

**CHAPTER 1**  
**BACKGROUND AND OBJECTIVES**

Prepared for:

Methow Basin

Submitted by:

Golder Associates Inc.  
Seattle, Washington

June 26, 2002

003-1047-200.001  
Chapter 1

TABLE OF CONTENTSPage No.

1.	BACKGROUND AND OBJECTIVES	1-1
1.1	Previous Water Resource Planning Efforts in the Methow Basin	1-1
1.2	Technical Assessment Objectives and Organization	1-2
1.2.1	Report Objectives	1-2
1.2.2	Report Organization	1-3

LIST OF TABLES

## **1. BACKGROUND AND OBJECTIVES**

This section presents an overview of past water resource planning efforts in the Methow Basin, a summary of the report objectives and organization of the report.

### **1.1 Previous Water Resource Planning Efforts in the Methow Basin**

Significant water resource planning and resource protection efforts have been ongoing in the Methow Basin for over 25 years. Resource allocation and protection have been a high priority for many stakeholders in the basin, and has resulted in strong citizen involvement in successive planning processes. Agency involvement has also been strong in the Methow Basin. The combination of these interests has resulted in highly visible, data intensive, resource planning efforts that have spanned decades.

In the 1970's the Department of Ecology (Ecology) and the United States Geological Survey (USGS) jointly prepared several reports overviewing existing water resource data, use, availability and shortages. Ecology also prepared various reports specifically addressing streamflow in the Basin including estimates of natural monthly flows and the impacts of water use and irrigated lands on streamflow. The Methow Basin Level B Study, conducted by the Pacific Northwest River Basins Commission in 1977 also addressed existing and anticipated water resource issues and needs, including storage, over a planning horizon that extended to the year 2000.

The Water Resources Management Program for the Methow River Basin (Kauffman and Bucknell, 1976), conducted by Ecology and adopted in 1976 (WAC 173.548) is the basis for the current regulatory baseflows set in the Basin. As a result of this study often referred to as the "Methow Basin Plan," a regulatory baseflow rule was adopted for the headwaters, and upper, middle, and lower Methow River, Early Winters Creek, the Chewuch River and the Twisp River. This program also set a 2.0 cubic feet per second (cfs) limit on surface water withdrawals for future single domestic and stock water allocation from each of the seven primary reaches of the Basin and gives regulatory baseflows a higher priority than public water supplies. Furthermore, this program closed a number of sub-basins to further consumptive allocation.

During the early 1990s Ecology prepared reports that addressed closed tributaries, hydraulic continuity, water use, and relationships between fish habitat and instream flows. An Instream Flow Incremental Methodology (IFIM) study was conducted in 1992 (Caldwell and Catterson, 1992). The purpose of these studies was to provide a basis for review of regulatory baseflows adopted by Ecology in 1976 and to determine the impact of new water right appropriations on fish habitat. The Pilot Project Committee did not accept this study claiming that the flows the IFIM study deemed optimal for fish exceeded those that occurred historically.

Legislation was passed in 1990 calling for a cooperative approach to water resource planning among interest groups, local governments, tribes, and water users. The proposed Chelan Agreement established a water resource pilot planning process, and in 1991 the Methow River Basin was selected as a pilot basin under the Chelan process. The goal of the Methow Valley Water Pilot Planning Project and its Planning Committee was to create a water resource management plan for the Methow River Basin that

provided recommendations for resolving water use conflicts both at the present time, and over a 20 to 50 year planning horizon. Ecology director Christine Gregoire met with citizens and stated that Ecology would not engage in further regulation of local waters if the pilot project would move forward to develop a plan per the Chelan planning process.

After two years of work, the Pilot Project produced a plan in 1994 (Methow Valley Water Pilot Planning Project, 1994). Much of the technical data presented in the Pilot Project plan is pertinent to this Level 1 Technical Assessment Report. However, there were stakeholders in the Methow Basin community that did not support the Pilot Project plan, and consequently, the Okanogan County Commissioners did not vote to approve it. Furthermore, the Ground Water Advisory Committee, also commissioned by Ecology, developed were working toward a Ground Water Management Plan at the same time as the Pilot Project. Some of the findings of the Groundwater Advisory Committee were in conflict with the Pilot Project Plan.

The current watershed planning effort was initiated in 1998 when funding was made available from Ecology under House Bill 2514. Initiating governments included Okanogan County, Methow Valley Irrigation District, Colville Confederated Tribes, and the Town of Twisp. Not unlike the previous Pilot project, watershed planning under 2514 is a tool for developing water resource management strategies in the context of current laws and policies. An overview of the Watershed Planning Process is provided in Section 2 of this report. The interested stakeholders involved in this process are listed in Section 2.2. This Level 1 Technical Assessment report is prepared as a product of Phase II, Level 1 of the Watershed Planning Process.

## **1.2 Technical Assessment Objectives and Organization**

### **1.2.1 Report Objectives**

The objective of this Level 1 Technical Assessment is to compile, characterize, and provide a preliminary assessment of existing information for Water Resource Inventory Area 48 (WRIA 48). The relevant technical data for the watershed is summarized in a context that can be used to move forward in the 2514 Watershed Planning Process. The data presented in this Phase II, Level 1 Watershed Technical Assessment is intended for use in further analyses that address water quantity and quality issues in the Methow Basin.

Further analyses that investigate the cause and effect relationships in the Basin will be performed for, and presented in, the Phase II, Level 2 Technical Assessment. The technical approach, or protocol, for these further analyses are summarized at the end of each technical section of this report. These assessments, will in turn, be used to develop and focus a Watershed Plan that addresses critical issues with reasonable and defensible solutions that can be implemented as Phase III of the Watershed Planning Process. The Planning Unit has discussed potential Watershed Plan actions during the Phase II process that may be included as part of the Phase III Watershed Plan to help to focus this Phase II, Level 1 Assessment Report.

This Level 1 Technical Assessment is intended to fulfill the requirements of the Phase II, Level I Assessment of the 1998 Watershed Planning Act ([RCW 90.82](#)). These requirements include:

- Provide an inventory of existing information relevant to watershed planning in WRIAs 48;
- Organize the existing information into categories based on major technical disciplines (e.g., climate, hydrology, land use etc.);
- Present the existing information and describe the major characteristics of the watershed;
- Provide a preliminary assessment of information gaps;
- Provide a foundation for Level 2 Assessment of Phase II; and,
- Provide data to support development of a Watershed Plan under Phase III.

### **1.2.2 Report Organization**

This Level 1 Assessment summarizes existing information for the following technical disciplines and specifies a protocol for additional analyses of existing data, where necessary, based on Planning Unit objectives and water resource management issues in the basin. The recommended technical protocols for each discipline are presented in Section 13 of this report.

Section 3 - Basin Characteristics

Section 4 - Climate

Section 5 - Streamflow

Section 6 - Groundwater

Section 7 - Storage

Section 8 - Water Quality

Section 9 - Land Cover and Land Use

Section 10 - Water Use

Section 11 - Water Rights

Section 12 - Basin-wide Water Balance

Section 13 - Technical Assessment Protocol