoman/Cowlitz, Lewis/Salmon-Washougal, Little/Middle Spokane, Middle Snake, Skokomish-Dosewallips, Stemilt-Squilchuk and Wenatchee.
- Seven watershed planning units that finished their DIPs in 2006 made good progress on plan implementation work in 2007. These seven units represent nine watersheds: the Entiat, Island, Lower Chehalis/Upper Chehalis, Moses Coulee/Foster, Pend Oreille, San Juan, and Walla Walla.

Phase 3: Plan Development

- Four watershed plans, approved earlier by the local planning units, were approved by nine county boards of commissioners. The plans are from the Middle Snake, Palouse, Stemilt-Squilchuck and Upper Crab-Wilson watersheds. Due to county and watershed boundary overlaps the county boards involved in these plan adoptions were from Adams, Asotin, Chelan, Columbia, Garfield, Grant, Lincoln, Spokane and Whitman Counties. This work demonstrated a tremendous cooperative effort by the local planning units and the respective county boards.
- One new watershed plan was approved by the Rock-Glade Planning Unit. This plan is expected to go to the Klickitat and Benton County Boards for public hearings and consideration for adoption in early 2008.

¹ The Lower Yakima and Naches watersheds are represented by one planning unit.

Phase 1: Planning Unit Organization and Formation

- Two new watershed planning units were formed for the Chelan and Lower Lake Roosevelt watersheds. Chelan County (Chelan) and Lincoln County (Lower Lake Roosevelt) are the lead agencies and have been awarded Phase 1 planning grants.
- Representatives from the White Salmon sub-basin in Klickitat and Skamania counties have also started Phase 1 work. We expect to receive a Phase 1 planning grant application from the White Salmon planning unit in early 2008.

Detailed activity summaries for the above watersheds are included in Section 5 of this report.

The Watershed Planning Act: 1998 through 2007

Nine years of statewide WPA progress is summarized below:

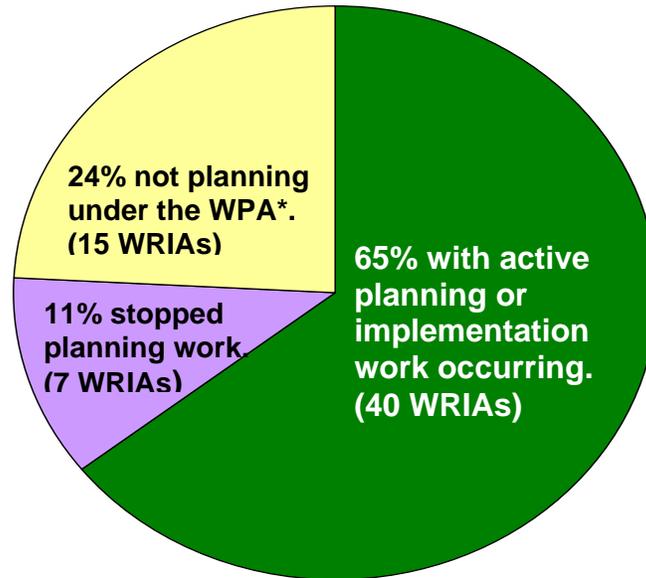
- 40 planning units representing 47 Water Resource Inventory Areas (WRIAs) started work under the WPA.
- 34 planning units are active today in 40 WRIAs. This means the WPA is being used in 64% of the state's WRIAs. Of the 40 original planning units, five could not reach consensus on their plans and the process stopped during Phase 3 (one of these units represented two WRIAs). One unit disbanded in Phase 2. Figure 1 on page 7 summarizes statewide watershed planning involvement and activity.
- 28 watershed plans have been written and approved by planning units.
- 26 of those 28 plans, covering 32 WRIAs, have been approved by one or more county boards of commissioners. This is an 18% increase in approved plans from one year ago. Figure 2 on page 7 summarizes current and projected plan adoptions.
- 21 planning units are now using grants to do Phase 4 Plan Implementation work. This is a 20% increase from the number of planning units in Phase 4 at the end of 2006.
- 11 Detailed Implementation Plans were completed for an increase of 57% from 2006.
- Four watershed plans are in the process of being written by planning units. Planning unit approval and county board adoption is expected by June 2009 for two plans and by June 2011 for another two plans.

Figure 3 on page 8 shows WPA implementation status for all WRIAs. Appendix A shows the status of each watershed in tabular format. Section 6 has a detailed narrative for each watershed's planning status and progress on instream flow rules or activity.

Watershed planning progress continues to involve nearly every county, several tribal entities, numerous local jurisdictions (cities, PUDs, conservation districts, irrigation districts and other special districts or boards, etc.), and educational institutions working with local citizen volunteers, other interested parties and state agency employees.

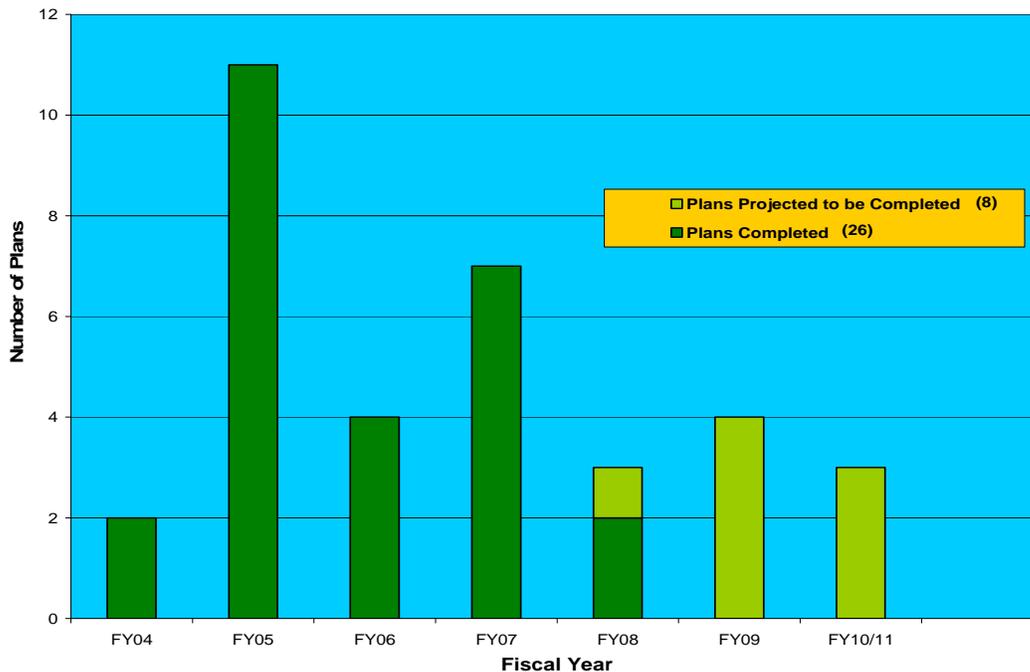
Watershed Planning Act: Status at a Glance

Figure 1: Watershed Planning Act Activity Statewide (62 WRIAs)



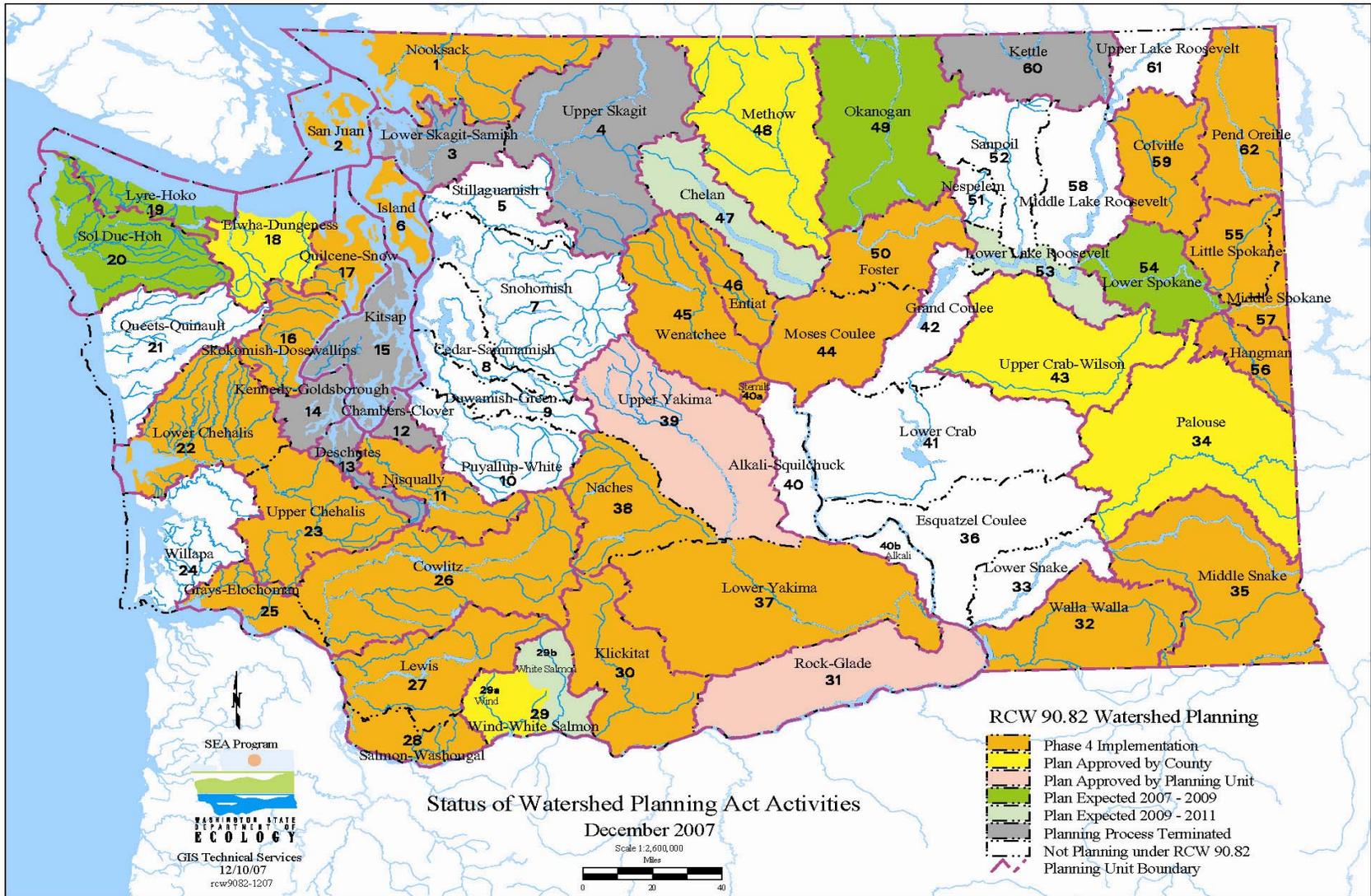
*The 15 WRIAs not planning under the WPA are from the central Puget Sound region, and sparsely populated areas of coastal and eastern Washington without pressing water management issues. Some central Puget Sound basins are conducting their own watershed planning initiatives under local self-funded or other scenarios.

Figure 2: Number of Watershed Plans Completed² and Projected to be Completed



² “Completed” means plans have been formally adopted by one or more County Boards of Commissioners.

Figure 3: Statewide Watershed Planning Act Status



Funding Summary for the 2007-09 Biennium

The 2007 Legislature appropriated \$13.1 million from the Operating Budget for watershed planning and implementation, and \$20.2 million from the Capital Budget for statewide water resource management projects for this biennium.³ The Operating Budget appropriation, from the Water Quality Account (WQA/GF-S), represents an increase of \$2.0 million per biennium above the \$11.1 million appropriated in the 2003-05 and 2005-07 Operating Budgets. The Capital Budget appropriation, from the State Building Construction Account (SBCA), represents a reduction of \$5.2 million from the \$25.4 million appropriated in the 2005-07 Capital Budget.

The Operating Budget appropriation is exclusively for use by planning units working under the Watershed Planning Act and for Ecology staff working to support specific plan implementation projects. The Capital Budget appropriation is available statewide to all WRIsAs for eligible water resources improvement or enhancement projects. However, priority preference is given to watersheds with plans developed under the WPA. During each grant cycle, Ecology solicits for and reviews activities or projects proposed by planning units to be funded from the both Operating and Capital Budget appropriations.

The Operating Budget for watershed planning is managed through Ecology's Water Quality Account (WQA). The WQA is now considered a "near General Fund" account. This means grants to, and expenditures by, local units of government must be managed on a fiscal year basis instead of biennially. This aspect of WQA administration creates additional work and challenges for Ecology budget analysts and grant managers as well as for our local planning unit counterparts.

For example, contract preparation at the beginning of each fiscal year, and contract close-out or extension at the end of each year, doubles the work done by Ecology and grantees that was previously done on a biennial basis. Specific start-to-end watershed planning and project work carried out by grantees typically and necessarily spans time frames greater than 12 months. This extra work created by annual grant management and accounting processes competes for increasingly scarce time and resources at both state and local levels. Ecology will be examining alternatives to fiscal year grant management and accounting cycles during 2008.

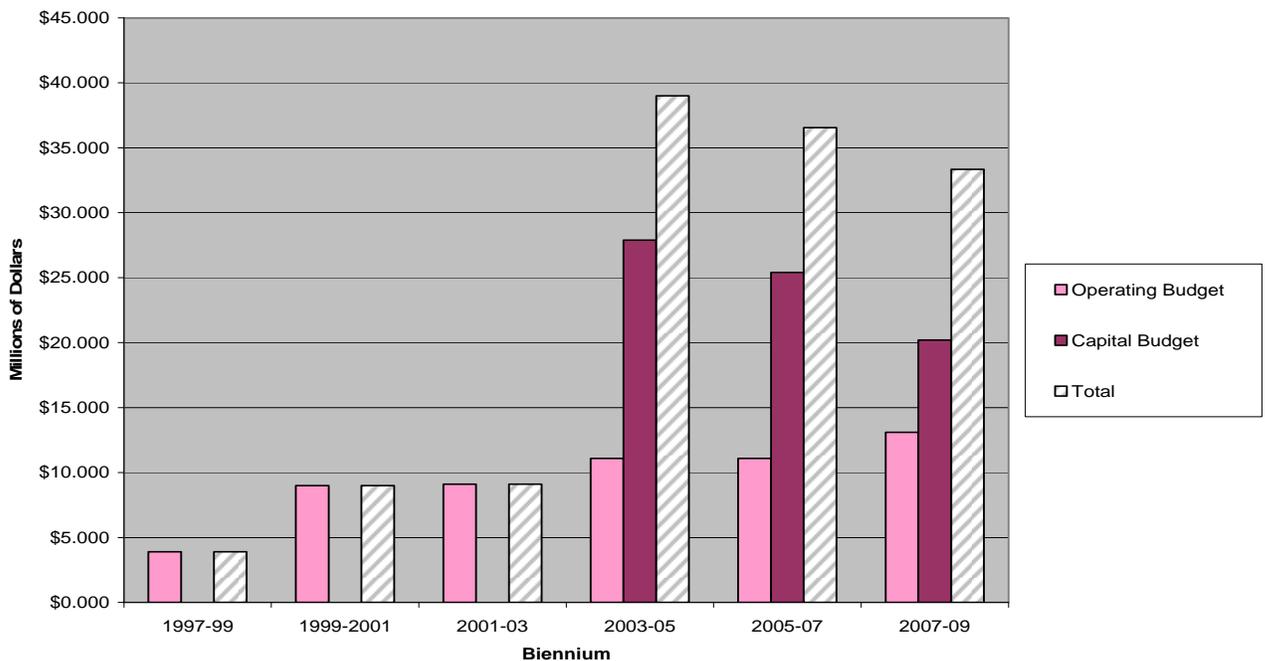
Table 1 on page 10 summarizes past and current Operating and Capital Budgets for Ecology's Watershed Planning Program. Figure 4 on page 10 presents this same data in bar chart format.

³ From 1998 through June 2007, the Legislature appropriated over \$44.2 million in Operating Budget funds to support the Watershed Planning Act (WPA) and local development and implementation of watershed plans. Of that appropriation, \$34.1 million was spent on watershed planning and implementation activity. In addition, over \$72 million in Capital Budget funding has been made available for a variety of specific water resource management projects in the 2003-05, 2005-07 and 2007-09 biennia. Details on Operating Budget expenses through June 2007 for each WRIA involved in the WPA is in Section 5.

**Table 1: Legislative Funding to Support Watershed Planning,
Plan Management and Project Implementation**
(in millions of dollars)

Biennium:	1997-99	1999-2001	2001-03	2003-05	2005-07	2007-09
Operating Budget Appropriation (WQA/GF-S) (Available only for the Watershed Planning Act)	\$3.9	\$9.0	\$9.1	\$11.1	\$11.1	\$13.1 ⁴
Capital Budget Appropriation (SBCA) (Available to local units of government in all water resource inventory areas)				\$ 27.9	\$25.4	\$20.2
Total Funding/Biennium	\$3.9	\$9.0	\$9.1	\$39.0	\$36.5	\$33.3

Figure 4: Legislative Funding to Support Watershed Management



⁴ \$985,000 of the \$13.1 million appropriation is being used for Ecology professional, technical and administrative support to implement the WPA with local planning units. This is not a new task but it is a new source of funding this task. The amount available for local watershed planning and implementation grants and projects from the Operating Budget is \$12.1 million.

2007-09 Operating Budget: Focus on Plan Implementation and Management

The 2006 Legislative Report on Watershed Planning and Instream Flow Setting emphasized the expected shift from planning work to on-the-ground implementation and plan management projects. Ecology's use of the 2007-09 Operating Budget appropriation meets that expectation by allocating more than five times as much funding for implementation projects than the amount allocated for plan development activities.

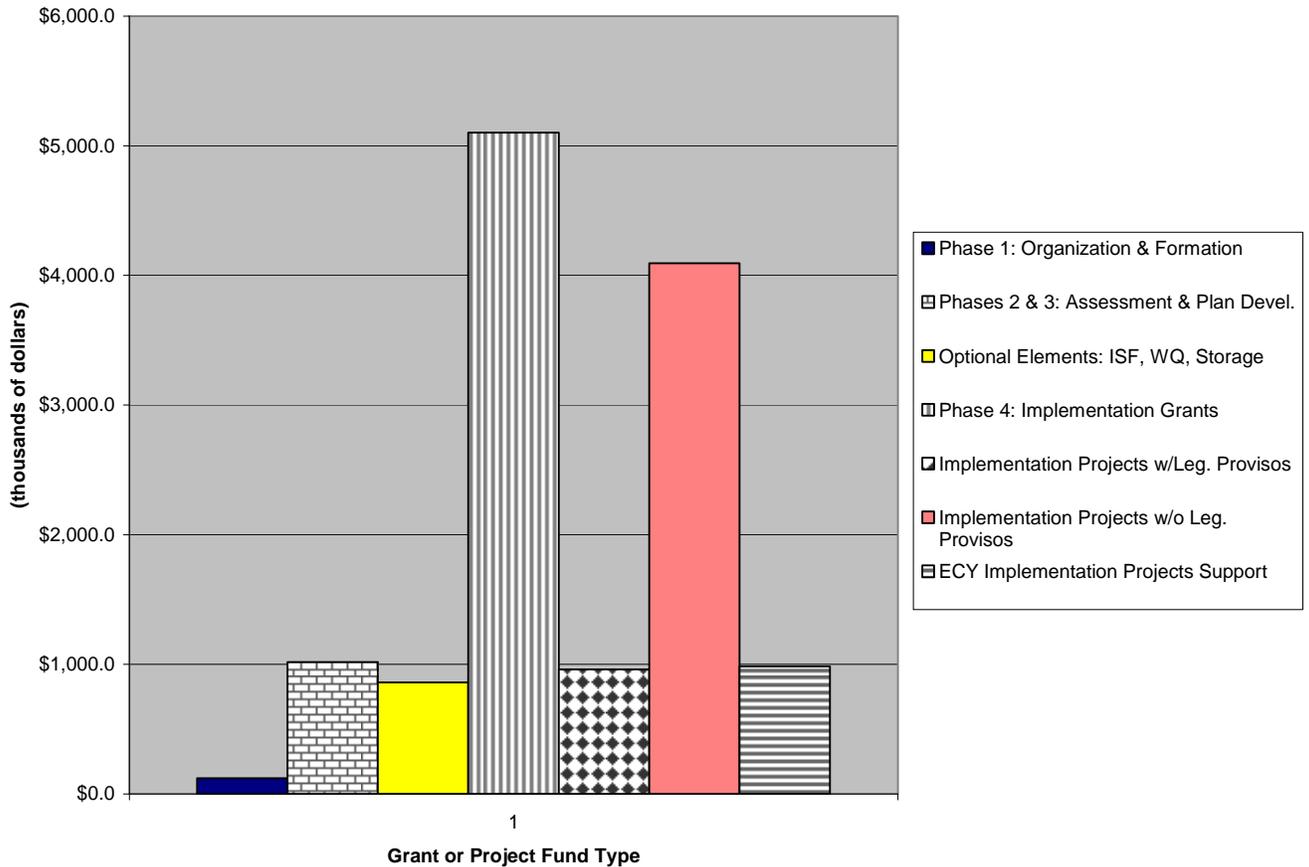
The 2007-09 Operating Budget appropriation allocations are shown in Table 2 and in Figure 5 on page 12 in bar chart format. These allocations were made by Ecology WPA managers and staff based on Chapter 90.82 RCW statutory funding obligations for planning units. They reviewed where each planning unit is in relation to their planning and implementation grant schedule to come up with the dollar amounts shown under **Plan Development Grants** (Phases 1, 2 & 3) and **Implementation Grants** for Phase 4: Plan Implementation Support Grants.

The allocation under **Implementation Grants** for 'Implementation Projects without Legislative Provisos' is the remainder of funds available from the total appropriation of \$13.1 million, after provisoed projects and Ecology Implementation Project Staff Support are subtracted from the total appropriation. As of December 2007, a total of \$4.05 million out of \$4.09 million has been awarded for specific implementation projects. Use of the remaining \$40,000 from this allocation is planned for additional small implementation support project grants for eligible watershed planning units.

Table 2: 2007-09 Operating Budget for Watershed Planning and Implementation

Total Amount Appropriated	\$13,140,355
Plan Development Grants	
Phase 1: Planning Unit Organization and Formation	\$122,276
Phases 2 & 3: Watershed Assessment and Plan Development	\$1,016,765
Phases 2 & 3 Optional Grants: Instream Flows, Water Quality, Storage	\$860,826
Subtotal	\$1,999,867
Implementation Grants	
Phase 4: Plan Implementation Support Grants	\$5,101,399
Implementation Projects with Legislative Provisos (Bertrand & Fishtrap Projects)	\$960,000
Implementation Projects without Legislative Provisos	\$4,094,089
Subtotal	\$10,155,488
Ecology Implementation Project Staff Support	\$985,000
Total	\$13,140,355

Figure 5: 2007-09 Operating Budget for Watershed Planning and Implementation

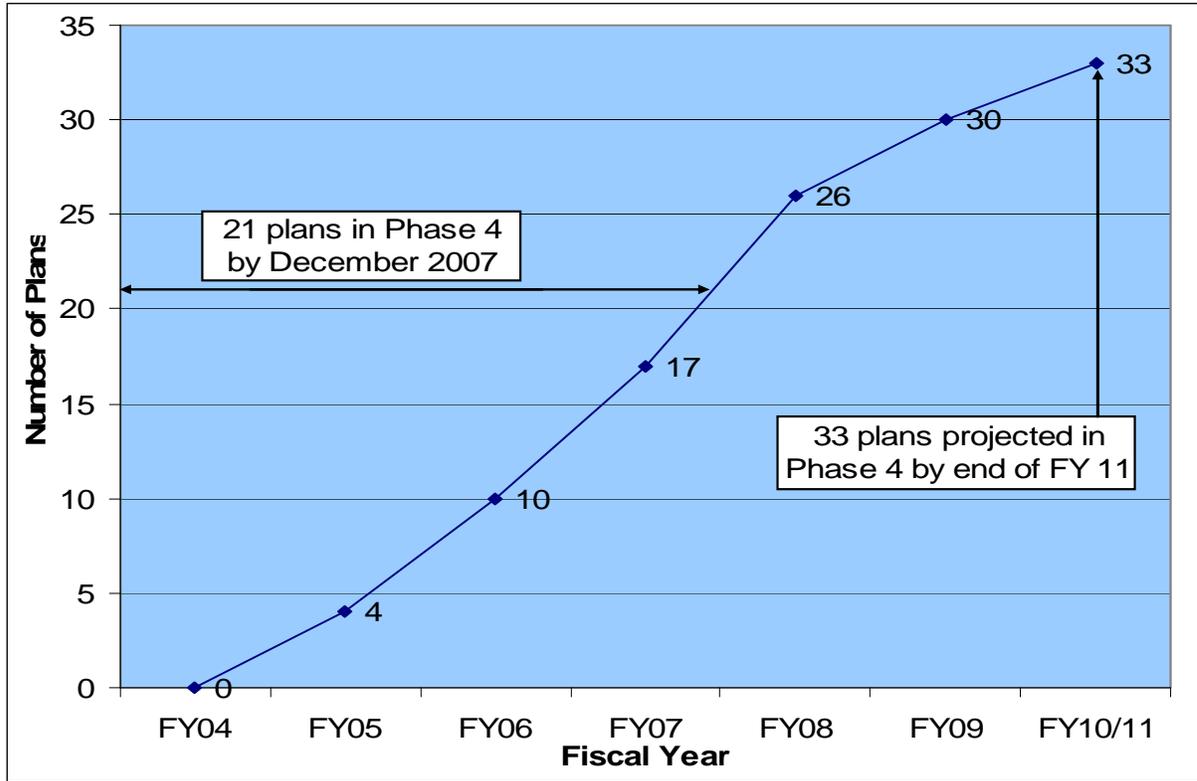


It's important to note that the difference in expenditures between planning and implementation grants could change in future years. Planning units could form in WRIAs not working under the WPA today. Ecology would then need to address these different funding scenarios in future budget requests and internal allocations. This would rebalance the amount of available operating funds for watershed planning and implementation activities.

Figure 6 on page 13 shows the numbers of watershed plans approved by planning units and approved by one or more county boards. At the end of December 2007, 21 planning unit lead agencies have started or are well underway in their Phase 4: Plan Implementation activities (see Section 5: Watershed Planning & Implementation Details).

Figure 6 also shows our future outlook based on the status of several planning units now in Phases 1, 2 or 3 of watershed planning. We predict another five plans will be finished and in Phase 4 status by June 2008, four plans will be finished by June 2009 and three more by or before June 2011.

Figure 6: Current and Projected Watershed Plan Completion



The above projected plan completion trend line was combined with information obtained from last year’s 2007-09 biennial budget building activity. Together they show it’s reasonable to expect that Ecology’s future watershed planning budget requests will increase from current levels to support new plan development needs and continue approved plan implementation activities.

2007-09 Capital Budget: A Focus on Implementing Planned Projects

The Capital Budget appropriation of \$20.2 million funds long term projects from adopted watershed plans such as water infrastructure, water storage, stream gaging or water use metering and water rights acquisitions. Capital Budget funding in the last two biennia and the 2007-09 biennium has continued to support a variety of projects in all statewide WRIAs. The funds were allocated by Ecology managers as shown in Table 3 and Figure 7 on page 14. These allocations are based on SBCA management experience and demonstrated needs.

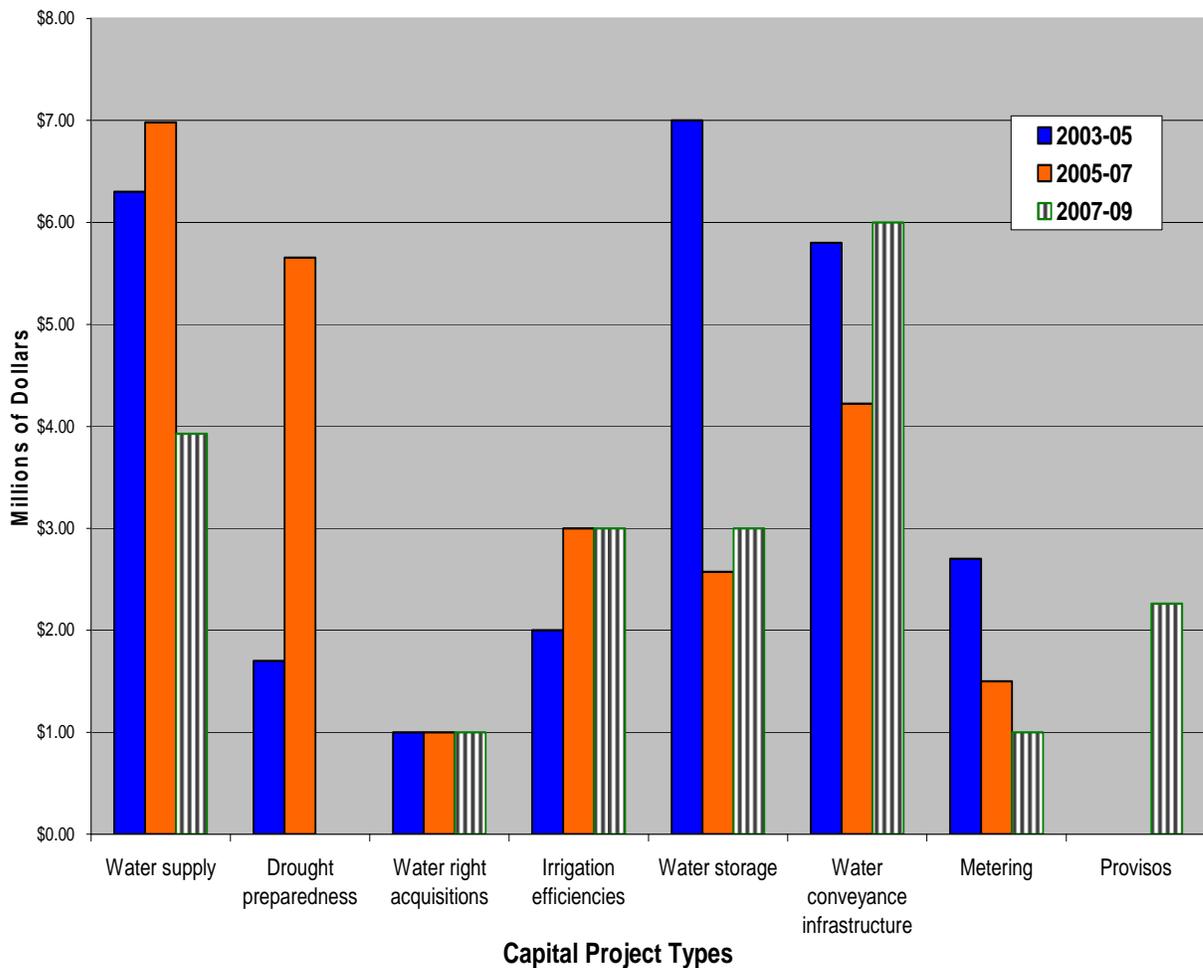
It’s important to understand the Capital Budget funds are available for use in all WRIAs, not just those working under the WPA. Ecology reviews applications for Capital Budget funded projects and prioritizes those projects that are part of an approved watershed plan’s implementation agenda.

Appendix D lists statewide projects and anticipated expenditures as of December 2007, totaling \$9.9 million. The remaining \$10.3 million from the total appropriation is for other project proposal costs now under reviewed with local entities and for new proposals that occur during the biennium. Unspent funds from the 2007-11 biennium are usually re-appropriated in the next budget cycle.

**Table 3: Capital Budget Allocations for Statewide Watershed Projects
(in millions)**

Project Type	Biennium		
	2003-05	2005-07	2007-09
Water supply	\$6.300	\$6.981	\$3.927
Drought preparedness	\$1.700	\$5.654	N/A
Water rights acquisitions	\$1.000	\$1.000	\$1.000
Irrigation efficiencies	\$2.000	\$3.000	\$3.000
Water storage	\$7.000	\$2.573	\$3.000
Water conveyance infrastructure	\$5.800	\$4.224	\$6.000
Stream Gaging/ Water Use Metering	\$2.700	\$1.500	\$1.000
Provisos (Planning Unit Support) ⁵	N/A	N/A	\$2.260
Total	\$27.900	\$25.432	\$20.187

Figure 7: Capital Budget Allocations for Statewide Watershed Projects



⁵ These provisos are for planning unit support and specific, high-priority implementation projects.

Recommendations for Statute Changes, Rule and Policy Revisions

RCW 90.82.043(5) provides that by December 1, 2003 and by each December 1st thereafter, the director of Ecology “...shall report to the appropriate legislative standing committees regarding statutory changes necessary to enable state agency approval or permit decision making needed to implement a plan approved under this chapter.”

Four new watershed plans were finished and approved by county boards in 2007.⁶ Law changes and rule revisions coming from those four plans are listed below. There weren't any policy revisions recommended from these plans. Ecology's responses to the recommended changes and revisions are at the end of each sub-section.

Statutory Changes

1. Planning units from both the Middle Snake and Palouse watersheds developed plan recommendations to address riparian stock water rights. For example, they want the Legislature to look at:
 - Landowner riparian stock water rights that aren't expressly articulated in an adjudication or claim/certificate.
 - The potential loss of landowner riparian stock water rights and/or priority dates when riparian areas are fenced off to livestock or water is provided by an alternative source (surface diversion or shallow ground water wells).
 - The legal ambiguity related to water right relinquishment for riparian stock water rights.

Conversations with representatives from other planning units, in particular the Colville and the Pend Oreille basins, also note stock watering issues are limiting watershed landowners from implementing best agricultural practices to reach adopted water quality goals.

2. The Palouse Watershed Plan identifies an action item for the planning unit to develop legislative recommendations regarding water conservation incentives and water banking.
3. The Middle Snake Plan identifies an action item for the planning unit to develop legislative recommendations regarding water rights relinquishment in Chapter 90.14 RCW (“Water rights – registration - waiver and relinquishment, etc.”).

Ecology watershed planning staff will coordinate with the water rights staff with respect to Item 1. Ecology's tentative 2009 legislative plans are to address potential legal ambiguities for water right relinquishments. Items 2 and 3 are for specific watershed units to pursue on their own, and Ecology staff may be asked to provide professional or technical support.

⁶ Plans completed in 2007 were for the Middle Snake, Palouse, Stemilt-Squilchuck, and Upper Crab-Wilson (WRIAs 35, 34, 40a, and 43, respectively). See Ecology's 2004, 2005 and 2006 Annual Reports to the Legislature for previous recommendations.

Rule Revisions

1. The Middle Snake Plan identifies an action item for the planning unit to develop rule revision recommendations that would keep water from being transferred out of the basin.
2. The Klickitat Watershed Management Plan was approved by the Klickitat County Board in December 2006. The Klickitat River Basin Planning Unit recommended a rule revision when they developed their plan, and asked that their recommendation be routinely published in the annual report. They recommended Ecology amend WAC 173-563-020(4) (from “Instream Resources Protection Program for the Main Stem Columbia River”) which reads:

“Any water right application considered for approval or denial after that date will be evaluated for possible impacts on fish and existing water rights. The department will consult with appropriate local, state, and federal agencies and Indian tribes in making this evaluation.”

In current WAC there is no limit on the length of time associated with the consultation requirement. The Planning Unit recommends this rule amendment a limit on the amount of time allowed for consultation to ensure timely processing of water rights.

3. The Klickitat River Basin Planning Unit previously recommended that Ecology adopt in its stock-watering policy (*POL-1025: “Policy for Conveying Stock Water Away From Stream to Protect Water Quality,” 1994*) into administrative rule. This policy currently allows and encourages the conveyance of stock water from a watercourse to an off-stream storage system to protect the riparian zone. The policy also says the amount of water consumed can’t be changed, and overflow water must be returned to the watercourse near the point of diversion.

Item 1 is a responsibility for the planning unit to pursue. Ecology will look at any specific rule revision recommendations and decide on the best course of action. Items 2 and 3 are being considered by Ecology for potential rule revision or adoption.

Policy Revisions

There were no specific policy revisions recommended in the four plans approved in 2007.

Section 2: Instream Flow Progress

The Watershed Planning Act (WPA) gave local planning units the option of addressing instream flows as part of their watershed management plans. When planning units properly approve and recommend flows, the law directs Ecology to undertake rule making to adopt such flows.

Of the 34 watershed planning units working under the WPA, 27 planning units chose to examine instream flows as part of their plan development. There is a broad range of progress

within these watersheds, varying from preliminary scientific studies to rule adoption and implementation. Specific information about instream flow work in these basins is in Section 5: Watershed Planning & Implementation Details.

The law also gave Ecology the authority to adopt instream flows by rule in basins where local consensus on flow recommendations was not reached or where there was no formal watershed planning. In previous years, two water management/instream flow rules were adopted by Ecology in basins not planning under the WPA: Stillaguamish (August 2005) and Skagit (Amendment May 2006) (WACs 173-505 and 173-503, respectively).

During 2007, significant statewide progress was made on instream flow rule making. Ecology successfully adopted two rule amendments, for the Walla Walla and Wenatchee watersheds, both products of watershed planning. Extensive field data was collected on hundreds of streams and rivers across the state, and several planning units adopted flows in approved plans.

2007 Rule Adoptions

The existing Walla Walla (WRIA 32) and Wenatchee (WRIA 45) watershed rules were both amended this year. These were high priority rules. Both watersheds include listed endangered species, and are among the state's 16 fish-critical basins. Rule development was heavily driven by local efforts and included participation from planning units, tribes and counties.

As with other recent rules, the amendments establish *instream flows* and *closures*. *Instream flows* are water rights that protect and preserve instream resources; including wildlife, fish, recreation, navigation, aesthetics, water quality and livestock watering. In seasons and locations where water is not reliably available above the *instream flows*, streams and aquifers are *closed* to future use. The purpose of a *closure* is to protect against the impairment of existing rights, including the *instream flows* set in rule. The two rule amendments also address other management needs specific to the watersheds, as described below.

The existing Walla Walla rule (WAC 173-532) was amended in August 2007. The rule amendments established four instream flow water rights and modified seasonal closures to protect streams during water-critical months. The rule also closed the shallow gravel aquifers, limited future permit-exempt well withdrawals, and required mitigation for new exempt uses. In addition to the typical closure and instream flow provisions, the rule set up a process to allow high flows to be used for storage projects that will benefit fish. See Section 5 of this document for more detail on the rule and other management activities in Walla Walla.

The Wenatchee rule (WAC 173-545) was adopted in December 2007. The rule amended the original 1983 rule, based on planning unit recommendations. Key rule amendments:

- Set instream flows for three new stream locations and revised existing flows where studies directed.
- Established maximum allocation limits to protect high flow functions on streams that remain "open" to new water withdrawals.
- Created reservations for certain future uses of water.

- Closed Chumstick and Mission Creek sub-basins, while integrating ongoing studies towards future management. Created interim reservations while studies are being completed.
- Replaced a seasonal closure on Peshastin Creek with a combination of instream flows and maximum allocation limits.

Overall progress on rule making

The unique characteristics of each watershed and the responsiveness of local communities usually determine the timelines for rule making progress. Progress for our more recent rules is often slower than originally projected. Experience has shown that our newer rules are much more complex and comprehensive than their counterparts in the 1970s and 1980s.

While we often refer to the current outcomes as ‘instream flow rules,’ it is more accurate to call them ‘water management rules.’ In addition to creating stream management control points and setting instream flow levels, the current rules often include permit-exempt ground water withdrawal management, water reserves for future consumptive use, determinations of seasonal and year-round closures, and other innovative and complex management tools.

Developing water management rules has become more complex as we understand more about our changing physical and social environment. Shrinking snow packs, increased frequency of drought years, continued population growth and land use development combine to increase demand and reduce water availability. At the same time, water levels and flows for needs such as fish habitat, recreation and fish listed in the Endangered Species Act also must be maintained or improved.

Since the time that most current water resource regulations were adopted, the results of scientific studies have increased our understanding of the physical connections between ground and surface waters. This physical connection is referred to by professionals in the field as “hydraulic continuity.” In response to studies and court decisions that recognize hydraulic continuity, watershed planning units have addressed water demand and supply needs from a more comprehensive and holistic management perspective.

Comprehensive water management plans offer the best approach to achieve sustainable long-term planning goals. However, this approach usually increases the need for more and better field data to resolve complex issues. Management of permit-exempt well uses in relation to instream flow protection and planning for future supply is very challenging. Legal questions surrounding the extent of a permit-exempt water right have made it difficult to estimate water use and to account for it when managing a ground water reserve.

Comprehensive management plans and rules require water planners to develop integrated strategies. Examples of strategies include guidelines for evaluating future mitigation of new ground water uses, processing water rights in open water markets, or evaluating innovative ground water storage projects. Experience has shown these post-rule activities are often as complex as the rules themselves. However, these management strategies cannot be ignored since they are the cornerstone of rule implementation.

The water management rules currently being developed focus on protection of existing water rights and instream resources, while providing water for future urban and rural needs. The complexity and number of factors involved result in rule making proceeding more slowly than anticipated. However, the end result should provide Washington citizens with comprehensive rules that more effectively manage water in the future.

Table 4 summarizes rule making progress, completed and projected, through 2009.

Table 4: Rule Development Progress under the Watershed Planning Act

Water Resource Inventory Area	Start Rule Development (File CR-101)	Target Date for Rule Proposal (File CR-102)	Target Date for Rule Adoption (File CR-103)
Entiat (46)	Started 2004	<i>Filed</i> March 2005	<i>Adopted</i> August 2005
Walla Walla (32)	Started 2004	<i>Filed</i> February 2007	<i>Adopted</i> August 2007
Wenatchee (45)	Started March 2007	<i>Filed</i> July 2007	<i>Adopted</i> December 2007
Lewis (27)	Started 2005	Winter 2008	Summer 2008
Salmon-Washougal (28)	Started 2005	Winter 2008	Summer 2008
Quilcene-Snow (17)	Started 2004	Spring/Summer 2008	Fall/Winter 2008-09
Elwha-Dungeness (18)	Started 2004	Summer 2008 (Dungeness only)	Winter 2008-09
Grays-Elochoman (25)	Started 2005	2009	2009
Cowlitz (26)	Started 2005	2009	2009

In addition to instream flow rule making under the WPA, Ecology has completed or started rule making in three watersheds that are not planning under the Act:

- Stillaguamish (WRIA 5) — New rule adopted August 2005.
- Upper Skagit (WRIA 4) — Rule amendment adopted May 2006.
- Lower Skagit-Samish (WRIA 3) — Rule making started 2005. The rule adoption process is on hold pending legal action on the Skagit instream flow rules.

See Appendix E for a map showing statewide status of instream flow rule-making activities.

Public outreach and involvement

In addition to rule development and implementation, outreach and communication are integral to the process. Communicating rule concepts and issues to the public is essential to maintaining steady progress. This kind of work is time consuming and slow, but is necessary to building local awareness, acceptance, and to foster future governance.

Strong communication and coordination with local county and city governments are also essential. Rule implementation depends upon effective shared governance, and requires close coordination between Ecology and the local entities that are responsible for managing growth and water demand.

Ecology’s outreach approach is to establish early, open and ongoing communication with watershed planning units and interested stakeholders in each watershed involved in rule making. Ecology staff works with key decision makers in each WRIA, including elected officials, tribal representatives, realtors, farmers, environmental organizations, business communities and other interested parties.

Open houses and other public meetings create opportunities for the general public to learn about local water issues, voice their concerns and participate in water management decisions. Ecology’s goal is to improve the public’s overall understanding of complex water resource issues and to include the public in the rule-making process. This approach helps gain local ownership and buy-in when instream flow targets are set in state rules.

Section 3: Water Banking

Water banking in watersheds can be used to solve water supply and demand problems and help meet instream flow targets. Water banking can make water available for instream and out-of-stream uses by holding water rights and transferring them to future users. This is done by acquiring current water rights and putting them in to a water rights trust with the state.

Water banking is currently only being done in the Yakima River Basin. Water planners and managers created a water bank when RCW 90.42.100, “Water Banking,” was adopted by the Legislature in 2003. The Yakima water bank has been operating for about three years. State law is ambiguous about the legality of using the state’s trust water rights program for water banking in other basins. Ecology is working with local watershed planning units to gauge their interest in expanding the trust water rights program for water needs statewide.

Several watershed planning units are looking into water acquisition and water banking as potential solutions to meet out-of-stream demands and instream flow needs. Acquisition and banking are mentioned in plans, reports, grant applications or rule-making requests from these watersheds:

Colville	Elwha-Dungeness.	Entiat	Grays- Elochoman/Cowlitz
Klickitat	Lewis/Salmon- Washougal	Nisqually	Nooksack
Quilcene/Snow	Upper/Lower Chehalis	Walla Walla	Wenatchee

Examples of water banking or water marketing efforts by watershed planning units are:

- The Wenatchee Watershed Management Plan contains detailed recommendations for water banking in their watershed.⁷

⁷Wenatchee Watershed Management Plan
http://www.co.chelan.wa.us/nr/nr_wen_watershed.htm

- The Bertrand sub-basin of the Nooksack watershed is working on a cooperative, locally-managed water management program to meet instream flow targets. The program will use contracts between water users and the Bertrand Watershed Improvement District. We expect it to function like a bank, using contracts that provide incentives for the participation of existing water rights holders.
- Even though the Walla Walla instream flow rule doesn't include a named water banking program, the watershed plan will assist future permit-exempt users by developing a group mitigation program similar to water banking.
- The approved plans for the Salmon-Washougal, Lewis, Cowlitz, and Grays-Elochoman watersheds all propose management schemes that require functioning water banks for existing water rights.

Ecology has given water banking and water acquisition development grants to four watershed planning units. They will study the uses of water banking in watershed plan implementation projects and plan for water bank development. These four units are the Elwha-Dungeness, Entiat, Quilcene-Snow and Walla Walla watersheds.

In 2006, the Columbia River Basin Water Management Program (RCW 90.90) was passed to provide a framework for water purchases and transfers along the Columbia River corridor. This program is also expected to function like a water bank.

For more information about water banking see the following Ecology publications (for direct web links please see the electronic version of this report):

- 2004 Report to the Legislature: Water Banking in Washington
<http://www.ecy.wa.gov/biblio/0411030.html>
- 2006 Report to the Legislature: Water Banking in Washington
<http://www.ecy.wa.gov/biblio/0611048.html>
- Analysis of Water Banks in the Western US
<http://www.ecy.wa.gov/programs/wr/instream-flows/wtrbank.html>

Section 4: Reclaimed Water

From RCW 90.82.040(5)(b):

Beginning with the December 1, 2007, report, and then every two years thereafter, the director shall include in each report:

- *The extent to which reclaimed water has been identified in the watershed plans as potential sources or strategies to meet future water needs, and*
- *Provisions in any watershed implementation plans that discuss barriers to implementation of the water reuse elements of those plans.*

The department's report shall include an estimate of the potential cost of reclaimed water facilities and identification of potential sources of funding for them.

Ecology's Water Quality Program has prepared a full report on reclaimed water and water reuse. The report, *Implementation of Reclaimed Water Use: 2007 Report to the Governor and State Legislature* is at <http://www.ecy.wa.gov/biblio/0710098.html>.

Identification of Reclaimed Water Strategies in Watershed Plans

Reclaimed water or water reuse were noted as potential strategies to meet future water supply needs in 25 of 31 (80%) completed watershed plans. Each planning unit with a completed watershed plan must also prepare a Detailed Implementation Plan (DIP). Reclaimed water strategies were included in six of DIPs, and will be part of plan implementation actions.

Table 5 on page 25 shows the plans that referenced reclaimed water and water reuse as potential strategies for future supply, and which plans included this topic in their DIPs. Table 6 on page 26 shows specific reclaimed water facility projects in WRIsAs with watershed planning and their design capacity in millions of gallons per day.

It's important to note the existence of a reclaimed water facility in these watersheds does not necessarily mean that watershed planning was the sole driver of a facility's construction. In several cases these reclaimed water facilities had been conceived in advance of or during the watershed planning process.

Plan Provisions that Discuss Barriers to Implementing Water Reuse

When reclaimed water or water reuse is listed as a potential strategy to meet future needs in finished watershed plans there generally wasn't a detailed discussion about implementation barriers. Some specific examples when barriers were discussed are:

- The completed plan for WRIA 37/38: Lower Yakima/Naches mentioned the cost of facilities is one barrier, and that the Department of Health, in working with basin water purveyors, needs to look for and create opportunities for water reuse.

- The WRIA 27/28: Lewis/Salmon-Washougal plan addressed a water reuse barrier: “Water reuse and recycling in the industrial sector is currently much more feasible than in the municipal sector for WRIAs 27 and 28, due to lower costs compared with municipal projects, fewer public concerns, and the need to manage wastewater discharges while complying with discharge permit limitations. Many water-intensive industries in the basin have already implemented water recycling processes.”

A subgroup of Ecology’s Water Quality Program Reclaimed Water Rule Advisory Committee identified four broad areas of barriers to implementing reclaimed water projects:

- Economics and markets
- Ensuring safe (health) sources of water for reclamation and reuse
- Dealing with ‘One size fits all’ regulations (to scale different sized plants)
- Technical challenges

Estimated costs of reclaimed water facilities

Ecology staff reviewed 13 projects that are under construction or in final design phases. These projects have the best current cost data to use for making reliable cost estimates. Based on maximum design capacities of these projects, the average cost per gallon of reclaimed water is \$3.36/gallon. However, cost effective reclaimed water facilities are typically designed to process thousands or millions of gallons of water per day. A more realistic cost estimate is to multiply the per gallon cost by one million gallons to arrive at an estimated cost of \$3.36 million per million gallons of reclaimed water capacity. This estimate is based on large and small projects ranging from the reclaimed water component of Brightwater in King County to a project to irrigate a Tukwila golf course with a simple ‘purple pipeline’ connection.

Two difficult issues in estimating project costs are:

- Getting legitimate values; estimated costs vary greatly from real construction costs.
- Separating costs; reclaimed water costs are often included with and therefore ‘hidden’ in overall wastewater treatment plant construction and O/M costs.

Utilities often build new or expanded wastewater treatment plants with the technology in place to meet reclaimed water standards. However, they often don’t have a reclaimed water use identified or a current desire to reuse water. In these cases total project costs are based on today’s current wastewater treatment capacity.

If a utility later decides to change their operating permit to include reclaimed water production, it may only need to build a new pump station and install pipes between the treatment plant and the reclaimed water user or site. Under this scenario, the pre-existing infrastructure costs of the wastewater treatment system may not be well separated from the costs of the reclaimed water system. Only the new distribution costs are accounted for in the total cost of reclaimed water capacity.

At the other extreme utilities that decide upfront to build a reclaimed water plant as part of their wastewater treatment plant lump treatment and distribution costs together and the

resultant apparent cost/gallon is much higher. The Lacey-Olympia-Tumwater- Thurston County plant at Hawks Prairie is an example of this kind of cost accounting).

Identification of potential sources of funding reclaimed water facilities

There are a several potential funding sources but reclaimed water projects might not be as competitive in some cases as other water quality projects. In the 2007-09 biennium a \$5.0 million grants program for Puget Sound was dedicated strictly to reclaimed water. Other potential fund sources are Ecology's the Centennial Clean Water Fund and the State Revolving Fund, the Public Works Trust Fund and Community Development Block Grants (Community Trade and Economic Development), the United States Department of Agriculture and local bonding programs.

Ecology's 2007 report to the legislature on reclaimed water recommends an appropriation of \$50 to \$100 million for long term funding needs.

**TABLE 5. Reclaimed Water or Water Reuse References
in RCW 90.82 Watershed Plans**

WRIA Planning Unit	Plan Status	Plan Referenced Reclaimed or Reused Water?	Reclaimed or Reused Water Part of Detailed Implementation Plan?	Year Plan Approved
WRIA 1	Final	Yes	No	2005
WRIA 2	Final	Yes	No	2004
WRIA 6	Final	Yes	No	2005
WRIA 11	Final	Yes	No	2003
WRIA 12 (stopped)	Draft	Yes	N/A	N/A
WRIA 13 (stopped)	Draft	Yes	N/A	N/A
WRIA 14 (stopped)	Draft	Yes	N/A	N/A
WRIA 15 (stopped)	Draft	Yes	N/A	N/A
WRIA 16	Final	Yes	No	2006
WRIA 17	Final	Yes	No	2003
WRIA 18	Final	Yes	No	2005
WRIA 19	Phase 3			
WRIA 20	Phase 3			
WRIA 22/23	Final	Yes	No	2004
WRIA 25/26	Final	Yes	No	2006
WRIA 27/28	Final	Yes	No	2006
WRIA 29a	Final	No	N/A	2006
WRIA 29b	Phase 1			
WRIA 30	Final	No	N/A	2006
WRIA 31	Final	No	N/A	2007
WRIA 32	Final	Yes	Yes	2005
WRIA 34	Final	Yes	No	2007
WRIA 35	Final	Yes	No	2007
WRIA 37/38	Final	Yes	Yes	2002
WRIA 40a	Final	No	N/A	2007
WRIA 43	Final	Yes	Yes	2006
WRIA 44/50	Final	Yes	No	2004
WRIA 45	Final	Yes	No	2006
WRIA 46	Final	Yes	No	2004
WRIA 47	Phase 2			
WRIA 48	Final	No	N/A	2005
WRIA 49	Phase 3			
WRIA 53	Phase 1			
WRIA 54	Phase 3			
WRIA 55/57	Final	Yes	Yes	2006
WRIA 56	Final	Yes	Yes	2005
WRIA 59	Final	No	N/A	2004
WRIA 62	Final	Yes	Yes	2005

Table 6. Reclaimed Water Design Capacity in Watershed Planning Areas - May 2008

	Site	Permit Number	Class of Water	Existing Design Capacity (MGD)	WRIA - Name	Chapter 90.82 RCW Watershed Plan?	Detailed 90.82 Implementation Plan?
1	Holmes Harbor	ST 3737D	A	0.10	6 - Island	Yes	Yes
2	City of Yelm	WA0040762C	A	1.00	11 - Nisqually	Yes	Yes
3	LOTT - Martin Way	ST 6206A	A	2.00	13 - Deschutes	No*	No
4	LOTT - Budd Inlet	WA0037061C	A	1.50	13 - Deschutes	No*	No
5	North Bay/Case Inlet	ST 6039C	A	0.37	14 - Kennedy-Goldsborough	No*	No
6	Sequim	WA0022349C	A	0.80	17 - Quilcene-Snow	Yes	Yes
7	Sunland Sewer District	ST 6003B	D	0.16	17 - Quilcene-Snow	Yes	Yes
8	City of Chehalis	WA0021105	A & C	3.50	23 - Upper Chehalis	Yes	Yes
9	Cardinal Glass	ST 6210	A	0.01	26 - Cowlitz	Yes	Due 10/08
10	City of College Place	WA-002065-6	C	1.65	32 - Walla Walla	Yes	Yes
11	City of Walla Walla	WA-002462-7	A	9.60	32 - Walla Walla	Yes	Yes
12	City of Medical Lake	WA-0021148	A	1.85	54 - Lower Spokane	In Draft	-
13	City of Cheney	WA-0020842	D	2.70	56 - Hangman	Yes	Yes
	*Planning stopped- only a draft plan done						

Total 25.24 Million Gallons per Day of Reclaimed Water

Section 5: Watershed Plan Implementation: Next Steps

Looking Ahead

Now that 28 watershed plans are finished and another six completed plans are due in the next 4 years, we are heavily focused on implementing new and high priority projects listed in the Detailed Implementation Plans. These projects will be carried out by state agencies, local units of government and sometimes private landowners or non-for-profit groups. The challenging part is making sure multiple projects going on at the same time are well coordinated and sequenced when necessary.

Ecology watershed planning staff work closely with local watershed planning units each year to estimate the costs of implementing finished plans. This work informs development of Ecology's budget request from both the Operating and Capital Budgets for upcoming biennial and supplemental budgets sessions.

For example, in April 2008 Ecology asked watershed planning units with finished plans, and those units whose plans will be done by June 2009, to submit preliminary implementation project proposals. As expected, most planning units and sponsoring local governments requested more state funding for implementing planned projects than is typically appropriated by the Legislature for these activities.

In addition to documenting project implementation needs, an estimate of the amount of funding needed to meet financial obligations prescribed in the Watershed Planning Act for each planning units currently in Phases 1, 2, 3 or 4 of the process. These preliminary project ideas and estimated Act obligations were used to build the 2009-11 biennial budget request for submittal to OFM on September 1, 2008.

As the shift to plan implementation continues, planning units have identified specific actions or projects they expect will need more state and local funding support. These actions or projects include:

- Conservation actions
- Data system support
- Enforcement (water rights/law) support
- Ground water and surface water computer modeling
- Instream flow setting, monitoring, tracking and enforcement
- Public education and outreach
- Stream gaging studies and flow data generation
- Water banking systems
- Water rights adjudication and permitting
- Water quality monitoring and water quality enforcement
- Water use and availability assessments
- River and wetland restoration
- Water storage options

Detailed summaries of projected spending for watershed implementation projects in the 2007-09 biennium from the Operating and Capital Budget Accounts are in Appendices C and D.

Challenges

Talks with representatives of several planning units throughout the state confirmed they are thinking ahead about their long term financial support needs. We are finding out they generally do not have enough local resources to fund full time water planning or plan implementation staff to keep the plans alive and moving ahead without continued and sustained state or other source funding assistance.

Local units of government involved in watershed planning efforts may also need to look ahead and think creatively about additional local funding sources. Local funding could be used for local long-term operational implementation needs or to fund capital-type projects that Ecology or other sources may not be able to cover. A list of current grant or loan funding sources that may provide additional sources of funds for implementing watershed plan projects is at the end of this section.

During climates of reduced or uncertain funding from federal and state budgets, watershed planning units and their sponsoring local entities may be even more challenged financially and will need to look for other regional, local and private or non-profit resources to fund plan implementation.

A proposal to address this challenge is to amend The Watershed Planning Act. The WPA currently provides funding to watersheds for up to five years in Phase 4, while work starts on implementing completed plans. Many water availability, water management, water quality, near shore and in-stream projects have implementation timeframes and need resources that go way beyond five years.

An amendment to the WPA to extend each finished plan's implementation horizon (in the WPA) an additional two to four or more years may solve part of the long term funding challenge. Additional, new legislative funding would not be necessary if carry forward levels could be sustained. Planning units would continue to be eligible for the same level of funding they currently get in Phase 4-Year 5 of implementation: \$50,000 per year per planning unit with a required 10% local match.

Other Grant and Loan Funding Sources for Plan Implementation

This list below shows the variety of grant or loan funding sources now available to local units of government. These programs are managed by several different state agencies and direct links to each grant or loan website are provided here for electronic use of this report. There may be other programs that are not on this list. Agencies responsible for each program are shown in parenthesis for each link.

- Agricultural Water Supply Grant Program (ECY)
<http://www.ecy.wa.gov/biblio/ecy070203.html>
- Centennial Clean Water Fund, State Revolving Fund and Clean Water Act Sect. 319 (ECY)
<http://www.ecy.wa.gov/biblio/9920.html>

- Coastal Protection Fund/Terry Husseman Account [no web link, contact ECY for eligibility]
- Columbia River Basin Water Management Grant Program (ECY)
<http://aww.ecology/cro/cr%5Fgrants.html>
- Community Development Block Grants (CTED)
<http://cted.wa.gov/site/314/default.aspx>
- Department of Agriculture Grant Programs
<http://agr.wa.gov/Marketing/default.htm>
- Public Works Trust Fund and State Drinking Water Revolving Fund (CTED and DOH)
http://www.pwb.wa.gov/Program_Information.asp
- EPA Targeted Watersheds Program
<http://yosemite.epa.gov/r10/water.nsf/Office+of+Water/PS08RFP>
- Irrigation Efficiency Grants Program (Conservation Commission)
http://www.scc.wa.gov/index.php?option=com_content&task=view&id=53&Itemid=156
- On-Site Septic System Repair Grant Program (Puget Sound only) (ECY)
<http://www.ecy.wa.gov/programs/wq/funding/OSS.htm>
- Reclaimed Water Grants Program (ECY)
<http://www.ecy.wa.gov/programs/wq/funding/RECLAIMED%20WATER/ReclaimedWaterGrants.htm>
- Salmon Recovery Funding Board Grants (WDFW)
<http://www.rco.wa.gov/srfb/grants.asp>
- Water Acquisition Program (ECY)
<http://www.ecy.wa.gov/biblio/0311005.html>
- Water Metering Program (cost share with Conservation Districts) (ECY)
<http://www.ecy.wa.gov/programs/WR/measuring/measuringhome.html>

Integrating Watershed Planning with other Environmental Management Programs

Watershed planning and implementation actions have been and can be integrated with other similar or key federal, state or regional water and environmental management programs and initiatives. Current or potential integrations between watershed planning and specific environmental management programs are briefly discussed below:

Current Integration

Puget Sound Partnership: Ecology Watershed Planning Leads who work with watershed planning units in the Puget Sound basin are identified as the agency's first points of contact for Puget Sound Action Area meetings and other workshops. Their role is to look for and find ways that watershed planning outcomes and implementation needs may contribute to the development of the Puget Sound Action Agenda.

Although water availability was a required component of watershed planning, several planning units in the Puget Sound basin also addressed water quality issues. The future roles and linkages of watershed lead staff, watershed planning units and plan outcomes will continue to evolve. The overriding goal is to avoid duplication of past efforts and to ensure watershed planning outcomes related to water quality and habitat are integrated whenever practical in the Puget Sound Partnership's agenda.

Salmon Recovery and the Endangered Species Act (ESA): Several watershed planning units and WRIAs coincide with regional salmon recovery boards or have water bodies with ESA listed species. Ecology regional Watershed Planning Leads working routinely coordinate with their federal and state agency counterparts and local groups working on salmon recovery or ESA listing issues.

One of the best examples of integration is on the lower Columbia River. The Lower Columbia Fish Recovery Board is the lead agency for the WRIA 25/26 Grays-Elochoman/ Cowlitz and the WRIA 27/28 Lewis/Salmon-Washougal Watershed Planning Units. The occurrence and content of watershed planning has benefited from such close association to this fish recovery effort, and vice versa.

At a high level, the Department of Ecology is a signatory agency to a *Memorandum of Agreement* that also includes the Departments of Agriculture, Fish and Wildlife, Health, Community Trade and Economic Development, Natural Resources, Transportation, and the Governor's Salmon Recovery Office, Interagency Committee for Outdoor Recreation, State Parks and Recreation Commission and Conservation Commission. This memorandum was written and signed in 1998 to integrate work on the Watershed Planning Act and the Salmon Recovery Planning Act.

Since 1998, the majority of state agency memorandum signatories have moved on to other positions or left state government. The former Puget Sound Water Quality Action Team was also a signatory agency. Given the recent creation of the Puget Sound Partnership establishing a formal connection between that entity and other state agencies working on similar goals should also be established.

Ecology and the Governor's Salmon Recovery Office have initially discussed reconvening representatives of the signatory agencies, which forms the state's caucus on Watershed and Salmon Recovery Planning sometime in 2008. The memorandum has been a useful tool and guidepost in the past for staff implementing various components of both acts. Reconvening the state's caucus would help sustain the 'state speaking with one voice' approach to address ongoing statewide salmon recovery and watershed planning and implementation needs.

Columbia River Basin Water Management Program (CRMP): County level advisory group meetings attended by eastern and central Washington county commissioners and local watershed planning coordinators are also attended by Ecology special assistant directors, managers, policy staff and Watershed Leads. This activity integrates and coordinates CRMP objectives with the implementation of completed watershed plans or plans now in draft status.

Chehalis Basin Floodplain Management Initiatives: The Chehalis Basin Partnership (CBP), the planning unit for the Lower Chehalis and Upper Chehalis watersheds (WRIAs 22 and 23), has provided a ready made forum for planning unit and citizen discussions about the early December 2007 flooding events. The CBC has hosted federal and state agency representatives and consultants to get detailed information about the meteorological and hydrologic aspects of the flooding, and to get information and make comments on long term flood protection proposals and projects. The CBC will continue to work on implementing its

watershed plan, while cooperating with other local, regional, state and federal entities working on flood plain management initiatives and actions.

The Shoreland Management Act, the Growth Management Act, and Potable Drinking Water Programs: Many watershed planning processes and plan implementation projects have also considered or integrated aspects of the above laws and programs. Since water availability, water quality and habitat for fish and wildlife is directly linked to how, where and when future local development takes place, successful plans have consciously coordinated with state agency and local staff working on the above topics.

Potential Integration

The potential for ways to integrate watershed planning processes and outcomes with other existing or emerging water and environmental management programs should always be examined. In times of increasing levels of competition for limited or shrinking financial or staff resources, leveraging work done by watershed planning units, capitalizing on implementation project results or avoiding duplication of efforts with other initiatives having similar or related environmental objectives is very important.

While no new formal type or memorandum of agreement level of integration have been made recently, there may be outcomes in finished or from evolving watershed plans that can inform discussions, planning and decisions on topics such as climate change and some of its anticipated symptoms of global warming and sea level rise.

The primary purpose of watershed planning was to guide future decisions on water availability for farms, fish and people. If significant climatic changes occur that cause reductions in the amounts or timing of surface water flows or affect the reliability of and access to groundwater resources, watershed planning will be increasingly important. Once a watershed plan is finished there are no legal requirements to make plan amendments as more information on water resources or climatic conditions is available. However, if or when new plan amendments would help address emerging challenges and better integrate other environmental initiative, local watershed planning units could potentially reconvene if lead agencies and stakeholders are interested and new funding sources or grants could support them.

Section 6: Watershed Planning & Implementation Details

This section presents detailed information for all statewide Water Resource Inventory Areas (WRIAs) for those areas now involved in the Watershed Planning Act, as well as for watersheds that are not actively planning under the Act. When 'Water Quality' is listed as an optional planning element, please visit Ecology's Total Maximum Daily Load home page to learn about specific basin activities for this topic at TMDL Home Page.

(<http://www.ecy.wa.gov/programs/wq/tmdl/index.html>)

WRIA 1 Nooksack

Watershed Planning Phase 4: Plan approved June 2005
Detailed Implementation Plan
finished July 2007

Optional Elements: Water Quality, Habitat, Instream Flows

Planning and Operating Expenditures through June 2007: \$879.6 K

Projected Grant Expenditures July 2007 through June 2009: \$1,219 K



The Nooksack Watershed Plan was approved by Whatcom County in June 2005, and the Nooksack Watershed Phase 4 Implementation Grant was signed in June 2006. Their Detailed Implementation Plan and Water Monitoring Plan were finished in July 2007.

Instream Flow Status

Existing instream flows were set in 1985 (WAC 173-501). As a part of the Watershed Plan, the WRIA 1 Instream Flow Selection and Adoption Plan was developed. This plan describes a sub-basin by sub-basin approach for work on treaty reserve water rights and instream flows. The first areas to pilot instream flow negotiations under the Instream Flow Selection and Adoption Plan were the Bertrand Creek and Middle Fork Nooksack River watersheds; negotiations began there in 2006, and are still underway. After successful processes and methods have been demonstrated in this pilot project, instream flow assessments will continue in other drainages in WRIA 1. The goal is to recommend amendments to the existing instream flow rule in about five years.

An Innovative Pilot Project

An innovative pilot project underway in WRIA 1 is a process to develop a locally driven, flexible water management strategy. Concurrent with the instream flow negotiations described above, Ecology is working with the Bertrand Watershed Improvement District, Lummi Nation, Nooksack Tribe, Whatcom County and others to craft a Memorandum of Understanding (MOU) on a cooperative water management program. Under this program, Ecology will support greater flexibility in the way water is managed in exchange for the establishment and achievement of target stream flows. With continued success in negotiations it is realistic to anticipate having an MOU signed by the end of 2008.

Nooksack Watershed Planning Website: <http://www.wria1project.wsu.edu/>

WRIA 2 San Juan

Watershed Planning Phase 4: Plan approved October 2004
Detailed Implementation Plan
finished January 2006

Optional Elements: Water Quality, Habitat, Instream Flows

Planning and Operating Expenditures through June 2007: \$896.7 K

Projected Grant Expenditures July 2007 through June 2009: \$128.7 K



San Juan County approved the WRIA 2 Watershed Management Plan and started Phase 4 work in October 2004. They completed their Detailed Implementation Plan in January 2006. Key plan recommendations include developing an MOU with Ecology on water management issues, conducting ongoing ground water monitoring and analysis, and developing an expedited permitting process for use of rainwater collection systems.

Instream Flow Status

The Planning Unit conducted an instream flow assessment, established a stream gaging network and collected data on seven streams of interest in the islands. The Planning Unit concluded that most streams in the San Juan Islands primarily provide food sources and/or shelter locations for fish rather than spawning activity. Further focus on instream flow was not pursued by the Planning Unit.

Ecology doesn't anticipate conducting further studies or setting instream flows at this time, but will continue to assess impacts of proposed surface and ground water withdrawals on fish resources as part of water rights permit processing. Ecology is currently collecting hydrological data in the Cascade Creek basin (Orcas Island) in order to process water rights applications for this area.

San Juan Watershed Planning Website: <http://www.sanjuanco.com/health/ehswrm.aspx>

WRIA 3/4 Lower Skagit-Samish/Upper Skagit

Watershed Planning: The planning process stopped during Phase 3. A draft watershed plan was written for the Samish Basin in December 2004, but it wasn't finished or voted on by the Planning Unit.

Optional Elements: Instream Flows

Planning and Operating Expenditures through June 2007: \$1,088.6 K

Projected Grant Expenditures July 2007 through June 2009: \$236.5 K



Even though the planning process was stopped, Ecology continues to support water resources management projects in the basins. One hundred thousand dollars is allocated to implement the Skagit River instream flow rule and another \$136.5 K is being used for a USGS stream gaging project.

Instream Flow Status

In consultation with local governments and tribes, Ecology developed an amendment to the existing “Instream Resources Protection Program--Lower and Upper Skagit Water Resources Inventory Area (WRIA 3 and 4)” rule, WAC 173-503. The amendment was adopted in May 2006. The rule amendment was developed to resolve a lawsuit filed by Skagit County on the existing rule, originally adopted in 2001. To address the legal challenge, a process was needed to provide certainty for water users who are junior to the instream flows. Shortly after the amended rule was adopted, the parties reached settlement.

The rule amendment established reservations of water, not subject to existing instream flows, for specific out-of-stream uses (residential, commercial/industrial, agricultural irrigation and stock watering). When reserved water is fully allocated, the rule closes certain tributaries. The rule also specifies when future permits may be issued by Ecology.

Ecology worked with Skagit County and the local community to implement the instream flow rule in 2007. Implementing efforts have focused on integrating land use planning with the water management framework in the rule. Skagit County and Ecology defined local and state implementing actions in an Inter-local Agreement relating to tracking and accounting for new water uses under the water reservations.

Ecology will also be developing an instream flow rule for the Samish River basin, an independent drainage system in WRIA 3. Before watershed planning was stopped for WRIs 3 and 4, instream flow work and planning focused on the Samish sub-basin of WRIA 3. The Planning Unit completed a considerable amount of work on instream flows, but was unable to reach consensus on the flow levels or develop a final watershed management plan. As a result, Ecology is proceeding with rule making to establish flows, using the technical work completed by the Planning Unit. Ecology is delaying work on the Samish instream flow rule until issues on the Skagit River rule are resolved and the implementation process is on track.

Information on the Skagit Instream Resources Protection Program rule can be found at: <http://www.ecy.wa.gov/laws-rules/archive/wac173503.html>

WRIA 5 Stillaguamish

Not working under the Watershed Planning Act.



Instream Flow Status

In consultation with Washington State Department of Fish and Wildlife and the Tribes, Ecology adopted the “Instream Resources Protection and Water Resources Program” rule (WAC 173-505) in August 2005. The rule established instream flows for 32 rivers and streams in the basin, reserved a limited amount of ground water for future domestic use, reserved a limited amount of water for stock watering, established maximum limits for withdrawals from nine water sources, closed lakes and ponds to new diversions (except for domestic use), and closed numerous rivers and streams to new uses unless the use qualifies under identified exceptions.

Since the rule adoption in 2005, Ecology has been working with Snohomish and Skagit Counties to implement the rule. Implementing efforts have focused on integrating land use planning with the water management framework in the instream flow rule, and tracking development in the basin.

Information on the Stillaguamish rule can be found at: <http://www.ecy.wa.gov/laws-rules/archive/wac173505.html>

WRIA 6 Island

Watershed Planning Phase 4: Plan approved June 2005
Detailed Implementation Plan
finished December 2006



Optional Elements: None

Planning and Operating Expenditures through June 2007: \$827 K

Projected Grant Expenditures July 2007 through June 2009: \$200 K

Island County approved their Watershed Management Plan in June 2005 and began Phase 4 implementation in August 2005. Their Detailed Implementation Plan was finished in December 2006. Their key plan actions include: monitoring and protection for seawater intrusion in vulnerable areas, water system coordination, and local review and “preprocessing” assistance to Ecology on new water right applications. They also are protecting aquifer recharge areas by promoting Low Impact Development land use practices.

Instream Flow Status

WRIA 6 does not have instream flows set, and the Planning Unit did not recommend adoption of instream flows. No instream flow activities are currently scheduled in this watershed.

Island County Watershed Plan Website:

<http://www.islandcounty.net/health/WRAC/WatershedPlanning.htm>

WRIA 7 Snohomish

Not working under the Watershed Planning Act.

Instream flows were set in 1979 (WAC 173-507).



WRIA 8 Cedar-Sammamish

Not working under the Watershed Planning Act.

Instream flows were set in 1979 (WAC 173-508).



WRIA 9 Duwamish-Green

Not working under the Watershed Planning Act.

Instream flows were set in 1980 (WAC 173-509).



WRIA 10 Puyallup-White

The basin was closed by rule in 1980 (WAC 173-510).



WRIA 11 Nisqually

Watershed Planning Phase 4: Plan approved April 2004
Detailed Implementation Plan
finished April 2007

Optional Elements: Water Quality, Habitat, Instream Flows
Planning and Operating Expenditures through June 2007: \$745.1 K
Projected Grant Expenditures July 2007 through June 2009: \$220 K



Pierce, Thurston, and Lewis counties approved the Nisqually Watershed Plan in April 2004. The Nisqually Tribe was the lead agency and this was the first watershed plan approved in the state. The Planning Unit began Phase 4 Implementation in November 2005. Key recommendations of the plan include sub-basin processing of water right applications, ongoing instream flow work in the Mashel basin and additional efforts in water conservation, reuse, and reclamation. A final Detailed Implementation Plan was completed in April 2007.

Instream Flow Status

Instream flows were set in 1981 (WAC 173-511).

The Planning Group recommended existing closures should be maintained, unless new technical information suggests otherwise. It also recommended retaining instream flow levels in the Nisqually River, but doing more work on the Mashel River to improve stream flows and address the water supply needs of the town of Eatonville.

In 2005 Ecology completed Instream Flow Incremental Methodology (IFIM) studies for Mashel River, which included hydrographs/exceedance curves, estimates of allocated water and actual water use, summary of habitat conditions, and an assessment of hydraulic continuity.

Nisqually Watershed Planning Website: <http://nisquallyriver.org/planning.html>

WRIA 12 Chambers-Clover

Watershed Planning: The planning process was stopped in Phase 3. The planning unit completed the final draft Watershed Management Plan in September 2004, but was unable to reach consensus agreement. The Puyallup Tribe voted against plan approval.

Optional Elements: Water Quality, Habitat
Planning and Operating Expenditures through June 2007: \$657.2



Instream Flow Status

Instream flows were adopted by rule in 1979 (WAC 173-512). Ecology does not plan to amend the existing rule.

WRIA 13 Deschutes

Watershed Planning: The planning process was stopped in Phase 3. The watershed planning unit completed a final draft watershed plan in October 2004, but was unable to reach consensus agreement on the plan. The Squaxin Island Tribe voted against plan approval.

Optional Elements: Water Quality, Habitat, Instream Flows

Planning and Operating Expenditures through June 2007: \$464.7 K



Instream Flow Status

The Deschutes instream flows/closures were set in 1980 (WAC 173-513). Ecology does not plan to amend the existing rule.

WRIA 14 Kennedy-Goldsborough

Watershed Planning: The planning process was stopped in Phase 3. The Planning Unit completed a draft watershed plan in May 2006, but was unable to reach consensus agreement on the plan. The Squaxin Island Tribe voted against plan approval.

Optional Elements: Water Quality, Habitat, Instream Flows

Planning and Operating Expenditures through June 2007: \$742.1 K



HB 1295 was introduced in the 2007 Legislature to split WRIA 14 into two watersheds. The bill would to create the Goldsborough Creek (14a) and Kennedy Creek (14b) watersheds solely for planning purposes.

The bill would allow the Skokomish-Dosewallips Planning Unit (WRIA 16) to continue planning along the South Shore of lower Hood Canal. This area is currently in WRIA 14. This action aligns precisely with the Puget Sound Partnership's "Hood Canal Action Area" plan. The bill proposed to free-up unspent planning and implementation funds from the Kennedy-Goldsborough Planning Unit (WRIA 14) since they disbanded before adopting a plan. A split of WRIA 14 would only be for watershed planning, and isn't intended to affect the WRIA 14 boundary for other activities.

HB 1295 was fully supported by the WRIA 16 Planning Unit (including Jefferson County, Mason County, and the Skokomish Tribe). The bill passed the House unanimously, but failed to make it to the Senate floor for a vote. SB 6204 was pre-filed for the 2008 Legislature, and is identical to the first introduction of HB 1295. As of this writing, the bill has been passed out of committee.

Instream Flow Status

Instream flows were set in 1984 (WAC 173-514). Ecology does not plan to amend the existing rule.

WRIA 15 Kitsap

Watershed Planning: The Planning Process was stopped in Phase 3. The Planning Unit completed a final draft watershed plan in June 2005, but was unable to reach consensus agreement on the plan.

The Squaxin Island Tribe voted against plan approval.

Optional Elements: Water Quality, Habitat, Instream Flows

Planning and Operating Expenditures through June 2007: \$813.7 K



Ecology continues to assist Kitsap County with water resource management issues. The county received a \$50,000 integration grant from Ecology to facilitate discussions about salmon management, water quantity and water quality issues with local cities. Representatives from cities, the county and the Suquamish tribe have formed the West Sound Watersheds Council to coordinate work on natural resources issues.

Kitsap County was also awarded a capital grant for \$264,000 in 2007 for development of four storm water storage facilities. The grant will pay for the system's design, cost estimates and permitting. The facilities are being designed to improve stream flows and aquifer levels in the Barker Creek and Clear Creek watersheds. This grant came after a previous Ecology grant that helped the County identify potential sites for aquifer storage.

Instream Flow Status

Instream flows were set in 1981 (WAC 173-515). Ecology does not plan to amend the existing rule.

WRIA 16 Skokomish-Dosewallips

Watershed Planning Phase 4: Plan approved July 2006

Phase 4 grant received in July 2007

Optional Elements: Water Quality, Habitat, Instream Flows

Planning and Operating Expenditures through June 2007: \$736.2 K

Projected Grant Expenditures July 2007 through June 2009: \$383.1 K



The Watershed Plan was approved by the Planning Unit in May 2006 and approved unanimously by the Mason and Jefferson Boards of County Commissioners in July 2006. The plan included 82 recommendations including 14 for all of Hood Canal. The planning unit received a Phase 4 Implementation grant in July 2007. They are now working closely with the Puget Sound Partnership to develop the Partnership's Action Agenda for the Hood Canal Action Area.

Instream Flow Status

Instream flow recommendations were not included in the approved plan. Ecology plans to initiate rule development once agency resources become available.

WRIA 17 Quilcene-Snow

Watershed Planning Phase 4: Plan approved January 2005
Detailed Implementation Plan
finished in October 2007

Optional Elements: Water Quality, Habitat, Instream Flows

Planning and Operating Expenditures through June 2007: \$858.4 K

Projected Grant Expenditures July 2007 through June 2009: \$453.2K



Jefferson County approved the Quilcene-Snow Creek Watershed Management Plan in January 2005. The planning unit finished their Detailed Implementation Plan in October 2007. They intend to follow Ecology's water management/instream flow rule development process. In addition to supporting additional work on instream flow setting, the plan's key recommendations include: ongoing surface and ground water monitoring, and support for water acquisition and conservation programs. The planning unit will review the plan's priorities to manage any new challenges related to future adoption of the instream flow rule.

Instream Flow Status

Although instream flow recommendations were not included in the approved plan, the Planning Unit, Ecology, and Department of Fish and Wildlife did agree on flow numbers for most major creeks and streams. Ecology prepared a draft water management/instream flow rule that, in addition to establishing flow numbers, included measures to manage withdrawals of ground water. Many local streams support or have supported salmon. This area has a fairly low population, but is growing rapidly. There is concern that unregulated, permit-exempt well drilling and use could further diminish stream flows, impair existing water rights or induce seawater intrusion.

Ecology had planned to propose the rule in October 2005; however the rule adoption schedule was changed to allow enhanced outreach with local governments, Tribes and the public. Public workshops were held in May and July 2007 to explain water management issues and present information gathered about water management needs. Ecology has been meeting directly with local governments, Tribes, the Planning Unit and community groups. The current schedule calls for rule adoption in 2008.

In addition to the current effort on the WRIA 17 instream flow rule, further outreach and development of management strategies is needed for the small group of streams that are located in the Clallam County portion of WRIA 17 before a rule can be adopted for this area. The timing on this effort is not set.

Quilcene-Snow Watershed Planning Website: <http://wria17.co.jefferson.wa.us/>

WRIA 18 Elwha-Dungeness

Watershed Planning Phase 3: Plan approved June 2005

Optional Elements: Water Quality, Habitat, Instream Flows, Storage
Planning and Operating Expenditures through June 2007: \$927 K

Projected Grant Expenditures July 2007 through June 2009: \$365 K



Clallam County approved the Elwha-Dungeness Watershed Plan in June 2005. Ecology started local discussions on rule making and water supply options in the fall of 2006. Ecology proposes to adopt rules for the Elwha-Dungeness watershed in two phases. The first phase will focus on the Dungeness and the second phase in the Elwha Morse planning area. Recommendations in the Elwha-Dungeness Watershed Plan will be used as the basis for rule development and content.

Development of the Phase 4 Detailed Implementation Plan is being delayed during rule discussions. A number of projects recommended in the watershed plan are able to proceed now. Development of a Memorandum of Understanding with Clallam County is an expected outcome of the instream flow and water management rule and continued Phase 4 discussions.

Instream Flow Status

The approved watershed plan includes instream flow recommendations for the Dungeness River and lower tributaries, Elwha River lower tributaries and independent streams. In conjunction with the instream flow recommendations, the Dungeness River Management Team recommended addressing future domestic needs in the Dungeness Watershed while protecting and continuing to restore Dungeness river flows. The Elwha Morse Management Team discussions were less detailed but recognized potential problems with water availability and ground water development in the western portion of the Elwha-Dungeness WRIA. For the time being, the Elwha Morse Management Team is focusing on water conservation and prioritization of plan recommendations.

Rule development for the Dungeness planning area is underway. Ecology and stakeholders are in detailed discussions of water supply strategies and rule concepts. During the first half of 2008, Ecology will be working with governments, planning unit members, interest groups and interested public members to develop rule language and water supply options.

Clallam County's Elwha-Dungeness Watershed Planning Website:

http://www.clallam.net/environment/html/wria_18_draft_watershed_plan.htm

Ecology's Elwha-Dungeness Watershed Planning Website:

<http://www.ecy.wa.gov/apps/watersheds/planning/18.html>

WRIA 19 Lyre-Hoko

Watershed Planning Phase 3: Phase 3 plan and instream flow recommendations were due December 2005.

Optional Elements: Water Quality, Habitat, Instream Flows

Planning and Operating Expenditures through June 2007: \$748.3 K

Projected Grant Expenditures July 2007 through June 2009: \$140 K



The Lyre-Hoko Planning Unit completed a near-final draft Watershed Plan that includes instream flow recommendations in November 2005, but since that time have not been able to reach agreement on the plan. Local and state planners continued working with the planning unit in 2006 and 2007 on a revised final draft. The draft will go through a public review before the planning unit votes on their final approval and forwards it to the county commissioners for plan adoption.

A significant amount of extra work has been required to address forest issues (the current dominant land use in this watershed) and refinements to instream flow recommendations. There is interest in proceeding to Phase 4 after plan adoption.

Instream Flow Status

The Planning Group agreed to instream flow numbers, and plans to submit them to Ecology with completion of their final plan. Ecology will initiate rule development once final recommendations are received and agency resources become available.

WRIA 20 Sol Duc-Hoh

Watershed Planning Phase 3: Phase 3 plan and instream flow recommendations were due December 2005.

Optional Elements: Water Quality, Habitat, Instream Flows

Planning and Operating Expenditures through June 2007: \$578.4 K

Projected Grant Expenditures July 2007 through June 2009: \$100.1K



The planning unit spent most of 2007 reviewing late-arriving comments on its draft plan. The public review is complete and the group is working to resolve issues from the review process. Final approval by the planning unit and adoption by the Clallam and Jefferson counties' commissioners is anticipated in early 2008. There is solid interest in proceeding to Phase 4 after plan adoption.

Instream Flow Status

The planning unit addressed some policy-related instream flow recommendations but did not include any flow number recommendations in their draft plan. Some additional stream gaging and limited instream flow studies will facilitate the development of a rule with numeric instream flows in this watershed. Ecology anticipates initiating rule development in the 2007-09 biennia.

WRIA 21 Queets-Quinault

No instream flow activities/ Not working under the Watershed Planning Act.



WRIA 22/23 Upper Chehalis/Lower Chehalis

Watershed Planning Phase 4: Plan approved May 2004
Detailed Implementation Plan
finished October 2006

Optional Elements: Water Quality, Habitat, Instream Flows

Planning and Operating Expenditures through June 2007: \$1,630.2 K

Projected Grant Expenditures July 2007 through June 2009: \$250 K



The Boards of Commissioners from Grays Harbor, Lewis, Mason, and Thurston Counties approved the Chehalis Watershed Plan in May 2004. The planning unit started their Phase 4 plan implementation work in October 2005, and completed and approved their Detailed Implementation Plan in October 2006. Key recommendations in the implementation plan are: development of a water data management system; increased compliance efforts toward illegal water users; and additional incentives for water conservation and reclamation. The Chehalis Partnership started a Geographic Information System Clearinghouse through Grays Harbor College. The system integrates water quality and other natural resource data and information for the entire watershed. An expanded water quality monitoring program was launched with funds appropriated by the Legislature.

Instream Flow Status

Instream flows were set in 1976 (WAC 173-522).

The Chehalis Partnership reviewed existing instream flows. Their findings, based on technical studies and existing data, indicated that low-flow conditions may be a concern in many streams and rivers in the Chehalis Basin. Data indicate that stream flows are not met many days from July through October. The Partnership recommended that current instream flows should be retained and regularly monitored. At this time, Ecology does not intend to propose amendments to the existing flow rule.

Chehalis Watershed Planning Website: http://www.co.grays-harbor.wa.us/info/pub_svcs/ChehalisBasin/Index.html

WRIA 24 Willapa

No instream flow activities/ Not working under the Watershed Planning Act.



WRIA 25/26 Grays-Elochoman/Cowlitz

Watershed Planning Phase 4: Plan approved July 2006

Phase 4 work began in October 2007

Optional Elements: Water Quality, Habitat, Instream Flows

Planning and Operating Expenditures through June 2007: \$1,164.8 K

Projected Grant Expenditures July 2007 through June 2009: \$398.1 K



Wahkiakum, Lewis, Cowlitz, and Skamania counties unanimously approved the Watershed Plan in July 2006. Plan adoption came after a county remand process and changes to the plan by the planning unit. A Phase 4 implementation grant was awarded in October 2007 and the planning unit is working on their Detailed Implementation Plan. Lewis County was awarded an operational grant for a feasibility study on a potential regional water supply from the lower main stem Cowlitz River, which may serve the Vader-Toledo-Winlock area. This planning unit was also awarded a \$50K grant for further development of an innovative mitigation strategy for new water rights, which they are undertaking in conjunction with the Lewis/Salmon-Washougal planning unit.



Instream Flow Status

The watershed plan contains recommendations for numeric flows, open and closed areas, water reservations for future use, and offset requirements to access water from reservations. Ecology anticipates proposing a rule in late 2008 or early 2009, once rulemaking is well under way in the Lewis/Salmon-Washougal watersheds.

Grays-Elochoman/Cowlitz Watershed Planning Website:

<http://www.lcfrb.gen.wa.us/Watershed%20planning%20general/Watershed.htm>

WRIA 27/28 Lewis/Salmon-Washougal

Watershed Planning Phase 4: Plan approved by county July 2006

Phase 4 work began in March 2007

Optional Elements: Water Quality, Habitat, Instream Flows

Planning and Operating Expenditures through June 2007: \$1,201.7 K

Projected Grant Expenditures July 2007 through June 2009: \$265 K



Cowlitz, Clark, and Skamania unanimously approved the watershed plan in July 2006 after a county remand process and changes to the plan by the planning unit. Members of the planning unit, primarily the PUDs and counties, are already implementing some of the early action plan recommendations. This includes development of an important major new water supply near the confluence of the North Fork Lewis River and the Columbia River. This new supply will provide water to meet growth needs and improve instream flows in the East Fork Lewis River sub-basin. A grant application for a watershed implementation capital fund grant is pending in support of this major new water project in Clark County. There is also a capital grant application for a new water supply source in the Camas area, which will provide water for future growth as well as improve instream flows in the Washougal River sub-basin.



Instream Flow Status

The watershed plan contains recommendations for numeric flows, open and closed areas, water reservations for future use, and offset requirements to accessing water from reservations. A draft rule is expected to be proposed for public comment in 2008.

Lewis/Salmon-Washougal Watershed Planning Website:

<http://www.lcfrb.gen.wa.us/default1.htm>

WRIA 29a Wind

Watershed Planning Phase 3: Plan approved November 2006

Optional Elements: Water Quality, Habitat

Planning and Operating Expenditures through June 2007: \$530 K

Projected Grant Expenditures July 2007 through June 2009: \$160 K



The plan for the western half of the Wind-White Salmon watershed (WRIA 29) was approved by the Planning Unit in December 2005, and approved by Skamania and Klickitat Counties in November 2006. Phase 4 implementation actions and grant requests are not expected until FY09. The 2007 Legislature split the Wind-White Salmon watershed into two sub-basins for continued planning and implementation purposes. The Wind sub-basin in the western part of the basin became WRIA 29a and the White Salmon sub-basin in the east became WRIA 29b.

Instream Flow Status

The Planning Unit, in consultation with Ecology, is working on instream flow recommendations. Instream flow work began in the summer of 2006 and will continue through the biennium to June 2009. This planning unit is using a combination of operational funds and capital grant funds to have new gages installed in the watershed to support instream flow recommendations.

WRIA 29b White Salmon

Watershed Planning Phase 1: Phase 1 (Formation/Organization)
completion expected early 2008

Optional Elements: Water Quality, Habitat

Planning and Operating Expenditures through June 2007: N/A

Projected Grant Expenditures July 2007 through June 2009: \$225 K



The 2007 Legislature split the Wind-White Salmon watershed into two sub-basins for continued planning and implementation purposes. The White Salmon sub-basin planning group started organizing in late 2007. A completed watershed plan is expected between July 2009 and June 2011.

WRIA 30 Klickitat

Watershed Planning Phase 4: Plan approved August 2006
Phase 4 started December 2006

Optional Elements: Water Quality, Habitat

Planning and Operating Expenditures through June 2007: \$819.7 K

Projected Grant Expenditures July 2007 through June 2009: \$218.8 K



Klickitat County approved their watershed plan in August 2006 and received a Phase 4 funding grant in December 2006. The unit is now working on the Detailed Implementation Plan and expects to finish by March 2008.

Instream Flow Status

No instream flows are set in this watershed. The Planning Group elected not to undertake instream flows. However, the plan contains strategies for improving stream flows. Ecology does not anticipate adopting instream flows at this time.

WRIA 31 Rock-Glade

Watershed Planning Phase 3: Plan approved November 2007
Plan adoption by counties expected early 2008

Optional Elements: Water Quality, Habitat, Storage

Planning and Operating Expenditures through June 2007: \$658.4 K

Projected Grant Expenditures July 2007 through June 2009: \$290.4 K



The Rock-Glade Watershed Management Plan was approved by the planning unit on November 20, 2007. The plan was forwarded to Klickitat, Benton and Yakima County commissioners for their review and to provide public notice and conduct public hearings. The watershed plan is multifaceted, with actions and strategies ranging from area-wide issues (such as Columbia River water supply) to water quality protection and restoration within the basin tributaries. The plan also calls for storage options, assessments and monitoring of water quality and habitat, safe and reliable water supplies for small communities and projects to protect and improve habitat for listed fish species. The counties' boards are expected to consider final watershed plan adoption at a joint meeting in early 2008.

Instream Flow Status

No instream flows are set in this watershed. The planning unit elected not to undertake instream flows. However, the plan is expected to contain strategies for improving stream flows. Ecology does not anticipate conducting any instream flow activities at this time.

WRIA 32 Walla Walla

Watershed Planning Phase 4: Plan approved June 2005
Detailed Implementation Plan
finished June 2006



Optional Elements: Water Quality, Habitat, Instream Flows, Storage
Planning and Operating Expenditures through June 2007: \$1,095.9 K
Projected Grant Expenditures July 2007 through June 2009: \$397.7 K

The Walla Walla Watershed Detailed Implementation Plan was finished in June 2006. Three on-the-ground projects were funded during the first year of Phase 4 implementation. Scoping for the second year of funding will include refining project selection and coordination with Salmon Recovery efforts, BPA Sub-basin Planning and the “Walla Walla Water Management Initiative” (see below).

Instream Flow Status

In August 2007, Ecology adopted amendments to Water Resources Program WAC 173-532. The adoption was a result of negotiations between Ecology, the Planning Unit and local stakeholders during much of 2006 and 2007. Rule making also involved extensive public participation during pre-proposal workshops, formal hearings and rule implementation workshops.

The key amendments include:

- Instream flows on the Walla Walla River, Mill Creek, North Fork Touchet River and Touchet River.
- Closures for surface waters and the shallow gravel aquifer.
- Limits of use and mitigation requirements for future permit-exempt ground water withdrawals.
- Procedures for approving use of high flows for storage projects that benefit fish.

Interest groups are also implementing several projects that were identified and prioritized by the Planning Unit. Projects include: a smolt adult ratio study that will help identify the adequacy of stream flows needed for migrating salmonids; a shallow aquifer recharge pilot project; and a study of surface and ground water that will include monitoring of shallow aquifer recharge sites to measure their effectiveness. These projects are not only essential to the progress of the Water Management Initiative (below) but also to the effective implementation and management of the newly amended water management/instream flow rule.

Walla Walla Water Management Initiative

To address the unique water challenges found in the Walla Walla Basin, local interests worked with Ecology to jointly develop the concept of the Walla Walla Water Management Initiative. The Initiative offers local entities the opportunity to pilot a local approach to water management. Basin entities have begun exploring options for an appropriate leadership and governance structure with legal status, responsibility and authority.

Two reports were prepared by the Ruckelshaus Center in 2007 relating to the Water Management Initiative. The first report, prepared in January 2007, focused on the design and implementation of innovative water management efforts. The second report, completed in July 2007, provided an assessment of the Basin's capacities for implementing water and fish improvements. Both documents are being used to design a proposal for a local leadership and governance structure. We anticipate providing the Legislature, in 2008, with a report (possible legislative proposal) outlining the local organizational structure, its function and authority and proposed mechanisms to address the bi-state flow protection issues.

WRIA 33 Lower Snake

No instream flow activities/ Not working under the Watershed Planning Act.



WRIA 34 Palouse

Watershed Planning Phase 3: Plan approved November 2007

Optional Elements: Water Quality, Instream Flows

Planning and Operating Expenditures through June 2007: \$789.7 K

Projected Grant Expenditures July 2007 through June 2009: \$169.3 K



The Palouse Watershed Planning Unit approved their plan in October 2007. Commissioners from Adams, Lincoln, Spokane and Whitman counties approved the Palouse Watershed Plan during a four-county meeting in November 2007. The plan focuses on providing the community with clean, reliable water. The Palouse Plan reflects the bi-state nature of the watershed, given strong participation from the planning unit's Idaho voting members. Phase 4 will begin in January 2008 and completing the Detailed Implementation Plan is the unit's top priority. Also in 2008, discussions will resume about an instream flow management recommendation for the North Fork Palouse River.

The planning unit is researching ways to improve water supplies in two areas. They are assessing potential aquifer storage and recovery (ASR) with the "*Palouse Aquifer Enhanced Recharge Feasibility Project*" on a Kamiak Butte site. This assessment is scheduled for completion by fall 2008. They are also assessing feasibility of an ASR project in Pullman.

The Palouse Watershed Planning Unit coordinated with the Washington State University, University of Idaho, Palouse Basin Aquifer Committee, private businesses, Whitman and Latah Counties and state agencies to successfully host the 2nd Palouse Water Summit.

The Palouse basin has significant ground water challenges. Basin aquifer levels have been declining over a foot a year for many years. The planning unit joined with the Palouse Basin Aquifer Committee to seek funding to improve the ground water monitoring network and identify options for sustainable regional water supplies, especially for the growing university communities of Pullman and Moscow.

Instream Flow Status

Instream flow assessments were completed for the main stem Palouse, North Fork Palouse and Cow Creek. Although surface and ground water management strategies are discussed in the Watershed Plan, the recently approved plan does not include formal recommendations. The Planning Unit will be working with Ecology and the Department of Fish & Wildlife in Phase 4 on refining their analysis of surface and ground water supply, community growth and ecological water needs in the basin. The group will also be seeking funds for the potential instream habitat assessment of additional streams.

WRIA 35 Middle Snake

Watershed Planning Phase 4: Plan approved August 2007
Phase 4 implementation grant
awarded October 2007

Optional Elements: Water Quality, Habitat, Instream Flows
Planning and Operating Expenditures through June 2007: \$784.7 K
Projected Grant Expenditures July 2007 through June 2009: \$498.6 K



County commissioners from Whitman, Columbia, Garfield and Asotin counties approved the Middle Snake Watershed Plan in a joint meeting June 18, 2007. Watershed plan highlights include: a recommendation for instream flows for the Tucannon River and Asotin Creek; water allocations for out-of-stream uses; and coordinating with the Snake River Salmon Recovery Plan on fish habitat strategies. The planning unit is committed to work with Ecology and the Dept. of Fish & Wildlife during Phase 4 implementation to complete surface and ground water management recommendations for future rule making. The unit also plans to assess surface and ground water connectivity in targeted basin areas and complete the Detailed Implementation Plan.

Instream Flow Status

Ecology will consider rule making when recommendations are received from the Planning Unit.

Middle Snake Watershed Planning Website: <http://www.asotinpod.org/msww/>

WRIA 36 Esquatzel Coulee

No instream flow activities/ Not working under the Watershed Planning Act.



WRIA 37/38/39 Lower Yakima/Naches/Upper Yakima

Watershed Planning Phase 4: Plan approved November 2005
(WRIA 37 & 38 only)
Detailed Implementation Plan
finished in July 2007

Optional Elements: Water Quality, Habitat

Planning and Operating Expenditures through June 2007: \$1,865.1 K

Projected Grant Expenditures

July 2007 through June 2009: \$283.9 K (WRIAs 37 and 38 only)

Three years after planning unit approval, the Yakima, Benton, and Klickitat Boards of Commissioners approved the Yakima Basin Watershed Management Plan for the Lower Yakima and Naches watersheds. Kittitas County opted out of final plan adoption for the Upper Yakima basin; they are not eligible for implementation grants.

The lead agency for the Lower Yakima and Naches basins is the Yakima Water Resources Agency. They received Phase 4 funding in September 2006 and the planning unit completed the Detailed Implementation Plan in July 2007.

The watershed plan contains no obligations for county or state agencies.

Instream Flow Status

No instream flows are set in rule; however, target flows (enacted by Congress) and instream flow tribal treaty rights (affirmed by the Yakima Superior Court) are in place in the Yakima Basin. Both are managed by the U.S. Bureau of Reclamation. Ecology anticipates no additional instream flow activities at this time.

Lower Yakima/Naches/Upper Yakima Watershed Planning Website:

<http://www.co.yakima.wa.us/YBWRA/Default.htm> - Yakima Basin Water Resource Agency

WRIA 40a Stemilt-Squilchuck

Watershed Planning Phase 4: Plan approved June 2007
Phase 4 started November 2007

Optional Elements: Storage

Planning and Operating Expenditures through November 2008: \$148.8 K

Projected Grant Expenditures July 2007 through June 2008: \$50 K

The plan was approved in by the Chelan County commissioners in June 2007. The plan's focus is on water quantity and an evaluation of water storage opportunities. Specific new work on these topics will be addressed in the Detailed Implementation Plan. The planning unit expects to complete the Detailed Implementation Plan by March 2008. Early action opportunities for storage have been identified and funding for implementation is currently being requested. The planning unit has decided not to address instream flows.



WRIA 40b Alkali-Squilchuck

No instream flow activities/Not working under the Watershed Planning Act.



WRIA 41 Lower Crab

No instream flow activities/Not working under the Watershed Planning Act.



WRIA 42 Grand Coulee

No instream flow activities/Not working under the Watershed Planning Act.



WRIA 43 Upper Crab-Wilson

Watershed Planning Phase 3: Plan approved March 2007

Optional Elements: Water Quality, Habitat, Instream Flows, Storage

Planning and Operating Expenditures through June 2007: \$723.3 K

Projected Grant Expenditures July 2007 through June 2009: \$225.9 K



The WRIA 43 plan was approved by the planning unit in December 2006 and approved by Lincoln, Grant and Adams County Commissioners at a joint session held March 5, 2007. The planning unit spent the rest of the year working on early implementation projects, including a small water storage assessment, and preparing to enter Phase 4 of watershed planning. The unit is expected to request Phase 4 Implementation funding in early 2008 and will work on their Detailed Implementation Plan, expecting to finish before December 2008.

Instream Flow Status

An instream flow study has been completed. However, the Watershed Plan did not include recommendations for numerical instream flows, because of disagreements about the proposed flow numbers.

WRIA 44/50 Moses Coulee/Foster Creek

Watershed Planning Phase 4: Plan approved November 2004

Detailed Implementation Plan

finished February 2006

Optional Elements: Water Quality, Habitat, Instream Flows

Planning and Operating Expenditures through June 2007: \$1,856.3 K

Projected Grant Expenditures July 2007 through June 2009: \$377 K



The Moses Coulee/Foster Creek Watershed Management Plan was approved by

Boards of Commissioners from Douglas and Grant Counties in November 2004. The planning unit began Phase 4 in February 2005 and completed their Detailed Implementation Plan in February 2006. The unit reached agreement on instream flow recommendations.

The implementation plan has 63 specific recommendations. Key recommendations include: support for a Trust Water Rights Program; more study on potential water storage projects; and continued monitoring of surface and ground water quality. The planning unit has successfully completed six implementation projects and continues to work on other recommendations and projects.

Instream Flow Status

Flow recommendations from the WRIA 44/50 Planning Unit were received with the final Watershed Plan in November 2004. The Planning Unit will also be considering three additional instream flows recommendations during 2008.

Moses Coulee/Foster Creek Watershed Planning Website:
http://www.fostercreek.net/WRIA44-50_Final_Watershed_Plan.pdf

WRIA 45 Wenatchee

Watershed Planning Phase 4: Plan approved June 2006

Phase 4 started March 2007

Optional Elements: Water Quality, Habitat, Instream Flows

Planning and Operating Expenditures through June 2007: \$1,092.3 K

Projected Grant Expenditures July 2007 through June 2009: \$555 K



The Watershed Plan, which includes instream flow recommendations, was approved and approved by the Chelan County Board of Commissioners in June 2006. The Planning Unit began Phase 4 in March 2007 and expects to complete their Detailed Implementation Plan by April 2008.

Instream Flow Status

Instream flows were set in 1983 (WAC 173-545). The Planning Unit developed and approved a new water resource management strategy for WRIA 45 that includes management flows (revised instream flows) at specified control points, a water reserve, and maximum allocations. In December 2007, Ecology the new recommended instream flows and other rule recommendations through an amendment of the original rule (*see* “Instream Flow Progress” in Section 2 for more detail of rule amendments).

Wenatchee Watershed Planning Website:
<http://www.ecy.wa.gov/apps/watersheds/planning/45.html>

WRIA 46 Entiat

Watershed Planning Phase 4: Plan approved September 2004
Detailed Implementation Plan
finished February 2006

Optional Elements: Water Quality, Habitat, Instream Flows

Planning and Operating Expenditures through June 2007: \$843.6K

Projected Grant Expenditures July 2007 through June 2009: \$115.4K



The Entiat Watershed Management Plan was the first watershed plan in the state to include instream flow recommendations when it was approved by the Chelan County Board of Commissioners in September 2004. Other recommendations in the Plan include development of programs for water conservation, water acquisition, and trust water rights, and ongoing and increased water quality monitoring. The Phase 4 Detailed Implementation Plan was completed in February 2006, and work continues to carry out the plan.

Instream Flow Status

Ecology adopted WAC 173-546, “Water Resources Management Program -- Entiat River Basin Water Resource Inventory Area (WRIA) 46” in August 2005.

Entiat Watershed Planning Website: http://www.cascadiacd.org/index.php?page_id=233

WRIA 47 Chelan

Watershed Planning Phase 1: Organization and formation
started February 2007

Optional Elements: Water Quality and Storage

Planning and Operating Expenditures through June 2007: \$2.7 K

Projected Grant Expenditures July 2007 through June 2009: \$397.3 K



The Chelan Watershed Planning Unit was awarded a \$50K planning grant in February 2007 to work on formation and organization tasks. They expect to complete Phase 1 by March 2008. We expect the planning unit to request additional funding to begin Phase 2 work in 2008. Their plan is due in 2012.

WRIA 48 Methow

Watershed Planning Phase 3: Plan approved June 2005

Optional Elements: Water Quality, Habitat

Planning and Operating Expenditures through June 2007: \$1,073.8 K

Projected Grant Expenditures July 2007 through June 2009: \$200 K



The Okanogan County Commissioners approved the Methow Watershed Plan in June 2005. Plan recommendations included: review and work to justify an amendment to the existing instream flow rule; protection for ground water recharge from unlined irrigation ditches; and relaxation of the water relinquishment statute.

Phase 4 work was expected to start in 2007 but the planning unit has not applied for funding.

Instream Flow Status

Instream flows were set in 1976 (WAC 173-548). The Planning Group and Ecology have agreed that the rule will be revisited after the submittal of new, adequate data.

Methow Watershed Planning Website:

<http://okanogancounty.org/water/watershed%20planning;%20methow.htm>

WRIA 49 Okanogan

Watershed Planning Phases 2 and 3: Plan due 2009

Optional Elements: Water Quality, Habitat, Instream Flows

Planning and Operating Expenditures through June 2007: \$252 K

Projected Grant Expenditures July 2007 through June 2009: \$548 K



The planning unit is working on Phase 2 Watershed Assessment and Phase 3 Plan Development at the same time. Their final watershed plan is due in 18 months. An instream flow study focusing on four primary tributaries to the Okanogan River will be conducted in 2008.

Instream Flow Status

Instream flows were set in 1976 (WAC 173-549).

WRIA 51 Nespalem

No instream flow activities/ Not working under the Watershed Planning Act.



WRIA 52 Sanpoil

No instream flow activities/Not working under the Watershed Planning Act.



WRIA 53 Lower Lake Roosevelt

Watershed Planning Phase 1: \$50 K planning grant awarded December 2007

Projected Grant Expenditures July 2007 through June 2009: \$150 K



Ecology awarded a Phase 1 Watershed Planning Grant to Lincoln County in December 2007. The county is the Lead Agency to form the Lower Lake Roosevelt Watershed Planning Unit. Organizational planning activities are scheduled to begin in January 2008. The final plan is due in 2009-2011.

WRIA 54 Lower Spokane

Watershed Planning Phase 3: Plan due September 2009

Optional Elements: Water Quality, Instream Flows, Storage

Planning and Operating Expenditures through June 2007: \$438.9 K

Projected Grant Expenditures July 2007 through June 2009: \$410.5 K



The Planning Unit completed the Phase II technical report in February 2007 and a multi-purpose water storage assessment in October 2007. Following initial screening and a review of future water needs, the multi-purpose water storage work group directed the study to focus on the West Plains Study Area because of the declining ground water level and critical water needs.

The Planning Unit initiated Phase 3 in July 2007, and has formed six work groups to focus on selected issues and develop white papers that will include issues, goals, objectives, and recommended actions for the planning unit's consideration. The planning unit is also working on: pre-adjudication work; the Dissolved Oxygen water quality clean-up plan and the Avista hydroelectric power FERC re-license; and the Section 401 water quality certification. A draft plan is anticipated to be available for public review in September 2008.

Instream Flow Status

The Planning Unit has completed an instream flow study of selected reaches of the Spokane River and toe-width measurements on Deep, Coulee, Spring and Little Chamokane Creeks. A stakeholder work group was formed in collaboration with WRIA 55/57 to develop integrated instream flow recommendations for the main stem of the Spokane River. Ecology will consider rule making when recommendations are received from the Planning Unit, currently expected in the summer of 2008.

WRIA 55/57 Little Spokane/Middle Spokane

Watershed Planning Phase 4: Plan approved January 2006

Optional Elements: Instream Flows, Storage

Planning and Operating Expenditures through June 2007: \$1,924 K

Projected Grant Expenditures July 2007 through June 2009: \$335 K



The Boards of Commissioners from Spokane, Stevens, and Pend Oreille counties approved their final watershed plan in joint session in January 2006. The Planning Unit anticipates approving the Phase 4 detailed implementation plan in early 2008. Since plan adoption, additional work has continued on instream flow assessment, a feasibility study on reusing wastewater, and developing education and outreach materials about water conservation and irrigation efficiencies.

The planning unit is also engaged in pre-adjudication work, the Dissolved Oxygen water quality clean-up plan, the Avista hydroelectric power FERC re-license and Section 401 water quality certification. The planning unit is actively engaged in reviewing and commenting on water supply plans and local land use actions that affect water resources. All of the Spokane

River watersheds are participating in a Regional Water Conservation Collaboration to develop priorities and strategies for engaging stakeholders and the public in effective water conservation actions.

Instream Flow Status

Instream flows were set in 1976 for the Little Spokane River (WAC 173-555). Additional instream flow data collection was completed for the Middle and Lower Spokane River in May 2007. The planning unit approved instream flow recommendations for the river at Barker Road and for aesthetic and recreational flows in the 2006 approved watershed plan. The joint WRIA 54 and 55/57 instream flow work group is now collaborating on instream flow recommendations for the entire Spokane River, integrating the research from the recent studies with those completed in 2004 and during the Avista FERC re-licensing process.

Little and Middle Spokane Watershed Planning Website:

<http://www.spokanecounty.org/wqmp/projects/ASP/Home.asp>

WRIA 56 Hangman (Latah) Creek

Watershed Planning Phase 4: Plan approved September 2005

Phase 4 started October 2006

Optional Elements: Water Quality, Habitat, Instream Flows, Storage

Planning and Operating Expenditures through June 2007: \$811.4 K

Projected Grant Expenditures July 2007 through June 2009: \$351.8 K



Spokane and Whitman Counties approved the final Hangman (Latah) Creek Watershed Management Plan in September 2005. Phase 4 implementation started in October 2006 and should be completed in early 2008. Some of the plan recommendations include:

- Strategies to address compliance and enforcement of water rights and claims;
- Developing a drought management plan;
- Investigating water rights trust and banking;
- Evaluating policies to limit the maximum daily withdrawal of domestic exempt wells to less than 5000 gallons per day;
- Additional gaging and monitoring of both surface and ground water;
- Changing a water right source from surface to ground water where feasible;
- Restoration of riparian habitat;
- Collaborating with Ecology and others on the TMDL development and implementation; and
- Strategies to bolster water conservation.

The planning unit has partnered with WRIs 34 and 54 to conduct a geophysical orientation survey on the West Plains, where the water table is declining.

Instream Flow Status

The Planning Unit completed a hydrological investigation to evaluate stream flow conditions primarily for fisheries. Flow recommendations were developed for three levels of habitat protection, however, the Planning Unit has not yet reached consensus on all elements of a recommendation for instream flows.

Hangman (Latah) Creek Watershed Planning Website: <http://www.sccd.org/water/hangman/>

WRIA 58 Middle Lake Roosevelt

No instream flow activities Not working under the Watershed Planning Act.



WRIA 59 Colville

Watershed Planning Phase 4: Plan approved November 2004
Detailed Implementation Plan
finished in March 2006

Optional Elements: Water Quality, Storage

Planning and Operating Expenditures through June 2007: \$1,001.9 K

Projected Grant Expenditures July 2007 through June 2009: \$159.3 K



Stevens County approved the Colville Watershed Management Plan in November 2004 and began Phase 4 implementation within four months. The planning unit completed their Detailed Implementation Plan in March 2006. An important implementation activity is to conduct additional stream flow studies to support modifying the existing stream closures in the basin. The plan also recommended hiring Watermaster, and the planning unit recently submitted a formal request for stream adjudication to Ecology.

Instream Flow Status

Instream flows and stream closures were set in 1977 (WAC 173-559). The Detailed Implementation Plan calls for additional flow studies to support possible opening of some of the closures. Ecology, along with the state Department of Fish & Wildlife, the Spokane Tribe of Indians, and the Planning Unit gathered flow and habitat data throughout the basin in 2006. Instream flow negotiations began in the fall of 2007.

Colville Watershed Planning Website:

<http://www.ecy.wa.gov/apps/watersheds/planning/59.html>

WRIA 60 Kettle

Watershed Planning: Stopped at end of Phase 2

Optional Elements: Instream Flows

Planning and Operating Expenditures through June 2007: \$223.5 K



In 2004, the Kettle Watershed Planning Unit voted to discontinue their planning work at the end of Phase 2, and not move forward into Phase 3 plan development. Ecology doesn't plan to conduct additional studies or propose instream flow rules in the current biennium.

WRIA 61 Upper Lake Roosevelt

No instream flow activities/ Not working under the Watershed Planning Act.



WRIA 62 Pend Oreille

Watershed Planning Phase 4: Plan approved June 2005

Phase 4 started September 2005

Optional Elements: Water Quality, Habitat

Planning and Operating Expenditures through June 2007: \$633.3 K

Projected Grant Expenditures July 2007 through June 2009: \$\$289.7 K



Pend Oreille County Board of Commissioners approved the Pend Oreille Watershed Management Plan in June 2005 and began their first year of Phase 4 Implementation in September 2005. The planning unit completed their Detailed Implementation Plan in October 2006. They are developing education and outreach projects to engage the public in restoration and instream flow activities.

Instream Flow Status

No instream flows are set in WRIA 62. Instream flow field work is expected to begin in spring 2008. Ecology is providing technical and grant assistance but does not currently have rule making scheduled in this basin.

Pend Oreille Watershed Planning Website: <http://www.pocd.org/wria.html>

Appendices

Appendix A: Watershed Planning Units and Watershed Planning Act Progress

Appendix B: Alphabetical List of WRIA Names and Numbers

Appendix C: 2007-09 Operating Budget Projected Spending Detail

Appendix D: 2007-09 Capital Budget Projected Spending Detail

Appendix E: Map of Instream Flow Rule-Making Activities

Appendix A: Water Resource Inventory Areas & Watershed Planning Progress

WRIA Name	WRIA Number	Phase 1: Organization and Formation	Phase 2: Watershed Assessment	Phase 3: Plan Approved by Planning Unit	Phase 3: Plan Adopted by County Board(s)	Phase 4: Plan Implementation
Nooksack	1	✓	✓	✓	✓	✓
San Juan	2	✓	✓	✓	✓	✓
Lower Skagit-Samish/ Upper Skagit	3, 4	✓	✓	Planning stopped in Phase 3		
Island	6	✓	✓	✓	✓	✓
Nisqually	11	✓	✓	✓	✓	✓
Chambers-Clover	12	✓	✓	Planning stopped in Phase 3		
Deschutes	13	✓	✓	Planning stopped in Phase 3		
Kennedy-Goldsborough	14	✓	✓	Planning stopped in Phase 3		
Kitsap	15	✓	✓	Planning stopped in Phase 3		
Skokomish-Dosewallips	16	✓	✓	✓	✓	✓
Quilcene-Snow	17	✓	✓	✓	✓	✓
Elwha-Dungeness	18	✓	✓	✓	✓	
Lyre-Hoko	19	✓	✓			
Sol Duc-Hoh	20	✓	✓	✓		
Lower/Upper Chehalis	22/23	✓	✓	✓	✓	✓
Grays-Elochoman/Cowlitz	25/26	✓	✓	✓	✓	✓
Lewis/Salmon-Washougal	27/28	✓	✓	✓	✓	✓
Wind	29a	✓	✓	✓	✓	
White Salmon	29b	✓ (Phase 1 Grant Application expected early 2008)				
Klickitat	30	✓	✓	✓	✓	✓

WRIA Name	WRIA Number	Phase 1: Organization and Formation	Phase 2: Watershed Assessment	Phase 3: Plan Approved by Planning Unit	Phase 3: Plan Adopted by County Board(s)	Phase 4: Plan Implementation
Rock-Glade	31	✓	✓	✓		
Walla Walla	32	✓	✓	✓	✓	✓
Palouse	34	✓	✓	✓	✓	
Middle Snake	35	✓	✓	✓	✓	✓
Lower Yakima/Naches/Upper Yakima ⁸	37/38/39	✓	✓	✓	✓	✓
Stemilt-Squilchuck	40a	✓	✓	✓	✓	✓
Upper Crab- Wilson	43	✓	✓	✓	✓	
Moses Coulee/Foster Ck	44/50	✓	✓	✓	✓	✓
Wenatchee	45	✓	✓	✓	✓	✓
Entiat	46	✓	✓	✓	✓	✓
Chelan	47	✓				
Methow	48	✓	✓	✓	✓	
Okanogan	49	✓	✓			
Lower Lake Roosevelt	53	✓				
Lower Spokane	54	✓	✓			
Little Spokane/Middle Spokane	55/57	✓	✓	✓	✓	✓
Hangman	56	✓	✓	✓	✓	✓
Colville	59	✓	✓	✓	✓	✓
Kettle	60	✓	Planning stopped at end of Phase 2			
Pend Oreille	62	✓	✓	✓	✓	✓
	Totals	38	37	28	26	21

⁸ One lead agency facilitated watershed planning for WRIsAs 37, 38 and 39. The planning unit approved the plan that included the Upper Yakima (WRIA 39). Kittitas County decided to opt out of the process and did not adopt the WRIA 39 portion of the plan.

Appendix B: Cross Reference List of WRIA Names and Numbers
(Only for WRIsAs now or formerly involved in the Watershed Planning Act)

Water Resource Inventory Area Name (listed alphabetically)	Water Resource Inventory Area Number
Chambers-Clover	WRIA 12
Colville	WRIA 59
Deschutes	WRIA 13
Elwha-Dungeness	WRIA 18
Entiat	WRIA 46
Grays-Elochoman/Cowlitz	WRIA 25/26
Hangman	WRIA 56
Island	WRIA 6
Kennedy-Goldsborough	WRIA 14
Kettle	WRIA 60
Kitsap	WRIA 15
Klickitat	WRIA 30
Lewis/Salmon-Washougal	WRIA 27/28
Little Spokane/Middle Spokane	WRIA 55/57
Lower Chehalis/Upper Chehalis	WRIA 22/23
Lower Skagit-Samish/Upper Skagit	WRIA 3/4
Lower Spokane	WRIA 54
Lower Yakima/Naches	WRIA 37/38
Lyre-Hoko	WRIA 19
Nooksack	WRIA 1
Methow	WRIA 48
Middle Snake	WRIA 35
Moses Coulee/Foster Creek	WRIA 44/50
Nisqually WRIA	WRIA 11
Okanogan	WRIA 49
Palouse	WRIA 34
Pend Oreille	WRIA 62
Quilcene-Snow	WRIA 16
Rock-Glade	WRIA 31

(continued on next page)

Water Resource Inventory Area Name	Water Resource Inventory Area Number
San Juan	WRIA 2
Skokomish-Dosewallips	WRIA 16
Sol Duc-Hoh	WRIA 20
Stemilt-Squilchuck	WRIA 40a
Upper Crab-Wilson	WRIA 43
Upper Yakima	WRIA 39
Walla Walla	WRIA 32
Wenatchee	WRIA 45
White Salmon	WRIA 29b
Wind	WRIA 29a

Appendix C: 2007-09 Operating Budget Projected Spending Detail

(This spending detail excludes the \$960,000 proviso for the Bertrand and Fishtrap Projects in Section 1, Table 2.)

WRIA and Project Detail	FY 08	FY 09	Total
WRIA 1 Watermaster for Lummi Tribe	\$6,500	\$12,500	\$19,000
WRIA 1 WR Claims Analyst	\$50,000	\$50,000	\$100,000
WRIA 11 Nisqually Ops/Maintenance	\$10,000	\$10,000	\$20,000
WRIA 16 Webb Hill	\$128,500		\$128,500
WRIA 17 Chimacum Ground water Study	\$52,000	\$101,235	\$153,235
WRIA 17 Quilcene Facilitator	\$100,000		\$100,000
WRIA 18 Dungeness Facilitator	\$90,000	\$10,000	\$100,000
WRIA 18 Water Conservation	\$65,495	\$99,505	\$165,000
WRIA 19 Turbidity Monitoring	\$20,000	\$20,000	\$40,000
WRIA 25/26 Mitigation	\$29,170	\$20,830	\$50,000
WRIA 26 S. Lewis Utility Feasibility	\$46,219		\$46,219
WRIA 29a Surface Water Monitoring	\$20,000	\$108,000	\$128,000
WRIA 3 Skagit Rule Implementation	\$69,779	\$30,221	\$100,000
WRIA 3 Skagit USGS Support	\$74,175	\$62,325	\$136,500
WRIA 31 Rock Creek Assessment	\$83,000	\$42,000	\$125,000
WRIA 32 Coordination and Integration	\$9,000	\$56,000	\$65,000
WRIA 32 Smolt Production Measurement	\$17,100	\$120,900	\$138,000
WRIA 35 Hydrogeological Study	\$97,000	\$203,000	\$300,000
WRIA 44/50 Monitoring	\$91,000	\$107,000	\$198,000
WRIA 45 Cumulative Impact Analysis	\$132,000		\$132,000
WRIA 45 Hydrogeological Monitoring	\$25,000	\$105,000	\$130,000
WRIA 45 Water Reservation Accounting and Metering	\$40,000	\$35,000	\$75,000
WRIA 48 ISF Rule Revision	\$25,000		\$25,000
WRIA 54/56/34 Geophysical Study	\$32,500	\$92,500	\$125,000
WRIA 55 Little Spokane Gauge Operation & Maintenance	\$54,000	\$54,000	\$108,000
Ecology Environmental Assessment Program: Stream Gaging	\$420,000	\$420,000	\$840,000
Ecology Water Resources Program: Colville/Entiat Pre-Adjudication Project	\$187,989	\$217,500	\$405,489
State Dept. of Fish & Wildlife: Instream Flow Support	\$100,000		\$100,000
Operating Budget Projected Spending Totals as of December 2007	\$2,075,427	\$1,977,516	\$4,052,943
Total Available for Biennium			\$4,094,089
Balance for additional planning unit support or small implementation projects			\$41,146

Appendix D: 2007-09 Capital Budget Projected Spending Detail

(Only the Project Types from the Capital Budget allocations on Table 6, page 14 that are currently funded are shown here)

Ecology Region and Project Name	Project Type	Sponsor/ Lead Agency	WRIA	County	Projected 07-09 Cost
Northwest Regional Office (NWRO)					
Kitsap Storm water Storage: Engineering	Storage	Kitsap County	15	Kitsap	\$264,300
NWRO Water Storage sub-total					\$264,300
Stillaguamish Stream Gage Enhancement	Gaging	Stillaguamish Tribe	5	Snohomish	\$15,500
Nooksack River Stream Gaging Program	Gaging	Lummi Natural Resources	1	Whatcom	\$38,400
NWRO Stream Gaging sub-total					\$53,900
Total NWRO					\$318,200
Southwest Regional Office (SWRO)					
Aquifer Recharge Feasibility Study Expansion	Storage	Clallam County Environ., Health	18	Clallam	\$100,000
Town of Eatonville Shallow Aquifer Recharge and Storage	Storage	Town of Eatonville	11	Pierce	\$270,000
Chehalis Basin Multi-purpose Storage assessment - Phase 2	Storage	Grays Harbor County	22/23	Grays Harbor	250,000
Water Storage Feasibility Study for Skokomish Watershed	Storage	Mason County DCD-Planning	16	Mason	163,400
SWRO Water Storage sub-total					\$783,400
Camas Surface Water to Ground water Source Substitution	Infra	City of Camas, LCFRB	28	Clark	\$390,000
Lewis Regional Water Supply	Infra	Clark Public Utilities	27/28	Clark	\$531,000
Storm water Retrofitting for Treatment and Infiltration	Infra	Pierce County Public Works and Utilities, Water Programs Division	12	Pierce	\$240,000
SWRO Water Conveyance Infrastructure sub-total					\$1,161,000
WRIA 18 Water Exchange	Acquisition	Clallam County Environ Health	18	Clallam	\$75,000
SWRO Water Acquisition sub-total					\$75,000

Ecology Region and Project Name	Project Type	Sponsor/ Lead Agency	WRIA	County	Projected 07-09 Cost
Nisqually Stream Flow Gages	Gaging	Nisqually Tribe	11	Thurston	\$13,000
Western WRIA 29a Surface Water Monitoring Strategy	Gaging	Skamania County Planning	29	Skamania	\$20,000
SWRO Stream Gaging sub-total					\$33,000
Total SWRO					\$2,052,400
Central Regional Office (CRO)					
WRIA 40A Water Storage Feasibility Study	Storage	Chelan Co. Nat. Res.	40a	Chelan	\$80,000
CRO Water Storage sub-total					\$80,000
Taneum Creek Fish Passage	Infra	Kittitas Conservation Trust	39	Kittitas	\$400,000
Knapp-Wham Hanan-Detwiler consolidation project	Infra	Chelan Co CD	46	Chelan	\$300,000
WRIA 40A Irrigation Infrastructure Improvement Project Design	Infra	Chelan Co Nat. Res.	40a	Chelan	\$96,600
CRO Water Conveyance Infrastructure sub-total					\$796,600
Water Acquisition Project	Acquisition	Chelan CD	46	Chelan	\$75,000
CRO Water Rights Acquisition sub-total					\$75,000
Install SnoTel Monitoring Site and Swale Creek Monitoring Well	Gaging	Klickitat County	30	Klickitat	\$50,000
Hydrogeologic Monitoring Equipment Installation	Gaging	Chelan County Nt. Resources	45	Chelan	\$93,000
Stream Gage Siting, Installation, and Calibration	Gaging	Klickitat County Dept Nat. Res.	30	Klickitat	\$50,000
Establish Stream flow Gage Network, Rock, Wood Gulch, and Alder Creeks	Gaging	Klickitat County Dept Nat. Res.	31	Klickitat	\$40,000
Purchase install 3 stream gages in the Methow	Gaging	Town of Twisp	48	Okanogan	TBD

Ecology Region and Project Name	Project Type	Sponsor/ Lead Agency	WRIA	County	Projected 07-09 Cost
WRIA 40A Stream Gaging/Weather Station	Gaging	Chelan County Nt. Resources	40a	Chelan	\$22,000
CRO Stream Gaging sub-total					\$255,000
Total CRO					\$1,206,600

Eastern Regional Office (ERO)

Saltese Flats Restoration Investigation	Storage	Spokane County	57	Spokane	\$225,000
WRIA 55/57 Wetland Restoration Feasibility Study	Storage	Spokane County	55/57	Spokane, Pend Oreille, Stevens	\$175,000
Walla Walla Shallow Aquifer Recharge	Storage	Walla Walla County	32	Walla Walla	\$902,000
ERO Water Storage sub-total					\$1,302,000
Rockford Water Efficiency & Public Safety	Infra	Town of Rockford	56	Spokane	\$738,900
Pullman/WSU Wastewater Reuse & Reclamation	Infra	City of Pullman	34	Whitman	\$2,000,000
WRIA 32 Irrigation Piping/Lining	Infra	Walla Walla County	32	Walla Walla, Columbia	\$1,000,000
ERO Water Conveyance Infrastructure sub-total					\$3,738,900
North Fork Palouse Stream Gage	Gaging	Palouse CD	34	Whitman	\$13,000
Little Spokane River Elk Stream Gage	Gaging	Spokane CD	55	Spokane	\$13,000
Colville Instream flow monitoring	Gaging	Stevens County	59	Stevens	\$90,000
ERO Stream Gaging sub-total					\$116,000
Total ERO					\$5,156,900

TOTAL WATER STORAGE \$2,429,700

TOTAL WATER CONVEYANCE INFRASTRUCTURE \$5,696,500

TOTAL WATER RIGHTS ACQUISITION \$150,000

TOTAL STREAM GAGING \$457,900

Watershed Councils \$1,200,000

Capital Budget Projected Spending Total as of December 2007 (Additional project funding from the total \$20.2 M appropriation anticipated in remainder of biennium)	\$9,934,100
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Appendix E: Map of Instream Flow Rule-Making Activities

