

2. WATERSHED PLANNING

The 1998 Washington State legislature passed House Bill 2514, codified into [RCW 90.82](#), to set a framework for addressing the State's water resources issues. RCW 90.82 states:

“The legislature finds that the local development of watershed plans for managing water resources and for protecting existing water rights is vital to both state and local interests. The local development of these plans serves vital local interests by placing it in the hands of people: Who have the greatest knowledge of both the resources and the aspirations of those who live and work in the watershed; and who have the greatest stake in the proper, long-term management resources. The development of such plans serves the state's vital interests by ensuring that the state's water resources are used wisely, by protecting existing water rights, by protecting instream flows for fish and by providing for the economic well-being of the state's citizenry and communities. Therefore the legislature believes it necessary for units of local government throughout the state to engage in orderly development of these watershed plans.”

Twelve State agencies signed a [Memorandum of Understanding](#) in 1998 identifying roles and responsibilities of the participating agencies; fostering cooperative working relationships among participating state agencies, local governments and tribes; and coordinating implementation procedures referred to in the Watershed Management and Salmon Recovery Acts. This memorandum commits these agencies to work through issues in order to speak with one governmental voice when sitting at local planning unit tables. Technical water management protocols are not addressed in this MOU. The following agencies signed this document:

- The Department of Agriculture
- The Conservation Commission
- The Department of Community, Trade and Economic Development
- The Department of Ecology
- The Department of Fish and Wildlife
- The Department of Health
- The Department of Natural Resources
- The Department of Transportation
- The Interagency Committee for Outdoor Recreation
- The Puget Sound Water Quality Action Team
- The Salmon Recovery Office, within the Governor's Office
- The State Parks and Recreation Commission

The purpose of RCW 90.82 is to provide a framework for local government, interest groups and citizens to collaboratively identify and solve water related issues in each of the 62 Water Resource Inventory Areas (WRIAs) of Washington State.

The RCW 90.82 does not require watershed planning but instead enables a group of initiating agencies to:

- Select a lead agency;
- Apply for grant funding;
- Define the scope of the planning; and,
- Convene a local group called a planning unit for the purpose of conducting watershed planning.

The initiating agencies include all the counties within the WRIA, the largest city, and water purveyor within the WRIA and any Tribe with reservation lands within the watershed. Tribes must be given the option to participate, but their participation is not mandatory. Although all initiating entities must agree that they want Watershed Planning occur in the basin and their participation is optimal, , participation is not required for watershed planning to proceed.

Under the law, the Planning Unit (PU) has considerable flexibility to determine the planning process, focus on areas or elements of particular importance to local citizens, assess water resources and needs, and recommend management strategies. RCW 90.82 identifies four topics that can be addressed within the watershed Technical Assessment and subsequent plan. Water quantity must be addressed if grant funds are accepted. Water quality, habitat and instream flows may be addressed but are optional. The law specifies certain types of information that must be gathered and a range of water resource management strategies that need to be addressed.

The law also includes constraints on the activities of planning units. For example, the PU does not have the authority to change existing laws, alter water rights or treaty rights, change treaties, or require any party to take an action unless that party agrees.

Three phases of watershed planning are identified in RCW 90.82:

- Phase I - Organization
- Phase II - Assessment
 - ⇒ Level 1 Assessment: A compilation and review of existing data (within time and budget limitations) relevant to defined objectives. If the Planning Unit decides that the existing data is sufficient to support the management requirements of all or some of the issues, the Planning Unit may choose to skip Level 2 and move on to Level 3 for these issues.
 - ⇒ Level 2 Assessment: Collection of new data within the time frame of the planning process to fill data gaps and to support decision needs.
 - ⇒ Level 3 Assessment: Long term monitoring of selected parameters following completion of the initial watershed plan to improve management strategies. The MBPU will be including studies not completed or initiated as part of the Level 1 or 2 Assessment in the Level 3 Assessment. These may include technical analyses that are identified as part of Phase III Planning.

- Phase III - Planning

RCW 90.82.130(1)(a) calls for a consensus approval of the watershed plan by all members of the Planning Unit (PU), or a consensus among the members of the PU appointed to represent units of government. Once the PU has accepted the plan by one of these methods it is referred to the County legislative body for approval. The County legislative body may veto the plan but must refer it back to the PU with recommended revisions. Once the plan has been approved by the county legislative bodies and the PU, the county and state agencies are required to implement the plan.

Furthermore, RCW 90.82.130 (3) addresses the obligation to implement elements of the watershed plan. It states that the PU can only add an element to its watershed plan that creates an obligation if each of the governments to be obligated has at least one representative on the PU and those members agree to adding the element.

2.1 The Watershed Planning Concept

Watershed planning within Watershed Resource Inventory Areas (WRIAs) recognizes the large scale and complexity of water resources and the wide variety of factors that influence the amount of water available for use. Although the geographic area contained in a WRIA rarely corresponds with political / jurisdictional boundaries, water resource issues such as water supply, water quality, and habitat for fish and wildlife are closely linked together within watersheds.

From an assessment perspective, the watershed (or basin) scale is appropriate since the hydrologic processes that occur within WRIA boundaries can be approximated by a basin scale hydrologic cycle or equation. This equation can be expressed generally as “water inflow to the basin is equal to water outflow from the basin plus / minus changes in water storage within the basin”. With a conceptual understanding of the hydrologic cycle within a basin, planners can gain insight on how future actions within the watershed may impact water resources.

2.2 The WRIA 48 Planning Unit

The WRIA 48 planning effort was initiated in 1998 by the following governments: Okanogan County, Methow Valley Irrigation District, Colville Confederated Tribes, and the Town of Twisp. Okanogan County is currently the lead agency for this effort and is one of the initiating governments. The initiating agencies formed a planning unit by asking various agencies, organizations and businesses to appoint a member. In addition, interested members of the public were invited to join. Members of the watershed Planning Unit include broad representation of interests within the basin and hold monthly meetings that are open to the public. Colville Confederated Tribes, previously participating in the Planning Unit, voluntarily left the process late in 2001.

In March 2002, the planning unit was made up of the following members:

Initiating Governments:

- Okanogan County
- Methow Valley Irrigation District (largest public water user)
- Town of Twisp (largest town in the WRIA)

State Agencies:

- Department of Ecology (represents all state agencies)
- Federal Agencies:
 - United States Forest Service (USFS)
 - Other Towns and Cities:
 - Town of Winthrop
 - City of Pateros

Irrigation

- Upper/Middle Methow Irrigation Ditches
- Methow Valley Canal Associates

Agriculture**Business****Fish and Wildlife****Recreational Interests****Environmental Groups**

- Methow Valley Concerned Citizens

Regional Interests

- Chewuch
- Early Winters
- Upper Methow
- Twisp River
- West Lower Methow
- East Lower Methow
- Goat/Wolf Creek
- Beaver Creek

Past Study Projects

- Pilot Project
- Groundwater Advisory Committee

Environmental

- Methow Valley Concerned Citizens

Technical Support Agencies

- Okanogan County Conservation District
- Washington State Department of Natural Resources
- Washington State Department of Health
- Washington State Department of Ecology
- Washington State Department of Fish and Wildlife
- U.S. Geological Survey
- U. S. Bureau of Reclamation
- United States Forest Service
- Washington State Conservation Commission

2.2.1 Phase II Watershed Planning Optional Components

RCW 90.82 requires that the initiating agencies use Phase II grant monies to address water quantity issues. The law provides that grant money may be requested to address water quality, fish habitat, and instream flows, at the option of the initiating agencies. In 1998, the Initiating Governments for WRIA 48 chose to address instream flows, water quality, and fish habitat as it relates to flow in addition to addressing quantity issues for the HB 2514 process. In 2001, the initiating governments voted not to submit an application for additional funding to support instream flow studies (funded under HB1832). The majority of the members of the WRIA 48 Initiating Governments cast votes in favor of maintaining the 1976 instream flows (regulatory baseflows set by Ecology). Okanogan County, Methow Valley Irrigation District, and the City of Twisp voted to maintain the 1976 regulatory baseflows, while the Colville Tribe via telephone conference voted no (Record of Proceedings Okanogan County Board of Commissioners, October 01, 2001). The Planning Unit supported the decision of the Initiating Governments not to submit an application for additional funding to support instream flow studies under HB 1832.

This Level 1 Technical Assessment addresses only the Water Quantity component of Watershed Planning. The MBPU has received all funds established under RCW 90.82 for Phase 2 Assessments. There is a potential for additional grant funding, established under ESHB 1832, of \$100,000 each for minimum instream flows, storage and water

quality assessments. The current state budget does not include funds for these ESHB 1832 assessments in the Methow.

2.2.2 Methow Basin Planning Unit Goals and Objectives

The following three objectives have been defined by the MBPU. It is important to appreciate that these objectives may be modified in the future and that the list below represents the objectives as of March 2002. The scope of work for this report (Level 1, Phase II of Watershed Planning) is to compile the information that will be used in Level 2, Phase II to address these objectives.

MBPU-1: Evaluate what amount of water can be reserved for human use and what amount of water is needed for fish and wildlife.

- Evaluate water storage options for use during late season low flow periods for fish and wildlife habitat and human use.
- Evaluate the role of present agricultural use on streamflows.
- Evaluate the effects of diversion canals on aquifer recharge.
- Evaluate the effects of diversion canals on habitat quality for fish and wildlife.
- Evaluate the role of forest management practices on basin streamflow.
- Develop water management strategies that meet human, fish, and wildlife needs during both normal and drought periods. Evaluate the effect of domestic use on aquifers, habitat quality and stream flows.

MBPU-2: Evaluate the technical basis of the 1976 Basin Plan:

- Evaluate the technical rationale for the 2 cfs limitation for domestic and stock watering set in the 1976 Basin Plan and subsequent WAC.
- Evaluate the technical basis for basin closures set forth in WAC.
- Evaluate the effect of changing group domestic wells to same priority as single domestic exempt wells.

MBPU-3: Compare actual use to allocated rights in WDOE database.

- Recommend methodologies for reconciling actual use (consumptive use) with claimed use.
- Evaluate water banking concepts as a tool for managing water supplies at the basin scale.
- Recommend regulatory approaches to set aside water for towns to facilitate their growth needs.

2.2.3 Phase II, Level 1 Assessment Process

A listing of the basic requirements for assessment of water quantity under the Watershed Management Act is provided in Table 2-1. This Final Level 1 Watershed Technical Assessment includes all the basic requirements listed in Table 2-1.

2.3 Related Planning and Regulatory Programs

The Watershed Management Act recognizes that water resources planning by federal, state, city, county and district entities and others occur under a variety of authorities. To take advantage of existing work and to avoid duplication, planning units are required to consider all existing plans and related planning activities. Relevant plans and programs should be looked at as sources of: 1) existing information; 2) water resources impact and mitigation studies; and, 3) authority to implement watershed plan recommendations.

The following lists local, state, and federal programs and plans relevant to watershed planning in WRIA 48:

Okanogan County/Local Programs

- Customs and Culture Ordinance
- Local Comprehensive Planning and the Growth Management Act (GMA);
- Critical Area Ordinances and the GMA;
- Groundwater Management Areas and Plans;
- Local Agricultural Programs; and,
- Adjacent Watershed Planning Efforts.

State Programs

- State Environmental Policy Act (SEPA);
- Washington State Water Quality Guidelines;
- Washington State Department of Health (DOH) Water Quality Monitoring; and
- The Washington Department of Ecology's (Ecology's) Shorelands and Water Resources Program.

Federal Programs

- National Environmental Policy Act (NEPA);
- The Federal Clean Water Act;
- The Federal Safe Drinking Water Act;
- The Federal Clean Water Act (CWA) Section 303(d);

- The Federal Total Maximum Daily Load (TMDL) process; and
- The Federal Endangered Species Act (ESA).

2.3.1 Local Programs

2.3.1.1 Okanogan County Customs and Culture Ordinance

Okanogan County Commissioners passed Resolution 66-95 (referred to as the “Customs and Culture” Ordinance) in 1995. The ordinance is intended to create a county land use planning process that protected not only the natural environment, but also the customs, culture and economic stability of Okanogan County and private property rights of its citizens. The land use ordinance requires federal and state agencies proposing to undertake or engage in any planning activities, which will significantly affect the natural and/or socioeconomic environment in Okanogan County to agree to participate in joint planning for implementation of any policy affecting County lands.

The resolution describes the social and economic aspects of the County, the recent impacts of federal decisions on the County, and the amount and type of commodity, recreational, or other industrial or land use required to support the tax base for Okanogan County and maintain community and economic stability of Okanogan County. The purpose of this resolution is to begin to define custom and culture as required by the National Environmental Policy Act (NEPA).

2.3.1.2 Local Comprehensive Planning

Comprehensive plans are important to consider within the context of watershed planning because cities and counties: 1) govern land use within their corporate boundaries; and 2) have a great deal of responsibility for choosing and financing infrastructure that both effect and mitigate impacts on water resources. The towns of Withrop, Twisp and Pateros in the Basin have approved a comprehensive land use plan, setting forth their designs for growth in their towns. These are implemented through zoning and other regulations, including utility policies. The plans and policies of all three towns allow residential and commercial growth.

City and county comprehensive plans are a means to coordinate more narrowly focused efforts over a broader jurisdictional area and at a watershed scale. Comprehensive plans define existing conditions, provide a forum for evaluating and making important public decisions, and provide authority to implement many potential watershed plan recommendations.

2.3.1.3 Critical Area Ordinances and the GMA

The GMA combined with Article 11 of the Washington State Constitution mandates that local jurisdictions adopt ordinances that classify, designate, and regulate land use in order to protect critical areas. Okanogan County does not currently plan under GMA, however, they are involved in critical area planning under GMA critical area regulations.

Critical areas are defined as wetlands, frequently flooded areas, aquifer recharge areas, geologically hazardous areas, and those areas necessary for fish and wildlife conservation.

Because Okanogan County is a non-GMA county, by extension, the towns of Twisp and Winthrop also escape requirements to fully plan under the act. However, all jurisdictions are required to update Critical Areas information and regulations, incorporating best available science. Winthrop and other towns in the basin will be working under a grant from the Office of Community Development to complete their 2002 GMA updates. Both towns also plan under critical area ordinances.

2.3.1.4 Groundwater Management Area Program and Plan

The concept of a groundwater management area is embedded in Washington Administrative Code. Under the provisions of the code, Ecology designates a groundwater management area after petition by local government. The community then develops a management plan for groundwater protection based on existing data and any new data collected.

The Methow Valley was designated a Groundwater Management Area by the Washington State Department of Ecology in 1987. A Draft Groundwater Management Plan was prepared by Okanogan County and its proactive Groundwater Advisory Committee (GWAC), with assistance from Ecology. The GWAC completed its study and published its recommended Groundwater Management Plan (GWMP) in early 1994. The GWMP recommends ongoing citizens' involvement in water planning and use; requires that new construction provide an estimate of water withdrawn for domestic (indoor) consumption; encourages the development and use of Group A and B water systems, and recommended elevating the status of Group A and B Water Systems to the same priority as single family domestic.

2.3.1.5 Adjacent Watershed Planning Efforts

Watershed planning is not currently being conducted in WRIA 47 (Chelan) or WRIA 49 (Okanogan). WRIAs 44 and 50 (Moses Coulee and Foster) are jointly conducting Watershed planning directly downstream of the Methow Basin.

2.3.2 State Programs

2.3.2.1 State Environmental Policy Act (SEPA)

The State Environmental Policy Act (SEPA) was adopted in 1971 to ensure that environmental values were considered during decision-making process by state and local agencies. Adoption of the watershed plan and any associated implemented projects will invoke SEPA for cities, counties and other agencies subject to SEPA. The methodology for watershed planning is similar to that for a SEPA programmatic Environmental Impact Statement (EIS). Therefore, it may streamline the planning process and reduce SEPA requirements in subsequent implementation of watershed plan

recommendations if the watershed planning process is structured in a similar way to that of an EIS. Although this Level 1, Phase II data compilation report is not directly subject to SEPA review, it does follow the SEPA structure by summarizing existing conditions within WRIA 48 using best available science. This Level 1, Phase II data compilation report is completed in support of the Phase III Watershed Plan. The Phase III Watershed Plan is subject to SEPA review.

2.3.2.2 Washington State Water Quality Guidelines

Ecology has broad authority over surface water and groundwater quality (WAC 173-200 and WAC 173-201). Effective implementation of Ecology's water quality programs is a component of watershed planning. Watershed planning in WRIA 48 must acknowledge Ecology's standards and implementation guidance for surface water and ground water quality in any land-use or development issues.

2.3.2.3 Washington State Department of Health (DOH) Water Quality Monitoring

The Washington State DOH oversees compliance of public water systems with water quality monitoring requirements. Based on the source water assessment classifications given by DOH, public water systems are required to monitor various parameters at various frequencies at each of their water sources. The water quality monitoring results are reviewed by DOH to ensure compliance with water quality standards and with monitoring requirements. In addition, Washington DOH oversees the Consumer Confidence Report (CCR) federal rule (40 CFR 141 Subpart O) which was adopted as a state rule (WAC Chapter 246-290 Part 7 Subpart B) in June 2000. It became effective as a state requirement on August 21, 2000. This state regulation requires Group A community water systems to provide their customers with a report each year about the quality of water being served by the system. Group A water systems serve 15 or more connections or 25 or more people. This regulation does **not** apply to transient non-community (TNC), non-transient non-community (NTNC) or Group B water systems. The Consumer Confidence Report is required to be delivered to water system customers and the State Department of Health before July 1 of each year.

2.3.2.4 Ecology's Shorelands and Water Resources Program

Ecology's Shorelands and Water Resources program is charged with managing Washington State's water resources to ensure that the waters of the state are protected and used beneficially. An important component of water management is permitting and enforcement of water rights.

The Water Resources Management Program for the Methow River Basin (Kauffman and Bucknell, 1976); often referred to as the 1976 Methow Basin Plan, set minimum stream flows, closed a number of sub-basins to further consumptive allocation, and established a reservation of water for future consumptive allocation in each of seven primary reaches of the Basin (WAC 173.548).

2.3.3 Federal Programs

2.3.3.1 National Environmental Policy Act (NEPA)

National Environmental Policy Act (NEPA) is triggered by various actions including the investment of federal funds or watershed planning actions by federal agencies such as the USFS. If it is anticipated that NEPA will be invoked during the watershed planning process, NEPA requirements should be reviewed so that they can be incorporated early in the watershed planning process.

2.3.3.2 The Federal Clean Water Act

The Federal Clean Water Act (CWA) is the primary legislation controlling water quality in the United States. The goals of the CWA are:

- To develop technology to eliminate the discharge of pollutants;
- To achieve water quality high enough to be protective of fish and wildlife, and recreation;
- To prohibit the discharge of toxic pollutants; and,
- To construct publicly owned waste treatment facilities and to develop area-wide waste treatment management planning processes.

Three facets of the CWA are described in the sections below.

2.3.3.2.1 Federal Clean Water Act (CWA), NPDES

A National Pollutant Discharge Elimination System (NPDES) Permit is required for all point discharges to surface waters. Although the EPA is responsible for implementing this act, states may elect to develop and regulate their own programs providing their programs are at least as stringent as the federal program. Washington State has elected to assume responsibility for invoking the Federal Clean Water Act. The Department of Ecology (Ecology) has the primary responsibility for enforcing the CWA.

2.3.3.2.2 Federal Clean Water Act (CWA), Section 303(d)

The Federal Clean Water Act (CWA), Section 303(d), requires States to develop a list of water bodies that are not expected to meet water quality standards after implementation of technology-based pollution controls. These controls include enforceable best management practices for non-point sources. The EPA requires that these controls be completed or scheduled for completion within two years of the waterbody's listing. The 303(d) list contains all those water bodies that require some additional management activities.

2.3.3.2.3 Total Maximum Daily Load (TMDL) Process

The Federal Clean Water Act (CWA) directs a that Total Maximum Daily Load (TMDL) is established for all water bodies listed under Section 303(d). The EPA defines a TMDL as

the sum of all pollution loads allocated to various sources and/or reserves after a public participation process. The TMDL is established so that pollution does not exceed the loading capacity of the waterbody segment. The TMDL also includes recommendations on how to control the pollution impairing the water as well as a monitoring program to ensure the effectiveness of these pollution controls.

2.3.3.3 The Federal Safe Drinking Water Act

The Federal Safe Drinking Water Act (SDWA) ensures public water systems meet national standards for the protection of public health. This act establishes primary and secondary drinking water standards. Primary standards are established for those contaminants that pose a human health risk. Secondary standards are based on aesthetic factors such as color and taste. The Washington State Department of Health (DOH) has responsibility for implementing the Federal Safe Drinking Water Act.

2.3.3.4 Endangered Species Act (ESA)

The Endangered Species Act (ESA) is administered by the National Marine Fisheries Service (NMFS) and the United States Fish and Wildlife Service. NMFS is accountable for anadromous fish such as Pacific salmon. The Methow Basin provides important migration, rearing and spawning habitat for threatened and endangered fish species listed under the ESA, including Spring Chinook Salmon (*Oncorhynchus tshawytscha*), Summer Steelhead (*Oncorhynchus mykiss*), and Bull Trout (*Salvelinus confluentus*). Spring Chinook were listed as endangered under the Endangered Species Act on March 24, 1999 and Methow Summer Steelhead were listed as endangered under the Endangered Species List on August 18, 1997. Bull Trout were listed as threatened under the Endangered Species act on June 12, 1998 and Westslope Cutthroat Trout (*Oncorhynchus clarki lewisi*) are listed as a species of concern.

Over these past few years, biological opinions and associated enforcement actions under the ESA by NMFS on the Early Winters, Skyline, Wolf Creek, and MVID irrigation operations have heightened the sensitivity of water issues and authority in relation to ESA. Although Watershed Planning under RCW90.82 is certainly relevant to ESA issues, it is not a suitable substitute for ESA compliance because it is largely focused on water quantity, particularly water allocation and use. The ESA is largely focused on habitat quality and associated fish productivity, which involves water quantity plus a number of other attributes independent of water quantity.

TABLE 2-1

Watershed Management Act Technical Assessment
Requirements for Water Quantity for WRIA 48

| Component | Technical Assessment Requirements of the Watershed Management Act (WMA) |
|------------------|---|
| Water Quantity | Surface and groundwater present in the basin |
| | Water rights, in the form of claims, permits, certificates and in-stream flows |
| | Water use estimates for historic, current and future conditions |
| | Hydraulic continuity between surface water and groundwater |
| | Water availability, based on a comparison of appropriation and presence |
| | An outline of potential strategies for increasing or better managing water resources in the basin |