

SECTION II

THE COORDINATED WATER SYSTEM PLAN PROCESS

1. INTRODUCTION

The Public Water System Coordination Act, Chapter 70.116 RCW, establishes a procedure for the State's water utilities to coordinate their planning and construction programs with those of adjacent water utilities and other local governmental activities. This Act specifies that the Department of Health (DOH) or the County Legislative Authority may declare an area within a County as a Critical Water Supply Service Area (CWSSA). This declaration is based upon the findings of a Preliminary Assessment identifying problems related to inadequate water quality, unreliable service, or lack of coordinated planning.

The State Legislature had previously enacted the Water Resource Act, Chapter 90.54 RCW, which set forth fundamentals of water resource policy to ensure the waters of the State will be protected and fully utilized for the greatest benefit of the people of the State. Subsequently, "Procedures Relating to the Reservation of Water for Future Public Water Supply," Chapter 173-590 WAC, were established. These procedures are available to public water systems within a geographical area for use in reserving water rights required to meet their projected domestic needs over the next 50 years. This program is administered by the Department of Ecology in an effort to resolve competing water use activities within a geographical area and establish a management system that will ensure that an efficient overall water resource program is developed.

The Public Water System Coordination Act and the Water Rights Reservation processes may be used individually or in combination by the local public water utilities. Implementation of either of these laws requires that a Coordinated Water System Plan (CWSP) be prepared for the study area. The Island County CWSP has been prepared in accordance with requirements of both. It consists of a compilation of water system plans prepared by each expanding water utility, and this document, which is known as the Regional Supplement. Copies of applicable supporting regulations are provided in Appendix A.

2. PRELIMINARY ASSESSMENT

In an effort to address various issues and concerns related to water supply in Island County, a Preliminary Assessment of problems related to water supply and fire protection issues, water quality, and reliability of service was prepared for the water systems by Island County and DOH in January 1985. Several problems were identified in the Preliminary Assessment, many of which could be solved on an individual utility basis. There were, however, a number of problems the Preliminary Assessment identified as being most appropriately solved through implementation of the Coordination Act.

Based on the conclusions of the Preliminary Assessment, the Board of Island County Commissioners (BICC) declared the County a CWSSA, through Ordinance PD-85-07, on August 19, 1985.

By this action, the Public Water System Coordination Act was invoked. A Water Utility Coordinating Committee (WUCC) and Steering Committee were formed by Island County Ordinance PD-11-85, dated September 16, 1985. The WUCC was made up of representatives of purveyors with 50 or more service connections, as well as representatives from Island County, DOH, and other constituencies.

As its first action, the WUCC recommended the External Boundary of the CWSSA be extended to include all of Island County. The BICC formally adopted the External Boundaries on May 12, 1986.

3. CWSP PREPARATION

Preparation of the CWSP involved the joint efforts of participating local WUCC and Steering Committee members and County agency staff through approximately 2 years of monthly meetings. In addition, a design standards subcommittee met frequently to address facility design standards and specifications. Several special meetings were also held with County departments to establish or clarify policies.

The following areas received particular emphasis during preparation of the CWSP:

A. Future Service Area

Each utility was requested through correspondence, and during the WUCC meetings, to plot its existing and future service area boundaries on a map. The future service area boundaries were plotted on base maps to identify conflicting or unclaimed areas. Those utilities that did not identify their future service area were assumed not to be interested in expanding. For those utilities, the future service area was assumed to correspond to the existing service area. A standard agreement was formulated to allow utilities to recognize adjacent service areas by reference to the standard base maps. No known service area conflicts are unresolved.

B. Minimum Design Standards

This subject included a diverse list of considerations by the utilities, including: material specifications, construction practices, distribution facilities, metered services, fire flow requirements, etc. The contents and application of these standards were developed jointly through input of WUCC representatives and the County. Final standards are reviewed in Section VI. When adopted by the County, these will become the

minimum standards for all construction in new and expanding water systems. A water utility may adopt these standards by reference, or may adopt more stringent standards.

C. Utility Service Review Procedure (USRP)

The USRP was developed to identify the appropriate purveyor, both willing and capable, to provide water service to new developments and expansions. This procedure utilizes the recognized future service areas and minimum design standards as a basis for assigning new applicants for development permits to water utilities. In undesignated areas, the procedure emphasizes adjacent utilities as the preferred service providers. The procedure for utility service review is outlined in Section VI.

D. Satellite System Management Agency (SSMA)

A program for providing satellite system services to existing and future water utilities was developed. These services would be provided by prequalified SSMA's receiving Island County approval. Specific prequalification criteria were developed which reflect Island County's need to ensure long-term competent water service to both current and future customers.

E. Regional Water Supply

The regional supply needs of Island County were evaluated for the future 10-, 25-, and 50-year planning periods. Forecasts of future water demand within the area were made based upon available population estimates and water use data. An estimate of the seasonal usage impact was included in the future demand forecast. Long-term water supply alternatives were considered, including conservation. The conclusion was reached that future supply requirements for most areas can be met from local groundwater. Section III presents an evaluation of conservation potential and Section VII presents alternatives for regional supply.

F. Water Rights

A thorough review of the status of existing water rights within the area was conducted with the intent of preparing an application for Water Rights Reservation. In March 1988, the Legislature passed Substitute Senate Bill No. 6724 which prohibits action on applications for water rights reservation until July 1, 1989. Therefore, the CWSP focused on an evaluation of existing rights and deficiencies in the current process of allocation.

G. Individual Water System Plans

The Public Water System Coordination Act states that each purveyor within the External Boundary shall be responsible for preparing a Water System Plan for the purveyor's future service area. An exception to this is

for non-municipally owned public water systems which existed prior to September 21, 1977, and which have met minimum State Board of Health requirements but do not plan to extend water service beyond their existing area.

The planning requirements are determined by DOH and vary for utilities based upon their size. These requirements are summarized in Exhibit II-1. All completed comprehensive water system plans of the individual utilities are incorporated herein to the CWSP by reference, as Appendix B and are kept on file at Island County Health Department (ICHHD) and Island County Planning Department (ICPD).

Exhibit II-2 illustrates the procedure established for the review and approval of individual water system plans by the County and DOH. This procedure should be utilized for plans reviewed as a component of the CWSP effort. It is recommended as the method to be used for the future review of plans not yet submitted and for updates of all individual plans.

4. CURRENT STATUS

The Regional Supplement and some individual comprehensive water system plans are ready for adoption by the County as a CWSP. The submittal date for individual water system plans within 1 year of CWSP adoption. This is to enable smaller utilities an opportunity to incorporate the completed CWSP Regional Supplement into their plans.

WAC 248-56-800 enables DOH to approve portions of the CWSP found to be consistent with adopted plans and policies. As additional water system plans receive County and DOH approval, they may be administratively included within the adopted CWSP.

Table II-1 lists the Class 1 and 2 water utilities, municipal water utilities, and expanding Class 3 and 4 water utilities, which participated in the CWSP. Table II-1 also lists the level of their planning requirement. This Table provides a basic reference document for County administration agencies as they utilize the USRP. It will enable County staff to establish a utility's service area and their compliance with interlocal agreements.

As indicated on Table II-1, some utilities have not submitted their future service areas, service area agreements, or water system plans. The CWSP recommends that all expanding, municipal, or special district water utilities complete these documents and submit them to the Health Department no later than September 1, 1989. Unless a documented health-related improvement is involved, facility construction for new or expanding systems may not proceed without water plan review and approval by Island County and DOH. If a service area conflict arises, development activity should be denied within the contested service area, pending resolution. Due to the importance of tracking the status of these utilities, the

ICPD should be responsible for updating the master service area maps and Table II-1. The computerized data used to develop the base map and service areas have been provided to ICPD for this purpose.

Appendix B includes a list of water systems and their planning status in accordance with DOH requirements. Plan Content Guidelines are also described in Appendix B. It is provided as an Appendix so the County can continue to update the list as new systems become eligible and plans are approved. Likewise, Appendix F provides status of service area agreements. Section VI reviews policies applying to service area approvals.

5. RELATED STUDIES

During Preparation of the CWSP, several concurrent studies were integrated into the planning process. The following is a summary of these related studies and their relationship to the CWSP.

A. Zone of Influence Planning and Urban Business Center Planning

On December 18, 1984, the Board of Commissioners declared its intent that the County develop a planning component for areas near cities and towns (Zones of Influence), and areas near clustered mixed uses (Urban Business Centers). In order to address a strong desire of citizens to preserve the County's rural environment, zoning changes were needed to protect the rural areas by channeling growth to infilling of areas already exhibiting mixed use or small town qualities.

During the CWSP development, County and municipal staff developed proposed planning guidelines and participated in numerous public meetings. In these meetings, a wide divergence of opinion was encountered, and the eventual recommendation to the Board of Commissioners was found to be unacceptable. Currently, a new and more simplified approach is being pursued which will likely result in simplified sub-area plans for appropriate commercial core areas.

The service area policies of the CWSP, Section VI, include the requirement for purveyors to consider this special planning process as a criterion for future service area designation.

B. Groundwater Quality Monitoring

As a continuation of a 205j monitoring program, the Island County Health Department has maintained testing equipment and sampled various wells for evidence of contamination. Testing has principally been done at monitoring wells near landfill sites, but groundwater impacts near sludge utilization projects have also been evaluated.

This testing has been invaluable in providing assurance that activities potentially destructive to the limited groundwater resource for public water supply are being managed properly. The Ground Water Resource

Assessment of Appendix K indicates that shallow aquifer zones in some areas are potential future supplies. The data collected by these special water quality studies provides a baseline for future trend evaluation. In addition, the experience gained in sampling and testing provides a response capability to other contamination threats.

C. Drinking Water Program

During CWSP development, the Health Department continued its program of improving water supply service in Island County. The principal benefits of this program to the CWSP are the identification of unregistered water system and update of the water facilities inventories. The Health Department also files well logs for all wells drilled in the County. The Drinking Water Program is a prototype of some Satellite System Management services, as discussed in Section VI. Much of the Drinking Water Program activity is focused on the small water systems experiencing supply and/or management problems. This program, which is undertaken at a cost of over \$50,000 per year to the County, is in addition to the normal functions of small water system design approval, water quality compliance, and well site evaluation.

D. Washington Water Utilities Council Database

The Washington Water Utilities Council (WWUC) is a committee of the Pacific Northwest Section of the American Water Works Association. The WWUC has, during the course of this CWSP development, prepared a database which provides a limited overview of the type of water resource information that is presently available, and under development, pertaining to public water supply needs. The information collected is a unique attempt to consolidate and combine data from numerous planning studies at a regional level.

The draft report, issued by the WWUC in February 1989, established that forecasting of water demand (and resource needs) requires a methodology on one of three levels: per capita requirement applied to population forecast, per capita requirements for different land use areas applied to overall population forecast, and sophisticated forecast based on econometric modeling. The demand forecast in this CWSP is a variation of the first methodology. Due to lack of metered systems in Island County, the other methodologies are not suitable.

TABLE II-1
ISLAND COUNTY CWSP
STATUS OF PARTICIPATING PURVEYORS

WFI	Purveyor	Service Area Mapped	Class	Service Area Agreement Filed	Plan Requirement	Date of Plan Approval
MAJOR SYSTEMS, EXPANDING OR NON-EXPANDING						
Cities						
155509	Town of Coupeville	X	1		AWSP	
45950W	City of Langley	X	1		AWSP	
62650C	City of Oak Harbor	X	1		WSP	
Districts						
04950P	Bayview Beach Water Dist.	X	2		Q	
107483	Camano Vista Water Dist.	?	2		Q	
13900C	Clinton Water Dist.	X	1		AWSP	
162562	Crockett Lake Water Dist.	X	1		AWSP	
264508	Freeland Water Dist.	X	1		AWSP	
338704	Holmes Harbor Water Co.	No	2	No	AWSP	
Boundary:						
435508	Lagoon Point Water Dist.	X	1		AWSP	
45364E	Lakeview Terrace	No	2	No	AWSP	
Boundary:						
46650K	Ledgewood Beach W.D.	X	2		Q	
480205	Long Beach Water Dist.	X	2		Q	
61603K	N. Whidbey Water Dist.	X	3	Yes	Q	
669501	Penn Cove Water Dist.	X	1		AWSP	
72150R	Rhodena Beach Water Dist.		2		Q	
	Saratoga Water Dist.	No		No		
76470X	Scatchet Head Water Dist.	X	1	3/10/88	AWSP	
96042Q	Swantown Water Dist.	X	2		Q	
Other Class 1 Systems						
00410R	Admiral's Cove, Inc.	X	1		AWSP	
10580Q	Camaloch Assn.	X	1		AWSP	
10600T	Camano Co-op Water & Power	X	1	1/12/88	AWSP	
SP130F	Camano Island State Park	X	1		-	
107507	Camano Water Assn.	X	1		AWSP	
37680C	Chateau St. Michelle		1		-	
16274J	Crosswoods Water Co.		1		AWSP	
20250L	Duguala Community, Inc.	X	1		AWSP	
SP285T	Fort Ebey State Park	X	1		-	
SP2757	Fort Casey State Park	X	1		-	
33150P	Hillcrest Village Water Co.	X	1		AWSP	
499547	Madrona Beach Community Water System	X	1		AWSP	
034207	NAS Whidbey Island	X	1		WSP	
592000	New Utsalady Water System	X	1		Q	
61750E	Northgate Terrace	X	1		AWSP	



TABLE II-1 continued

WFI	Purveyor	Service Area Mapped	Class	Service Area Agreement Filed	Plan Requirement	Date of Plan Approval
662187	Parkwood Manor MHP		1		AWSP	
74000F	Rolling Hills Glencairn Community	X	1		AWSP	
76050W	Sandy Hook Yacht Club Est.	X	1	1/27/88	AWSP	
763000	Saratoga Water, Inc.		1		AWSP	
771486	Sea View Water Co.		1		AWSP	
789759	Sierra Country Club, Inc.	X	1		AWSP	
SP8204	S. Whidbey State Park		1		-	
466703	W. B. Waterworks #1	X	1		AWSP	
263146	Whidbey West Water System	X	1		AWSP	
OTHER WATER SYSTEMS. EXPANDING						
North Whidbey (Class 2)						
	Fircrest Water Assn.	X			Q	
	Harris Custer Estates Water Assn.	X		3/1/88	Q	
	Indian Ridge Water Co.	X			Q	
	Shirona Water System					
	Wildwood Water System					
North Whidbey (Class 3 and 4)						
	Cliff View Water Coop				Q	
	Strawberry Pt. Water Assn.	X			Q	
Central Whidbey (Class 3 and 4)						
	Fort Casey Inn	X			Q	
South Whidbey (Class 2)						
	Inglewood Park Water Sys.	X			Q	
	Skyline West Comm. Club	X			Q	
	Useless Bay Shores	X			Q	
	W&B Waterworks Nos. 2 & 3				Q	
	Windmill Heights Community	X		3/11/88	Q	
South Whidbey (Class 3 and 4)						
	Beverly Beach Division #3	X			Q	
	Groom, J.D.	X			Q	
Camano Island (Class 2)						
	Camano City Comm. Club	X			Q	

AWSP - Abbreviated Water System Plan
WSP - Water System Plan
Q - Planning Questionnaire



EXHIBIT II-1

DOH PLANNING REQUIREMENTS FOR WATER SYSTEMS

These guidelines are intended to serve as an outline for preparation of water system plans and to serve as partial criteria for approval of those plans by the Department of Health's district engineer.

The following purveyors are required by various State regulations to develop a Water System Plan and/or assist in the preparation of a Coordinated Water System Plan:

1. All water systems with more than 1,000 service connections (WAC 248-54-580, State Board of Health Water Supply Regulations).
2. All water systems within the external boundaries of a Critical Water Supply Service Area (CWSSA) (WAC 248-54-580, State Board of Health Water Supply Regulations, and WAC 248-56-700, Water System Coordination Regulations - see Footnote *).
3. All water systems within the geographical area established for reserving a future domestic water supply (WAC 173-590-070, Reservation of Public Water Supply Regulations).

If a water system plan is required by one of the above regulations, the contents of that plan will vary in detail according to the size of the public water system, consistent with the following:

1. Water System Plan - for those public water systems with over 1,000 service connections.
2. Abbreviated Water System Plan - for those public water systems serving between 100 and 1,000 service connections.
3. Water System Planning Questionnaire - for all remaining public water systems.

Supplementary Provisions are required in addition to the above plans for those water systems within the external boundaries of a CWSSA or within the geographical area established for reserving future domestic water supply. Supplemental provisions developed under the Water System Coordination Act are expected to be more detailed, emphasizing the relationship between water systems and oriented more towards system management than supplementary provisions for reservation of future supply. Supplementary provisions for reservation should concentrate on future water needs and source development.

The following chart is intended to help determine which plan contents should be followed for each of the regulations listed.

Plan Contents/ Plan Requirements	Water System Plan (1000 Services)	Abbrevi- ated Water System Plan (100-1,000 Services)	Planning Question- naire (Other Systems)	Supple- mentary Provi- sions for Water System Coord- ination Act	Supple- mentary Provi- sions for Res- erving Public Water Supply
Board of Health Regulations (WAC 248-54-580)	X				
Water System Coordination Act (WAC 248-56-700)	X	X	X	X	
Reservation of Public Wtr. Supply (WAC 173-590-070)	X	X	X		X

* Water systems in existence prior to September 21, 1977 are exempt from the planning requirements if they are:

1. Owner operated and serving less than 10 customers (or one industry).
2. Non-municipally owned and have no plans for expansion (provided they meet all applicable State Board of Health regulations).

Note: Plan content Guidelines are described in Appendix B.



EXHIBIT II-2
 ISLAND COUNTY CWSP
 REVIEW OF COMPREHENSIVE WATER SYSTEM PLANS

