

WRIA 1 Detailed Implementation Plan

July 2007

This July 2007 WRIA 1 Detailed Implementation Plan has been prepared for WRIA 1 Watershed Management Project participants. It is a tool intended to facilitate implementation of actions and strategies in the June 2005 WRIA 1 Watershed Management Plan. The WRIA 1 Detailed Implementation Plan is intended as a living document that will be reviewed and updated on an ongoing basis. This July 2007 WRIA 1 Detailed Implementation Plan is the document approved by the WRIA 1 Planning Unit on June 20, 2007.

FINAL

**WRIA 1 Detailed Implementation Plan
July 2007**

Submitted to:

WRIA 1 Watershed Management Project Participants

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1.0 Overview for Developing the WRIA 1 Detailed Implementation Plan

1.1 Overview

A detailed implementation plan is the primary grant requirement for the first year Washington State Department of Ecology, Phase 4 Implementation Grant. The detailed implementation plan submitted to Ecology must meet certain requirements identified in RCW 90.82.043 and 90.82.048 to qualify a watershed planning area for subsequent years of Phase 4 Implementation Grant funds.

The RCW 90.82.043 requirements for a detailed implementation plan focus on strategies that provide sufficient water for instream and out of stream uses and that include timelines and milestones for achieving the strategies. Specifically, strategies meeting the RCW requirements will address provision of sufficient water for a) production of agriculture, b) commercial, industrial, and residential uses, and c) instream flows. Timelines and milestones included in the detailed implementation plan need to also address planned and future use of existing water rights for municipal water supply purposes that are inchoate (have never been used), including how the rights will be used to meet the projected future needs and how these rights will be addressed when implementing ISF strategies (RCW 90.82.048).

In addition to timelines and milestones, other requirements for a detailed implementation plan as identified in RCW 90.82.043 include defining coordination and oversight responsibilities, interlocal agreements, rules, or ordinances that may be needed to implement strategies, local administrative approvals and permits, and funding mechanisms.

1.2 Approach for Developing the WRIA 1 Detailed Implementation Plan

The WRIA 1 Detailed Implementation Plan is based on the actions and strategies in the approved June 2005 WRIA 1 Watershed Management Plan (WMP), which were developed with the involvement of the caucus-based WRIA 1 Planning Unit, the WRIA 1 Technical Teams (Water Quality, Water Quantity, Instream Flow, Fish Habitat, Public Involvement and Education, Watershed Plan Development, and Decision Support System), the WRIA 1 Staff Team/Technical Team Leads (tribal, state, and local governments and utility district staff), and the WRIA 1 Joint Board (policy board). The WRIA 1 WMP actions and strategies address the goals and objectives of the WRIA 1 Watershed Management Project and include water quality, water quantity, instream flows, and fish habitat. As part of the process for developing the WRIA 1 Detailed Implementation Plan (DIP) the WRIA 1 WMP actions and strategies were reviewed to confirm that strategies are in place that meets the DIP requirement for addressing provision of sufficient water for agriculture production, commercial, industrial, and residential uses, and instream flows.

For purposes of completing the WRIA 1 DIP, the actions and strategies in the WRIA 1 WMP were categorized into three tiers. The Tier 1 actions and strategies are those that are most directly associated with addressing the provision of water to instream and out of stream users and/or are strategies that relate to each other and are important factors in addressing water use. Tier 1 strategies include the WRIA 1 Decision Support System and underlying models, the WRIA 1 Instream Flow Selection and Adoption Action Plan (WRIA 1 ISF Action Plan), Compliance and Natural Resource

Policy Integration Programs, a WRIA 1 Long Term Monitoring Strategy, and Adaptive Management. Tier 2 strategies include those actions that are likely to be included or have elements that are included in the Tier 1 strategies or that, as a stand-alone action, are not likely to significantly influence provision of water to a user. Tier 2 strategies include Ground Water Augmentation, Water Use Efficiency, Public Involvement and Education and ‘Other’¹. For example, Ground Water Augmentation as identified in the WRIA 1 WMP is an action being considered or likely to be considered as part of the WRIA 1 ISF Action Plan negotiations occurring in a specific drainage. Tier 3 strategies and actions address goals of the WRIA 1 Watershed Management Project that are not directly related to the provision of water for instream and out of stream uses. Tier 3 strategies include Ground Water Model, South Fork Temperature and High Resolution Surface Water Quality Model, Socioeconomic Study, E. Hemmi, Pilot County Facility and/or Road Low Impact Design, and Low Impact Development Program

Sequencing of actions and strategies in the WRIA 1 DIP includes first completing and initiating the Tier 1 actions then using Adaptive Management to evaluate the strategies to determine if they are meeting their intended objectives. The WRIA 1 DIP incorporates a realistic timeframe for implementing these actions with achievable interim milestones. A Governance and Administration task is also included in this WRIA 1 DIP as a Tier 1 strategy to ensure that the actions and strategies described in this document are implemented in a manner consistent with the June 2005 approved WRIA 1 WMP and this WRIA 1 DIP.

This WRIA 1 DIP is intended to provide a framework for implementing strategies and actions from the June 5 WRIA 1 WMP, not as a forum to review the previously approved strategies and actions. The WRIA 1 DIP has been developed from the perspective that it is an addendum to the WRIA 1 WMP and therefore does not repeat but references information from the WRIA 1 WMP as needed to assist the reader. This WRIA 1 DIP has been prepared as an implementation tool for the entities identified as lead for actions and strategies identified in the WRIA 1 WMP. It is also a tool for WRIA 1 Watershed Management Project participants to use in monitoring the implementation and progress of actions and strategies designed to achieve the water quality, water quantity, instream flows, and fish habitat goals established in March 2000. This DIP has been prepared with the intent that it will be reviewed and updated in accordance with the adaptive management strategy outlined in the WRIA 1 WMP and in Table 3 of this WRIA 1 DIP.

Given the intended use of the WRIA 1 DIP as a tool for implementing actions in the WRIA 1 WMP, the format is primarily a series of implementation tables that chart the tasks, subtasks, milestones, timelines, leads, and other information relevant to Tier 1 strategies and actions. The narrative included in the WRIA 1 DIP is intended to support the implementation tables and address elements of RCW 90.82.043 and 90.82.048.

¹ The June 2005, WRIA 1 Watershed Management Plan identifies “Other Actions” and lists Feasibility Deep Aquifer Storage, Transbasin Importation, Water Transfer Procedures & Challenges, Water Banking Survey, Water Rights Information Center, and Water Reuse.

2.0 Coordination of Activities with Other Planning Entities

This section of the WRIA 1 DIP addresses the requirement of RCW 90.82.043 to “consult with other entities planning in the watershed management area and identify and seek to eliminate any activities or policies that are duplicative or inconsistent”.

2.1 Coordination of WRIA 1 Watershed Planning with Other WRIA 1 Planning Efforts

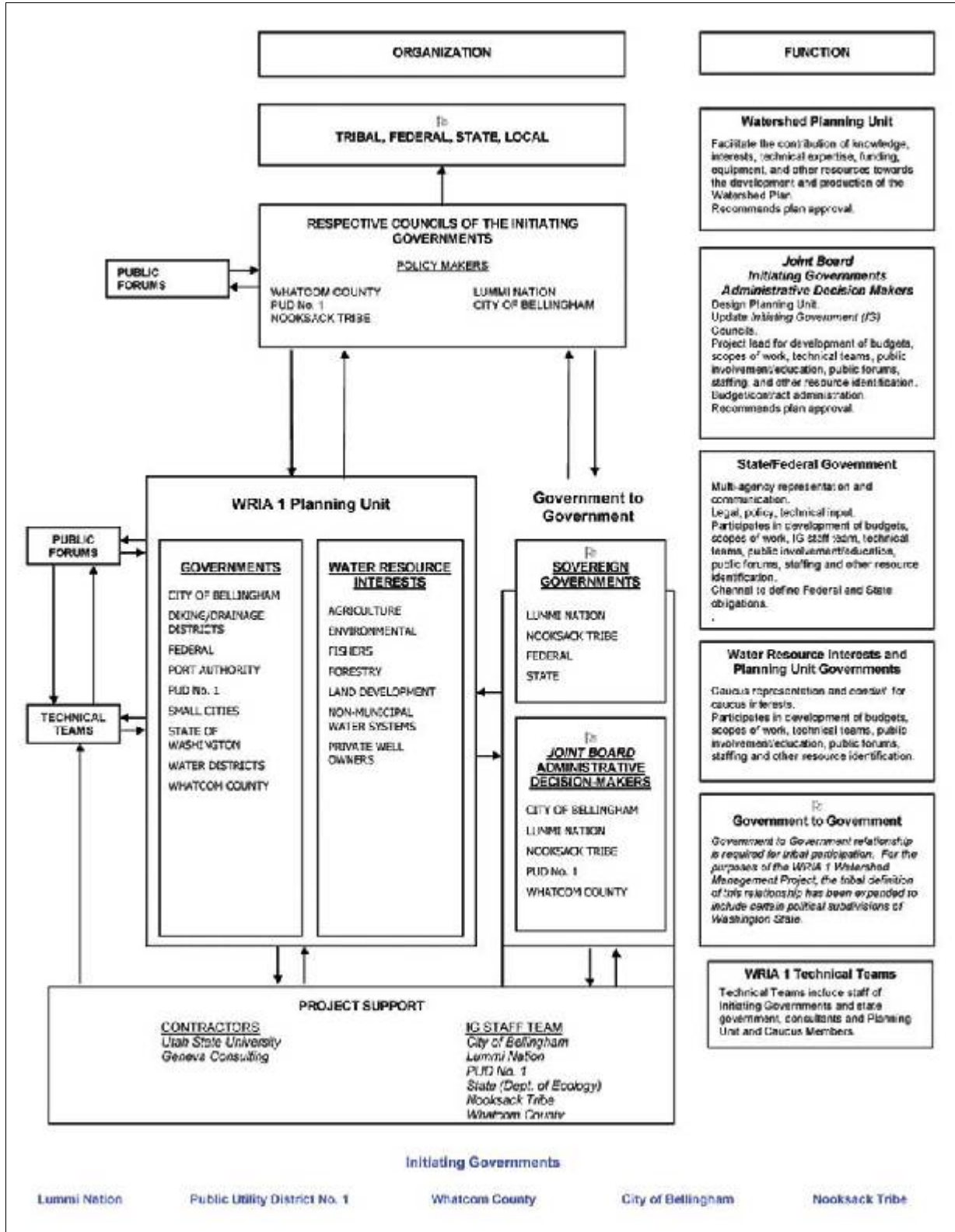
The primary mechanism to address the RCW requirement for consultation with other planning entities has been to involve the entities throughout the WRIA 1 Watershed Management Project process beginning with Phase I – Organization and continuing through the current Phase IV – Implementation.

Section 1 of the June 2005, WRIA 1 Watershed Management Plan – Phase 1 (WRIA 1 WMP) describes the organizational structure of the WRIA 1 Watershed Management Project including the interests and caucuses represented on the WRIA 1 Planning Unit, the members of the WRIA 1 Joint Board, the purpose of the WRIA 1 Staff Team and Technical Teams, and the function of each of these entities in the process. The structure and functions described in the WRIA 1 WMP have remained in affect through the development of the WRIA 1 DIP. Figure 1 is a modification of the structure and function document included in Section 1 of the WRIA 1 WMP and is intended to illustrate the WRIA 1 Management Project structure.

During Phase III- Watershed Management Plan Development, there was extensive participation of the WRIA 1 participants in identifying actions and strategies to address key issues and to develop the WRIA 1 WMP implementation strategy. The relationship of other planning activities to the recommended actions and strategies being considered was discussed prior to making the WRIA 1 WMP recommendations. For those recommendations that had a potential for duplication or inconsistencies, a phased or stepped approach to implementation was recommended that includes identifying potential overlapping elements as well as identifying gaps that programs may not be addressing. To address potential duplication and inconsistencies among existing programs, a specific recommendation is included in the WRIA 1 WMP for a Natural Resource Policy Integration (NRPI) Program. The NRPI Program is a Tier 1 program in this WRIA 1 DIP.

The WRIA 1 Salmon Recovery Program is a multi-government planning effort with a WRIA-wide scope to address salmon recovery and protection of ESA and non-ESA listed species of salmonids. The WRIA 1 Salmonid Recovery Plan includes implementation of actions that are directly or indirectly linked to the actions and strategies identified in the WRIA 1 DIP. Given the linkages between these programs, the WRIA 1 Joint Board tasked the WRIA 1 Staff Team to work with the WRIA 1 Salmon Recovery Program participants to develop options for program coordination and integration. A feasibility assessment associated with implementing the concepts proposed in Phases 2 and 3 of the draft *Governance Structure for Implementing WRIA 1 Programs* (Appendix A) is a task in this WRIA 1 DIP.

Figure 1. WRIA 1 Watershed Management Project Organizational Structure



2.2 WRIA 1 Detailed Implementation Plan Action Linkages to Other Planning Efforts

Efforts to avoid duplication or inconsistencies between WRIA 1 WMP actions and strategies and other planning efforts continue into Phase IV – WMP Implementation. Table 1 lists Tier 1 DIP Actions, other key programs with potentially similar actions, linkages to WRIA 1 Phase IV Implementation, and the approaches being used to reduce the potential for duplicative efforts.

The following summary outlines the administrative and governance steps being taken to avoid duplicative or inconsistent activities between WRIA 1 DIP and other entities' program activities:

- Planning entities and other entities responsible for actions that affect or may be affected by actions and strategies implemented during Phase 4 of watershed planning have been participating in the WRIA 1 Watershed Management Project since Phase 1 of the WRIA 1 Watershed Management Project. The result of early and continued involvement of the planning entities is intended to reduce potential for duplicative or inconsistent programs being considered for inclusion in the WRIA 1 WMP.
- As noted in Section 2.1, the WRIA 1 Joint Board and WRIA 1 Salmon Recovery Board are evaluating options for an integrated governance structure for the WRIA 1 Watershed Management Project and the WRIA 1 Salmon Recovery Program. The WRIA 1 Staff Team presented an option to the WRIA 1 Joint Board on April 12, 2007 that includes a three phased approach that improves program coordination in the short-term and envisions comprehensive natural resource program integration in the long-term (Appendix A). The structure presented is similar to concepts previously developed by WRIA 1 Watershed Management Project participants. At the April meeting, representatives of the policy boards of both programs – the WRIA 1 Watershed Management Project and the WRIA 1 Salmon Recovery Program – signed approval documents implementing the first phase of the proposed option and supporting further analysis of the feasibility of the concepts presented in Phases 2 and 3. Timelines and milestones associated with completing the feasibility analysis are included in this WRIA 1 DIP as a Tier 1 strategy under Governance and Administration.
- Implementing the NRPI program included as a Tier 1 Action in the WRIA 1 DIP will address potential duplications and inconsistencies within existing programs administered by planning entities. Whatcom County is developing a Comprehensive Water Resource Integration Project that will be considered in implementation of the NRPI program. The estimated schedule for completing the Water Resource Integration Project is winter 2007. The outcomes of that project will be further considered as part of the timelines and milestones identified for the NRPI and Adaptive Management tasks of this WRIA 1 DIP.

Table 1. Coordination of Tier 1 Watershed Management Plan Actions with other Planning Activities

WRIA 1 WMP Action or Strategy	Programs with Potentially Similar Actions to a WRIA 1 WMP Action or Strategy	Linkage to WRIA 1 WMP	Comments	Agencies/Entities Involved in Programs with Similar Actions	Steps Taken to Ensure Coordination of Similar Actions
Tier 1					
Decision Support System (DSS)	<ul style="list-style-type: none"> TMDL Development 	<ul style="list-style-type: none"> Surface water quality modeling Lake-response modeling (Lake Whatcom) 	<ul style="list-style-type: none"> Modeling is conducted to determine TMDL targets for selected parameters 	<ul style="list-style-type: none"> Department. of Ecology (lead) Whatcom County Public Works (WCPW)/City of Bellingham (COB) are involved in process 	<ul style="list-style-type: none"> The Dept. of Ecology's (Ecology) Bellingham Field Office is represented on the WRIA 1 Staff Team and WRIA 1 Water Quality Technical Team. Staff from jurisdictions affected by established TMDLs participates in the WRIA 1 Watershed Management project.
	<ul style="list-style-type: none"> Lake Whatcom Management Program 	<ul style="list-style-type: none"> Lake response and watershed loading models 	<ul style="list-style-type: none"> The DSS includes a surface water quality model for Lake Whatcom designed to integrate with the TMDL model. 	<ul style="list-style-type: none"> COB, WCPW, and Lake Whatcom Water and Sewer District (LWWSO) 	<ul style="list-style-type: none"> The Lake Whatcom Management Program is recognized in the WRIA 1 WMP as having a management program in place. The City of Bellingham Mayor and the Whatcom County Executive are participants on the Lake Whatcom Management Team and are members of the WRIA 1 Joint Board. The Lake Whatcom Water and Sewer District General Manager is a member of the Lake Whatcom Management Team and is a member of the Water District Caucus, which is represented on the WRIA 1 Planning Unit.
	<ul style="list-style-type: none"> Comprehensive Plans 	<ul style="list-style-type: none"> Land use planning 	<ul style="list-style-type: none"> No comments. 	<ul style="list-style-type: none"> Each jurisdiction within Whatcom County 	<ul style="list-style-type: none"> The Natural Resource Policy Integration (NRPI) program is a Tier 1 Action in the WRIA 1 Detailed Implementation Plan (DIP). The DSS as a tool in the jurisdictions' planning efforts is anticipated to occur as part of NRPI implementation.
ISF Selection and Adoption Action Plan	<ul style="list-style-type: none"> WRIA 1 Salmon Recovery Plan 	<ul style="list-style-type: none"> Fish habitat protection and restoration Stream flow 	<ul style="list-style-type: none"> Policy-level Salmon Recovery Board has members-in-common with the policy-level WRIA 1 Joint Board 	<ul style="list-style-type: none"> Lummi Nation, Nooksack Tribe, and Washington Department of Fish and Wildlife (Co-Managers) and Whatcom County and City Mayors (Local Govt. Caucus) comprise the Salmon Recovery Board Lummi Natural Resources (LNR), Nooksack Natural Resources (NNR), COB, Small Cities, WDFW, and WCPW comprise Steering Committee and Technical Work Group 	<ul style="list-style-type: none"> Entities involved in the WRIA 1 Salmon Recovery Plan implementation are also involved in the WRIA 1 Watershed Management Project with representation on the WRIA 1 Joint Board, WRIA 1 Staff Team and Technical Teams, and WRIA 1 Planning Unit. The policy boards of the WRIA 1 Watershed Management Project and the WRIA 1 Salmon Recovery Program evaluated options for an integrated governance approach for implementation of the two plans (see Appendix A).
Compliance	<ul style="list-style-type: none"> TMDL Compliance 	<ul style="list-style-type: none"> Enforcement of BMPs or other mechanisms implemented for purposes of achieving target loads 	<ul style="list-style-type: none"> No comments. 	<ul style="list-style-type: none"> Ecology 	<ul style="list-style-type: none"> Ecology's Bellingham Field Office is represented on the WRIA 1 Staff Team and Technical Teams.
	<ul style="list-style-type: none"> Department of Ecology Water Resources Program/State Water Code 	<ul style="list-style-type: none"> Water right processing, enforcement of use, and instream flows 	<ul style="list-style-type: none"> No comments 	<ul style="list-style-type: none"> Ecology 	<ul style="list-style-type: none"> Ecology's Bellingham Field Office is represented on the WRIA 1 Staff Team and Technical Teams and is a key participant in the Bertrand ISF Pilot Negotiations.
Natural Resource Policy Integration	<ul style="list-style-type: none"> Comprehensive Water Resource Integration Project 	<ul style="list-style-type: none"> Intent is to identify areas of integration for Whatcom County programs and recommend prioritization process for funding of projects within water-related programs 	<ul style="list-style-type: none"> An RFP is being developed to conduct the work. The schedule for product delivery will likely not be available in time for the DIP. It will be considered in Adaptive Management. 	<ul style="list-style-type: none"> WCPW 	<ul style="list-style-type: none"> Whatcom County Public Works and Planning and Development Services are involved in the WRIA 1 Watershed Management Project. The Comprehensive Water Resource Integration Program is expected to support implementation of the NRIP.
	<ul style="list-style-type: none"> Shoreline Management Programs 	<ul style="list-style-type: none"> Land use and protection of instream uses 	<ul style="list-style-type: none"> No comments. 	<ul style="list-style-type: none"> Each jurisdiction within Whatcom County and WA Dept of Ecology 	<ul style="list-style-type: none"> Coordination/integration of activities for this program will be considered as part of the NRIP.
	<ul style="list-style-type: none"> Critical Areas Ordinance 	<ul style="list-style-type: none"> Land use and protection of wetlands and other critical areas 	<ul style="list-style-type: none"> No comments. 	<ul style="list-style-type: none"> Each jurisdiction within Whatcom County 	<ul style="list-style-type: none"> Coordination/integration of activities for this program will be considered as part of the NRIP.

WRIA 1 WMP Action or Strategy	Programs with Potentially Similar Actions to a WRIA 1 WMP Action or Strategy	Linkage to WRIA 1 WMP	Comments	Agencies/Entities Involved in Programs with Similar Actions	Steps Taken to Ensure Coordination of Similar Actions
Tier 1					
	<ul style="list-style-type: none"> Flood Hazard Management 	<ul style="list-style-type: none"> Comprehensive flood hazard management planning includes recommendations for addressing frequently flooded areas and projects 	<ul style="list-style-type: none"> No comments. 	<ul style="list-style-type: none"> WCPW Lummi Nation 	<ul style="list-style-type: none"> Coordination/integration of activities for this program will be considered as part of the NRIP.
WRIA 1 Long Term Monitoring Program Strategy	<ul style="list-style-type: none"> TMDL Implementation 	<ul style="list-style-type: none"> Monitoring may take place by entities, organizations, and/or agencies to determine whether target TMDLs are being met for selected parameters. 	<ul style="list-style-type: none"> Monitoring for Nooksack River TMDL compliance being done at select locations. 	<ul style="list-style-type: none"> Ecology, NWIC, WCD, Whatcom County 	<ul style="list-style-type: none"> A WRIA 1 Long Term Monitoring Plan (LTMP) is being developed as part of the WRIA 1 DIP. Coordinating with the TMDL monitoring is being considered as part of the WRIA 1 LTMP.
	<ul style="list-style-type: none"> WRIA 1 Salmon Recovery Plan 	<ul style="list-style-type: none"> Habitat assessments 	<ul style="list-style-type: none"> Areas of WRIA 1 have assessments completed while other areas do not Restoration projects have been undertaken with SRFB grants that will require long term monitoring A monitoring program for salmon recovery is being considered as part of the regional salmon recovery program A local monitoring program for salmon recovery is under discussion. 	<ul style="list-style-type: none"> Identified under ISF Selection and Adoption Action Plan 	<ul style="list-style-type: none"> A WRIA 1 Long Term Monitoring Plan (LTMP) is being developed as part of the WRIA 1 DIP. Coordinating with the WRIA 1 Salmon Recovery Program technical staff on the WRIA 1 LTMP is occurring. The policy boards of the WRIA 1 Watershed Management Project and the WRIA 1 Salmon Recovery Program are evaluating options for an integrated governance approach for implementation; this will include discussion of monitoring.
	<ul style="list-style-type: none"> Marine Resource Committee 	<ul style="list-style-type: none"> Organizes coastal surveys 	<ul style="list-style-type: none"> Focus is on coastal drainages, which have not been a primary focus of WRIA 1 WMP Phase 1. MRC has appears to have a more significant linkage to the WRIA 1 Salmon Recovery Plan implementation than to the WRIA 1 Plan implementation. 	<ul style="list-style-type: none"> WCPW supported 	<ul style="list-style-type: none"> Whatcom County Public Works is involved in developing the WRIA 1 LTMP and provides support to the MRC. The involvement in both activities will address coordination needs.
	<ul style="list-style-type: none"> Bertrand Watershed Improvement District 	<ul style="list-style-type: none"> Monitoring for project effectiveness Ambient monitoring 	<ul style="list-style-type: none"> Current monitoring is conducted on water quality by NWIC, Ecology, and WCD. A monitoring program for the Bertrand WID is under development as part of the ISF pilot negotiation process. 	<ul style="list-style-type: none"> Bertrand WID 	<ul style="list-style-type: none"> The WRIA 1 LTMP that is being developed involves WRIA 1 participants that are also key participants of the Bertrand ISF pilot negotiations. Therefore, the monitoring program of the Bertrand WID is being considered in the WRIA 1 LTMP.
	<ul style="list-style-type: none"> Whatcom County Flood Hazard Management 	<ul style="list-style-type: none"> Monitoring associated with flow and climate 	<ul style="list-style-type: none"> No comments 	<ul style="list-style-type: none"> WCPW 	<ul style="list-style-type: none"> Whatcom County Public Works is involved in developing the WRIA 1 LTMP. Their involvement will address coordination needs.
	<ul style="list-style-type: none"> Dept of Ecology Water Resources Programs 	<ul style="list-style-type: none"> Water usage 	<ul style="list-style-type: none"> Ecology is currently required to obtain annual use estimates on 80% of water use. They report the data is available but they would like feedback on the desired format for the data, primarily geographic delineation (i.e., sub-basin, watershed, section) 	<ul style="list-style-type: none"> Ecology 	<ul style="list-style-type: none"> Ecology's Bellingham Field Office is represented on the WRIA 1 Staff Team and Technical Teams and is involved, therefore, in developing the WRIA 1 LTMP. The format for reporting the usage data will be considered as part of the LTMP that is developed.
Adaptive Management	<ul style="list-style-type: none"> WRIA 1 Salmon Recovery Plan 	<ul style="list-style-type: none"> WRIA 1 Salmon Recovery Plan includes an Adaptive Management element 	<ul style="list-style-type: none"> The Adaptive Management element of the local salmon recovery plan is being developed as part of implementation 	<ul style="list-style-type: none"> Identified under ISF Selection and Adoption Action Plan 	<ul style="list-style-type: none"> It is anticipated that the policy boards of the WRIA 1 Watershed Management Project and the WRIA 1 Salmon Recovery Program will consider adaptive management are part of their evaluation and discussion of options for an integrated governance approach for implementation of the two plans.

3.0 Strategies for Provision of Water for Instream and Out of Stream Users

This section of the WRIA 1 DIP addresses the requirements of RCW 90.82.043, which requires strategies to provide sufficient water for a) production of agriculture; b) commercial, industrial, and residential use; and c) instream flows; and RCW 90.82.048(1), which requires the DIP address planned and future use of existing water rights for municipal water supply purposes including those that are inchoate, how these rights will be used to meet projected future needs, and how these rights will be addressed when implementing instream flow strategies

3.1 Definitions of Municipal Water Supply and Inchoate Water Rights

RCW 90.03.015 as amended by SSHB 1338² defines municipal water supply as a beneficial use of water meeting any one of several criteria including: (a) supplying water to 15 or more residential connections or to a non-residential population of at least 25 people for at least 60 days a year, (b) government purposes by a city, town, public utility district, county, sewer district, or water district, or (c) delivery of treated or raw water to a public water system for the previously identified purposes.

Inchoate water is a term that is used to describe the portion of a water right that has never been used. The 2003 Municipal Water Law, including amendments to RCW 90.03.015 definitions for municipal water supplier and municipal water supply purposes, affects water rights including those retained as inchoate. Provisions of SSHB 1338, the Municipal Water Law, are being challenged by a coalition of environmental groups and a number of tribal governments. Four individuals and four environmental groups, including Puget Sound Harvesters, Washington Environmental Council, Sierra Club, and The Center for Environmental Law and Policy have filed a lawsuit in King County Superior Court challenging various aspects of this statute. Seven western Washington Indian tribes, including the Lummi Nation, have filed a similar law suit in King County Superior Court challenging various aspects of this statute. A summary of the aspects challenged in the tribes' suit includes³: 1. The retroactive validation of water rights allegedly lost through relinquishment prior to the enactment of the statute; 2. The elimination of the beneficial use requirement for a greatly expanded group of private water users that are now defined as "municipal users" (expansion of unused rights); 3. The elimination of previously required analysis of change of place of use requirements for entities classified as "municipal"; and 4. Changes in population served and maximum connection requirements for certain state water holders without adequate procedural safeguards. The suit alleges that these changes adversely and unconstitutionally impact instream flow rights that benefit the tribes' treaty reserved fishing rights. The outcomes of these legal challenges will need to be taken into consideration as DIP strategies affecting future water use are implemented, evaluated, and/or developed.

² Second Engrossed Second Substitute House Bill 1338, Municipal Water Supply – Efficiency Requirements, approved June 20, 2003, AKA "Municipal Water Law".

³ The summary of points describing the provisions being challenged has been provided by the Lummi Nation. The *Complaint for Declaratory and Injunctive Relief* filed by the seven tribes can be downloaded at the Washington State Department of Ecology website along with other documents associated with the Municipal Water Law (www.ecy.wa.gov/programs/wr/rights/muni_wtr.html#docsdevelop).

3.2 Water Rights in WRIA 1

In 2001, the WRIA 1 Planning Unit approved work to further WRIA 1 participants' understanding of the status of water rights in WRIA 1. The intent of the staged work was to address WRIA 1 Watershed Management Project Scope of Work item 3.1.4.5 (Appendix B of the June 2005, WRIA 1 WMP). According to the June 14, 2001 Water Rights Review Stage 1 Report, the purpose of Stage 1 was to total the amount of water allocated on "paper" for the existing water right documents. Washington State Department of Ecology water right documents and database were the basis for the work. The Stage 1 Report includes a detailed description of the methods used and tables totaling ground and surface water instantaneous withdrawal and annual acre-feet allocations by document type and by drainage. Stage 2 of the effort was completed in September 2002 and included the mapping of water right certificates, permits, applications, and select claims, identification of current water right holders, and field work to meet with and access their water rights.

Table 2 is a summary of the water allocations by subbasin in WRIA 1. The Access database completed as part of the Stage 1 and Stage 2 effort provides the capability for querying the database in a variety of ways that support the strategies identified in the WRIA 1 WMP and this WRIA 1 DIP for addressing instream and out of stream water use.

3.3 Instream Flow and Water Supply Strategy

The June 2005 WRIA 1 WMP refers to instream flows as perhaps the most significant challenge facing WRIA 1. While instream flows were established by Washington State in 1985 to ensure protection of instream uses including a harvestable surplus of salmon, they also have major impacts on subsequent out of stream uses, which includes production of agriculture and commercial, residential, and industrial water supplies. Based on the challenges associated with meeting both instream and out-of-stream water use needs, it was agreed by WRIA 1 Watershed Management Project participants that the latest science would be used to reevaluate instream flows. Section 2.3.1.5 of the June 2005 WRIA 1 WMP discusses the technical work including the construction of a Decision Support System with underlying models that will assist WRIA 1 Watershed Management Project participants in evaluating instream flows. Also as part of the WRIA 1 Watershed Management Project, a strategy has been developed that will use the technical tools being developed to reevaluate the existing instream flows and defines a process for meeting challenges associated with the instream and out of stream water needs. The strategy is the WRIA 1 Instream Flow Selection and Adoption Action Plan (WRIA 1 ISF Action Plan) and is summarized in Section 3 of the June 2005 WRIA 1 WMP and included as Appendix C of that document. The WRIA 1 DIP includes implementing the ISF Action Plan as a Tier 1 strategy after an evaluation of the ISF Pilot Negotiation projects has been conducted.

In summary, the WRIA 1 ISF Action Plan is a strategy that addresses water use and water need challenges on a drainage level. It involves a negotiation process with stakeholders to achieve recommended target flows identified using the technical tools described in Section 2 of the WRIA 1 WMP. As part of the negotiation process, management approaches will be identified for achieving the flows. In drainages involving municipal water rights, the instream flow negotiation process will include those stakeholders as described in the WRIA 1 ISF Action Plan. It is anticipated that the

Table 2. Summary of water allocations by subbasin in WRIA 1

Subbasin	Documents	Estimated			Document			Est. & Doc. Allocation		
		CF8	GPM	Acre-Feet	CF8	GPM	Acre-Feet	CF8	GPM	Acre-Feet
South Fork Nooksack		0.0	250.0	148.9	77.8	4140.0	2796.7	77.8	4390.0	2945.6
Allocations (WRATS database)										
Ground Water	14 certificates 11 claims									
Surface Water	42 certificates 9 claims									
South Fork Applications Pending	25-50									
North Fork Nooksack		1.1	240.0	7975.2	364.9	20,514.0	266,020.0	366.0	20,754.0	273,995.2
Allocations (WRATS database)										
Ground Water	26 certificates 7 claims									
Surface Water	49 certificates 15 claims									
North Fork Nooksack Applications Pending	25-50									
Middle Fork Nooksack		0.0	0.0	90,510.0	129.1	85.0	23.5	129.1	85.0	90,533.5
Allocations (WRATS database)										
Ground Water	2 certificates 2 claims									
Surface Water	6 certificates 5 claims 1 permits									
Middle Fork Nooksack Applications Pending	0-25									
Lower Nooksack		0.0	3376.0	7,008.3	738.6	114,669.3	96,374.6	738.6	118,045.3	103,382.9
Allocations (WRATS database)										
Ground Water	585 certificates 154 claims 1 permit									
Surface Water	274 certificates 37 claims									
Lower Nooksack Applications Pending:	250-300									
Birch Bay		0.0	50.0	61.6	2.1	947.0	6603.5	2.1	997.0	6665.1
Allocations (WRATS database)										
Ground Water	19 certificates 1 claims									
Surface Water	9 certificates 4 claims									
Birch Bay Applications Pending:	0-25									
Drayton Harbor		0.0	550.0	562.4	122.9	23,079.8	13,422.2	122.9	23,629.8	13,984.6
Allocations (WRATS database)										
Ground Water	106 certificates 39 claims 2 permit									
Surface Water	33 certificates 15 claims									
Drayton Harbor Applications Pending:	50-75									
Lummi Bay		0.0	0.0	469	2.6	4792	4987.5	2.6	4987.5	5456.5
Allocations (WRATS database)										
Ground Water	23 certificates 8 claims 3 permits									
Surface Water	8 certificates 3 claims									
Lummi Bay Applications Pending:	0-25									
Point Roberts		0.0	0.0	0.0	0.2	513.0	502.9	0.2	513.0	502.9
Allocations (WRATS database)										
Ground Water	7 certificates 4 claims 1 permit									
Surface Water	1 certificates 4 claims									
Point Roberts Applications Pending:	0									

Quantities were "Estimated" if water right documents were filled out incomplete.

inchoate rights, and the way in which they will be considered in meeting projected water needs will be addressed at that time. Table 3 of this WRIA 1 DIP includes the milestones and schedules for identifying the geographic areas for implementing the ISF Action Plan. Also included in this DIP is a mechanism under the Adaptive Management section for evaluating the outcomes of all of the DIP Tier 1 strategies to determine effectiveness in addressing their intended goals. If it is determined that the ISF Action Plan and associated negotiation process is not sufficiently addressing water supply for future uses including the role of unused rights, additional strategies will be identified. The schedule outlined in Table 3 for reviewing the outcomes of Tier 1 actions is quarterly beginning during the 1st Quarter of 2008.

4.0 Implementation Strategies, Milestones, and Schedule

This section of the WRIA 1 DIP addresses the requirements of RCW 90.82.048 to identify timelines and milestones for implementing actions and strategies addressing current and future water use and requirements of RCW 90.82.043 to identify strategies for provision of water for instream and out of stream water users including identifying milestones to measure progress.

4.1 Implementation Strategies

The actions and strategies in the WRIA 1 DIP are based on those described in the approved June 2005 WRIA 1 WMP. As described in Section 1.2 of this WRIA 1 DIP, actions and strategies from the WMP have been categorized into three tiers with Tier 1 actions and strategies the current focus for implementation. Previous sections of this document describe the approach for preparing the WRIA 1 DIP, the approach for evaluating implementation actions, and the approach for modifying and adjusting this WRIA 1 DIP.

Given that the intent of the WRIA 1 DIP is to have a tool that entities can use to identify and prioritize implementation actions, all relevant information for implementing Tier 1 actions and strategies is summarized in a table format. Table 3 is formatted to identify the Tier 1 Action, subtasks for implementing the action, identified milestones and schedule. Also included in Table 3 is a column labeled 'Related Information' that describes intent, process, and/or other information considered relevant to implementing a subtask. Table 3 is placed at the end of Section 5.0 of this document.

Since this WRIA 1 DIP is a living document, it will change as actions are implemented and technical information is refined and updated. The DIP will be reviewed on a regular basis as described under Adaptive Management in Table 3.

4.2 Long Term Monitoring Strategy

A recommendation of the June 2005 WRIA 1 WMP is to develop a comprehensive WRIA-wide long term monitoring program. Given the importance of monitoring to achieving the overall goals and objectives of the WRIA 1 Watershed Management Project, the strategy for a WRIA-wide long term monitoring program was prepared concurrent with the development of this WRIA 1 DIP. The

rationale for developing the long term monitoring strategy in a parallel process to the development of the WRIA 1 DIP is that elements of the monitoring strategy could then be incorporated into the DIP with identified milestones and schedule for their implementation. This is intended to expedite the timeframe for collecting information needed to further inform implementation and evaluation of WMP actions.

There are three elements to the WRIA 1 Long Term Monitoring Strategy (Appendix B):

- An over-arching WRIA 1-wide program that addresses WRIA 1 Watershed Management Project goals and objectives;
- A complementary monitoring element that supports existing monitoring programs designed and implemented to meet an entity's specific program goals and objectives, that complement the over-arching WRIA 1-wide monitoring program, and that are important to achieving the goals of the WRIA 1 Watershed Management Project; and
- A drainage-based monitoring element that incorporates monitoring elements associated with individual drainages as the drainages implement organized management units.

Section 6 of the WRIA 1 Long Term Monitoring Strategy includes recommendations associated with data collection, data management, and data analysis. Milestones and schedule for implementing the recommendations have been incorporated into Table 3 of this WRIA 1 DIP.

4.3 Milestones and Schedule

Table 3 of the WRIA 1 DIP identifies interim milestones and a quarterly schedule for implementing Tier 1 actions and strategies. The schedule in this version of the WRIA 1 DIP for the Tier 1 actions spans Quarter 3 of 2007 (Q3/07) to Q4/09. However, the intent is to review actions and strategies identified in the DIP on a regular basis as part of Adaptive Management, which may result in adjustments to both schedule and milestones. It is also important to note that Section 5 of the June 2005 WRIA 1 WMP identified actions for implementation from 2005/2006. The status of those activities was taken into consideration in developing this WRIA 1 DIP and is reflected in the milestones and schedule identified in Table 3.

The availability of funding and continued commitments from WRIA 1 Watershed Management Project participants is a critical component of implementation; changes in either may adversely affect the implementation schedule. Conversely, securing dedicated project funding and/or staff will provide additional opportunities for implementing actions. Changes affected by funding and staffing will be reflected in adjustments made to the WRIA 1 DIP as part of Adaptive Management.

5.0 Funding Options

This section of the WRIA 1 DIP addresses the requirements of RCW 90.82.043 to identify funding mechanisms for implementing actions.

Successful implementation of actions and strategies identified in the approved June 2005 WRIA 1 WMP and its associated WRIA 1 DIP requires a long term commitment to staffing and funding resources. Tasks to address long term funding are identified in the "Related Information" column of Table 3 of this DIP and include establishing a funding subcommittee to participate in identifying

funding options for consideration. The intent is to expand on the May 2005 effort of a WRIA 1 Planning Unit subcommittee that reviewed and identified funding options for presentation to the legislative bodies. The funding subcommittee will also consider governance and integration topics given their relationship to funding.

Interim funding to continue implementing actions and strategies as identified in this WRIA 1 DIP will be pursued through Phase IV Watershed Planning Implementation funds provided by the Washington State Legislature, commitments from participating governments for continued staff involvement, and pursuing partnerships with other entities implementing similar or complementary programs.

5.1 Phase IV Watershed Planning Funds

Phase IV Watershed Planning Implementation funds include:

- Up to \$100,000 per year for the first three years of implementation, with a 10% required match. Second and third year funding is conditioned on the completion of an approved DIP.
- Up to \$50,000 for the fourth and fifth years of implementation, with a 10% required match.
- \$30,000 to \$60,000 is available for “Watershed Councils” for administrative support in the FY 2008-2009 biennium from the Watershed Planning Capital Fund.

It is anticipated that Phase IV Implementation funds will be applied to projects in this WRIA 1 DIP as outlined in Table 4 - Summary of Funding for 2007-2009.

5.2 Watershed Operating and Capital Budget

Washington State Watershed Operating and Capital Budget is a potential source for funding priority projects in a watershed. The total amount in the Watershed Operating Budget state-wide for the 2008-2009 biennium is approximately \$4 million, whereas the Capital Budget has about \$12 million available for the biennium. The WRIA 1 Staff Team is preparing budget requests for funding consideration in this biennium to implement portions of this WRIA 1 DIP including stream gages and water quality monitoring. Table 4 identifies actions being considered for this funding source.

5.3 Watershed Protection and Restoration Grant

The Nooksack Indian Tribe was awarded a Washington State Department of Ecology Watershed Protection and Restoration Grant (\$50,000) to support integration and coordination of WRIA 1 Salmon Recovery Program efforts with other watershed planning efforts. Table 3 of this WRIA 1 DIP includes subtasks under Natural Resources Program Integration and Governance and Administration that reference coordinating with the Nooksack Indian Tribe on efforts pursued under the Watershed Protection and Restoration Grant.

5.4 Resource Commitments from Implementing Entities

Table 3 identifies leads responsible for implementing subtasks under each Tier 1 Action. In most cases, the existing resources of the entity identified are used to support their participating staff. In addition to the lead identified, other entities’ staff may be involved in the implementation of individual subtasks. For example, references to the WRIA 1 Staff Team as lead for overseeing the

implementation of a subtask actually involves staff representing the Joint Board entities and the Washington State Department of Ecology. There has not been an effort in this DIP to quantify the value of these commitments although the total value is significant.

5.5 Partnership Opportunities

Opportunities to partner with other entities involved in activities or programs underway in WRIA 1 will be pursued during implementation of the WRIA 1 DIP. Table 3 identifies several subtasks where establishing partnerships may benefit or expedite implementation. The WRIA 1 Long Term Monitoring Plan is an example of a Tier 1 program that has a number of opportunities for establishing partnerships. In situations where implementation involves a partnership between implementing entities, an Interlocal Agreement, Memorandum of Understanding, or other agreement that formalizes the partnership will be developed as necessary.

Table 3. Detailed Implementation Plan Summary of Actions, Timelines, and Resources

Implementation Actions		Schedule	Activity Leads	Agreements	Related Information	
Task	Subtasks	Quarter/Yr				
TIER 1 ACTIONS						
Complete Phase III Technical Scope of Work	<ul style="list-style-type: none"> USU Phase III Scope of Work Models Completed WRIA 1 review & comment process associated with each of the milestones. 	<ul style="list-style-type: none"> Pre-Peer Review Model/Reports for WRIA Technical Team Review Peer Review (Full Beta) Model/Reports Full Release Model/Reports Uncertainty/Sensitivity Memo Final approval of USU contract deliverables 	<ul style="list-style-type: none"> Q3/07 (pre-peer review version) Q4/07-Q1/08 (peer review version) Q2/08 (full release version & uncertainty/ sensitivity memo) Q2-Q3/08 (final approvals on contract deliverables) 	<ul style="list-style-type: none"> WRIA 1 Joint Board⁴ lead on USU contract (all milestones) WRIA 1 Staff Team/Tech Team Leads coordinate review & comment 	<ul style="list-style-type: none"> Existing- USU Phase III Contract Existing- MOA between WRIA 1 Initiating Governments 	<ul style="list-style-type: none"> Phase III technical work to complete the Decision Support System and related models (Surface water quality, surface water quantity, and instream flow/fish habitat) is described in the June 2005 WRIA 1 WMP. Each entity involved in the WRIA 1 process will need to consider staff allocation for participating in the review and comment process for the USU products listed under “milestones”.
	<ul style="list-style-type: none"> DSS Technology Transfer/ Training (includes SWQN, SWQL, ISF/FH models) 	<ul style="list-style-type: none"> DSS Server installation and configuration Technical workshop-Scenario Builder Training DSS final training 	<ul style="list-style-type: none"> Q3/07 (DSS install & Scenario Training) Q2/08 (final DSS training) 	<ul style="list-style-type: none"> WRIA 1 Joint Board administrator lead for coordinating with USU on DSS install and training workshop 	<ul style="list-style-type: none"> Existing- USU Phase III Contract Existing- MOA for WRIA 1 Initiating Governments 	<ul style="list-style-type: none"> Entities having the DSS installed on their servers and that are interested in participating in the DSS administration training will need to coordinate with Whatcom County/DSS Tech Team
	<ul style="list-style-type: none"> Peer Review of Models and Associated Support 	<ul style="list-style-type: none"> Establish Peer Review Panel Compilation of Tech Team and Peer Review Panel (PRP) comments on Full Beta release. Compilation of Tech Team and PRP comments on full release. 	<ul style="list-style-type: none"> Q4/07 (Establish Panel) Q4/07-Q2/08 (PRP and TT review/comment) 	<ul style="list-style-type: none"> WRIA 1 Joint Board administrator lead for Peer Review Panel WRIA 1 Staff Team/Tech Team Leads coordinate review & comment 	<ul style="list-style-type: none"> Existing- USU Phase III Contract Existing- MOA for WRIA 1 Initiating Governments New- Contracts with PRP members if needed 	
Complete WRIA 1 Instream Flow Pilot Negotiation Projects	<ul style="list-style-type: none"> Bertrand Drainage Instream Flow Pilot 	<ul style="list-style-type: none"> Negotiated agreements on recommended target flows. Target flows presented to Joint Board and Planning Unit for consideration. Joint Board and Planning Unit approval of target flows. 	<ul style="list-style-type: none"> Q3/07 (ISF participants agree on target flows) Q4/07 (Joint Board and Planning Unit consideration of target flows) Q2/08 (seek Joint Board and Planning Unit approval) 	<ul style="list-style-type: none"> Public Utility District No. 1 lead on administering task orders for contracted services to implement elements of Bertrand ISF negotiation pilot project. Department of Ecology is lead for legal mediation contract. 	<ul style="list-style-type: none"> Existing-Interlocal agreement between PUD & Whatcom County. Existing-Confidentiality agreements signed by ISF negotiation participants. New-MOA between affected parties. New- Negotiated agreements with Bertrand stakeholders 	<ul style="list-style-type: none"> The Bertrand Drainage Instream Flow Pilot project is an early implementation activity initiated in fall 2005 with funds from Whatcom County and Department of Ecology and supported with in-kind contributions from Initiating Governments. The pilot is using the ISF Selection and Adoption Action Plan described in Section 3 of the WRIA 1 WMP as guidance. The pilot negotiation process is nearing the final stages of the four step process for the Selection phase of the ISF Action Plan. The WRIA 1 Detailed Implementation Plan focuses on milestones, schedule, and resources associated with completing the Bertrand Drainage Instream Flow Pilot. Alternative approaches for formalizing flow process (e.g., less formal MOU and/or negotiated settlement approved by court) may be considered as part of the milestones listed.
	<ul style="list-style-type: none"> Middle Fork Instream Flow Pilot 	<ul style="list-style-type: none"> Negotiated agreements on recommended target flows. Target flows presented to Joint Board and Planning Unit for consideration. Joint Board and Planning Unit approval of target flows. 	<ul style="list-style-type: none"> Q3/07 (ISF participants agree on target flows) Q4/07 (Joint Board and Planning Unit consideration of target flows) Q2/08 (seek Joint Board and Planning Unit approval) 	<ul style="list-style-type: none"> City of Bellingham lead on Middle Fork ISF negotiation pilot project Department of Ecology is lead for legal mediation contract. 	<ul style="list-style-type: none"> Existing- Interlocal agreement between PUD & Whatcom County. Existing- Confidentiality agreements signed by ISF negotiation participants. New-MOA between 	<ul style="list-style-type: none"> The Middle Fork Instream Flow Pilot project is an early implementation activity initiated in fall 2005 with funds from City of Bellingham and Department of Ecology and supported with in-kind contributions from Initiating Governments. The pilot is using the ISF Selection and Adoption Action Plan described in Section 3 of the WRIA 1 WMP as guidance. The pilot negotiation process is nearing the final stages of the four step process for the Selection phase of the ISF Action Plan.

⁴ Whatcom County administers the USU contract on behalf of the WRIA 1 Joint Board.

Implementation Actions			Schedule	Activity Leads	Agreements	Related Information
Task	Subtasks	Milestones	Quarter/Yr			
TIER 1 ACTIONS						
					<ul style="list-style-type: none"> affected parties. New- Negotiated agreements with Middle Fork stakeholders 	<ul style="list-style-type: none"> The WRIA 1 Detailed Implementation Plan focuses on milestones, schedule, and resources associated with completing the Middle Fork Instream Flow Pilot. Alternative approaches for formalizing flow process (e.g., less formal MOU and/or negotiated settlement approved by court) may be considered as part of the milestones listed. Consider climate change in assessing future water needs with projections of water availability, particularly in watersheds that contain snowpack and/or glaciers.
WRIA 1 Instream Flow Selection & Adoption Action Plan (ISF Action Plan)	<ul style="list-style-type: none"> Evaluate ISF Pilot Negotiation Process 	<ul style="list-style-type: none"> Compare implementation of ISF Pilot Negotiation process to documented WRIA 1 ISF Action Plan process to identify areas where implementation may have differed from the planned process. Review and evaluate ISF Pilot Negotiation process through interviews with participants of the ISF Pilots and public process or technical documents. Prepare summary report identifying outcomes of evaluation and recommendations for changes to the WRIA 1 ISF Selection and Adoption Action Plan. 	<ul style="list-style-type: none"> Q4/07 (initiate review and evaluation of documents from ISF Pilot projects) Q1/08 (interview pilot participants) Q1/08-Q2/08 (prepare summary report) 	<ul style="list-style-type: none"> WRIA 1 Staff Team/Tech Team coordinates task 	<ul style="list-style-type: none"> Existing- Interlocal agreement between PUD & Whatcom County. Existing- Confidentiality agreements signed by ISF negotiation participants. TBD 	<ul style="list-style-type: none"> The evaluation of the ISF Pilot Projects will be completed and recommendations considered prior to implementing the WRIA 1 ISF Selection and Adoption Action Plan Version 6C. The pilot project evaluations will take into consideration WRIA 1 Planning Unit comments received during review of the Detailed Implementation Plan. Comments received included involving the Planning Unit in addressing the process and principles used in producing target flow recommendations and possibly reviewing management recommendations associated with the target flow proposals.
	<ul style="list-style-type: none"> Selection of geographic areas for initiating and implementing ISF Action Plan. 	<ul style="list-style-type: none"> ISFWG recommend next four drainages for initiating the ISF Action Plan process (2 upper watershed and 2 lower watershed) Present geographic area recommendations to Joint Board and Planning Unit for consideration. Joint Board and Planning Unit approval of geographic areas for ISF Action Plan implementation. 	<ul style="list-style-type: none"> TBD 	<ul style="list-style-type: none"> WRIA 1 Staff Team/ Tech Team Leads coordinate process for selecting geographic areas. Lead for the geographic areas selected will be considered as part of the Joint Board discussion of geographic areas to initiate ISF process. WCPDS lead for DIP developed under Phase 4 Implementation Grant 	<ul style="list-style-type: none"> Existing- MOA between WRIA 1 Initiating Governments 	<ul style="list-style-type: none"> Milestones and schedule for implementing the ISF Selection and Adoption Action Plan is dependent on the outcomes of the evaluation that will be conducted of the ISF Pilot Negotiation process described in the previous subtask. The existing MOA between the Initiating Governments (IG) supports continued participation of IG staff for purposes of implementing the ISF Action Plan. The ISFWG are considering Fishtrap and Tenmile as the 2 lower WRIA 1 drainages and North Fork and South Fork as the 2 upper WRIA 1 drainages. ISFWG recommends initiating concurrent processes for two drainages; one in the upper watershed and one in the lower watershed.
	<ul style="list-style-type: none"> Initiate process in two of the four selected areas. 	<ul style="list-style-type: none"> Prepare PIE plan Initiate public outreach in 2 of the 4 geographic areas selected ISFWG workshops with affected parties within the identified drainages to discuss flow recommendations. Initiate meetings between ISFWG and affected parties and enter into confidentiality 	<ul style="list-style-type: none"> TBD 	<ul style="list-style-type: none"> TBD 	<ul style="list-style-type: none"> New- Confidentiality agreements with participants of ISF negotiations 	<ul style="list-style-type: none"> Drainages in the lower watershed that are being considered by the ISFWG are expected to proceed sooner than drainages in the upper watershed with regard to public outreach efforts and creation of a drainage management unit given existing community awareness and involvement in local water issues. Initiating public outreach includes developing a PIE plan for outreach efforts through the negotiated flow stage. The Bertrand and Middle Fork ISF Pilot PIE efforts will be considered in the drafting of a PIE plan that can be used as a template for the remaining geographic areas. A template

Implementation Actions			Schedule	Activity Leads	Agreements	Related Information
Task	Subtasks	Milestones	Quarter/Yr			
TIER 1 ACTIONS						
		<ul style="list-style-type: none"> agreements Updates on process to WRIA 1 Watershed Management Project participants 				<p>that can be modified or adapted to meet the needs of the individual drainage will maximize resources and expedite the process.</p> <ul style="list-style-type: none"> Public outreach should be a stepped process starting with general ISF process information targeting a general audience prior to the ISFWG organizing workshops in the drainage with affected parties to discuss initial target flows. It is anticipated that the combination of early outreach and initiation of ISFWG workshops will result in establishing a drainage-level management unit if one does not already exist. A single point of contact for implementing the ISF Action Plan public outreach is important to maintaining and ensuring consistency throughout the implementation process.
	<ul style="list-style-type: none"> Develop Initial Target Flows in first two areas 	<ul style="list-style-type: none"> ISFWG reviews IF/FH Tech Team preliminary flows for selected drainages; present to ISF process participants 	<ul style="list-style-type: none"> TBD 	<ul style="list-style-type: none"> TBD 		<ul style="list-style-type: none"> The ISF/FH Technical Team have identified preliminary flows for the basins that are being considered for ISF negotiations. The preliminary flows will be reviewed and evaluated by the ISFWG to identify any additional model output or data needed from USU as they calibrate the WRIA 1 models.
	<ul style="list-style-type: none"> Convert target flows to negotiated flows in first set of selected basins for Joint Board and Planning Unit approval 	<ul style="list-style-type: none"> Members of affected parties in two selected drainages meet with ISFWG to evaluate and refine instream and out of stream water use for current and future needs Identify management options and strategy for addressing water needs ISFWG and affected parties reach agreement on target flows and prepare recommendations to Joint Board and Planning Unit for approval. Target flows presented to Joint Board and Planning Unit for consideration. Joint Board and Planning Unit approval of target flows. 	<ul style="list-style-type: none"> TBD 	<ul style="list-style-type: none"> TBD 	<ul style="list-style-type: none"> New-MOA between affected parties. New- Negotiated agreements with drainage area stakeholders 	<ul style="list-style-type: none"> Inchoate rights are considered in discussions of current and future water use estimates/ needs and management options/strategies to meet instream and out of stream water use. Experience of the ISF Pilot Negotiations indicates that the processes in the two basins may occur at slightly different rates depending on a number of factors including availability of technical information, water use information, number of stakeholders, and extent of community preparedness specific to forming a drainage-based management unit and/or entering discussion of instream flows. Alternative approaches for formalizing flow process (e.g., less formal MOU and/or negotiated settlement approved by court) may be considered as part of the milestones listed.
	<ul style="list-style-type: none"> Initiate process in next two geographic areas (second set of four areas selected in Q3/07) 	<ul style="list-style-type: none"> Initiate public outreach in next two geographic areas selected ISFWG workshops with affected parties within the identified drainages to discuss flow recommendations. Initiate meetings between ISFWG and affected and enter into confidentiality agreements Updates on process to WRIA 1 Watershed Management Project participants 	<ul style="list-style-type: none"> TBD 	<ul style="list-style-type: none"> Lead for the geographic areas selected will be considered as part of the Joint Board discussion of geographic areas to initiate ISF process⁵. 	<ul style="list-style-type: none"> New- Confidentiality agreements with participants of ISF negotiations 	<ul style="list-style-type: none"> PIE plan template created in Q3/07 will be modified, if necessary, and plan activities adapted to selected drainages for purposes of initiating outreach. Public outreach should be a stepped process starting with general ISF process information targeting a general audience prior to the ISFWG organizing workshops in the drainage with affected parties to discuss initial target flows. It is anticipated that the combination of early outreach and initiation of ISFWG workshops will result in establishing a drainage-level management unit if one does not already exist.

⁵ Lead for the geographic areas is assumed to be the lead for the remaining steps associated with implementing the ISF Action Plan within the geographic area identified.

Implementation Actions			Schedule	Activity Leads	Agreements	Related Information
Task	Subtasks	Milestones	Quarter/Yr			
TIER 1 ACTIONS						
	<ul style="list-style-type: none"> Develop Initial Target Flows in next two basins. 	<ul style="list-style-type: none"> ISFWG reviews IF/FH Tech Team preliminary flows for selected drainages; present to ISF process participants 	<ul style="list-style-type: none"> TBD 	<ul style="list-style-type: none"> TBD 		<ul style="list-style-type: none"> It is anticipated that the WRIA 1 DSS will expedite review of initial preliminary flows for presentation to the participants of the ISF negotiations.
	<ul style="list-style-type: none"> Convert target flows to negotiated flows in second set of selected basins for Joint Board and Planning Unit approval 	<ul style="list-style-type: none"> Members of affected parties in selected drainages meet with ISFWG to evaluate and refine instream and out of stream water use for current and future needs Identify management options and strategy for addressing water needs ISFWG and affected parties reach agreement on target flows and prepare recommendations to Joint Board and Planning Unit for approval. Target flows presented to Joint Board and Planning Unit for consideration Joint Board and Planning Unit approval of target flows. 	<ul style="list-style-type: none"> TBD 	<ul style="list-style-type: none"> TBD 	<ul style="list-style-type: none"> New-MOA between affected parties. New- Negotiated agreements with drainage area stakeholders 	<ul style="list-style-type: none"> The schedule for the second set of the four drainage basins selected in Q3/07 is expected to be shorter than the negotiation process in previous basins for the following reasons: confidentiality agreements and MOAs from previously negotiated basins can be used as templates, water use estimating will be expedited by availability of WRIA 1 models, and discussion of management options/strategies can draw on experience and outcomes of previously negotiated basins. Alternative approaches for formalizing flow process (e.g., less formal MOU and/or negotiated settlement approved by court) may be considered as part of the milestones listed.
	<ul style="list-style-type: none"> Complete ISF negotiations in remaining WRIA 1 basins. 	<ul style="list-style-type: none"> Identify geographic areas, milestones, timelines, budget, and responsible lead for purposes of completing ISF negotiations in remaining WRIA 1 drainages. 	<ul style="list-style-type: none"> TBD 	<ul style="list-style-type: none"> TBD 	<ul style="list-style-type: none"> New-MOA between affected parties will be developed as the processes are initiated in the remaining geographic areas. New- Negotiated agreements with drainage area stakeholders will be developed as part of the process. 	
	<ul style="list-style-type: none"> Final Flow Recommendations 	<ul style="list-style-type: none"> ISFWG compile and review recommended flows from each drainage system for inconsistencies and contradictions Present complete set of flow recommendations to Joint Board and Planning (includes holding public hearing on recommendations) Joint Board and Planning Unit approval of final recommended flows Incorporate approved final flows into next version of WRIA 1 WMP Planning Unit provides direction to Ecology to proceed with rule-making if change to current regulatory flows is required. Forward agreed to flows to 	<ul style="list-style-type: none"> TBD 	<ul style="list-style-type: none"> TBD 	<ul style="list-style-type: none"> TBD 	

Implementation Actions			Schedule	Activity Leads	Agreements	Related Information
Task	Subtasks	Milestones	Quarter/Yr			
TIER 1 ACTIONS		Federal/Tribal/State settlement negotiations				
WRIA 1 Long Term Monitoring Plan Strategy	<ul style="list-style-type: none"> Identify ground water monitoring program to support Section 3.0 of WRIA 1 LTMP strategy. 	<ul style="list-style-type: none"> Compile existing WRIA 1 programs relative to ground water monitoring. Conduct review of existing WRIA 1 programs. Develop draft monitoring program, if needed, based on outcome of review. Identify lead, funding, and agreements needed to implement ground water program. Incorporate into WRIA 1 LTMP Strategy as part of adaptive management (Section 7.0, WRIA 1 LTMP Strategy). 	<ul style="list-style-type: none"> Q1/08 	<ul style="list-style-type: none"> WRIA 1 ST/TTL coordinates implementing recommendation. WRIA 1 QnTT is lead for reviewing existing programs and, if needed, drafting program to fill gaps or draft new program. 	<ul style="list-style-type: none"> Existing- MOA for WRIA 1 Initiating Governments 	<ul style="list-style-type: none"> Corresponds to Recommendation DC1 of the WRIA 1 Long Term Monitoring Plan Strategy, Section 6.0.
	<ul style="list-style-type: none"> Develop agreements for including stream temperature and periodic dissolved oxygen measurements at all gage stations equipped with recorders or telemetry systems. 	<ul style="list-style-type: none"> Identify approach(es) for obtaining agreements with USGS and/or EAP to install, operate, and maintain stream temperature recorders at gage stations. Identify approach(es) for obtaining periodic dissolved oxygen measurements at gage stations at part of station maintenance. Install stream temperature probes at gage stations that do not currently have probes Obtain agreements with USGS, EAP, and/or others for purposes of implementing recommendation. Obtain agreements with Environment Canada for three existing border stations relative to installation of stream temperature recorders and periodic dissolved oxygen measurements. 	<ul style="list-style-type: none"> Q3/07 (approaches for obtaining agreements) Q1/08 (install probes at gages) Q4/07 (obtain agreements for implementing data collection at USGS/EAP sites) Q1/08 (obtain agreements w/ Environment Canada for border sites) 	<ul style="list-style-type: none"> WRIA 1 ST/TTL coordinates implementing recommendation with USGS and/or EAP 	<ul style="list-style-type: none"> Existing- MOA for WRIA 1 Initiating Governments New- Agreement with USGS and/or EAP for new measurements at gage stations. New- Agreement with Environment Canada for adding new measurements at border gage stations. 	<ul style="list-style-type: none"> Corresponds to Recommendation DC2 of the WRIA 1 Long Term Monitoring Plan Strategy, Section 6.0. Annual costs identified in first bullet do not include installation of stream temperature probes. As of March 2007, WRIA 1 Staff Team members in conjunction with USGS have developed an action plan to install stream temperature probes at six of the USGS stations with potentially available funding through existing programs.
	<ul style="list-style-type: none"> Identify and secure agreements and/or funding for stream gage network. 	<ul style="list-style-type: none"> Develop matrix of gages and current sources of funding (short and long term) Develop matrix of funding options and leads for stream gage network (includes O&M costs for flow and temp and periodic DO measurements). Present options to decision-makers for discussion. Follow-up to outcomes of decision-makers' discussion incorporated into WRIA 1 LTMP strategy adaptive management. Secure agreements for funding options. 	<ul style="list-style-type: none"> Q3/07 (develop matrix of current funding) Q4/07 (develop matrix of long-term funding options) Q1/08 (present options to decision-makers) Q2/08 (Secure agreements) 	<ul style="list-style-type: none"> WRIA 1 ST/TTL coordinates tasks associated with identifying funding options, presenting to decision-makers, and securing agreements. 	<ul style="list-style-type: none"> Existing- MOA for WRIA 1 Initiating Governments New- Long-term agreements developed with EAP and/or USGS for gage stations. 	<ul style="list-style-type: none"> Corresponds to Recommendation DC3 of the WRIA 1 Long Term Monitoring Plan Strategy, Section 6.0. The WRIA 1 stream gage network consists of 29 gages, 3 of which are located in British Columbia and are operated by Environment Canada. The remaining 26 gages are currently operated by EAP or USGS with funding support by different agencies. Estimated costs to maintain, operate, and publish results differ between USGS and EAP with the primary difference being in the publication. The minimum estimated annual cost associated with the 26 gages is \$330,200. This annual estimated cost does not include periodic dissolved oxygen measurements. Environment Canada's annual costs for operating and maintaining the three border stations will be discussed as part of the agreements discussed and obtained in previous task.

Implementation Actions			Schedule	Activity Leads	Agreements	Related Information
Task	Subtasks	Milestones	Quarter/Yr			
TIER 1 ACTIONS						
	<ul style="list-style-type: none"> Correlate existing gaging stations over a range of flow conditions. Conduct short-term (preferably one year duration) measurements at unaged drainages to establish correlations with existing stations. 	<ul style="list-style-type: none"> Develop draft scope of work and budget for two-year field effort to correlate existing gage stations. Develop draft scope of work and budget for one year data collection effort at unaged drainages for purposes of establishing correlation with existing stations. Present scopes of work and budgets to WRIA 1 Staff Team for discussion. Identify lead and funding for implementing scopes. Incorporate into WRIA 1 LTMP strategy adaptive management for implementation purposes. 	<ul style="list-style-type: none"> Q1/08 (draft scopes of work) 	<ul style="list-style-type: none"> WRIA 1 ISF/FH and SWQN Technical Team Members lead on initiating discussion and drafting scopes of work. WRIA 1 ST/TTL identifies potential lead and funding source for decision-makers consideration. WRIA 1 ST/TTL coordinates implementation of technical scope of work as part of WRIA 1 LTMP Strategy adaptive management. 	<ul style="list-style-type: none"> Existing- MOA for WRIA 1 Initiating Governments New- Contract for data collection and analysis. 	<ul style="list-style-type: none"> Corresponds to Recommendation DC4 of the WRIA 1 Long Term Monitoring Plan Strategy, Section 6.0.
	<ul style="list-style-type: none"> Establish agreements and/or funding for water quality monitoring stations identified in WRIA 1 LTMP Strategy. 	<ul style="list-style-type: none"> Identify short-term funding options for stations that may no longer be funded past 10/07. Develop long-term funding options for 6 stations for a range of water quality parameters. Present options to decision-makers for discussion. Follow-up to outcomes of decision-makers' discussion incorporated into WRIA 1 LTMP strategy adaptive management. Obtain agreements with USGS, EAP, and/or others for purposes of implementing recommendation. 	<ul style="list-style-type: none"> Q3/07 (short term funding) Q4/07 (long term funding options; coordinate with stream flow network) Q1/08 (present options; coordinate with stream flow network) Q2/08 (Secure agreements) 	<ul style="list-style-type: none"> WRIA 1 ST/TTL coordinates tasks associated with identifying funding options, presenting to decision-makers, and securing agreements. 	<ul style="list-style-type: none"> Existing- MOA for WRIA 1 Initiating Governments New- Long-term agreements developed with EAP and/or others for water quality stations. 	<ul style="list-style-type: none"> Corresponds to Recommendation DC5 of the WRIA 1 Long Term Monitoring Plan Strategy, Section 6.0.
	<ul style="list-style-type: none"> Develop framework for a drainage-based monitoring program. 	<ul style="list-style-type: none"> Draft framework for program based on programs developed for pilot negotiation areas. Incorporate framework into WRIA 1 LTMP strategy adaptive management program for implementation. 	<ul style="list-style-type: none"> Q1/08 (develop program) Q2/08 (incorporate in LTMP strategy) 	<ul style="list-style-type: none"> WRIA 1 ST/TTL coordinates completion of tasks. 	<ul style="list-style-type: none"> Existing- MOA for WRIA 1 Initiating Governments 	<ul style="list-style-type: none"> Corresponds to Recommendation DC6 of the WRIA 1 Monitoring Plan Strategy, Section 6.0. The ISFWG has been working with the Bertrand WID to develop a monitoring program for the Bertrand drainage that addresses drainage management needs. The program being developed for the WID will serve as a basis for WRIA 1 ST/TTL discussions for a general framework that can be adopted by other drainage management units.
	<ul style="list-style-type: none"> Incorporate elements of Habitat Monitoring Methodology into the WRIA 1 LTMP Strategy. 	<ul style="list-style-type: none"> Review parameter monitoring methodologies developed as part of the overall Habitat Monitoring Methodology Incorporate relevant methodologies into WRIA 1 LTMP Strategy. 	<ul style="list-style-type: none"> Q4/07 (review monitoring methodologies) Q1/08 (incorporate into LTMP strategy) 	<ul style="list-style-type: none"> ISF/FH Tech Team lead for coordinating meetings with Salmon Recovery Work Group to review monitoring methodologies. WRIA 1 ST/TTL for coordinating incorporation of relevant methodologies 	<ul style="list-style-type: none"> Existing- MOA for WRIA 1 Initiating Governments 	<ul style="list-style-type: none"> Corresponds to Recommendation DC7 of the WRIA 1 LTMP Strategy, Section 6.0.

Implementation Actions			Schedule	Activity Leads	Agreements	Related Information
Task	Subtasks	Milestones	Quarter/Yr			
TIER 1 ACTIONS						
				into the WRIA 1 LTMP Strategy.		
	<ul style="list-style-type: none"> Coordinate with entities implementing complementary programs. 	<ul style="list-style-type: none"> Obtain complementary program information from implementing entities. Incorporate complementary program details into WRIA 1 LTMP Strategy. 	<ul style="list-style-type: none"> Q3/07 (initiate contact; gather program data) Q4/07 (incorporate details into WRIA 1 LTMP Strategy) 	<ul style="list-style-type: none"> WRIA 1 ST/TTL coordinate task. 	<ul style="list-style-type: none"> Existing- MOA for WRIA 1 Initiating Governments 	<ul style="list-style-type: none"> Corresponds to Recommendation DC8 of the WRIA 1 LTMP Strategy, Section 6.0.
	<ul style="list-style-type: none"> Identify centralized system for managing data at stations identified in the over-arching monitoring program. 	<ul style="list-style-type: none"> Evaluate WRIA 1 Decision Support System data management system and framework for purposes of using it as a centralized system for WRIA-Wide data management. 	<ul style="list-style-type: none"> Q4/07 (Evaluate DSS data management system) Q1/08 (Collaborate with entities collecting data to agree on approach) Q2/08 (develop agreements to implement centralized data management system) 	<ul style="list-style-type: none"> Whatcom County /WRIA 1 DSS Tech Team (conduct evaluation, collaborate with others, coordinate with ST/TTL, obtain agreements) 	<ul style="list-style-type: none"> Existing- MOA for WRIA 1 Initiating Governments New- agreements with entities collecting data relative to approach and process for managing data 	<ul style="list-style-type: none"> Corresponds to Recommendation DM1 of the WRIA 1 LTMP Strategy, Section 6.0. The evaluation for a centralized data management system should consider interactive linkage to a GIS mapping system, provides a clear linkage to updating the WRIA 1 DSS and underlying models, and use of a web-based tool to communicate data coordination between agencies and that supports public outreach and education.
	<ul style="list-style-type: none"> Incorporate data from complementary programs into WRIA 1 Decision Support System. 	<ul style="list-style-type: none"> Coordinate with entities of complementary programs to identify format and process for DSS Data Manager to receive data. 	<ul style="list-style-type: none"> Q2/08 	<ul style="list-style-type: none"> Whatcom County/WRIA 1 DSS Tech Team for coordinating with entities of complementary programs. WRIA 1 ST/TTL for coordinating incorporation outcomes into the WRIA 1 LTMP Strategy. 	<ul style="list-style-type: none"> Existing- MOA for WRIA 1 Initiating Governments 	<ul style="list-style-type: none"> Corresponds to Recommendation DM2 of the WRIA 1 LTMP Strategy, Section 6.0.
	<ul style="list-style-type: none"> Integrate water use information into WRIA 1 DSS. 	<ul style="list-style-type: none"> Provide feedback to Ecology on format for organizing data collected by Ecology on metered water users. 	<ul style="list-style-type: none"> Q3/07 	<ul style="list-style-type: none"> Department of Ecology - BFO 	<ul style="list-style-type: none"> TBD 	<ul style="list-style-type: none"> June 2005 WRIA 1 Watershed Management Plan recommends receiving annual updates from Ecology on water use information relative to their current requirements for obtaining use data on 80% of water use, integrating it into the DSS, and as appropriate, refining water use information in the ISF Pilot negotiations. Ecology will provide meter data from WRIA 1 to the Planning Unit upon request. At this time the data are WRIA-wide. Breakdown of the data into smaller geographic units could be provided depending upon available resources at Ecology's Bellingham Field Office (BFO). Corresponds to Recommendation DM3 of the WRIA 1 LTMP Strategy, Section 6.0.

Implementation Actions			Schedule	Activity Leads	Agreements	Related Information
Task	Subtasks	Milestones	Quarter/Yr			
TIER 1 ACTIONS						
	<ul style="list-style-type: none"> Establish process for analyzing data collected under WRIA 1 LTMP Strategy and evaluating if goals and objectives of Strategy are being met. 	<ul style="list-style-type: none"> Establish process for analyzing data. Evaluate data and assess extent to which goals and objectives are being met. Make recommendations for program modifications to be considered as part of LTMP Strategy adaptive management. 	<ul style="list-style-type: none"> Q4/07 (identify process) TBD (schedule for evaluating data and subsequent recommendations will be addressed as part of the process established. 	<ul style="list-style-type: none"> WRIA 1 ST/TTL coordinate task. 	<ul style="list-style-type: none"> Existing- MOA for WRIA 1 Initiating Governments 	<ul style="list-style-type: none"> Corresponds to Recommendation DA1 of the WRIA 1 LTMP Strategy, Section 6.0.
Compliance Program ⁶	<ul style="list-style-type: none"> Water right education efforts and technical assistance 	<ul style="list-style-type: none"> Continue water right education in the ISF pilot negotiation drainages (Bertrand and Middle Fork) Continue providing technical assistance to the Bertrand WID as part of the ISF Pilot Negotiations to develop a cooperative water management strategy that addresses water use for permitted and non-permitted users. Evaluate 2005/2006 water code compliance efforts and outcomes of investigation of complaints. Based on evaluation, identify drainages that may benefit from a prioritized focus on education and/or technical assistance. 	<ul style="list-style-type: none"> Q3/07 through Q2/08 (continue water right education in ISF pilot areas) Q4/07 (technical assistance to Bertrand WID) Q4/07 (evaluate code compliance and outcomes of complaint investigations) Q1/08 (identify drainages for focusing education and/or technical assistance) 	<ul style="list-style-type: none"> Ecology lead with updates to/coordination with WRIA 1 ST/TTL 	<ul style="list-style-type: none"> Existing- MOA for WRIA 1 Initiating Governments New- Bertrand WID agreement with Ecology for water management strategy that addresses water use. 	<ul style="list-style-type: none"> Ecology hired two new Water Resources staff in June 2006. Their duties include water code compliance/enforcement activities and reviewing and evaluating water right claims in WRIA 1. From June 2006 - April 2007 Ecology's Bellingham Field Office (BFO) responded to 32 water code complaints
	<ul style="list-style-type: none"> Identify approach(es) for implementing WRIA 1 Watershed Management Plan, Compliance Program goals 3-6. 	<ul style="list-style-type: none"> Establish committee composed of representatives of regulatory agencies to develop implementation strategy that addresses Compliance Program goals. Consider strategy elements for implementation as part of adaptive management. 	<ul style="list-style-type: none"> Q1/08 (establish committee) Q3/08 (strategy drafted) Q4/08 (consider elements to incorporate into adaptive management process) 	<ul style="list-style-type: none"> WRIA 1 ST/TTL coordinate task. 	<ul style="list-style-type: none"> Existing- MOA for WRIA 1 Initiating Governments 	<ul style="list-style-type: none"> Suggested composition of the committee is outlined in the WRIA 1 Watershed Management Plan, Section 3. This suggestion presents one approach for establishing the committee.
	<ul style="list-style-type: none"> Public education and technical assistance related to existing regulations addressing water supply, instream flow, water quality, and fish habitat issues 	<ul style="list-style-type: none"> Identify approaches for broadening exposure and scope of the County's Natural Resource Management website and education efforts. Develop additional education approaches and technical assistance needs to meet specific issues that may be identified through the committee process of addressing goals 3-6 of the compliance program (above subtask). Develop scope, budget, and lead for implementing additional education/technical assistance needs. 	<ul style="list-style-type: none"> Q3/08 	<ul style="list-style-type: none"> Whatcom County/WRIA 1 ST/TTL coordinate task with WRIA 1 PIE Tech Team 	<ul style="list-style-type: none"> Existing- MOA for WRIA 1 Initiating Governments 	<ul style="list-style-type: none"> Whatcom County PDS has developed a Natural Resource Management website to broaden public education of the CAO and SMP ordinances and natural resources associated with the ordinance. Whatcom County PDS developed informational brochures related to critical areas management and regulations for the public and other government entities within WRIA 1. Whatcom County PDS and Whatcom Conservation District developed an education and assistance document for small farm owners related to land management under the County CAO. Funding to continue educational opportunities and technical assistance to farm owners/operators has been dedicated through the 2007-2008 Whatcom County budget process.

⁶ Six goals are identified for the Compliance Program as described in the June 2005 WRIA 1 Watershed Management Plan. Briefly, the goals include: 1) public education of existing regulations that address water supply, instream flow, water quality, and fish habitat issues; 2) technical assistance to those regulated; 3) developing an understanding of where and why compliance is not adequate; 4) conducting prioritized enforcement as necessary to achieve WRIA 1 Watershed Management Project goals; 5) evaluate effectiveness of existing regulations; and 6) recommending changes to regulations that are found to be ineffective.

Implementation Actions			Schedule	Activity Leads	Agreements	Related Information
Task	Subtasks	Milestones	Quarter/Yr			
TIER 1 ACTIONS						
Natural Resource Policy Integration Program (NRPI) ⁷	<ul style="list-style-type: none"> Improve efficiency and effectiveness between existing natural resource programs. 	<ul style="list-style-type: none"> Implement outcomes of WRIA 1 Joint Board discussions associated with program coordination. Present outcomes of the Whatcom County Comprehensive Water Resource Integration Project. Present outcomes of Nooksack Tribe grant deliverable identifying approaches to improve integration and coordination between WRIA 1 watershed planning and salmon recovery planning. Identify additional areas, if necessary, for improving coordination and/or integration of elements within existing County programs. Identify opportunities for improving efficiencies and effectiveness among WRIA 1 jurisdictions implementing natural resource programs. Develop strategy for implementing opportunities and needs identified in previous milestones. Evaluate Whatcom County PDS website developed for the SMP and CAO for purposes of expanding scope of the website to include other Whatcom County natural resource programs and links to other jurisdictions natural resource programs. 	<ul style="list-style-type: none"> Q4/07 (implement outcomes of Joint Board discussions) Q1/08 (present outcomes of Comprehensive Water Resource Integration Project and Nooksack Tribe coordination grant) Q2/08 (identify additional coordination/integration needs) Q2/08 (develop strategy) Q4/07 (evaluate opportunities to expand Whatcom County PDS website) 	<ul style="list-style-type: none"> WRIA 1 ST/TTL coordinates outcomes of Joint Board discussions. WRIA 1 ST/TTL & WRIA 1 Salmon Recovery Steering Committee or its designated representatives coordinate reviews and developing strategy. Whatcom County evaluates opportunities to expand website. Whatcom County present outcomes of County Comprehensive Water Resource Integration project Nooksack Tribe present outcomes of watershed project/salmon recovery integration grant recommendations. 	<ul style="list-style-type: none"> Existing- MOA for WRIA 1 Initiating Governments Existing MOU between State of Washington Department of Health and Department of Ecology related to coordination between Planning, Engineer, Public Health and Safety Processes, and Water Resources. TBD 	<ul style="list-style-type: none"> Whatcom County PDS has recently updated the SMP and the CAO. Consistent with the WRIA 1 Watershed Management Plan NRPI Program task to evaluate potentially inconsistent goals and policies among County natural resource programs, the County assessed program goals and policies and addressed them as part of the CAO and SMP updates. The WRIA 1 Joint Board is considering options for improving program coordination of natural resource programs at a policy level. Whatcom County's Comprehensive Water Resource Integration Project is intended to identify the relationships among their programs and projects (consistencies/inconsistencies), identify guiding principles, and identify where the County should prioritize their resources to effectively implement the County adopted programs and projects. Phase 1 of the proposed project is planned for 2007. The Nooksack Tribe has been awarded a grant from the Department of Ecology that is intended to further integration and coordination of watershed planning and salmon recovery planning in WRIA 1. The State Department of Health (DOH) and Ecology have signed an MOU that will facilitate coordination between the two agencies for planning, engineering, public health and safety, and water resources issues. The MOU describes responsibilities related to the review of water system plans for consistency with watershed plans and instream flows, changes in water system place of use and number of connections, water system plan compliance water rights compliance and enforcement, water use efficiency, and other water system plan concerns. Staff coordinating activities of the WRIA 1 Watershed Management Project and/or the WRIA 1 Salmon Recovery Program should consider opportunities for enhancing coordination between program participants by distributing work products created in one or the other program to participants of the other program.

⁷ Three goals are identified for the Natural Resource Policy Integration Program as described in the June 2005 WRIA 1 Watershed Management Plan. Briefly, the goals include: 1) improve efficiency and effectiveness of water related natural resource planning and policy development, evaluation, and implementation among WRIA 1 jurisdictions; 2) utilize the WRIA 1 Watershed Management Project as a central clearinghouse for “best available science”; and 3) continuously improve the NRPI program.

Implementation Actions			Schedule	Activity Leads	Agreements	Related Information
Task	Subtasks	Milestones	Quarter/Yr			
TIER 1 ACTIONS						
	<ul style="list-style-type: none"> Maintain Whatcom County's resource library and electronic database of reports and plans and enhance it to serve as an online, searchable database that integrates studies and plans of other entities. 	<ul style="list-style-type: none"> Identify options for maintaining and enhancing library and searchable electronic database for WRIA 1 technical reports and plans. Evaluate feasibility of establishing a workstation with the WRIA 1 DSS installed for public use. Discuss options with likely WRIA 1 users of and contributors to a clearinghouse such as local governments, tribes, and non-profits. Based on discussions, develop strategy and scope for creating a clearinghouse/library and database. Implement strategy to provide web access to database. 	<ul style="list-style-type: none"> Q3/08 (identify options, evaluate feasibility of DSS workstation) Q3/08 (discuss options, develop strategy and scope) Q4/08 (implement integrated, web accessible database) 	<ul style="list-style-type: none"> WRIA 1 ST/TTL coordinate task. 	<ul style="list-style-type: none"> Existing- MOA for WRIA 1 Initiating Governments TBD 	<ul style="list-style-type: none"> The WRIA 1 Watershed Management Project website is currently hosted by WSU Extension, Whatcom County (www.wria1project.wsu.edu). Changes, if any, that occur to the WRIA 1 Watershed Management Project website as a result of implementing milestones identified in the NRPI program will be clearly communicated on the WRIA 1 Watershed Management Project website, Whatcom County website (www.co.whatcom.wa.us), and other related websites.
Governance and Administration	<ul style="list-style-type: none"> Implement Phase 1 of the March 2007 draft of the Governance Structure for Implementing WRIA 1 Programs⁸ 	<ul style="list-style-type: none"> Conduct consolidated policy board meetings for WRIA 1 Watershed Management Project and WRIA 1 Salmon Recovery Program. Prepare feasibility report for implementing concepts described in Phase 2 and Phase 3 of the Governance Structure for Implementing WRIA 1 Programs. Present feasibility report to Planning Unit for discussion, feedback/comments, and next steps. Present feasibility report to Joint Board and Salmon Recovery Board for discussion and next steps. 	<ul style="list-style-type: none"> Q3/07 (consolidated policy meetings) Q4/07 (feasibility report) 	<ul style="list-style-type: none"> WRIA 1 Staff Team/Designated representative for the WRIA 1 Salmon Recovery Board WRIA 1 Staff Team coordinate feasibility report with designated representative for Salmon Recovery Steering Committee 	<ul style="list-style-type: none"> Existing- MOA for WRIA 1 Initiating Governments Existing- ILA between Co-Managers and Local Governments creating the Salmon Recovery Board as Lead Entity Existing- ILA between Initiating Governments creation the WRIA 1 Joint Board Existing- Approval documents for consolidating meetings of the WRIA 1 Joint Board and WRIA 1 Salmon Recovery Board. 	<ul style="list-style-type: none"> Approval to consolidate meetings of the WRIA 1 Watershed Management Project and the WRIA 1 Salmon Recovery Program policy boards- WRIA 1 Joint Board and WRIA 1 Salmon Recovery Board, respectively- was received April 2007. Staff of the two programs will need to identify a process for organizing, setting agendas, and conducting the consolidated meetings. Phase 1 of the Governance Structure for Implementing WRIA 1 Programs recognizes that the Salmon Recovery Program participants will be establishing a community/stakeholder advisory group as part of their process that provides feedback to the Salmon Recovery Steering Committee. With the exception of the consolidated policy meetings, the Salmon Recovery Program and WRIA 1 Watershed Management Project will continue functioning as independent processes. Phases 2 and 3 of the March 2007 draft Governance Structure for Implementing WRIA 1 Programs presents a conceptual framework proposed for enhancing program coordination and integration; this conceptual framework is merely a proposal at this time. It is expected that the governance and funding subcommittee will consider ways of integrating Salmon Recovery and Watershed Planning, including this proposal. Consolidating policy board meetings will increase WRIA 1 Management Project and WRIA 1 Salmon Recovery Program coordination at the policy level.

⁸ Implementing Phase 1 of the March 2007 draft document *Governance Structure for Implementing WRIA 1 Programs* affects the policy board level of the WRIA 1 Structure and Function Document described in the June 2005 WRIA 1 Watershed Management Plan. The policy level change will consolidate meetings of the WRIA 1 Joint Board and the WRIA 1 Salmon Recovery Boards while retaining the decision-making process currently in place for the respective boards. Other elements of the organizational structure for the WRIA 1 Watershed Management Project remain unchanged from the interim implementation strategy as outlined in Section 4.2.2 of the WRIA 1 Watershed Management Plan.

Implementation Actions			Schedule	Activity Leads	Agreements	Related Information
Task	Subtasks	Milestones	Quarter/Yr			
TIER 1 ACTIONS						
	<ul style="list-style-type: none"> Identify long term funding options. 	<ul style="list-style-type: none"> Establish funding subcommittee to participate in identifying funding options. Prepare and present funding options to WRIA 1 Staff Team and WRIA 1 Salmon Recovery Steering Committee for discussion and feedback. Incorporate feedback and work with subcommittee to prepare funding presentation to WRIA 1 Joint Board/WRIA 1 Salmon Recovery Board and Planning Unit for discussion. Policy Boards and Planning Unit approval of preferred option for submitting to legislative bodies for consideration. 	<ul style="list-style-type: none"> Q4/07 (establish subcommittee) Q1/08 (prepare funding options; present to Staff Team/Steering Committee) Q2/08 (incorporate feedback; prepare presentation to policy boards and Planning Unit) Q3/08 (present to legislative bodies for consideration) 	<ul style="list-style-type: none"> WRIA 1 Staff Team and support staff lead for coordinating task. 	<ul style="list-style-type: none"> Existing- MOA for WRIA 1 Initiating Governments Existing- ILA between Co-Managers and Local Governments creating the Salmon Recovery Board as Lead Entity New -TBD 	<ul style="list-style-type: none"> In May 2005 members of the WRIA 1 Planning Unit created a subcommittee to review and identify long-term funding options for implementing the WRIA 1 Watershed Management Plan. The options were presented to the legislative bodies for consideration and discussion. A funding subcommittee that includes WRIA 1 Watershed Management Project participants and WRIA 1 Salmon Recovery Program participants will result in a broader representation of funding needs to present to the policy boards and legislative bodies for consideration. Governance structure and integration and coordination of programs should be considered as part of the funding subcommittee discussions. Funding options for dedicated long term funding will require additional processes at the legislative level.
	<ul style="list-style-type: none"> WRIA 1 Watershed Management Project Support 	<ul style="list-style-type: none"> Organize and conduct Planning Unit meetings as described in the June 2005 WRIA 1 Watershed Management Plan. Organize and conduct up WRIA 1 Staff Team meetings. Organize/coordinate Joint Board meetings. Prepare quarterly reports on implementation tasks for 2007/2008. Communication/coordination support for WRIA 1 Watershed Management Project. 	<ul style="list-style-type: none"> Q1/08 and Q3/08 (tentative schedule for conducting Planning Unit meetings assuming continued process of 1st meeting to review and 2nd meeting to approve) Monthly and as needed (Staff Team meetings) Quarterly and as needed (Joint Board meetings) Q4/07 through Q4/09 (quarterly reports for 2-year implementation schedule) Q4/07 through Q4/09 (ongoing project support) 	<ul style="list-style-type: none"> WRIA 1 Staff Team and support staff lead for coordinating tasks. 	<ul style="list-style-type: none"> Existing- MOA for WRIA 1 Initiating Governments Existing- ILA between Co-Managers and Local Governments creating the Salmon Recovery Board as Lead Entity 	<ul style="list-style-type: none"> The June 2005 WRIA 1 Watershed Management Plan includes an interim strategy for implementation of the WRIA 1 Watershed Management Plan for 2005/2006. This interim strategy is expected to continue through 2007/2008 while actions associated with this Detailed Implementation Plan are being implemented including options for a long-term funding source. The interim strategy for WRIA 1 Planning Unit meetings identifies up to four meetings per year for the primary purpose of considering recommendations relative to instream flows or to the Federal/Tribal settlement negotiations, legislative changes, and formal WRIA 1 Watershed Management Plan updates. The WRIA 1 Joint Board meetings will be organized and conducted as outlined in Phase 1 of the March 2007 draft <i>Governance Structure for Implementing WRIA 1 Programs</i>.
Adaptive Management	<ul style="list-style-type: none"> Develop Implementation Schedule for Tier 2 and Tier 3 Category WMP Actions 	<ul style="list-style-type: none"> Review status of Tier 1 actions and effectiveness in meeting program/project goals. Assess Tier 2 and Tier 3 WMP actions based on outcome of Tier 1 review and recommend changes/modifications to the Tier 2 and Tier 3 actions. Develop an implementation schedule for Tier 2 and Tier 3 actions. Incorporate modifications to Tier 1 actions recommended as part of the effectiveness review. 	<ul style="list-style-type: none"> Q1/08; Q3/08; Q1/09; Q3/09 (review status) Q4/08; Q4/09 (recommend modifications and develop new work plan/implementation schedule) 	<ul style="list-style-type: none"> WRIA 1 Staff Team and support staff lead for coordinating tasks. 	<ul style="list-style-type: none"> Existing- MOA for WRIA 1 Initiating Governments TBD 	<ul style="list-style-type: none"> The March 2000 Scope of Work for the WRIA 1 Watershed Management Project includes a strategy for adaptive management in Section 2.7. The review of the Tier 1 actions' effectiveness in addressing goals and objectives of the WRIA 1 Watershed Management Plan and modifications or changes that may need to be made to Tier 2 and Tier 3 actions based on the outcome of the review will be done consistent with the adaptive management process identified in the March 2000 Scope of Work. Tier 1 actions include implementing the ISF Action Plan, which is intended to address water availability for instream and out of stream uses as part of the negotiation process. If after reviewing the Tier 1 actions, it is determined that the negotiation process is not sufficiently addressing water supply for future uses and the role of inchoate rights in meeting future supplies, additional strategies will be identified using the Adaptive Management strategy outlined in Section 2.7of the March 2000 WRIA 1

Implementation Actions			Schedule	Activity Leads	Agreements	Related Information
Task	Subtasks	Milestones	Quarter/Yr			
TIER 1 ACTIONS						
						Watershed Management Project Scope of Work.
	<ul style="list-style-type: none"> Implement Section 7, Adaptive Management of the WRIA 1 Long Term Monitoring Program Strategy 	<ul style="list-style-type: none"> Establish coordinating/technical team to implement adaptive management steps identified in the WRIA 1 LTMP strategy. 	<ul style="list-style-type: none"> Q1/08; Q3/08; Q1/09; Q3/09 (coordinating/technical team meets to review steps) 	<ul style="list-style-type: none"> WRIA 1 Staff Team and support staff lead for coordinating tasks 	<ul style="list-style-type: none"> Existing- MOA for WRIA 1 Initiating Governments New – TBD 	<ul style="list-style-type: none"> The WRIA 1 Long Term Monitoring Program Strategy that includes Section 7, Adaptive Management, is included as an Appendix to the WRIA 1 Detailed Implementation Plan.
	<ul style="list-style-type: none"> Modifications/additions to strategies included in the June 2005 WRIA 1 Watershed Management Plan for addressing water quantity, water quality, instream flow, and fish habitat goals and objectives 	<ul style="list-style-type: none"> Prepare annual status report of implementation actions identified in the Detailed Implementation Plan. Based on report, evaluate implementation actions to identify need for modifications and/or additions to strategies for purposes of addressing WRIA 1 Watershed Management Project goals and objectives. Present list of changes, if any, to Planning Unit and Joint Board for consideration. 	<ul style="list-style-type: none"> Q1/08; Q1/09 (annual status report) Q2/08; Q2/09 (evaluate strategies) 	<ul style="list-style-type: none"> WRIA 1 Staff Team and support staff lead for coordinating tasks 	<ul style="list-style-type: none"> Existing- MOA for WRIA 1 Initiating Governments Existing- Section 2.7 of the March 2000 WRIA 1 Watershed Management Project. 	<ul style="list-style-type: none"> Strategies and programs identified in the June 2005 WRIA 1 Watershed Management Plan were developed to address the goals and objectives identified in the March 2000 WRIA 1 Watershed Management Project Scope of Work. Section 2.7 identifies an adaptive management process for evaluating effectiveness of the implementation strategies included in the WRIA 1 Watershed Management Plan. A report on status of WRIA 1 Watershed Management Plan actions identified for implementation in 2005/2006 was prepared December 2006. This format will be considered for annual reporting of implementation actions through 2009.

Appendix A
Governance Structure for Implementing WRIA 1 Programs

Author's Note: The WRIA 1 Joint Board approved Phase 1 of this document. Evaluating the concepts outlined in Phase 2 and Phase 3 is a task identified in the July 2007 WRIA 1 Detailed Implementation Plan.

GOVERNANCE STRUCTURE FOR IMPLEMENTING WRIA 1 PROGRAMS

INTRODUCTION

One of the fundamental premises of the WRIA 1 Watershed Management Project is the recognition that effective water resource management requires a commitment extending beyond the development of the Watershed Management Plan itself. The March 2000 Scope of Work listed a number of key areas and activities to be considered in an implementation strategy including a long-term organized structure to ensure implementation, review progress, involve the public, report to entities, and respond to new needs or information. Consistent with the WRIA 1 Watershed Project Scope of Work, the June 2005 WRIA 1 Watershed Management Plan references a long-term strategy that envisions a single management approach for long-term water resource management. The structure envisioned in the June 2005 plan continues representation of a wide-range of interests; involves federal, tribal, state, and local governments; and provides community members with opportunities to become involved in managing water resources in WRIA 1.

APPROACH FOR DEVELOPING IMPLEMENTATION GOVERNANCE STRUCTURE

In December 2006, the WRIA 1 Joint Board met to discuss implementation of the WRIA 1 Watershed Management Project. As part of the discussion, the Joint Board identified the need to begin evaluating options to integrate elements of the WRIA 1 Watershed Management Project and the WRIA 1 Salmon Recovery Program for purposes of increasing coordination and maximizing resources. The WRIA 1 Staff Team was directed by the Joint Board to collaborate with the WRIA 1 Salmon Recovery Steering Committee and Work Group to identify options for the Joint Board's evaluation.

The WRIA 1 Staff Team and the WRIA 1 Salmon Recovery Steering Committee and Work Group jointly met three times to discuss and develop options for the Joint Board. The starting point for the discussions was a review of the existing organizational structures for both programs, the previous proposal developed as part of the WRIA 1 Watershed Management Project, and the Skagit Watershed Council structure for their salmon recovery program. Based on the meeting discussions, an option was identified that met the needs of both the WRIA 1 Watershed Management Project and the WRIA 1 Salmon Recovery Program and addressed the Joint Board's request for an option that maximizes resources and increases coordination between programs. The option identified is also consistent with the long-term vision referenced in the June 2005, WRIA 1 Watershed Management Plan.

OVERVIEW OF PROPOSED GOVERNANCE STRUCTURE

The governance structure forwarded to the WRIA 1 Joint Board for consideration occurs in three phases. Achieving identified milestones mark the progression from one phase to the next. The one exception is progressing from the current WRIA 1 Watershed Management Project and WRIA 1 Salmon Recovery Program structures to the Phase 1 structure. The two differences between the current organizational structures and the Phase 1 structure are found at the Administration & Policy Related Decision-Maker level and the community involvement level of the Salmon Recovery Program. At the Administration & Policy level, the Phase 1 structure

combines meetings of the two program policy boards and creates a community stakeholder advisory group that provides feedback to the Salmon Recovery Steering Committee. The changes reflected in the Phase 1 structure may be implemented by the WRIA 1 Joint Board and WRIA 1 Salmon Recovery Board at any time.

The milestones associated with the progression from Phase 1 to Phase 2 include completion of the Comprehensive Water Resource Integration Project being pursued by Whatcom County Public Works, acceptance of the Utah State University (USU) WRIA 1 Decision Support System and underlying models, and completion of the technology transfer associated with the USU models. The primary difference between the Phase 1 and Phase 2 structure is found in the Program Oversight/Coordination Team level, which combines the WRIA 1 Staff Team and an equivalent staff-level team⁹ from the Salmon Recovery Program into a single team responsible for coordinating the WRIA 1 Watershed Management Project and Salmon Recovery Program.

Phase 3 is the final phase for an integrated natural resource program governance structure. The Phase 3 structure is consistent with the long-term structure envisioned by participants of the WRIA 1 Watershed Management Project. It includes a coordinating body labeled the Natural Resource Program Coordination Team on Figure 1, which is comprised of both dedicated staff independent of any one agency and agency staff. The vision for the Coordination Team is to eventually structure it as a 501(c)(3) organization, which will enable them to receive grants and other funding directly. The Coordination Team's primary responsibility is to ensure that WRIA 1 program activities are being coordinated on an agency and community level. Coordination on a community level includes supporting established drainage-based management units or sub-basin groups (e.g., watershed improvement districts, flood control management sub-zones) using guiding principles developed as an outcome of the Comprehensive Water Resource Integration Project to identify priority activities within their drainage or sub-zone for consideration in WRIA 1 work plans. The priority activities identified by the drainage level groups are forwarded by the Coordination Team to the Program Oversight & Administration level for review and incorporation into draft work plans that are then submitted to Policy Decision-Makers for review and approvals.

The phases summarized above are discussed in greater detail below. It is important to note that although identified milestones advance the progression from one phased structure to the next, the actual progression is not a discrete event. While the organizational structure may be at any one phase, there are activities and decisions being made by organizations and agencies that will incrementally move the process for coordinating natural resource activities toward the long-term vision of Phase 3.

PHASE 1

Phase 1 Overview

The structure in Phase 1 primarily retains the current structure and function for the WRIA 1 Watershed Management Project and the WRIA 1 Salmon Recovery Program. There are two changes in Phase 1 over the existing structures and functions: consolidation of the policy boards

⁹ The WRIA 1 Salmon Recovery Program does not currently have a team that can be equated to the WRIA 1 Staff Team. The WRIA 1 Salmon Recovery Program decision-makers should designate the appropriate group within their framework to function in the relevant capacities as outlined in this document.

of the two programs into a single meeting format and addition of a community/stakeholder advisory group to the Salmon Recovery Program. There are no milestones associated with implementing this phase of the organizational structure. Transitioning to Phase 1 from the two current processes of the WRIA 1 Watershed Management Project and the Salmon Recovery Program can occur at any time the WRIA 1 Joint Board and Salmon Recovery Board opt to pursue the transition.

Elements of Phase 1

- WRIA 1 Watershed Management Project organizational structure and functions do not change.
- WRIA 1 Salmon Recovery Program organizational structure and functions do not change, except for the addition of the community/stakeholder group.
- Government-to-government relationship continues as established for WRIA 1 Project.
- WRIA 1 Joint Board and WRIA 1 Salmon Recovery Board meetings are combined. Members of the two policy boards are active participants in discussing all agenda items but decisions are made by the specific program's policy board. For example, salmon recovery and watershed planning agenda items are discussed by both policy boards but only Salmon Recovery Board members make decisions on salmon recovery agenda items and WRIA 1 Joint Board makes decisions on watershed planning agenda items.
- Salmon Recovery Program establishes a community/stakeholder group that provides feedback to the Salmon Recovery Steering Committee. Inviting members or caucuses participating on the WRIA 1 Planning Unit to participate in the salmon recovery advisory group will further increase the level of coordination between the WRIA 1 Watershed Project and Salmon Recovery Program. The actual mechanics of creating the salmon advisory group and their role (including defining their level of authority) needs further discussion.

Organizational Functions

Legislative Bodies:

- Organizational level reflects the Councils and/or Commissions of the individual jurisdictions involved in the processes. The Admin & Policy-Related Decision-Makers interact with their respective Councils or Commission.

Administrative & Policy-Related Decision-Makers:

- This organizational level includes the current WRIA 1 Joint Board membership and the WRIA 1 Salmon Recovery Board membership. The WRIA 1 Joint Board membership currently includes the City of Bellingham, Whatcom County, Public Utility District No. 1, Lummi Nation, and Nooksack Tribe. Membership on the Joint Board may be expanded to include the Washington State Department of Ecology. The WRIA 1 Salmon Recovery Board membership includes the mayors of cities in Whatcom County, the executive for Whatcom County, regional director for WDFW, and designated representatives of the Lummi Nation and Nooksack Tribes.
- Meeting agendas may include topics for both programs (watershed management project and salmon recovery) but decisions are made by the policy members associated with the individual programs according to their current operational procedures. For the WRIA 1 Joint Board, decisions are made by consensus of the Board members. For the WRIA 1 Salmon Recovery

Board, decisions are a consensus of the two caucuses represented by the Board: the Local Government caucus and the Co-Manager caucus.

- Meetings will occur semi-annually or as needed to provide policy direction to the WRIA 1 Staff Team and Salmon Recovery Steering Committee during program implementation. Although the Policy Board is not the avenue for public outreach, observers at the Policy Board meetings may be provided an opportunity on the agenda to address the Board on watershed management project and salmon recovery topics.
- This organizational level interacts with federal, state, and regional organizations at a policy-level and provides policy-related direction to staff for purposes of incorporating regional issues into local work plans, programs, etc.

Federal, State, Regional Involvement/Programs

- Representatives of federal, state, and regional agencies and/or programs interact at the Admin & Policy-Related Decision-Makers level to discuss policies and regulations that affect local program implementation.
- Representatives of federal, state, and regional entities interact with program staff as needed to provide technical or task-oriented feedback and/or involvement in program implementation.

WRIA 1 Staff Team, Technical Teams, Planning Unit

- Composition of the Staff Team, Technical Teams, and Planning Unit remain unchanged from the current WRIA 1 Watershed Management Project structure and functions¹⁰.
- Roles and responsibilities of the Staff Team, Technical Teams, and Planning Unit remain unchanged from the current WRIA 1 Watershed Management Project structure and functions.
- Interaction of the WRIA 1 Staff Team with the Admin & Policy-Related Decision-makers is unchanged from current process.

Salmon Recovery Steering Committee and Steering Committee Work Group

- Composition of the Steering Committee and Steering Committee Work Group remains unchanged from the current composition.
- Roles and responsibilities of the Steering Committee and Steering Committee Work Group remain unchanged from the current process.
- The WRIA 1 Staff Team interacts with the WRIA 1 Planning Unit to keep them updated on implementation activities. The Staff Team also assists in coordinating and supporting Planning Unit meetings.
- Interaction of the WRIA 1 Staff Team with the Admin & Policy-Related Decision-makers is unchanged from current process.

Planning Unit

- The function of the Planning Unit remains unchanged from its function as described in the June 2005 WRIA 1 Watershed Management Plan.

¹⁰ The structure and function documents for the WRIA 1 Watershed Management Project are available at www.wria1project.wsu.edu.

Salmon Recovery Advisory Council

- Composition of this newly created level to the Salmon Recovery Program is intended to include diverse representation of the community and will occur as part of the Salmon Recovery Program implementation process. An approach the Salmon Recovery Steering Committee should consider is to draft the functions and responsibilities of the community group and then distribute it with an invitation to the members of the WRIA 1 Planning Unit or members of their caucuses to participate.
- The function of the community group in the organizational structure is to provide feedback to the Salmon Recovery Steering Committee on program implementation activities and to actively participate with implementing projects.
- At the Salmon Recovery Board's discretion, members of the Salmon Recovery Advisory Council may participate in the Combined Review Team (CRT).¹¹

Advantages/Challenges

- Phase 1 can be implemented at any time without disrupting activities of individual programs or processes.
- Although Phase 1 addresses the interests of the Salmon Recovery Program by creating a community advisory group as part of the organizational structure it does not fully address the interest of some members, which is to use the existing WRIA 1 Planning Unit for the Salmon Recovery Program as the Planning Unit is currently structured. The challenge of using the WRIA 1 Planning Unit for the Salmon Recovery Program as the Planning Unit is currently structured is the level of responsibility associated with the Planning Unit.
- Inviting members of the WRIA 1 Planning Unit or their represented caucuses to participate on the newly created Salmon Recovery Advisory Council increases efficiency and coordination between programs. This cross-representation provides continuity in Phase 3 when merging of the caucus-based groups occurs.
- There is not dedicated staff or funding for implementing the programs.
- Government-to-Government relationship is retained.

PHASE 2

Phase 2 Overview

Two milestones that move the organizational structure from Phase 1 to Phase 2 is acceptance of Utah State University (USU) technical products including the WRIA 1 Decision Support System and underlying models and completion of the technology transfer associated with the products. Transition to Phase 2 may be facilitated by outcomes of the Whatcom County Comprehensive Water Resource Integration Project being pursued by Whatcom County Public Works that will provide guiding principles for implementing actions in the various county planning documents. The outcomes of the County's integration project may be available before the first two milestones and may, at the Joint Board/Salmon Recovery Board's discretion, be incorporated at some level into the Phase 1 structure.

¹¹ The CRT is comprised of community and technical members.

The structural change in Phase 2 over Phase 1 includes a change at the management/administrative staff level. This change includes combining the Phase 1 (and current) WRIA 1 Staff Team and an equivalent Salmon Recovery Program staff-level team identified in Phase 1. The intent of a combined staff function at this organizational level is to further increase the program coordination that was initiated in Phase 1 on the policy level and apply it at the administration level. The Administrative & Policy-Related Decision-Maker organizational level remains unchanged from Phase 1. Although the structure at the staff level changes, its operational function within the WRIA 1 Watershed Project and the Salmon Recovery Program remains unchanged.

Elements of Phase 2

- Government-to-government relationship continues at the Admin & Policy-Related Decision-Maker level.
- The WRIA 1 Staff Team and an equivalent Salmon Recovery Program staff level team consolidate into a single administrative staff organizational level that assures administration of the policies related to WRIA 1 Watershed Management Project and Salmon Recovery Program at the implementation level. The consolidation of the administrative staff also assures increased coordination between programs.
- Phase 2 retains the capacity of the WRIA 1 Watershed Management Project and the Salmon Recovery Program to independently implement program elements.
- The community stakeholder groups continue to function as in Phase 1.

Organizational Functions

Legislative Bodies:

- Organizational level reflects the Councils and/or Commissions of the individual jurisdictions involved in the processes. The Admin & Policy-Related Decision-Makers interact with their respective Councils or Commission.

Administrative & Policy-Related Decision-Makers:

- This organizational level retains the structure established in Phase 1 (consolidating Joint Board and Salmon Recovery Board meetings and agendas).
- Functions remain unchanged from Phase 1.
- Meeting frequency and opportunity for receiving program feedback from meeting observers remain unchanged from Phase 1.

Federal, State, Regional Involvement/Programs

- Representatives of federal, state, and regional agencies and/or programs interact at the Admin & Policy-Related Decision-Makers level to discuss policies and regulations that affect local program implementation.
- Representatives of federal, state, and regional entities interact with program staff as needed to provide technical or task-oriented feedback and/or involvement in program implementation.
- Program Oversight/Coordination
- Members of the WRIA 1 Staff Team and the equivalent staff level team from the Salmon Recovery Program combine to form a consolidated staff-level team that provides coordinated

implementation of the WRIA 1 Watershed Management Project and the Salmon Recovery Program.

- The functions of the Program Oversight/Coordination Team include implementing elements of the WRIA 1 Watershed Management Project and the Salmon Recovery Program according to approved work plans and direction provided by the Administrative & Policy-Related Decision-Makers.
- The Program Oversight/Coordination Team interacts with the WRIA 1 Watershed Management Project and Salmon Recovery Program technical teams/work group and the community groups as structured in their respective programs.
- The Program Oversight/Coordination Team interacts with federal, state, and regional representatives of agencies and programs as needed to receive technical or task-oriented feedback involving program implementation.
- Meetings of the Program Oversight/Coordination Team are open to members of the WRIA 1 Planning Unit caucuses and the Salmon Recovery Advisory Council. An opportunity is provided at the meeting for the Team to solicit feedback from the two community groups on a regular basis.

WRIA 1 Technical Teams and Planning Unit

- Composition of the Technical Teams and Planning Unit remain unchanged from Phase 1.
- Roles and responsibilities of the Technical Teams, and Planning Unit remain unchanged from Phase 1.
- Interaction of the Technical Teams and Planning Unit is primarily with the Program Oversight/Coordination Team.

Steering Committee (Salmon Recovery) Work Group

- Composition of the Steering Committee Work Group remains unchanged. “Steering Committee” in the title of the group is changed to “Salmon Recovery” (i.e., Salmon Recovery Work Group).
- Roles and responsibilities of the Salmon Recovery Work Group remain unchanged from Phase 1.
- The Salmon Recovery Work Group interacts with the Program Oversight/Coordination Team.

Planning Unit

- The function of the Planning Unit remains unchanged from its function as described in the June 2005 WRIA 1 Watershed Management Plan.

Salmon Recovery Advisory Council

- The functions of the Salmon Recovery Advisory Council remain unchanged from Phase 1.

Advantages/Challenges

- The transition from Phase 1 to Phase 2 can be implemented without disrupting activities of individual programs or processes.
- Phase 2 increases the level of coordination beyond the policy decision-making level by consolidating the staff level teams of the two programs into a single team. For the individuals

that currently participate on both the WRIA 1 Staff Team and the Salmon Recovery Program consolidating the two teams may improve efficiency of their time even considering that the length of time at a meeting may increase to cover topics of both programs.

- There is not dedicated staff or funding for implementing the programs. The need to fund support for this team may be needed since the day-to-day oversight and coordination occurs at this level of the organizational structure.
- Government-to-Government relationship is retained.

PHASE 3

Phase 3 Overview

Phase 3 is envisioned as the final structure for coordinated implementation of the natural resource-based programs in WRIA 1. The milestone associated with moving from Phase 2 to Phase 3 is the adoption of instream flows negotiated under the WRIA 1 Instream Flow Selection and Adoption Action Plan and completion of the second phase of the WRIA 1 Watershed Management Plan. The Phase 3 structure integrates and supports established flood control management sub-zones and other drainage-based management structures (e.g., Bertrand Watershed Improvement District). There are a number of changes that occur with the transition from Phase 2 to Phase 3. Primary changes include adding a Natural Resource Program Coordination Team of dedicated staff and agency staff, redefining the role of the administrative staff, expanding the policy level representation to include state and federal elected representatives, and increasing coordination among and between programs.

Elements of Phase 3

- Government-to-government relationship continues at the Policy Decision-Makers.
- The Program Oversight/Coordination Team from Phase 2 is renamed Program Oversight & Administration. In Phase 3, this level of the organization transitions to a program oversight team with the capacity to make administrative decisions necessary to implement Policy Board approved work plans and directives.
- Representation at the Program Oversight & Administration level may be expanded from WRIA 1 Watershed Project and Salmon Recovery Program administrative and program staff to include representation of other resource-based programs that this structure is designed to coordinate (e.g., watershed council type approach). Involvement of federal, state, and regional program representatives and coordination with their respective programs occurs at this level.
- The Policy Board (formerly the Admin & Policy-Related Decision-Makers) from Phase 2 transitions to a broader policy level group by inviting participation of federal and state legislative representatives.
- Composition of the Program Coordination Team is staff independent of any one agency dedicated to coordinating implementation of natural resource based programs including but not limited to the WRIA 1 Watershed Project, Salmon Recovery Program, and drainage based management units. The Program Coordination Team serves as an integrated clearinghouse for other agencies or organizations looking for support in coordinating their activities with other programs. Obtaining 501(c)(3) status for this organizational level has been suggested as an option for operating the Program Coordination Team.

Organizational Functions

Legislative Bodies:

- Organizational level reflects the Councils and/or Commissions of the individual jurisdictions involved in the processes. The Policy Decision-Makers and the Program Oversight & Administration levels interact with their respective Councils, Commissions, and Boards.

Policy Decision-Makers:

- The policy board of the natural resource programs (i.e., WRIA 1 Watershed Project and WRIA 1 Salmon Recovery Program) is expanded from Phase 2 to include federal and state legislative representatives.
- The Policy Decision-Makers review and discuss policy-related local, regional, state, and federal topics as they relate to local natural resource programs. Policy direction associated with these discussions is formulated and provided to the Program Oversight and Administration level staff to administer and implement accordingly.
- Meeting frequency for the Policy Decision-Makers is twice annually.
- The Government-to-Government relationship is retained at the Policy Decision-Makers level.

Federal, State, Regional Involvement/Programs

- Representatives of federal, state, and regional entities interact at the Program Oversight & Administration and Program Coordination Team levels as needed to provide technical or task-oriented feedback and/or involvement in program implementation.

Program Oversight & Administration

- A transition from Phase 2 to Phase 3 includes modifications to the administrative staff level of the structure. Phase 2 administrative staff is a consolidation of the WRIA 1 Staff Team and Salmon Recovery Steering Committee. Phase 3 includes these participants in addition to other representatives of resource-based programs. The concept of a watershed council is the framework for composition of the Program Oversight & Administration organizational level.
- The Program Oversight & Administration level is responsible for overseeing program implementation and has limited authority to make decisions necessary for administering the Policy Board's directives.
- The Program Oversight & Administration staff interacts with the Program Coordination Team to oversee program implementation occurs consistent with Policy Board direction.
- The Program Oversight/Coordination Team interacts with federal, state, and regional representatives of agencies and programs as needed to receive technical or task-oriented feedback involving program implementation.
- Meetings at the Program Oversight & Administration level are open to the community. Agendas will include a public comment opportunity.

Program Coordination Team

- The Program Coordination Team is administrative and technical staff necessary to serve the community as an integrated clearinghouse for resource-based programs and activities. Staff comprising the Team is anticipated as dedicated staff independent of any one agency.

Obtaining 501(c)(3) status for this level of the organizational structure is suggested as the means for achieving the desired function.

- One function of the Program Coordination Team is to interact on a daily basis with staff implementing resource-based programs, community stakeholder groups, and non-profit groups and other agencies involved in activities that have a direct or indirect relationship to other resource-based programs.

Community/Stakeholder Involvement

- A Watershed Advisory Group is one option for community/stakeholder involvement under Phase 3. Pursuing this option would result in a merging of the WRIA 1 Planning Unit and the Salmon Recovery Advisory Council with representation of additional community members representing elements of other resource-based programs. To accommodate sub-basin specific issues and needs, subcommittees could be created under the umbrella of the Watershed Advisory Group.
- A second option for active community/stakeholder involvement is to ensure that each resource-based program has its own community group associated with it similar to the Planning Unit and the Salmon Recovery Advisory Council for the WRIA 1 Watershed Project and the Salmon Recovery Program, respectively.
- In addition to a separate community/stakeholder group, the community has opportunities to provide feedback on programs at the Program Oversight & Administration and the Program Coordination Team levels.

Advantages/Challenges

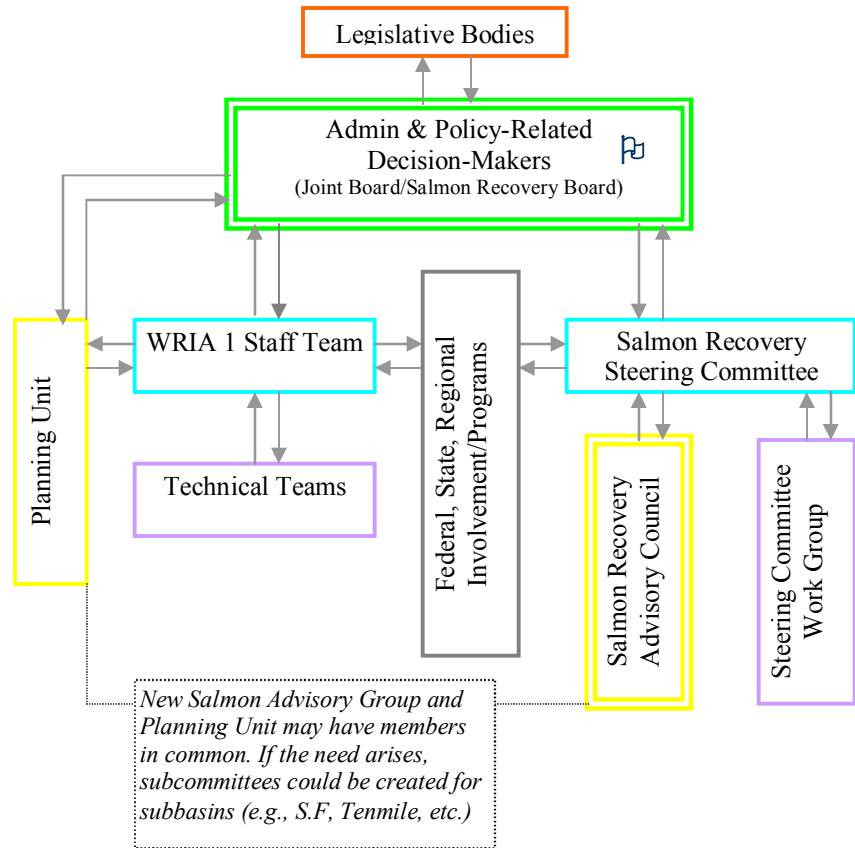
- The government-to-government relationship is retained.
- The coordinating body is comprised of dedicated staff that is not part of any one agency. This ensures the program coordination occurs at the level anticipated in approved work plans.
- A dedicated staff team requires dedicated funding. A source of funding for the coordination team will need to be identified and pursued.
- Expanding the Policy Board to include state and federal legislative representatives increases opportunities for obtaining and leveraging funds.
- Community members have multiple opportunities to participate in the process.

Figure 1. Proposed organizational structures for increased coordination and integration of WRIA 1 Watershed Project and WRIA 1 Salmon Recovery Program

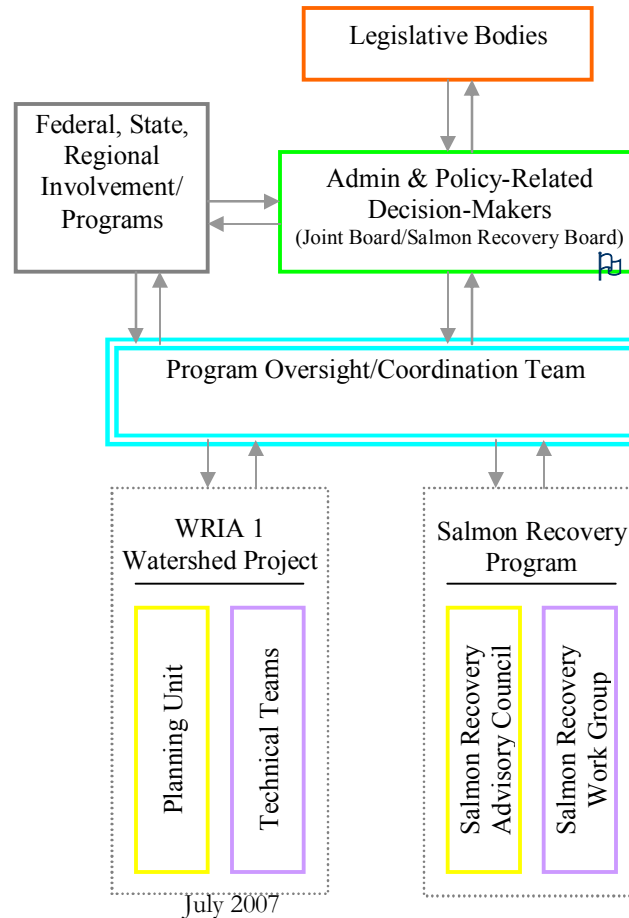
Legend:

- government-to-government
- Orange-** legislative (councils/commission)
- Green-** decision-makers (policy level)
- Turquoise-** management/admin staff level
- Purple-** technical staff
- Yellow-** community/stakeholder
- Grey-** relationship to federal, state, regional agency or program
- Blue-** independent, dedicated program staff
- Double border – change from existing or previous phase

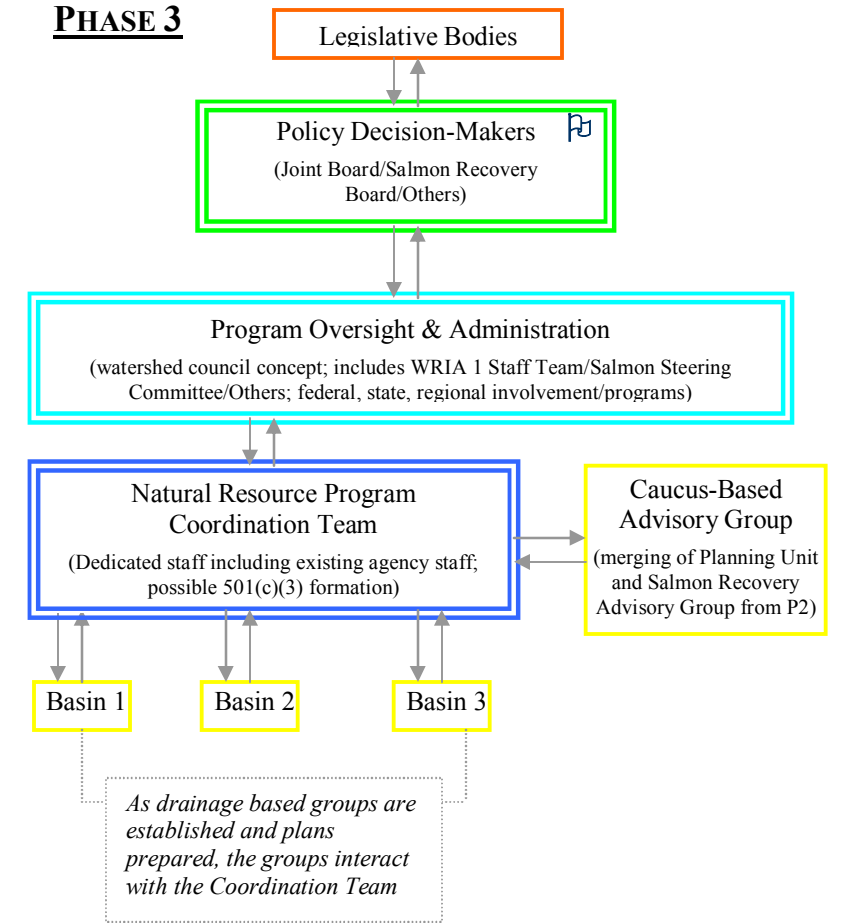
PHASE 1



PHASE 2



PHASE 3



Appendix B
WRIA 1 Long Term Monitoring Program Strategy

WRIA 1 Long Term Monitoring Program – Strategy for Implementation

Section 1-

Introduction

The June 2005 WRIA 1 Watershed Management Plan includes a recommended action of developing and implementing a WRIA 1 Long Term Monitoring Program (LTMP). This document outlines the strategy for implementing the recommended action.

An effective long-term comprehensive monitoring program is essential to measuring progress and success of actions implemented as part of the WRIA 1 Watershed Management Project. It is also important to informing additional recommendations or adjustments to the WRIA 1 Watershed Management Project that may occur under Adaptive Management.

As part of the WRIA 1 LTMP strategy, the WRIA 1 Instream Flow/Fish Habitat Technical Team and the WRIA 1 Salmonid Recovery Steering Committee are collaborating on a habitat monitoring methodology. Elements of the methodology will be incorporated into the WRIA 1 LTMP as part of Adaptive Management.

A comprehensive and viable monitoring program requires long-term funding commitments. Generally, however, tribal, federal, state, and local government funding for monitoring activities is limited and of short duration. The WRIA 1 LTMP strategy recognizes that to maximize limited resources, monitoring activities need to be planned and conducted in partnership with other agencies and organizations. These partnerships also provide for coordination with other WRIA 1 programs such as the WRIA 1 Salmon Recovery and with other entities involved in monitoring activities in WRIA 1. The partnerships may take the form of funding contributions, staff for implementing monitoring activities, and/or agreeing to long-term commitments to implement specific monitoring activities.

The WRIA 1 LTMP strategy purpose and approach is outlined in Section 2. Section 3 of this document identifies the goals and objectives upon which the WRIA 1 strategy is based. The elements of the WRIA 1 LTMP strategy, including approaches for integrating and coordinating with other agencies, are summarized in Section 4. Section 5 describes approaches for managing and reporting data collected under the WRIA 1 LTMP. Section 6 includes a summary of recommendations and milestones associated with implementing the WRIA 1 LTMP strategy as it is described in this document. Section 7 summarizes the Adaptive Management element of the WRIA 1 LTMP strategy.

Section 2 –

WRIA 1 Long Term Monitoring Program Purpose

The purpose of the WRIA 1 Long Term Monitoring Program (LTMP) is to establish and maintain an ambient monitoring program sufficient to assess current water quality, water quantity, and fish habitat conditions and trends and to protect beneficial uses in WRIA 1. The monitoring program will include data collection, quality assurance, data management, data analysis, and reporting. Data collected will inform policies and management actions necessary to meet the goals of the WRIA 1 Watershed Management Project by allowing for evaluation of the effectiveness of management actions and refinement of management tools.

The WRIA 1 LTMP consists of a tiered strategy that includes:

- An over-arching WRIA 1-wide program that addresses WRIA 1 Watershed Management Project goals and objectives;
- A complementary monitoring element that supports existing monitoring programs designed and implemented to meet an entity's specific program goals and objectives, that complement the over-arching WRIA 1-wide monitoring program, and that are important to achieving the goals of the WRIA 1 Watershed Management Project; and
- A drainage-based monitoring element that incorporates monitoring elements associated with individual drainages as the drainages implement organized management units are implemented.

Funding for the monitoring program will be through a combination of federal, tribal, state, and local funding. A dedicated funding source is needed to support implementation of the LTMP. The program strategy will be reviewed on a regular basis as described in the adaptive management element of this document. The spreadsheet included as Appendix A identifies sampling stations for the WRIA 1 LTMP, parameters measured, frequency, costs, and lead entity. The spreadsheet is a working document that will be completed and/or modified as the WRIA 1 LTMP is implemented.

Section 3.0 –

WRIA 1 Long Term Monitoring Program Goals and Objectives

The WRIA 1 Long Term Monitoring Program involves monitoring surface and ground water chemistry, stream flows, ground water levels, meteorological conditions, water use monitoring, biological conditions necessary for salmon and shellfish protection and restoration, and monitoring the implementation of management actions. The goals and objectives identified in this section of the WRIA 1 LTMP strategy relate to the over-arching

WRIA 1-wide program and are listed for water quantity, water quality, and instream flow/fish habitat.

3.1 Over-Arching Monitoring Element

3.1.1 Water Quantity

Goal 1-Collect water quantity data to meet the following objectives:

- Quantify stream flows at identified gage locations
- Refine water use estimates.
- Evaluate the effectiveness of actions implemented for flow augmentation.
- Identify status and trends in climate, instream flows, water use, and ground water levels.

3.1.2 Water Quality

Goal 1- Collect water quality data to meet the following objectives:

- Determine if applicable water quality standards are being met at sampling stations throughout WRIA 1.
- Evaluate if TMDL targets for identified parameters are being achieved in basins and sub-basins for which TMDLs are in place.
- Determine the duration and extent of water quality standards violations that correlate to storm or other events.
- Identify status and trends in surface and ground water quality.

3.1.3 Instream Flow/ Fish Habitat

There are several goals and objectives identified for addressing instream flow and fish habitat. Addressing these goals and objectives will be done in conjunction with the WRIA 1 Salmon Recovery Program implementation.

Goal 1- Collect and analyze data to support negotiated and regulatory instream flows.

Objectives include:

- Quantify flow conditions at stream gaging stations at key locations and at instream flow measurement sites to document existing conditions.
- Determine if negotiated or target instream flows are being met at identified locations.

Goal 2- Determine current fish habitat conditions to meet the following objectives:

- Quantify instream habitat accessible to upstream migrating adult and rearing juvenile salmon. For early run Chinook the WRIA 1 Salmon Recovery Board has identified 4 relevant parameters: abundance, productivity, spatial structure, and diversity.
- Assess the quality and potential use of instream habitat currently accessible to salmonids for use as a benchmark beginning with priority geographic areas.

Goal 3- Quantitatively determine if fish habitat conditions are improved by management actions

Goal 4- Collect and analyze information that will provide a better understanding of factors contributing to proper functions or impairments of the physical and biological processes that create and maintain properly functioning salmonid habitats within WRIA 1.

3.2 Complementary Monitoring Programs

Existing monitoring programs that complement the WRIA 1 over-arching monitoring program and that are important to achieving the overall goals of the WRIA 1 Watershed Management Project have specific goals and objectives that those monitoring programs are designed to achieve. The goals and objectives for the complementary programs are available can be obtained through the entities responsible for implementing the programs.

Section 4 –

WRIA 1 Long Term Monitoring Program Design

The WRIA 1 LTMP strategy is designed as a tiered program that includes: an over-arching WRIA 1 monitoring element designed to achieve the goals and objectives identified in Section 3; the complementary monitoring programs implemented by entities to meet their program-specific needs and that are important in achieving the overall WRIA 1 Watershed Management Project goals identified in the June 2005 WRIA 1 Watershed Management Plan; and the individual drainage monitoring plans that will be developed and implemented as drainage-based management units are established (e.g., watershed improvement districts). Some aspects of the over-arching monitoring program are underway while others are scheduled for implementation. The complementary programs are existing programs that generally have dedicated funding such as the Lake Whatcom monitoring program and the City of Bellingham urban streams program. Individual drainage monitoring plans are new monitoring programs that will be designed and implemented within the framework of the Adaptive Management element of the WRIA 1 LTMP strategy and the WRIA 1 Watershed Management Project.

The following is a summary of the WRIA 1 LTMP strategy.

4.1 Over-Arching WRIA-Wide Monitoring Element

The over-arching monitoring element of the program is designed to meet the core needs of the WRIA 1 Watershed Management Project. Monitoring associated with this element of the WRIA 1 LTMP includes measuring stream flows, water quality, and meteorological conditions for purposes of achieving the goals and objectives listed in Section 3. The strategy is built on developing and formalizing partnerships with entities involved in monitoring activities within WRIA 1 at identified core stations. The core stations are the

stations considered necessary for collecting data to address the WRIA 1 LTMP over-arching goals and objectives. Formalizing partnerships with the entities involved in monitoring activities at these stations will maximize available monitoring resources, potentially leverage additional federal, state, and local monitoring funds, and help ensure coordination among programs underway in WRIA 1. The map included in Figure 1 identifies the core stations for the over-arching monitoring element of the WRIA 1 LTMP strategy.

The following is a summary of each constituent of the over-arching WRIA-wide monitoring program. Although each constituent is described separately (e.g., water quantity, water quality), it is recognized that they are inherently linked.

Water Quantity

The United States Geological Survey (USGS) and Washington State Department of Ecology (Ecology) have stream flow measurement gages installed throughout WRIA 1. The types of gages installed include telemetry, stand-alone (recorder), and manual stage height. Twenty-six (26) of the twenty-nine (29) gage locations identified in Figure 1 are existing gages operated either by the USGS or Ecology. The three remaining gages are located on the north side of the U.S./Canada boundary and are operated by Environment Canada. The twenty-nine stream gage locations have been reviewed in the context of the goals and objectives of the over-arching monitoring element (Section 3) and the WRIA 1 Watershed Management Project. Table 1 is a summary of stream gage locations, type, and entity responsible for installation of the gage. The locations of the stream gages listed in Table 1 correspond to the mapped gages in Figure 1.

All of the identified stream gages are considered critical for achieving the WRIA 1 program goals and objectives. The existing USGS and Ecology gage stations are funded, operated, and maintained through programs of the sponsoring agency, partnerships with Tribal governments, and/or partnerships with local governments. Given the importance of the stations to the overall WRIA 1 project, the WRIA 1 LTMP strategy focuses on identifying and pursuing options to ensure continued funding for the gages identified in Figure 1.

Options being considered include consolidating gages currently operating under partnership agreements for fixed periods of time and/or that are dependent on grant funding under the auspices of a single agency. Gage stations maintained and operated for local programs such as the Whatcom County Flood Hazard Management Program that have a dedicated funding source are not being considered for consolidation. Agreements or other documentation associated with ensuring continued operation and maintenance of the stream flow gages is included in the appendices of the WRIA 1 LTMP Strategy.

In addition to flow, a number of the existing Ecology telemetry stations collect stream and air temperature. The WRIA 1 LTMP strategy includes incorporating stream temperature

Table 2. Summary of WRIA 1 Long Term Monitoring Program Stream Gage

Location	Station ID	Gage Type	Agency ^a	Period of Record ^b	Comments
Pepin Cr at International Boundary	08MH156	Recorder	Environment Canada	1985-present	Seasonal data collection
Bertrand Cr at International Boundary	08MH152	Recorder	Environment Canada	1984-present	Seasonal data collection
Bertrand Cr Trib nr H Street nr Lynden	12212430	Telemetry	USGS	Initiated 2007	New station initiated 1/16/07
Bertrand Cr @ mouth	01N060	Telemetry	Ecology	2003-present	
Fishtrap Cr @ International Boundary	08MH153	Recorder	Environment Canada	1984-present	Continuous record 1987-present; seasonal record 1984-1986
Fishtrap Cr @ Front St.	12212050	Recorder	USGS	1998-present	Funded through 6/07
Kamm Slough @ Northwood	01M090	Manual	Ecology	2003-present	
Tenmile Cr abv Barrett Lake	01P080	Telemetry	Ecology	2003-present	
Nooksack River @ Ferndale	12213100	Telemetry	USGS	1967-present	
Nooksack River @ North Cedarville	12210700	Telemetry	USGS	2000-present	Seasonal gage (mid-October through April)
Nooksack River @ North Cedarville	01A120	Manual	Ecology	1959-present	Long term station, sampled monthly
Anderson Cr @ mouth	01L050	Manual	Ecology	2003-present	
Anderson Cr @ Smith Rd nr Goshen	12210900	Recorder	USGS	1998-present	Funded through 6/07
Nooksack River above the MF	01A140	Telemetry	Ecology	2003-present	
Nooksack River @ Brennan	01A050	Manual	Ecology		Long term station, sampled monthly
Racehorse Creek	12206900	Recorder	USGS	1998-present	Funded through 6/07
Maple Cr @ mouth	01K050	Telemetry	Ecology	2003-present	
NF Nooksack River BL Cascade Creek	12205000	Telemetry	USGS	1937-present	
MF Nooksack River near Deming	12208000	Telemetry	USGS	1920-present	
MF Nooksack River abv Clearwater Cr	016100	Recorder	Ecology	2003-present	
Clearwater Creek near Welcome	12207850	Recorder	USGS	1998-2006	Funded through 6/07
Warm Creek at Welcome	12207750	Recorder	USGS	1998-2006	Funded through 6/07
SF Nooksack @ Potter Rd	01F070	Telemetry	Ecology	2003-present	
SF Nooksack River nr Edfro Cr	12209000	Telemetry	USGS	1934-present	
Skookum Creek	12209490	Telemetry	USGS	1998-present	Funded through 6/07
Hutchinson Cr nr Acme	01C070	Telemetry	Ecology	2003-present	
Sumas R at Telegraph Rd	01D100	Manual	Ecology	2003-present	
Dakota Cr at Giles Rd	01Q070	Manual	Ecology	2003-present	
California Cr at Valley View	01R090	Manual	Ecology	2003-present	

^aThe agency listed is the agency that installed the gage; it is not assumed to be the agency responsible for maintaining and/or funding the continued operation of the gage.

^bThe period of record is presented as general information; the initiating year is not intended to imply data collection began the first day of January of any identified year.

into all of the telemetry and recording stations in WRIA 1. Additionally, the WRIA 1 strategy includes incorporating dissolved oxygen measurements as part of the data collected at the gage stations on an opportunistic basis such as when flow data are downloaded or when station maintenance occurs. Incorporating these additional measurements into data collection at the stream gage locations is further discussed under *Water Quality* and *Meteorological Conditions*.

As part of the collaboration between the WRIA 1 Instream Flow/Fish Habitat Technical Team and the WRIA 1 Salmonid Recovery Steering Committee Work Group three subcommittees were formed to develop a monitoring methodology for each parameter being addressed by the group. The Water Subcommittee will be addressing stream flow, the addition of continuous recording of stream temperature, and the periodic measurements of dissolved oxygen as part of this joint effort, which will result in completing a monitoring methodology description that addresses of these items. The template for the monitoring methodology is included as Appendix A of this document.

The strategy for managing the data at all of the monitoring sites to ensure consistency in data reporting and compatibility for use in the WRIA 1 Decision Support System and its underlying models is described in Section 5.

Water Quality

Water quality stations for the over-arching monitoring element of the WRIA 1 LTMP strategy focus on meeting the goals and objectives outlined in Section 3. There are two types of water quality monitoring stations identified in Figure 1- continuous flow stations that include water quality measurements (i.e., water temperature and periodic measurements of dissolved oxygen) and water quality stations that do not gather flow data and that use grab samples for collecting data on selected water quality parameters. For the water quality only stations, analysis will be performed for a range of parameters including: dissolved oxygen, temperature, pH, suspended solids, nutrients, turbidity, and bacteria. Both types of stations are important for achieving the goals and objectives of the WRIA 1 LTMP strategy.

Table 2 includes a list of both types of water quality monitoring stations – combination flow/quality (F/Q) and water quality only - and parameters currently being measured and recommendations for additional ones. The monitoring locations listed in Table 2 correspond to those mapped in Figure 1.

The continuous (telemetry and recorder) flow and quality stations identified in Figure 1 may be considered for consolidation and operation under the auspices of a single agency (refer to *Water Quantity* discussion). In addition to collecting stream flow, some of these stations currently collect both stream and air temperature. The WRIA 1 LTMP strategy for the continuously recording stations includes further maximizing resources by incorporating

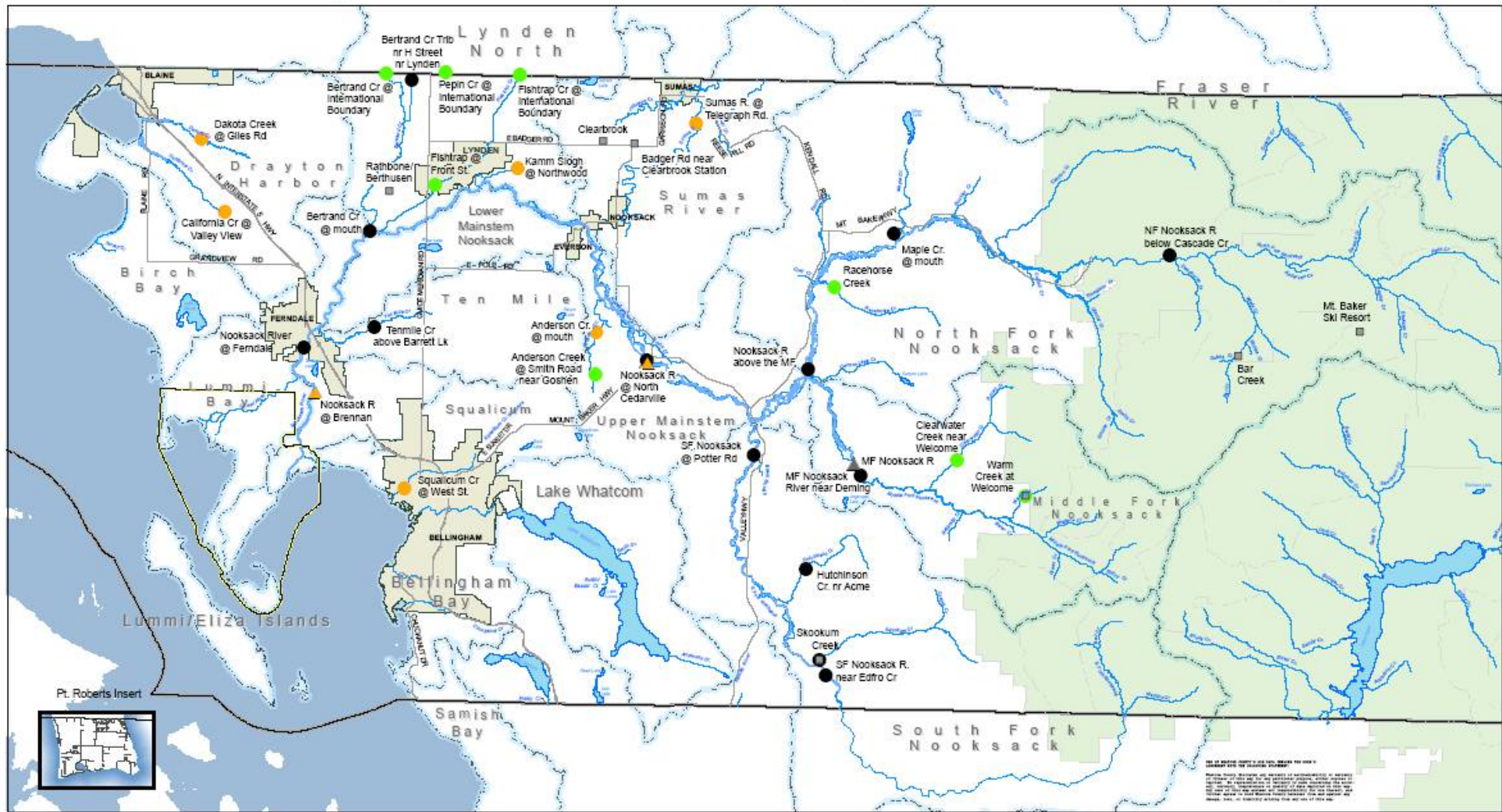
dissolved oxygen (DO) measurements in proposals for consolidation by taking DO measurements when servicing the station. The WRIA 1 LTMP strategy includes identifying a process to coordinate with entities on data collection. This process will include communicating with Environment Canada regarding the three gages they operate at the U.S./Canada boundary – Pepin, Bertrand, and Fishtrap – to discuss the feasibility of incorporating stream temperature and periodic dissolved oxygen measurements into their data collection activities.

There are eight (8) water quality stations identified in Figure 1 for the over-arching monitoring element of the WRIA 1 LTMP strategy. These sites have been or are being monitored by Ecology as part of their on-going ambient monitoring activities, the 5-year rotational¹² sites for additional monthly sampling, and/or the total maximum daily load (TMDL) program. Seven of the eight stations are currently monitored. Two of the eight stations are long-term ambient monitoring stations sampled by Ecology on a monthly basis and have a long period of record (>25 years). Five of the stations are sites currently being monitored by Ecology through September 2007 as part of the 5-year rotating schedule. One station – Tenmile Creek – is not currently being monitored for the full set of water quality parameters previously identified, but it is a station that had been part of the TMDL sampling program. The locations described above and identified in Table 2 are selected for the over-arching WRIA 1 monitoring strategy for a number of reasons including: 1) availability of a historic database for assessing trends in water quality, 2) a spatial distribution of stations beneficial to assessing current conditions, 3) potential for maximizing resources through partnerships with the agencies performing monitoring, and 4) a database that may provide information for evaluating effectiveness of management practices/programs.

The Water Subcommittee created as part of the collaboration between the WRIA 1 Instream Flow/Fish Habitat Technical Team and the WRIA 1 Salmonid Recovery Steering Committee Work Group is developing a monitoring methodology that will address a number of the parameters listed (further discussed under *Introduction* and *Water Quantity*). The template used by the Water Subcommittee will also be used for the parameters the Subcommittee does not address. The template for the monitoring methodology is included as Appendix A of this document.

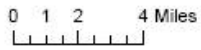
¹² On a 5-year rotating schedule, the Washington State Department of Ecology funds 1-year of monthly water quality sampling for additional ambient stations in WRIAs across the state.

Recommended Long Term Water and Climate Monitoring Sites for Watershed Plan Implementation



Monitoring Parameters and Gage Type in WRIA 1

- Color varies according to gage equipment.
- Flow and Quality
 - ▲ Quality
 - Climate
- Manual
Telemetry Recorder



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Table 3. WRIA 1 Long Term Monitoring Program Water Quality Stations

Location	Station ID	Station Type	Parameter		Comments
			Current	Recommend	
Bertrand Cr Trib nr H Street nr Lynden	12212430	Combination F/Q ¹³	Flow, air & water temp	Periodic DO ¹⁴	Newly installed USGS station (1/16/07)
Bertrand Cr @ mouth	01N060	Combination F/Q; Water Quality Station	Flow, air & water temp; nutrients, DO, pH, suspended solids, turbidity, bacteria		This water quality station is one of the stations on Ecology's 5-year cycle. The full set of water quality parameters will be measured 10/06-9/07. The LTMP strategy recommends continued sampling of all parameters beyond 9/07.
Fishtrap @ Front St	12212050	Combination F/Q	Flow	Water temp, Periodic DO	
Fishtrap @ Flynn Rd	01U070	Water Quality Station	DO, nutrients, water temp, pH, suspended solids, turbidity, bacteria		This water quality station is one of the stations on Ecology's 5-year cycle. The full set of water quality parameters will be measured 10/06-9/07. The LTMP strategy recommends continued sampling of all parameters either at Flynn Rd or at Front St.
Tenmile Cr abv Barrett Lake	01P080	Combination F/Q; Water Quality Station	Flow, air & water temp	DO, nutrients, pH, suspended solids, turbidity, bacteria	This location is not currently monitored on an ongoing basis for the full range of parameters listed. Collecting the full range of water quality parameters is a recommendation in the WRIA 1 LTMP strategy.
Nooksack R @ Brennan	01A050	Water Quality Station	DO, nutrients, pH, suspended solids, turbidity, bacteria, temp		
Nooksack R @ North Cedarville	01A120	Water Quality Station	DO, nutrients, pH, suspended solids, turbidity, bacteria, temp		
Anderson Creek @ Smith Rd nr Goshen	12210900	Combination F/Q	Flow	Water temp, Periodic DO	
Nooksack R above MF	01A140	Combination F/Q; Water Quality Station	Flow, air temp; nutrients, DO, pH, temp, suspended solids, turbidity, bacteria	Water temp at flow station	This water quality station is one of the stations on Ecology's 5-year cycle. The full set of water quality parameters will be measured 10/06-9/07. The LTMP strategy recommends continued sampling of all parameters beyond 9/07.

¹³ Combination F/Q station is a combination stream flow and water quality station.

¹⁴ Addition of periodic DO (dissolved oxygen) measurements is recommended for all Combination F/Q stations.

Location	Station ID	Station Type	Parameter		Comments
			Current	Recommend	
Racehorse Creek	12206900	Combination F/Q	Flow	Water temp, Periodic DO	
Maple Cr @ mouth	01K050	Combination F/Q	Flow, air & water temp	Periodic DO	
NF Nooksack River BL Cascade Cr	12205000	Combination F/Q	Flow	Water temp, Periodic DO	
MF Nooksack River	01G070	Water Quality Station	DO; nutrients, pH, suspended solids, turbidity, bacteria, temp		This water quality station is one of the stations on Ecology's 5-year cycle. The full set of water quality parameters will be measured 10/06-9/07. The LTMP strategy recommends continued sampling of all parameters beyond 9/07.
MF Nooksack River near Deming	12208000	Combination F/Q	Flow, water temp	Periodic DO	
MF Nooksack River abv Clearwater Cr	016100	Combination F/Q	Flow	Water temp, Periodic DO	
Clearwater Cr nr Welcome	12207850	Combination F/Q	Flow	Water temp, Periodic DO	
Warm Cr at Welcome	12207750	Combination F/Q	Flow	Water temp, Periodic DO	
SF Nooksack @ Potter Rd.	01F070	Combination F/Q; Water Quality Station	Flow, air & water temp; nutrients, DO, pH, suspended solids, turbidity, bacteria		This water quality station is one of the stations on Ecology's 5-year cycle. The full set of water quality parameters will be measured 10/06-9/07. The LTMP strategy recommends continued sampling of all parameters beyond 9/07.
SF Nooksack R nr Edfro Cr	12209000	Combination F/Q	Flow	Water temp, Periodic DO	
Skookum Cr	12209490	Combination F/Q	Flow	Water temp, Periodic DO	
Hutchinson Cr nr Acme	01C070	Combination F/Q	Flow, air & water temp	Periodic DO	

As with the continuous flow stations, dedicated funding and/or commitments from sponsoring agencies is needed for on-going water quality monitoring at the stations identified in the WRIA 1 LTMP strategy. Obtaining funding agreements, partnership agreements, and/or other documentation associated with ensuring continued monitoring of water quality is an essential part of the WRIA 1 LTMP strategy.

Instream Flow/Fish Habitat

The WRIA 1 Instream Flow/Fish Habitat (ISF/FH) Technical Team and the WRIA 1 Salmon Recovery Steering Committee Work Group are meeting jointly to develop a Habitat Monitoring Methodology that addresses issues and selects methods for monitoring that will

achieve the salmonid habitat monitoring objectives of both the WRIA 1 LTMP strategy (Section 3) and the WRIA 1 Salmonid Recovery Program. . The meeting summary from the initiating meeting, which outlines the process for developing the methodology, is included in Appendix B of this document. Relevant elements of the completed Habitat Monitoring Methodology, including funding commitments and/or partnership agreements to implement the methodology, will be incorporated into the WRIA 1 LTMP strategy as part of Adaptive Management.

Meteorological Conditions

Figure 1 identifies stations for collecting meteorological conditions. The WRIA 1 LTMP strategy is to support existing stations and to establish a new station in the upper Middle Fork Watershed. The new station will be established as part of Adaptive Management.

4.2 Complementary Monitoring Programs

A number of program-specific monitoring programs are being implemented by agencies. The goals and objectives for these monitoring efforts are designed specifically to address the programs' needs. Several of these existing monitoring programs, however, also support the overall goals and objectives of the WRIA 1 Watershed Management Project. Therefore, these programs are identified as part of the WRIA 1 LTMP strategy and include monitoring associated with the Whatcom County Shellfish and Marine Resources Programs, Ecology water use monitoring (WAC 173-173), the Lake Whatcom Management Program, and the City of Bellingham Urban Stream Program.

Stream flow and temperature monitoring in the Middle Fork Nooksack River are being conducted by different entities including the City of Bellingham and the Department of Ecology. Although the effort underway in the Middle Fork is a complementary program to the over-arching WRIA 1 LTMP strategy, a recommendation will be made to the entities currently involved in the existing complementary program to also record temperature at a downstream location on the Middle Fork.

Data collected by local industries and the Northwest Clean Air Agency may provide information associated with meteorological conditions that support the goals and objectives of the WRIA 1 LTMP. The location of these stations and the type of data collected will be identified and considered as part of the WRIA 1 LTMP strategy. Outcomes of the review will be considered as part of Adaptive Management.

4.3 Individual Drainage Monitoring Programs

This last tier of the WRIA 1 LTMP involves future monitoring programs designed and implemented as drainage-based management units are established. The WRIA 1 LTMP strategy is to develop a framework for the management units to adopt as their monitoring

program. This framework will be developed as part of the Adaptive Management element of the LTMP.

Section 5-

WRIA 1 Long Term Monitoring Program Quality Assurance, Data Management, and Reporting

The entities involved in water quality monitoring programs should have Quality Assurance Project Plans (QAPP) associated with their collection activities. The QAPPs generally include information describing the project and/or problem the monitoring plan is designed to address, sampling techniques, analytical methods, quality controls, data management, and data validation/verification. Since all of the over-arching water quality monitoring stations are stations currently being monitored by an existing state or federal agency, the WRIA 1 LTMP strategy is to rely on the QAPPs prepared by those entities.

The framework developed for monitoring programs that newly established drainage-based management units can adopt for their drainage, a QAPP template will be recommended such as the U.S. Environmental Protection Agency funded publication *The Volunteer Monitor's Guide to Quality Assurance Project Plans*.

Additional quality assurance and data management considerations will be incorporated into the WRIA 1 LTMP strategy as part of the WRIA 1 ISF/FH Technical Team and WRIA 1 Salmon Recovery Steering Committee Work Group's approach for developing a Habitat Monitoring Methodology for each parameter included in their methodology (Appendix A).

Section 6 –

WRIA 1 Long Term Monitoring Strategy Recommendations and Milestones

This section of the WRIA 1 LTMP provides a summary of tasks and recommendations associated with implementing the WRIA 1 LTMP strategy. Table 3 is a summary of the recommendations, schedule, and identified lead. The WRIA 1 Detailed Implementation Plan includes additional detail for implementing the WRIA 1 LTMP Strategy and recommendations.

6.1 Data Collection

DC1 - Identify a ground water monitoring program that supports the goals and objectives of the over-arching monitoring needs for the WRIA 1 LTMP (Section 3) and incorporate the program as an element of the WRIA 1 LTMP strategy.

DC2 - Develop a process and associated agreements for including stream temperature and periodic dissolved oxygen measurements at all gage stations equipped with recorders or telemetry systems as identified in Table 2. The process should consider coordinating

efforts with Environment Canada for the three gages located on the north side of the U.S./Canada boundary.

DC3 – Secure agreements and/or funding for the stream gaging network identified in Table 1 of this document. Relative to other watersheds, WRIA 1 has a large number of stream gaging stations. The annual cost to operate, maintain, and publish the results from each gaging station averages approximately \$12,700¹⁵ bringing the annual cost for the 26¹⁶ gage network to approximately \$330,000. This stream gaging network is believed to be the minimum amount needed to reliably estimate stream flow from the numerous other ungaged drainages in WRIA 1. Although the annual cost is relatively high, it may be a necessary annual expense in order to support knowledge-based decision making.

DC4 – Correlate the existing gaging stations with each other over a range of flow conditions over the next two years. In addition, short-term (preferably one year duration) measurements should be conducted at ungaged drainages to establish correlations with existing stations. If certain gaging stations are found to be highly correlated with other gaging stations, it may be possible to reduce the annual cost associated with the 26 gaging station network in DC3.

DC5 - Secure agreements and/or funding for water quality monitoring of a full range of parameters at Ecology Station ID Nos. 01N060, 01U070, 01P080, 01A140, 01G070, and 01F070 (Table 2). Five of the six stations are currently being monitored (10/06-9/07) under Ecology's 5-year rotating sampling program (refer to *Water Quality*, Section 4.1).

DC6 - Develop a general framework for a drainage-based monitoring program that can be adopted by newly established drainage-based management units.

DC7 - Review outcomes and recommendations included in the WRIA 1 ISF/FH Technical Team and the WRIA 1 Salmon Recovery Steering Committee Work Group's Habitat Monitoring Methodology scheduled for completion July 2007. Identify mechanism or next steps for incorporating applicable elements of the Habitat Monitoring Methodology and associated recommendations into the WRIA 1 LTMP strategy.

DC8 - Coordinate with entities involved in implementing complementary programs to identify additional monitoring needs such as temperature recorder at a downstream location on the Middle Fork, to obtain additional information on their programs such as current maps of active sampling locations, and duration of monitoring resource commitment for the complementary program.

¹⁵ USGS and EAP have different annual for their gages and publish results differently. This annual cost is an average of the total estimated annual cost of \$330,000 divided by the total number of gages in the US regardless of the gage's sponsor. Costs associated with the three Environment Canada gages are not included.

¹⁶ This does not include the three gage stations located at the U.S./Canada border operated by Environment Canada. These three border gage stations, however, are critical to the overall stream gage network.

Table 4. Summary of Recommendations, Schedule, and Lead

ID	Recommendation	Schedule	Lead
DC1	Identify groundwater monitoring program that addresses over-arching goals and objectives identified in Section 3.0.	Q1/08	WRIA 1 Staff Team
DC2	Establish agreements and/or funding for stream temperature and periodic dissolved oxygen measurements at flow stations.	Q4/07- Establish agreements with USGS and/or EAP	WRIA 1 Staff Team
DC3	Secure agreements and/or funding for the stream gaging network identified in Table 1.	Q2/08	WRIA 1 Staff Team
DC4	Correlate the existing gaging stations over a range of flow conditions. Conduct short-term (preferably one year duration) measurements at ungaged drainages to establish correlations with existing stations.	Q1/08- Initiate two-year effort to correlate gage stations. Q1/08- Initiate one-year data collection effort at ungaged drainages.	WRIA 1 Staff Team
DC5	Establish agreements and/or funding for water quality monitoring stations.	Q4/07- Establish agreement with EAP, Ecology-NFO, Tribes, and/or other	WRIA 1 Staff Team
DC6	Develop general framework for drainage-based monitoring programs.	Q1/08	WRIA 1 Staff Team
DC7	Incorporate elements of Habitat Monitoring Methodology into the WRIA 1 LTMP strategy.	Q4/07 – Review parameter monitoring methodologies developed as part of the overall Habitat Monitoring Methodology Q1/08 – Incorporate relevant methodologies into WRIA 1 LTMP strategy	WRIA 1 Staff Team
DC8	Coordinate with entities implementing complementary programs to obtain program information for incorporation into the WRIA 1 LTMP strategy including maps with station location and program goals and objectives.	Q3/07 - Initiate contact with leads of complementary programs; incorporate relevant detail into WRIA 1 LTMP strategy	WRIA 1 Staff Team
DM1	Identify centralized system for managing data at stations identified in the over-arching monitoring program.	Q4/07- evaluate DSS data management system and framework for purposes of a centralized system for data management Q1/08- collaborate with entities involved with data collection to agree on system Q2/08- develop necessary agreements to implement centralized data management system	Whatcom County-Public Works (Data Manager)
DM2	Collaborate with entities implementing complementary programs for purposes of incorporating data into the WRIA 1 data management system.	Q2/08- identify format and process	WRIA 1 Staff Team
DM3	Identify format for Ecology’s metered water use reporting.	Q3/07- identify format	Dept. of Ecology-NFO
DA1	Establish process for analyzing data collected under WRIA 1 LTMP to evaluate extent to which the goals and objectives in Section 3 are being addressed and, based on analysis, making recommendations for program modifications to be considered as part of Adaptive Management.	Q4/07- Identify process for analyzing data and evaluating effectiveness in meeting goals/objectives	WRIA 1 Staff Team

6.2 Data Management

DM1 - Identify a centralized system for managing data collected at stations identified in the overarching monitoring program of the WRIA 1 LTMP strategy. As part of the data management system, consider approaches that involve interactive linkages to a GIS mapping system that will reflect changes, modifications, and data. Provide a clear linkage in the data management system to the process that will be used to update the WRIA 1 DSS and its underlying models. As part of a centralized data management system, consideration should also be given to a web-based tool for communicating and coordinating data and related information between agencies, and that can be used to support public outreach and education.

DM2 - Collaborate with entities implementing complementary monitoring programs to incorporate data into WRIA 1 Decision Support System data management system.

DM3 - Coordinate with Department of Ecology to identify a format for Ecology to use in WRIA 1 to report the metered water use data that Ecology is currently required to collect.

6.3 Data Analysis

DA1 - Establish a process for conducting local analysis of data for purpose of evaluating extent to which the goals and objectives identified in Section 3 are being addressed by the WRIA 1 LTMP. When appropriate, as part of the analysis recommendations should be made for modifications to the WRIA 1 LTMP strategy for consideration in Adaptive Management.

Section 7–

WRIA 1 Long Term Monitoring Program Adaptive Management

The WRIA 1 LTMP adaptive management approach is designed to incorporate monitoring results from programs identified in the LTMP strategy back into the decision-making process in a manner consistent with the overall adaptive management approach described in the June 2005 WRIA 1 Watershed Management Plan. Ensuring monitoring results are appropriately influencing or being incorporated into management programs requires consistent dedication of resources including staff and funding. The steps associated with the WRIA 1 LTMP adaptive management approach, which will run concurrent with the WRIA 1 LTMP strategy implementation, include:

1. Evaluate monitoring data associated with the over-arching monitoring element of the WRIA 1 LTMP strategy and assess extent to which the goals and objectives identified in Section 3.0 have been achieved;
2. Evaluate monitoring data associated with complementary programs;
3. Evaluate status of implementing WRIA 1 LTMP recommendations in Section 6.0;

4. Evaluate status of funding to support implementation of WRIA 1 LTMP strategy;
5. Assess outcome of evaluations identified in numbers 1-4 and determine appropriate adaptive management options;
6. Implement the appropriate adaptive management action consistent with the adaptive management approach described in the WRIA 1 Watershed Management Plan; and
7. Monitor the effects of the adaptive management actions.

As part of the adaptive management process, a project team involved with coordinating implementation of the WRIA 1 Watershed Management Plan will initiate the process for implementing the steps outlined above. The process taken will be consistent with organizational procedures identified for the WRIA 1 Watershed Management Project.

Appendix C

WRIA 1 Caucus Comments Reviewed by WRIA 1 Planning Unit

The WRIA 1 caucus comments included in Appendix C were submitted by the due date of June 18, 2007 and compiled into a table for review at the June 20, 2007 WRIA 1 Planning Unit meeting. Comments received after June 18th are included in Appendix D. The WRIA 1 Planning Unit requested that the June 20th meeting summary be included in the appendix with the caucus comments the Planning Unit reviewed as further explanation for separating the caucuses' comments into two appendices.

Caucus	No.	Summary of Caucus Comments	Response
NGWS	1	Table 3: Not clearly labeled.	Change will be made
	2	Long Term Monitoring Plan: Caucus would like to see expedited implementation of the Long Term Monitoring Plan.	Comment noted; ST/TTL has started discussing various elements of the LTMP including seeking short-term funding
	3	NRPI: The feasibility of implementing the NRPI program should be continued but with consideration given to the time/resource investment in relation to the benefit that can ultimately be achieved given that the various programs have different and sometimes conflicting legislative mandates. The role of Drainage Based Management in achieving the NRPI program goals should be given careful consideration given it may deliver results sooner than a WRIA-wide effort. For example, the CAO provides a council-discretion exemption for drainages that have achieved an approved watershed plan.	Comment noted and will be raised for consideration by ST/TTL at next meeting.
	4	NRPI- Salmon Recovery and Watershed Planning has similar goals but differing governance structures, particularly related to stakeholder input. The role of the Planning Unit in the Watershed Planning Process has been fundamentally different than the role of the stakeholder process during the development of the Salmon Recovery Plan. If the integration of the two programs occurs as envisioned in Phase 3 of Appendix A of the DIP, the structure and function of the current Planning Unit will be required for the integrated stakeholder process. If the Salmon Recovery effort wishes to maintain a stakeholder input process, the integration of at least the stakeholder elements of the two processes will need to	Comment noted; action proposed in DIP for the governance structure includes a feasibility assessment of Phases 2 and 3 that will include PU input; concern raised will be provided as feedback to the Salmon Recovery entities

Caucus	No.	Summary of Caucus Comments	Response
		be abandoned if it is to have support of the NGWS.	
	5	Governance and funding subcommittee should begin to meet as soon as possible and should also consider costs of not implementing the WMP.	Comment noted and will be raised for consideration at next ST/TTL meeting
	6	Funding Sources: Funding approaches for implementing the WMP should consider alternatives such as but not limited to including all jurisdictions that will benefit at a rate proportionate to their tax base and a special purpose district with boundaries coterminous with those of WRIA 1.	Comment noted and will be raised for consideration at next ST/TTL meeting
	7	Governance Structure: A structure that integrates watershed planning with salmon recovery seems a logical step but there are concerns, as previously expressed, regarding the stakeholder input process for salmon recovery. The differing stakeholder processes appears to be one of a decision making mode as opposed to an advisory mode. The integration of the programs at the policy and staff level that occurs in Phase 1 and is proposed in Phase 2 may achieve a change in how the principals involved perceive stakeholder input into the salmon recovery program.	Comment noted and will be considered in the DIP action involving a feasibility assessment of Phases 2 and 3 of the Governance Structure; concern raised will be provided as feedback to the Salmon Recovery entities
	8	Caucus profusion: An explicit policy should be considered for adoption by the Planning Unit and Joint Board that groups of whatever status, government or non-government, formed as a result of or in response to the implementation of the WMP should specifically be barred from becoming caucuses.	Discussion by Planning Unit; Comment is noted and will be considered with outcome of Planning Unit discussion by ST/TTL at their next meeting

Caucus	No.	Summary of Caucus Comments	Response
Water District	9	Attribution: WRIA 1 Project documentation should give names of individuals and organizational designations.	Add WRIA 1 organizational chart to Section 2 of DIP
	10	Governance: The DIP document states the June 2005 WMP references a “single management approach” when the actual reference in the June 2005 WMP reads “a single management entity”. There was not consensus on the June 2005 WMP governance points. The DIP references the approach differently and leaves open the question of funding. What is meant by a single approach – for example, does the term imply that the approach outlined in the Governance document would preempt and/or delay other efforts?	The usage of “approach” rather than “entity” is not intended to imply that the DIP document will preempt and/or delay other efforts. It is noted that consensus has not been reached on a governance structure.
	11	Instream Flows: It seems unrealistic for the Planning Unit to sanction the technical validity of Target Flows from the pilot projects. Because the pilots are intended to provide potential models for other negotiations, however, the Planning Unit could address the process and principles the pilot projects have used in producing their recommendations. The Planning Unit might also reasonably review management recommendations associated with Target Flow proposals.	Comment noted and will be raised for discussion at next ST/TTL meeting; comments will be considered as part of the evaluation of the Pilot Project process
	12	County Comprehensive Water Resources Integration Project: What is the impact of the County’s Integration Project on the implementation plan and the County’s policy in the WRIA 1 planning process?	Comment is noted and will be raised for consideration at the next ST/TTL meeting
PWO (private well owners)	13	General Comments: Some members had difficulty reading, printing, and/or relating how the PWO’s will be affected. Other members thought the level of coordination between different agencies is to be applauded. None objected to the DIP.	Comments noted and will be considered in preparing future documents

Caucus	No.	Summary of Caucus Comments	Response
State	14	An important note for reviewing this document is that the purpose of this WRIA 1 DIP is not to review all of the June 2005 WRIA 1 WMP strategies and actions; it This WRIA 1DIP is intended to provide a framework for implementing the strategies <u>and actions from the June 5 WRIA 1 WMP, not as a forum to review the previously approved strategies and actions..</u>	(lines 87-88)
	15	Whatcom County Public Works is developing a CWRIP that will be considered in implementation of the NRPI program. The outcomes of the Comprehensive Water Resource Integration Project that Whatcom County Public Works is pursuing will be considered in the implementation of the NRPI program.	(lines 166-167)
	16	It is anticipated that the inchoate <u>unused rights, and the way in which</u> and how they will be <u>are</u> considered in meeting projected water needs, will be addressed at that time.	(Lines 243-244)
	17	• <u>\$30,000 to \$60,000 is available for “Watershed Councils” for administrative support in the FY 2008-2009 biennium from the Watershed Planning Capital Fund.</u>	(lines 335-336)
	18	projects in a watershed. The total amount <u>in the Watershed Operating Budget</u> state-wide for the 20087-2009 biennium is approximately \$4 million, <u>whereas the Capital Budget has about \$12 million available for the biennium.</u>	(lines 341-343)
	19	• <u>Consider climate change in assessing future water needs with projections of water availability, particularly in watersheds that contain snowpack and/or glaciers.</u>	(table 3, page 2, first row)

Caucus	No.	Summary of Caucus Comments	Response
	20	Planning Unit should be kept in the loop with more frequent updates and given the opportunity and mechanism to self-convene should some WRIA-related development so warrant.	The DIP includes preparing quarterly reports. Language can be added to more clearly identify distribution of the reports to the PU; Comment regarding self-convening is noted and will be raised at next ST/TTL meeting.
	21	Planning Unit caucuses should be receiving regular updates from the Bertrand pilot project.	Comment noted and will be provided to the Bertrand WID administrator.
	22	Any new WIDs or other sorts of drainage processes should automatically include Planning Unit caucuses in notifications of meetings, actions, plans, etc.	Comment noted and will be raised at next ST/TTL meeting to identify mechanism for addressing since the WIDs are not created through the WRIA process.

Following are the comments received by June 18, 2007 from WRIA 1 Planning Unit caucuses. The comments below were excerpted and compiled into the comment response table included in this appendix. The WRIA 1 Planning Unit reviewed the comment response table and the original comments received by June 18, 2007 at the Planning Unit meeting on June 20, 2007.

Water District Caucus

COMMENTS ON DETAILED IMPLEMENTATION PLAN (DIP)

Attribution. We have commented in the past that it would improve communication if WRIA documents gave names of actual individuals, in addition to organizational designations. We don't generally know who is on staff and technical teams, serving in lead roles, etc.

Governance The document on Governance Structure states "...the June 2005 WRIA 1 Watershed Management Plan references a long-term strategy that envisions a single management approach for long-term water resource management." The relevant WMP citation appears to be based on Section 4/Line 64 *et seq* (February 2005 Final Draft): "One of the recommendations put forth by the Working Group is based on the approach of a single management entity with a dedicated funding source."

There was no consensus on these points, and the DIP now talks about a single approach rather than a single entity, and leaves open the question of funding. The question is what is meant by a single approach – for example, does this term imply that the approach outlined in the Governance document would preempt and/or delay other efforts?

Instream Flows. The DIP envisions that Target Flows from the pilot projects will come to the Planning Unit for approval. It seems unrealistic for the Planning Unit to sanction the technical validity of such results. The Planning Unit lacks resources to perform this sort of oversight effectively. Because the pilots are intended to provide potential models for other negotiations, however, the Planning Unit could address the process and principles the pilot projects have used in producing their recommendations. We might also reasonably review management recommendations associated with Target Flow proposals.

County Comprehensive Water Resources Integration Project. The County has recently moved to attempt a more coordinated approach to water resource planning. What is the impact of this project on the implementation plan, and on the County's policy of "no policy" in the WRIA 1 planning process?

Non-Government Water Systems Caucus

Comments on June 7 2007 WRIA 1 DIP Docs

Skip Richards, Planning Unit Representative, Non-Government Water Systems (NGWS) Caucus

Errata: It would appear that in the .pdf file Page 14 Table 3 is not clearly labeled as such.

Substantive comments:

The NGWS caucus stands ready to approve the DIP docs, with these caveats, which it requests be incorporated into the document as an appendix, as was done in Appendix G of the WMP.

Long-term Monitoring Plan:

The sooner, the better. The more, the better. See comments on Governance and Funding.

Natural Resource Policy Integration Program (NRPIP):

The goal of integrating existing WRIA-wide regulatory programs like Shorelines, Critical Areas, etc. and building more effective interfaces with other policy planning and regulatory programs such as transportation, etc. is a good one. I supported it in principle during the development of the WMP and I still do. Given how many such programs there are, and how disjointed they are, having each been initiated under different, and sometimes conflicting, legislative mandates, often by different elements of the staff, and in response to input from differing interests within the broader community, etc., the effort involved to achieve the goal at the WRIA-wide level might require more time and staff resources than is cost-effective. I support continuing to work on investigating the feasibility of the NRPIP, but I raise this caveat in order to alert participants to the need to keep an eye on the point of diminishing returns. Meanwhile, however, the Drainage-based Management (DBM) approach can provide a way to put NRPIP to work in a meaningful way, on the ground where it counts, immediately, without waiting to achieve the grand integration at the WRIA-wide level. The CAO already provides a council-discretion exemption for drainages that have achieved an approved watershed plan. Yes, progress at that level is slow, too, but it promises to deliver real results on the ground sooner than other pathways. Given the challenge facing the grand integration process, then, the first element thereof should be to place such exemptions in all other NRP regulations in order to remove at least one key set of obstacles remaining to the achievement of DBM and NRPI.

Salmon Recovery and Watershed Planning: Of all the elements of NRPIP, this one is the most critical to the future success of the WMP and to the natural resource policy goals of the community as a whole. Especially given the virtual coincidence in the goals of these Siamese twin sisters, it is most unfortunate that the two efforts were surgically bifurcated by the state legislature in the first place. Given the need to move ahead locally on both fronts, there was no choice but to do what has been done, but now we're going to have to redo some of it. The biggest problem relates to the differing

governance structures for the two processes, especially the mechanisms to incorporate stakeholder input. In the 13 years I've been paying close attention to or directly involved in stakeholder processes, which includes the state Dept of Health Water Supply Advisory Committee, established by the legislature in 1995, where I served two years as chair, the WRIA 1 Watershed Management Project has the most effective stakeholder process of which I have any knowledge. It has been transparent, accountable, and, given the huge deficits in trust and understanding between many of the participants, stemming from mutually inflicted socio-cultural and economic wounds going back, in some cases, for over a century and a half, it has been highly effective in starting solidly down a path toward achieving the goals established for it by the Watershed Management Act. The Planning Unit's consensus decision process, widely viewed with skepticism across the spectrum, has produced, among other things, a robust General Scope of Work, a Technical Scope of Work, and a carefully constructed first phase of a comprehensive Watershed Management Plan, the latter developed in the absence of badly needed work product from the technical side that remains undelivered at of this writing.

Nothing of the kind can be said for the stakeholder process employed during the development of the Salmon Recovery Plan, nor does the legislation that brought that process into being require anything like the Planning Unit structure or function. Be that as it may, however, if it is the intent of the Joint Board to achieve, and for the state agencies to support, an eventual integration of the two processes, including the stakeholder input process, as envisioned in Phase 3 of Appendix A of the DIP docs, then such an arrangement will require essentially the same kind of structure and function as the Planning Unit, otherwise the integrity and capacity of the latter will be compromised, and this member thereof will resist heading in any direction that even hints at any such result. If the Salmon Recovery effort wishes to maintain a stakeholder input process similar to that it has employed before, it has every right to do so, but the decision to do so will in turn require abandonment of the integration of at least the stakeholder elements of the two processes, or risk setting the WMP on a collision course with the Salmon Recovery effort.

Governance and Funding:

Selling the concept: The governance and funding subcommittee should begin to meet as soon as possible. It should begin where the Planning Unit left off, looking at not only the benefits resulting from the implementation of the WMP, but also the costs of NOT implementing the WMP. A good start on defining those costs was abandoned prior to the completion of Phase One of the WMP, but that effort must be taken back up again if we are to succeed in convincing perennially cash-strapped local jurisdictions to pony up the resources necessary to make this ambitious plan a reality.

Funding source(s): Placing the entire burden of funding the implementation of the WMP upon one jurisdiction is the simplest approach, but probably the least palatable. The WMP was created with input by all local jurisdictions, and they all will benefit, so there is as much logic to asking them all to contribute, proportional to their tax base. In the alternative, a special purpose district could be formed, the boundaries of which would be coterminous with those of WRIA 1, specifically for the purpose of raising the needed funds.

Governing Structure: The integration of watershed planning with Salmon Recovery seems a logical step. Again, it is unfortunate the two were ever separated in the first place. The burden should be on those who advocate any other course than adoption by the Salmon Recovery program of a Planning Unit-like structure and function. If the operation of the Planning Unit had produced nothing but the churning chaos predicted by the skeptics, that would be one thing. To the contrary, the Planning Unit has succeeded, despite all of the obstacles noted above, and more besides, and it would be the height of folly to disregard that success when designing what amounts to a parallel process with highly overlapping goals. It is difficult to see how the two processes can achieve their coincident goals absent integration. It is difficult to see how overall integration of the two processes could be effective absent integration of the stakeholder input element. The initial discussions of the stakeholder element in the proposed three phases of the integration process were lame. The typical stakeholder input process permits staff to cherry pick input, which in turn discourages involvement and prevents the level of quality contribution by community members at the level achieved by the Planning Unit, where community input originated and drove many of the most productive efforts of the group, including the General Scope of Work, the Management Options Catalog and Criteria for Evaluating Solutions. It would appear the Salmon Recovery staff is fearful of that level of community input, which does not bode well for the final outcome of the Salmon Recovery effort. The central issue appears to be that a planning unit type of process would put the stakeholders in a decision making mode, as opposed to a merely advisory mode. The Planning Unit has demonstrated that that approach not only works, it produces far superior results than the traditional stakeholder input method. Perhaps once the higher level integration envisioned in Phases 1 and 2 is achieved, the rest of it won't be perceived by the principals as a threat any longer. I certainly hope so, because the perceived threat of a disempowerment of the community via a disabling of the Planning Unit is certainly a real one that will loom over future proceedings so long as it remains unresolved in a positive direction.

Caucus profusion: I raised the issue regarding WIDs becoming a caucus at the May 23 meeting. I raised that issue not to advocate such a course, but to ensure that issues of adequacy of representation do not arise in the future because we failed to recognize and address the problem now. I propose that an explicit policy be considered for adoption by the Planning Unit and Joint Board, that groups of whatever status, government or non-government, formed as a result of or in response to the implementation of the WMP should specifically be barred from becoming caucuses.

Private Well Owners Caucus

From WRIA 1 Planning Unit Representative:

After e-mailing the information on the DIP Draft and Appendix A and B to the small group of caucus member who have WMP discs and attended meetings discussing sections of WMP some had a tough time reading, printing, and or relating how they will be affected by it a PWO's. Others thought the level of coordination between different agencies is to be applauded. None objected nor do I, to the DIP Draft.

From Caucus Member:

I have read the documents provided and have the following comments from a private well owner perspective.

I did not find anything in the content that indicates private well owners have a voice in the Governance Structure document. It is apparent that private well owners will be impacted at some point in time based on the content of the monitoring program draft. Since there is a lack of documented history with regards to water levels of the water resources such as Ten Mile Creek which these efforts are trying to protect and salvage, it is apparent that items such as creek water levels are going to be set at arbitrary values. It appears that the emphasis of the contents of these documents is to try to include the various agencies who should have a voice but there is nothing which indicates that private well owners collectively have any voice. It is possible that private well owners could and probably will be seriously impacted.

Since Ten Mile Creek runs through a corner of my property, I am aware of the water level changes that seem to occur during the year and consequently I feel that we try to conserve the use of water. My neighbors do not seem to care what the water level is based on water that gets pumped out during summer months onto bean fields.

I cannot make a usable copy of the spread sheet due to the way it has been created.

I understand that an effort is in process to develop a plan for Ten Mile Creek which I assume is similar to the Bertrand Creek effort. Who is in charge of this?

Appendix D
Other WRIA 1 Caucus Comments

The comments presented below were received from caucus representatives after June 18, 2007 and were not reviewed by the WRIA 1 Planning Unit on June 20, 2007 as part of the comment response table. The Planning Unit discussed the points covered in the comments at the June 20th meeting in general and as part of other comments received. The June 20, 2007 Planning Unit meeting summary is provided in Appendix C.

Comments from Caucuses Received After June 18, 2007

Land Development Caucus Comments

- We believe it is premature to institute the Detailed Implementation Plan (DIP) before all of the modeling from Utah State University (USU) has been analyzed, although we are willing to discuss it. We feel that any approvals of future WRIA items and DIP items should be done with WRIA #1 Planning Unit approval, and using the same processes that we have used for the last almost ten years. We believe that quarterly meetings to discuss DIP processes might be one way to keep the Planning Unit in the loop. All major issues, including major funding issues, should go back to the Planning Unit for discussion.
- We are not satisfied that the information that we have received in response to our completing the WRIA #1 Planning Process will do anything to release water rights, and look forward to further discussion on this process.
- We believe, beyond instituting the Middle Fork and Ten-Mile Creek which are in process anyway, that no further implementation should be done until the pilot project on Bertrand Creek is completed. We want to see results from Bertrand Creek before we are comfortable going forward with any further pilot projects, and especially before we are comfortable instituting such processes WRIA-wide. We want to wait on implementation until the pilot projects are completed and the data from USU is analyzed.
- We absolutely do not like the proposed WRIA #1 structure. Phase 3 in particular is too vague, and there are too many hidden policy considerations in these structures. We would be comfortable retaining Whatcom County as the lead entity for WRIA.
- We especially do not like the 501© (3) component to proposed Phase 3. We are opposed to tying up public funds to benefit a nonprofit, and there are too many legal issues with this idea for us to be comfortable with this.
- We believe that we should wait on any instream flow negotiation until the models from USU are analyzed, and until we have results from the Bertrand Creek process. Once we have information from the Bertrand Creek process and the work that the WID is doing, then we would feel more comfortable discussing future instream flow negotiations.

- We are not excited about the idea that salmon recovery and WRIA 1 should merge. Some caucus members have concerns that WRIA was a process that encompassed much more than salmon recovery; there are other byproducts of instream flow besides salmon recovery. Other caucus members were concerned that salmon recovery funds may be placed in jeopardy, as they usually are for a specific purpose. The only way that we would be comfortable considering this idea is if the Planning Unit merges with salmon recovery, that the Planning Unit is still the lead agency, and that whatever entity arrives out of this merger would have the same rules, process, and procedures as the original WRIA process. We expect all important issues to be returned to the Planning Unit, using the same structure and processes that we are used to.

Non-Government Water Systems- Additional Comments

A few other points have arisen as the result of discussing the DIP with other caucuses:

1. Planning Unit should be kept in the loop with more frequent updates and given the opportunity and mechanism to self-convene should some WRIA-related development so warrant.
2. Planning Unit caucuses should be receiving regular updates from the Bertrand pilot project.
3. Any new WIDs or other sorts of drainage processes should automatically include Planning Unit caucuses in notifications of meetings, actions, plans, etc.