



Spokane County Coordinated Water System Plan Update

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Certificate of Engineer

Spokane County Coordinated Water System Plan Update 1999

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Acknowledgment

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Glossary of Acronyms and Terms

The following definitions are applicable to interpretation of the Coordinated Water System Plan. Additional definitions may be found in Chapter 246-290 WAC, “Drinking Water Regulations of the State Board of Health,” effective April 1999, Department of Health, LD-11, Olympia, WA 98504.

Acronyms:

APWA	The American Public Works Association
ASA	Aquifer Sensitive Area - Spokane-Rathdrum Sole Source Aquifer
AWWA	The American Water Works Association
BRB	Boundary Review Board
ccf	One hundred cubic feet
cfs	Cubic feet per second
CIP	Capital Improvement Program
CSI	Contaminant Source Inventory
CWPP	County-Wide Planning Policies
CWSP	Coordinated Water System Plan (Chapter 70.116 RCW)
CWSSA	Critical Water Supply Service Area (Chapter 70.116 RCW and Chapter 246-293 WAC)
DOH	Department of Health, State of Washington
DOT/APWA	Combined standards for public works construction practices of the Department of Transportation, State of Washington, and the American Public Works Association, 1998 Edition.
Ecology	Department of Ecology, State of Washington
EPA	United States Environmental Protection Agency
GIS	Geographic Information System
GMA	Growth Management Act
gpcd	Gallons per capita per day
gpd	Gallons per day
gpm	Gallons per minute
IUGA	Interim Urban Growth Area
MGD	Million gallons per day
RCW	Revised Code of Washington

SAJB Spokane Aquifer Joint Board
SCHD Spokane County Health Department
SCBP Spokane County Division of Building and Planning
SCDU Spokane County Division of Utilities
SEPA State Environmental Policy Act of 1971, Chapter 43.21C RCW
SMA Satellite Management Agency

UGA Urban Growth Area
ULID Utility Local Improvement District
USGS United States Geological Survey
USRP Utility Service Review Procedure. An administrative procedure established under local agency jurisdiction to identify the water purveyor best able to serve an area where new public water service is requested.

WAC Washington Administrative Code
WQMP Water Quality Management Program
WRIA Water Resource Inventory Area
WSP Water System Plan
WUCC Water Utility Coordinating Committee

Terms:

Classes of Public Water Systems Public water systems are generally classified into two categories as follows:

Group A - serving 15 or more connections or 25 or more people/day for 60 or more days/year.

Group B - serving less than 15 connections (but more than one single family residence) and less than 25 people for 60 days or more/year or less than 15 connections and any number of people for less than 60 days/year.

Group A systems are divided into a series of subgroups as diagrammed in Exhibit 1 at the end of this Glossary of Acronyms and Terms section. A full description of the classes of systems is contained in WAC 246-290-010.

Coordination Act	Public Water System Coordination Act as per Chapter 70.116 RCW
Designated Purveyor	A water purveyor (utility) identified to provide water service to a given area. When willing to provide the service in a timely and reasonable manner, the designated purveyor is assigned an exclusive right to provide public water service to the area and is required to include the area within its approved Water System Plan.
Expanding Water Systems	<p>A public water system installing additions, extensions, changes, or alterations to their existing source, transmission, storage, or distribution facilities that will enable the system to increase in size its existing service area and/or its number of approved service connection. Exceptions:</p> <p>A system that connects new approved individual retail or direct service connections onto an existing distribution system within an existing service area; or a distribution system extension in an existing service area identified in a current and approved water system plan or project report.</p>
Fire Flow	The rate of water delivery needed for the sole purpose of fighting fires. For design purposes, the fire flow volume shall be in addition to the requirements of the water system for domestic demand, and a 20 psi residual pressure should be maintained throughout the system under combined maximum demand flow conditions.
Franchise Area	Non-exclusive area in which a utility is permitted by the County to extend facilities in public rights-of-way. A franchise area is not equivalent to a service area.
Intertie	A physical connection between individual water systems which allows water supply to be transferred in one or both directions. An

intertie can be established as a primary source, secondary or peaking supply, or emergency supply. Ordinarily, the use of an intertie is governed by a written agreement or contract between the utilities. A modification to water rights issued by Ecology may also be required.

Interim Urban Growth Area
or Urban Growth Area

The Growth Management Act requires that participating counties designate a boundary that includes cities and other areas characterized by urban growth, or adjacent to such areas. Growth occurring outside the boundary cannot be urban in nature. As Comprehensive Plans are developed, the criteria and placement of these boundaries are guided by County-wide planning policies. An Interim Urban Growth Area (IUGA) is established first and used by local planning agencies to develop draft comprehensive plans. Some adjustments in the IUGAs may occur. Eventually a final Urban Growth Area (UGA) is determined and included in the completed comprehensive plan.

Land Use Designation

The land use(s) allowed in a geographical area by right or permit, as provided in the Spokane County Comprehensive Plan Zoning Ordinance, County-wide Planning Policies.

Level of Service

Operational features, such as pressure, flow, reliability, etc., provided to the customer by the water system.

New Construction

Any addition of supply, transmission, distribution or storage facilities, either in a new water system or an expanding water system, which provides a capability to serve additional dwelling units or other buildings.

Public Water System

Public water system shall mean any system providing water for human consumption through pipes or other constructed conveyances, excluding a system serving only

one single-family residence and a system with four or fewer connections all of which serve residences on the same farm. Such term includes:

- a) Collection, treatment, storage, and/or distribution facilitates under control of the purveyor and used primarily in connection with such system; and
- b) Collection or pretreatment storage facilities not under control of the purveyor, but primarily used in connection with such system.

Remote System

A public water system, located within the designated service area of a utility, that is detached from the primary facilities of the utility. A remote system has its own source of supply, unless it connects to the utility's primary source and distribution facilities.

Satellite Management Agency

An organization, individual, or other entity that is approved by DOH to own, manage and/or operate water systems in Spokane County.

Sentinel Well

A well selected to serve in a long-term routine monitoring function. Sentinel wells may also be in use by public purveyors, individual owners, or a county monitoring network of wells. These wells are sampled routinely rather than on a rotating basis.

Service Area

A specific geographic area serviced or for which service is planned by a purveyor. A geographical area assigned to a water purveyor for the purpose of providing both current and future public water service.

The service area of a city, town, or special purpose district shall include all of the area within its corporate boundaries plus, for extensions of water service, the area outside of the corporate boundaries which it is designated to serve pursuant to a

coordinated water system plan approved in accordance with RCW 70.116.050.

Boundaries are defined by agreements among adjacent utilities and are recorded on a set of maps on file with Spokane County. Water service provided within designated service areas must be consistent with local land use plans.

Service Area Agreement

An agreement signed by water utilities which identifies the service area for which the utility has water service responsibility.

Service Connection

A physical connection through which water may be delivered to a customer for discretionary use. Unless otherwise indicated, all such connections, whether currently in use or not, shall be considered as a service connection. The service connection defines the limit of the water utility's responsibility for system design and operation unless otherwise provided for in the water utility's condition of service policies.

Utility customers such as mobile home parks, planned unit developments, condominiums, apartment buildings, industrial/commercial sites, or other similar complexes are generally considered exterior to the water system. In such cases, the purveyor shall be required to meet design standards for water systems up to the point of service to the customer; and beyond that point, the applicable plumbing and building codes, fire codes, County health regulations, and local ordinances are deemed to be sufficient to protect the public health and to ensure adequate water service. These customers are not themselves considered herein as water purveyors unless specifically designated as such by DOH.

Timely and Reasonable

An entity seeking public water service is required to receive service from a utility, if the entity is located in that utility's service area. The entity is entitled to appeal this requirement and may prevail if it can be demonstrated that service is not being offered in a "timely and reasonable" manner.

Water System Plan

A written plan prepared for a particular water system and service area. Details of Water System Plan requirements can be found in WAC 246-290-100.



Section 1

Executive Summary



Introduction

The 1999 Spokane County Coordinated Water System Plan (CWSP) Update has been prepared by the Spokane County Water Utility Coordinating Committee (WUCC) representing the individual water utilities located in the northern 2/3 of Spokane County (County), as shown in Exhibit 1-1. In combination, the WUCC, the State Department of Health (DOH), and the Department of Ecology (Ecology) have continued their efforts to manage the County's potable water issues according to all applicable State and County public policies. During an 18-month period, meetings were held to review the existing 1989 CWSP, provide changes that reflect the current water system community in Spokane County, and provide guidance for the future. These actions were conducted with the primary objective of meeting the public drinking water supply needs of Spokane County and achieving coordination between water service and the Growth Management Act (GMA).

This CWSP Update provides a further refinement of process and strategy for the existing water utilities to define their role in a program to meet the County's Comprehensive Plan. This regional water plan represents the collective views of the WUCC and integrates the documented views of other State and local governments. The CWSP, when integrated with individual Water System Plans (WSP) and the GMA Comprehensive Plan, presents a significant piece of the larger resource and growth management plan for the County's future.



Authorization

Preparation of the CWSP Update has been in accordance with the contract between Spokane County and Economic and Engineering Services, Inc. (EES), dated October 16, 1997, through Resolution No. 97-1438. This project was funded, in part, through a grant from DOH. Approval and implementation of the CWSP will be by DOH, local water utilities, and Spokane County. Close coordination was maintained with DOH during CWSP preparation to conform with the statutory and grant requirements of this program.



Objectives

Beyond the statutory requirements used to develop this document as a CWSP and a County Water General Plan, there were several objectives established for the document. The procedures and recommendations presented herein were based on these objectives. Following are the objectives which guided the development of the CWSP:

- A. Prepare the CWSP Update in a manner that incorporates relevant provisions of the GMA, and educate local purveyors to issues affecting water service to urban and rural areas.
- B. Have WUCC members review and either reaffirm or revise their service area boundaries after consideration of the placement and responsibilities associated with the Interim Urban Growth Area (IUGA) boundary.

- C. Prepare an updated official map(s) of utility service areas for all WUCC members.
- D. Obtain Service Area Agreements from all participating WUCC members confirming their service area boundaries and service responsibilities.
- E. Establish urban and rural design standards consistent with GMA procedures and land use policies.
- F. Review and refine the Utility Review Response Procedure (USRP) to ensure compliance with GMA and other service provisions consistent with local land use policies.
- G. Examine several quantity and quality issues of significance related to the management of regional water resources.
- H. Promote, consolidate, and integrate the on-going regional water resource protection programs being performed by the County, Spokane Aquifer Joint Board (SAJB), and the City of Spokane (City) within the Spokane Aquifer.
- I. Initiate and assist the County with developing water resource protection programs outside of the Spokane Aquifer.
- J. Develop and recommend a program concept to address contaminant source inventory analysis and updates, and to initiate a coordinated water quality monitoring program within the Spokane Aquifer.
- K. Determine the proper jurisdiction to manage, finance, and implement provisions of the CWSP.
- L. Ensure that a final written document complies with the provisions and approval requirements of a CWSP and a Water General Plan.



Implementation

The following actions and recommendations have been endorsed by the WUCC to ensure implementation of the CWSP.

Service Area Designation

- Once adopted as part of this CWSP, the service area is the exclusive service area of the identified utility. This gives the utility first priority for serving future customers but requires that the service area is consistent with the utility's water system plan and that a Service Area Agreement has been submitted.
- All Group A and expanding Group B water systems must submit their updated service area map to the Spokane County Department of Public Works, Division of Utilities.
- Modifications to service areas prior to the next CWSP update will adhere to the adjustment procedures specified herein.

Service Area Agreements

- All Group A and Group B water systems approved to reach Group A status must submit a Service Area Agreement along with their service area map confirming the boundary.
- The utility must verify the Service Area Agreement has been signed by someone authorized to represent the utility.

Boundary Review Board

- Purveyors will be required to file a Notice of Intention with the Spokane County Boundary Review Board (BRB) for events specified in the CWSP.
- Until adoption of the CWSP Update occurs and individual WSPs are also updated, the utilities will be required to confirm the consistency of the service area boundary in both documents using the procedures outlined herein.

- ❑ The focus of the BRB in this process will be on service area boundary consistency, as identified in the CWSP and individual WSP, and not on facility sizing or alignment.

Water System Plan

- ❑ Designation of the service area to the utility is conditioned upon having met the WSP requirements approved for the utility by DOH.
- ❑ Utilities are to contact DOH to establish their planning requirements and a suitable schedule of WSP preparation.
- ❑ The service area is invalid if it is not consistent with a DOH approved and current WSP.

Department of Health Action

- ❑ Unless a documented, health-related problem is involved, a utility's failure to submit a Service Area Agreement and maintain an approved and current WSP will result in DOH's delay in the approval of proposed water system expansions within the service area.
- ❑ For utilities with contested service area conflicts, this denial will be limited to proposed activities within the contested service area.

Minimum Design Standards

- ❑ The Minimum Design Standards developed by the WUCC will be adopted by County Ordinance and applied throughout the Critical Water Supply Service Area (CWSSA). The Design Standards reference rural and urban levels of standards and are consistent with the County Comprehensive Plan.
- ❑ Because the GMA County-wide Planning Policies do not resolve the apparent conflict with language in the County's 1981 Comprehensive Plan, the WUCC recommends that the Comprehensive Plan be amended as soon as possible to

allow potable water supply outside the Interim UGA (IUGA).

- ❑ Water facilities outside the IUGA must be limited to provide service and fire protection to parcels which comply with approved local land use zoning and density policies.

Utility Service Review Procedure

- ❑ The USRP will be used for the review of applications for public water supply development in order to identify existing purveyors who are willing and able to extend this new water service.
- ❑ The USRP applies to all proposed land use activities requiring approval by the County, including: formal subdivisions; large lot divisions; short subdivisions; land use permits and approvals; the issuance of building permits; and water service requests.
- ❑ Water service requests occurring within the service area of a utility that does not have an approved individual WSP or Service Area Agreement will be denied unless the request is related to a documented health problem.
- ❑ The USRP should be used to clarify fire flow assignments and review applications for "Land Use Actions and Water Service Requests" and "Commercial Building Permits."
- ❑ Expanding Group B systems located within ¼ mile outside of service areas of existing utilities will be referred by the Spokane County Division of Utilities (SCDU) to adjacent utilities to evaluate merger options and other technical assistance.
- ❑ Expansion of an existing smaller utility located within a utility's service area will not be allowed without approval by the larger utility.

Satellite System Management

- SCDU will maintain a roster of approved Satellite Management Agencies (SMAs).
- Utilities servicing “remote” systems, that are not directly connected, should submit information in their next WSP update to comply with SMA criteria.

Receivership of Failing Systems

- SCDU will pursue an expeditious solution with all adjacent or SMA utilities to assist systems placed under receivership.
- Individual WSPs are required to include, along with other DOH criteria, a statement of the utility’s policy regarding its role in assuming responsibility for any failing systems that are located within their service area.
- In the event no existing utility is willing to accept this responsibility, the County will be designated the purveyor for receivership.

Regional Resource

- Examine additional source protection by expanding the defined wellhead protection areas onto the sidehills contributing water to the Spokane Aquifer.
- Develop an alliance between water purveyors and the Spokane County Stormwater Utility to address the sidehill contamination issue.
- Develop a two-year pilot program for water quality monitoring or from production wells.
- Pursue economies of scale in laboratory costs and shared data through increased purveyor participation.
- Develop long-term funding of water quality monitoring beyond the two-year pilot program.

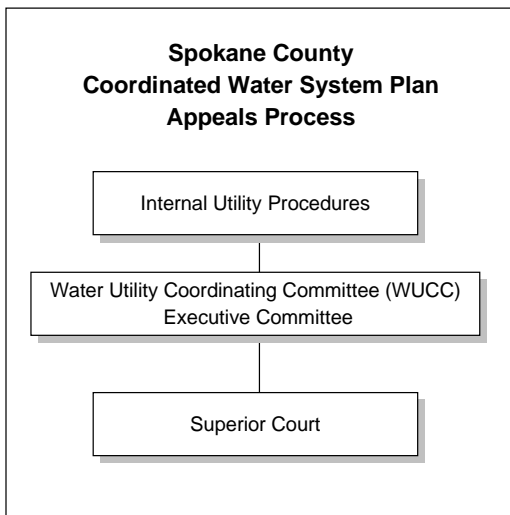
- Have the County complete a summary or “snapshot” Contaminant Source Inventory database.
- Determine purveyor commitment to an on-going County Contaminant Source Inventory database.
- Provide the Small System Wellhead Protection template workbook and diskette to interested purveyors through the SCDU.
- Continue to inform the WUCC and seek their support for source protection policies developed jointly by the City of Spokane and SAJB.
- Incorporate WUCC endorsed source protection policies for unincorporated areas into County programs by amendment of the CWSP or through other methods acceptable to the Board of County Commissioners.
- Continue to develop joint reservoir, interties, and shared facilities between adjacent utilities.
- Initiate conservation efforts by WUCC members that can be jointly implemented and achieve cost savings through combined purchasing.
- WUCC members should pursue joint procurement of leakage detection analysis and public education material.

CWSP Components

- The completed CWSP is presented in two parts: the Supplemental Provisions detailed in this document, and a compilation of individual WSPs to be approved by DOH.
- By reference herein, any changes requested to individual WSPs or service area boundaries prior to the next update of the CWSP can follow the administrative change procedures specified in the CWSP without additional formal action by the Board of County Commissioners.

Appeals Process

- Issues related to conformance with State Environmental Policy Act (SEPA), the GMA, any County-wide regional planning policies, County and City land use plans, financing policies, and wholesale agreements are not subject to CWSP appeal.
- If issues cannot be resolved between the applicant or utility, an appeal can be filed with the SCDU which triggers a review and written determination by the WUCC Executive Committee within 45 days.
- Any appeals from determinations by the WUCC Executive Committee will be made to Superior Court.



CWSP Funding

- Utilization of the implementation fees presented in Section 8.5 shall commence upon final approval of the CWSP Update. SCDU and the WUCC will review these fees on an annual basis to verify that the fees equitably reimburse SCDU for CWSP related activities.

Periodic Action

- The WUCC Executive Committee will continue as a standing committee which should meet at least semi-annually to review issues of regional significance and to review implementation issues regarding the CWSP.
- The CWSP no longer requires an update every 5 years. Rather, periodic updates may be initiated, as required, at the direction of the Board of County Commissioners or DOH. In accordance with Chapter 70.116.060(8) RCW, if DOH initiates an update or revision of the CWSP, the State shall pay for the cost of updating or revising the plan.

CWSP Approval

- Once approved by the WUCC, this CWSP Update should be reviewed by the County for conformance with County policies and submitted to DOH for approval pursuant to Chapter 70.116 RCW.
- The CWSP must be accompanied by an appropriate environmental document as required by the SEPA.
- Simultaneously, a County Services Act Review Committee should review the CWSP, in accordance with Chapter 36.94 RCW, and submit a recommendation to the Board of County Commissioners for adoption as a Water General Plan.

Section 2

The Coordinated Water System Plan Process

2.0 Introduction

The Public Water System Coordination Act (Coordination Act), enacted in 1977, modified in 1991, and codified as Chapter 70.116 RCW, establishes a procedure for the State's water utilities to coordinate their planning and construction programs with adjacent water utilities and other local government activities including the Growth Management Act (GMA).

An Update to the Coordinated Water System Plan (CWSP), has been completed in accordance with the Coordination Act and is composed of a regional supplement and a compilation of individual Water System Plans (WSP). Preparation of the regional supplement is the responsibility of a Water Utility Coordinating Committee (WUCC). Membership on the WUCC for this document included all Group A water utilities, as well as those Group B systems whose ultimate growth has been approved to reach Group A status. A schematic outlining the comparison of Group A and B systems is provided in Exhibit 2-1.

Once developed by the WUCC, the Coordination Act requires that the CWSP Update be submitted to the Board of County Commissioners for concurrence that the document is consistent with local planning policies and requirements. The document is subsequently submitted to the Washington State Department of Health (DOH) for approval. The CWSP can also be developed and approved as a Water General Plan in accordance with Chapter 36.94, the County Services Act. The approval procedures under this process are detailed later in this document but vary slightly in that additional reviews are required by a separate committee and the County Planning Commission before approval by the Board of County Commissioners.

Preparation of the 1999 CWSP Update was also influenced by three legislative changes since the prior update in 1989. These influences were passage of the GMA, and Substitute Senate Bills 5209 and 5448. A major effort of this update was to achieve coordination between water service and the GMA. Among many of GMA's provisions is the creation of an Interim Urban Growth Area (IUGA) boundary within which urban levels of growth densities is allowed. Outside the IUGA, rural densities are specified. Therefore, much effort was spent reviewing and revising water supply and service policies which support GMA and local land use policies.

Substitute Senate Bill 5209, passed by the 1995 Legislature, amended RCW 36.93, to provide clarification for Boundary Review Board (BRB) responsibilities in the extension of water and sewer service outside of service areas by a city, town, or

special purpose district. These revisions were incorporated into Utility Service Review Procedures developed by the WUCC.

The 1995 Legislature also passed Engrossed Second Substitute Senate Bill (E2SSB) 5448. This Bill created several modifications to the earlier version of the Public Water System Coordination Act. Exhibit 2-2 provides a comparison of the past and modified provisions. The CWSP Update has been prepared to be consistent with the new language and procedures.

It should also be noted that WAC 246-290, which are regulations governing Group A public water systems, were updated effective April 1999. The CWSP Update has also incorporated these changes.

2.1 CWSP History in Spokane County

This CWSP Update represents the third generation of CWSP efforts conducted by Spokane County (County) since the early 1980s. The County's original CWSP, completed in 1982, complimented other ongoing County activities to establish a cohesive strategy addressing water, wastewater, and land use issues throughout the same study area. Key issues at that time targeted the creation of procedures to define service areas and service responsibilities, eliminate the proliferation of poorly managed water systems, and establish design standards and regional interties or shared facilities.

The CWSP Update of 1989 reaffirmed the benefit and successes of the coordination process and expanded the study area boundaries to include areas experiencing or expected to experience increased growth and water demands. Its objectives reached beyond the statutory requirements to update the document as a CWSP and County Water General Plan. As with the original CWSP, the intent was to facilitate the coordinated provision of water and sewer service and provide a structured approach to water resource management throughout the area. Other items of importance were to: update planning data for the utilities; minimize the proliferation of small water systems; review local fire protection standards; revise the utility service review procedures; establish joint data management procedures; and evaluate West Plains water resource options.

2.2 CWSP Update Preparation

The 1999 CWSP Update had to reach back and refine or finalize some elements of prior efforts as well as focus on current considerations created by the legislative changes discussed above. The first two CWSP efforts were accomplished utilizing four distinct Critical Water Supply Service Areas (CWSSA) with four separate WUCCs, i.e., North Spokane, Spokane Valley, West Plains, and the City of Spokane. At the onset of this update process, members of all four areas met and concluded that the current issues were common to all utilities. Therefore, a

recommendation was submitted to the Board of County Commissioners for the abolishment of four WUCCs and the formation of a single WUCC for preparation of the 1999 CWSP Update. The WUCC also recommended that the exterior boundary of the study effort remain unchanged from 1989, unless any of the towns in the south County with IUGAs wished to participate. Subsequently invitations were extended to the Mayors of the Towns of Fairfield, Latah, Rockford, Spangle, and Waverly. Representatives of some of these communities occasionally attended WUCC meetings but did not express interest in expanding the CWSSA to include their towns. A copy of the Board of Commissioners Resolution implementing these two recommendations of the WUCC is included as Exhibit 2-3.

The WUCC selected a Chair, Mr. Steve Skipworth of Vera Water & Power, and appointed an Executive Committee, including the Chair, to review specialty issues such as design standards, fire flow requirements, regional resource data management and wellhead protection. One committee member was selected from each of the prior four WUCC areas, as shown in Table 2-1 below:

Area	Name	Utility
WUCC Chair	Steve Skipworth	Vera Water and Power
North Spokane	Susan McGeorge	Whitworth Water District #2
Spokane Valley	Ty Wick	Spokane Co. Water District #3
City of Spokane	Harry McLean	Spokane Water Department
West Plains	Paul Schmidt	City of Cheney

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

2.2.1 Coordination with the Growth Management Act

The Update evaluated the effects of implementation of the Growth Management Act on water system planning and service. GMA related material was distributed by representatives of the County Division of Long Range Planning and reviewed with WUCC members. Those purveyors on the fringe of IUGA boundaries, and particularly those with substantial facilities in the “rural areas” or with large service areas, faced more significant dilemmas surrounding service responsibilities. Defining levels of water service for “urban” versus “rural” areas was not completely addressed in the County-wide Planning Policies which, therefore, defaulted these policies to the County’s previous Comprehensive Land Use Plan. In order to clarify the County’s policy, the WUCC requested the County Planning Commission to amend the 1986 Comprehensive Land Use Plan during the interim until the GMA process was completed. A more detailed examination of these issues is presented in Section 4.

2.2.2 Water System Service Areas

Each utility was requested through correspondence, and during the WUCC meetings, to submit a map and a Service Area Agreement that verified its service area boundary. All changes were incorporated and the service area boundaries of the larger Group A systems and the smaller systems with intent to expand were updated and plotted to parcel level accuracy on GIS base maps. Systems previously identified as expanding, but which had not completed and submitted a Water System Plan (WSP) were re-categorized as non-expanding and the service area was assumed to correspond to the existing area in service.

Water systems were asked to review their service area and confirm that the boundary was consistent within the CWSP and their individual WSP. Upon completion of the CWSP, the DOH has the authority to deny extension requests for systems with inconsistent service area boundaries or if Service Area Agreements have not been submitted.

2.2.3 Minimum Design Standards

The design standards developed in the 1989 CWSP Update were reviewed by the Executive Committee and the WUCC and found to generally be acceptable in their present state. These standards are embodied in County Code 3.05, Uniform Fire Code. The applicability of these standards in “rural” areas was an issue related to the previous discussion of GMA coordination. It should be noted that DOH encourages the development of detailed construction specifications for each utility which are to be submitted with their individual water system plan.

2.2.4 Utility Service Review Procedure

The Utility Service Review Procedure (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 service areas as a basis for assigning new applicants for development permits and proposals for new water service to water utilities. In unclaimed areas, the procedure emphasizes adjacent utilities with an approved water system plan and Service Area Agreement as the preferred service provider. If adjacent and qualified utilities do not elect to provide service or do not exist, the applicant would be referred to an approved Satellite Management Agency (SMA), if one is available.

Clarification of responsibilities was pursued between the County Planning Division, Fire Marshall, Utilities Division, Boundary Review Board, and DOH. The revised USRP is outlined in Section 5.

2.2.5 Regional Resource Issues

The CWSP Update addresses activities to expand on-going wellhead protection efforts by the City of Spokane and the Spokane Joint Aquifer Board, composed by a group of utilities located over the Spokane-Rathdrum Aquifer lying east and north of the City of Spokane. Regional protection measures were evaluated to develop a Coordinated Water Quality Monitoring Plan, and a Contaminant Source Inventory Program. Source protection measures for all sized utilities located throughout the study area were addressed.

Several water resource management issues, common to all utilities, were covered by the CWSP Update. An updated list of existing and potential shared facilities and interties was generated. In addition, the WUCC examined various conservation activities available for efficient water use practices. Section 7 presents a summary of these activities.

2.2.6 Individual Water System Plans

State Board of Health rules (WAC 246-290-100) require that certain categories of public water systems shall develop a WSP for review and approval by DOH. One listed category is "Public water systems located in areas utilizing the Public Water System Coordination Act of 1977, Chapter 70.116 RCW and Chapter 246-293 WAC."

Elements of the WSP are to be based upon a 20-year planning period with identification of specific improvements and a financial program for the first six years. The purveyor is to update the plan at least every six years. However, DOH may require a plan submission or update at any time.

The planning requirements are determined by DOH and vary for utilities based upon their expansion plans, size, and intent for satellite management.

In the preparation or update of their plan, systems must address issues relating to their consistency with the CWSP. These issues include:

- Map of service area,
- Signed Service Area Agreement,
- Population and water demand projections,
- Design standards,
- Implementation of utility service review procedure,
- Satellite management policies and procedures, if utility intends to provide services, and
- Receivership policy.

All systems are to coordinate with DOH to determine the extent of water system planning requirements and their appropriate submittal date.

2.3 Regional Supplement

This CWSP Update has been prepared under the provisions of WAC 246-293-220 which allows for a CWSP which consists of: (1) a compilation of WSPs approved by DOH; and, (2) a supplement which addresses water purveyor concerns relating to the entire CWSSA. All completed WSPs of the individual utilities referenced herein are on file with DOH and the County. The review and approval procedure for this document is outlined in Section 8.

Table 2-2 lists those systems eligible for WUCC membership and whether the system has a current Service Area Agreement on file with the County. This table serves a number of purposes including the following:

- Identifies for each utility its compliance with submitting a Service Area Agreement, and the planning requirements of the CWSP.
- Assists the County and DOH in their review of the CWSP for consistency with County policies and State statutes and regulations.
- Directs County and DOH attention to those utilities which must satisfy basic CWSP planning requirements before system improvement and/or expansion of service takes place.

To assure a high degree of CWSP compliance, the WUCC maintains that:

- All water utilities who have not done so, should immediately complete and file Service Area Agreements with the County.
- Failure to have a Service Area Agreement and approved, current WSP on file should result in delays of approvals for proposed system expansions. As WSPs receive County and DOH approval, they will be administratively included within the adopted CWSP.
- Due to the importance of tracking the status of these utilities, the Spokane County Division of Utilities will be responsible for updating the service area maps and Table 2-2. The GIS files used to develop the base map and all service areas are available at the County for this purpose. Any changes to service areas boundaries will follow the procedure established in Section 3.

Table 2-2
Spokane County Coordinated Water System Plan
WUCC Membership

Utility	Water Facility Identification (WFI) No.	Group	Type	On Map	Service Area Agreement
AIRWAY HEIGHTS, CITY OF	006502	A	COMM	X	10-4-99
B & J WATER COMPANY	92230E	A	COMM	X	AG, M, AU
BADGER LAKE RESORT	46985A	A	COMM		
BALMER GARDENS	04179U	A	COMM	X	AG, M, AU
BLUE SKY COUNTRY FARMS	07516E	A	COMM		
CARNHOPE IRRIGATION DISTRICT # 7	11250M	A	COMM	X	11-24-99
CHATTAROY SPRINGS WEST W.D. # 11	122493	A	COMM	X	In Dispute
CHATTAROY VALLEY MOBILE ESTATES	122430	A	COMM	X	AG, M, AU
CHENEY, CITY OF	12400N	A	COMM	X	11-24-99
CLEAR LAKE WATER USERS ASSOCIATION	13525Y	A	COMM	X	9-21-99
CONSOLIDATED IRRG DIST # 19, SYS # 1 & 2	10220T & 10221A	A	COMM	X	11-24-99
CONSOLIDATED SUPPORT SERVICES	21850E	A	COMM	X	10-11-99
DEEP CREEK HUTTERITE	18375A	A	COMM		
DEEP CREEK RANCHETTES	390037	A	COMM	X	AG, M, AU
DEER PARK, CITY OF	185006	A	COMM	X	9-13-99
EAST SIDE LIBERTY LAKE IMP. CLUB	47145A	A	COMM		
EAST SPOKANE WATER DISTRICT # 1	219506	A	COMM	X	10-4-99
EASTERN WASHINGTON BIBLE CAMP	45086L	A	COMM	X	AG, M, AU
EASTERN WASHINGTON UNIVERSITY	219009	A	COMM	X	10-19-99
ELOIKA PINES ESTATES MHP	23180E	A	COMM	X	AG, M, AU
FAIRCHILD AIR FORCE BASE	243500	A	COMM	X	AU
FAIRCHILD MOBILE HOME PARK	24355K	A	COMM	X	AU
FAIRVIEW HEIGHTS TRAILER COURT	24595V	A	COMM	X	AG, M, AU
FOUR LAKES WATER DISTRICT # 10	26200P	A	COMM	X	In Dispute
GREENBLUFF BEACH WATER ASSOCIATION	51466C	A	COMM	X	11-24-99
GREEN RIDGE ESTATES	29485T	A	COMM	X	AG, M, AU
HANGMAN HILLS WATER DISTRICT # 15	308489	A	COMM	X	M, AU
HIDDEN HILLS ESTATES	326422	A	COMM	X	AG, M, AU
HIDE-A-WAY TRAILER PARK	32653U	A	COMM	X	AG, M, AU
HILLTOP MOBILE HOME PARK	33327T	A	COMM	X	AG, M, AU
HUTCHINSON IRRIGATION DISTRICT # 16	35100J	A	COMM	X	11-24-99
HUTTON SETTLEMENT	35125M	A	COMM	X	M, AU

Table 2-2 (cont)					
Utility	Water Facility Identification (WFI) No.	Group	Type	On Map	Service Area Agreement
INDIAN PRAIRIE MOBILE HOME PARK	106144	A	COMM	X	In Dispute
INDIAN VILLAGE ESTATES WATER ASSN	12028T	A	COMM	X	AU
IRVIN WATER DISTRICT # 6	36050R	A	COMM	X	11-24-99
LIBERTY LAKE SEWER & WATER DISTRICT	471500	A	COMM	X	11-24-99
MARSHALL COMMUNITY WATER ASSOCIATION	51845V	A	COMM	X	AG, M, AU
MEDICAL LAKE, CITY OF	53400V	A	COMM	X	11-24-99
MILLWOOD, TOWN OF	54850Q	A	COMM	X	11-24-99
MOAB IRRIGATION DISTRICT # 20	554401	A	COMM	X	9-14-99
MODEL IRRIGATION DISTRICT # 18	55550D	A	COMM	X	AG, M, AU
MODERN ELECTRIC WATER COMPANY	556008	A	COMM	X	M
MT SAINT MICHAEL'S SCHOOL & CHURCH	565573	A	COMM	X	AU
MT SPOKANE MOBILE HOME PARK	24064X	A	COMM	X	AG, M, AU
MULLEN HILL TERRACE MOBILE HOME PARK	57598P	A	COMM	X	AG, M, AU
NINE MILE MANOR ADDITION	59546H	A	COMM	X	AG, M, AU
NORTH GLEN WATER ASSOCIATION	60520B	A	COMM	X	AG, M, AU
NORTH MOUNTAIN VIEW WATER CO, INC	607805	A	COMM	X	In Dispute
NORTH SPOKANE IRRIGATION DISTRICT # 8	61300M	A	COMM	X	AG
ORCHARD AVE IRRIGATION DISTRICT # 6	64000E	A	COMM	X	M
PASADENA PARK IRRIGATION DISTRICT # 17	66300Y	A	COMM	X	AG, M, AU
PATTERSON ADDITION	66565B	A	COMM	X	11-24-99
PICNIC PINES TRAILER COURT	67295T	A	COMM	X	AU
PINE ACRES MOBILE HOME PARK	676158	A	COMM		
PINECROFT MOBILE HOME PARK	67623F	A	COMM	X	AG, M, AU
PIONEER WATER COMPANY	248850	A	COMM	X	AU
PLEASANT PRAIRIE WATER USERS	67880Q	A	COMM	X	AG, M, AU
REFLECTION WATER ASSOCIATION	717006	A	COMM	X	AG, M, AU
RIVERSIDE VILLAGE MOBILE HOME PARK	72935V	A	COMM	X	10-11-99
RIVERVALE WATER ASSOCIATION	72965M	A	COMM	X	AU
SHADY PINES TRAILER COURT	777770	A	COMM	X	AG, M, AU
SLEEPY HOLLOW APARTMENTS	803458	A	COMM		
SNOWBLAZE	81120Y	A	COMM	X	AG, M, AU
SPOKANE COUNTY WATER DISTRICT # 3	933505	A	COMM	X	11-24-99
SPOKANE, CITY OF	83100K	A	COMM	X	AG, M, AU

Table 2-2 (cont)					
Utility	Water Facility Identification (WFI) No.	Group	Type	On Map	Service Area Agreement
STARLIGHT MOTEL & MOBILE HOME PARK	838308	A	COMM	X	AG, M, AU
STEVENS CO. PUD - HALFMOON RANCHOS	304204	A	COMM	X	11-24-99
STEVENS CO. PUD - PANORAMA ACRES	65910X	A	COMM	X	11-24-99
STEVENS CO. PUD - RIVERSIDE	182904	A	COMM	X	11-24-99
STEVENS CO. PUD - SPOKANE LAKE PARK	830349	A	COMM	X	11-24-99
STEVENS CO. PUD - WEST SHORE	95450D	A	COMM	X	11-24-99
STRATHVIEW WATER DISTRICT # 16	84620T	A	COMM	X	9-21-99
SYRINGA HEIGHTS MOBILE HOME PARK	07741W	A	COMM	X	AG, M, AU
TIMBERLINE MOBILE HOME PARK	88386A	A	COMM	X	AG, M, AU
TRENTWOOD IRRIGATION DISTRICT # 3	89250C	A	COMM	X	AG, M, AU
VALLEY OF THE HORSES WATER DISTRICT # 12	90979W	A	COMM	X	AU
VEL - VIEW WATER DISTRICT # 13	91445F	A	COMM	X	AU
VERA WATER & POWER	914505	A	COMM	X	11-24-99
WHITE BLUFF - JSSA	10634M	A	COMM	X	AU
WHITWORTH COLLEGE	96580C	A	COMM	X	AG, M, AU
WHITWORTH WATER DISTRICT # 2, SYS # 2 & 8	99601Y & 966072	A	COMM	X	9-21-99
WILDROSE VILLAGE MOBILE HOME PARK	96891J	A	COMM	X	AU
WOODLAND PARK TRAILER COURT	981908	A	COMM		
CHATTAROY SPRINGS NORTH	516844	B			
CHATTAROY SPRINGS WATER ASSOCIATION	122472	B			
HOLIDAY TRAILER COURT	33679H	B			
OLD TRAILS COUNTRY ESTATES	51896N	B			
RIDGE WATER ASSOCIATION	034563	B		X	AU
RIDGEVIEW PARK ESTATES	04828X	B		X	AG, M, AU
WILLOW SPRINGS WATER USERS ASSOC	23177T	B			
CENTRAL PRE MIX-SULLIVAN ROAD	061644	A	NTNC		
FAITH CHRISTIAN SCHOOL	345319	A	NTNC		
FREEMAN SCHOOL DISTRICT # 358	26460H	A	NTNC		
GREAT NORTHERN SCHOOL DISTRICT # 312	29335C	A	NTNC		
JOHNSON MATTHEY ELECTRONICS	14313F	A	NTNC		
KAISER ALUMINUM - MEAD WORKS, N. PLANT	37420K	A	NTNC	X	AG, M, AU
KAISER ALUMINUM - TRENTWOOD WORKS	37450B	A	NTNC		
LIBERTY SCHOOL DISTRICT # 362	47163T	A	NTNC		
MUTUAL MATERIALS COMPANY	358159	A	NTNC		

Table 2-2 (cont)					
Utility	Water Facility Identification (WFI) No.	Group	Type	On Map	Service Area Agreement
NINE MILE FALLS SCHOOL DIST # 325 – ELEM	59543Y	A	NTNC		
NORTHWEST CHRISTIAN HIGH SCHOOL	05463X	A	NTNC		
ORCHARD PRAIRIE ELEM SCHOOL # 123	641055	A	NTNC		
RIVERSIDE S.D.CENTRAL SITE SCHOOLS	72831N	A	NTNC		
RIVERSIDE S.D. CHATTAROY ELEMENTARY	728281	A	NTNC		
SAINT GEORGE'S SCHOOL	75295P	A	NTNC	X	AG, M, AU
SPOKANE BUSINESS & INDUSTRIAL PARK	83027K	A	NTNC	X	AU
SPOKANE CHRISTIAN CENTER	28377C	A	NTNC		
UPPER COLUMBIA CONFERENCE	90690C	A	NTNC		
BAYOU TAVERN	29070E	A	TNC		
BURGER ROYAL	09370R	A	TNC		
CAMP SEKANI	10947U	A	TNC		
CHARLES A. RUBY COMPANY	30417F	A	TNC		
CLEAR LAKE PINES BEACH CLUB	13532N	A	TNC		
CLEAR LAKE RESORT	10647E	A	TNC	X	AU
COMMELLINI RESTAURANT	14327T	A	TNC		
COUNTRY CUSTOM MEATS	31640Y	A	TNC		
DJ'S MINI MART	304180	A	TNC		
ELK PARK CEMETERY DISTRICT	22914N	A	TNC		
FASMART, INC.	25840E	A	TNC		
FOOTHILLS COMMUNITY CHURCH	257745	A	TNC		
FOUR LAKES TACS WATER SYSTEM	005458	A	TNC		
GREENBLUFF TRADING POST	29714V	A	TNC		
HODGSONS RIVERSIDE SERVICE	335908	A	TNC		
JERRY'S LANDING	23175R	A	TNC		
MALLARD BAY RESORT	041938	A	TNC		
MEL'S GRUB & SUDS SALOON	565428	A	TNC		
MILLER'S ONE STOP	547303	A	TNC		
MT SPOKANE SKI # 1& 2	56620U & 56621B	A	TNC		
MURRAY WATER SYSTEM	006987	A	TNC		
NAGRA WATER	19700H	A	TNC		
NINE MILE FALLS COMMUNITY CHURCH	04559U	A	TNC		
NINE MILE RESORT	595537	A	TNC		
NINE MILE STORE	595558	A	TNC		
OSBORNE CHEROKEE LANDING RESORT	279818	A	TNC		

Table 2-2 (cont)					
Utility	Water Facility Identification (WFI) No.	Group	Type	On Map	Service Area Agreement
OVERLAND STATION	65017C	A	TNC		
PAT'S FOOD & FUEL	329706	A	TNC		
PATTISON'S NORTH	66581T	A	TNC		
PEACEFUL PINES TRAILER COURT	66633N	A	TNC	X	AU
PUERTA VALLARTA	75029P	A	TNC		
QWIK STOP #23 WATER SYSTEM	33827E	A	TNC		
RAINBOW COVE	14614C	A	TNC		
RANCH MOTEL	71110N	A	TNC		
RESORT AT MT SPOKANE	47370R	A	TNC		
RUBY'S ON SILVER LAKE	34199E	A	TNC		
SKYLINE MOTEL	43171R	A	TNC		
SPOKANE COUNTY - BEAR LAKE PARK	05075P	A	TNC		
SPOKANE COUNTY - HANGMAN VALLEY GOLF	30847R	A	TNC		
SPOKANE COUNTY - HANGMAN VALLEY GOLF II	026717	A	TNC		
SPOKANE COUNTY - LIBERTY LAKE GOLF	47140Q	A	TNC		
SPOKANE COUNTY - LIBERTY LAKE PARK	47147B	A	TNC		
SPOKANE COUNTY - MIRABEAU PARK	55227V	A	TNC		
SPOKANE COUNTY - OLD MYER'S RESORT	54300T	A	TNC		
SPOKANE COUNTY - SULLIVAN PARK	847451	A	TNC		
SPOKANE HATCHERY DOMESTIC WATER	FW0115	A	TNC		
SPOKANE RACEWAY PARK	83075U	A	TNC		
SPOKANE RIFLE CLUB NORTH	00079E	A	TNC		
SPOKANE RIFLE CLUB SOUTH	000802	A	TNC		
SPOKANE RIVER REST AREA	HD7303	A	TNC		
SUNDANCE GOLF COURSE	85208Y	A	TNC		
SUNSET INDUSTRIAL	11655Q	A	TNC		
TWIN CEDARS WATER SYSTEM	59330W	A	TNC		
WATERS EDGE CAMPGROUND	93590E	A	TNC		
WILLIAMS LAKE BEACH CLUB	09280W	A	TNC		
WSDP - MT SPOKANE STATE PRK, SYS # 3, 4 & 6	SP5722, SP573K & SP015D	A	TNC		
WSDP - RIVERSIDE STATE PARK, EQUESTRIAN, HEADQUARTERS & ORV AREA	SP727L SP729M SP731R	A	TNC		

Exhibit 2-1 Public Water Systems

Public Water Systems

- All systems except those serving only one single family residence
- See regulations for specific exemptions

Group A

- 15 or more connections
or
- 25 or more people/day for 60 or more days/year

Group B

- Less than 15 connections and less than 25 people for 60 or more days/year
or
- Less than 15 connections and any number of people for less than 60 days/year
or
- Less than 15 connections in use less than 60 days/year

Community

- 15 or more connections
or
- 25 or more people/day for 180 or more days/year

Non-Community

- 25 or more non-residents/day for 60 or more days/year
or
- 15 or more connections or 25 more residents between 60 and 180 day/year

Non-Transient

- 25 or more of the same non-residents/day for 180 or more days/year

Transient

- 15 or more connections in use less than 180 days/year
or
- 25 or more different non-residents for 60 or more days/year
or
- 25 or more of the same non-residents for between 60 180 days/year
or
- 25 or more residents for between 60 and 180 days/year

Exhibit 2-2
Engrossed Second Substitute Senate Bill 5448
E2SSB 5448 (CWSP Sections) Interpretation
Public Water System Coordination Act Revisions by SSB 5448

Section	Change	Interpretation
70.116.050 (1)	Each purveyor within the boundaries of a critical water supply service area shall develop a water system plan for the purveyor's future service area if such a plan has not already been developed: PROVIDED, That non-municipally owned public water systems are exempt from the planning requirements of this chapter, except for the establishment of service area boundaries if they have no plans for water service beyond their existing service area	<ul style="list-style-type: none"> • Deletes the exemption for non-municipally owned public water systems in existence as of September 21, 1977 that meet minimum quality and pressure design criteria.
70.116.050 (2)	After the boundaries of a critical water supply service area have been established pursuant to RCW 70.116.040, the committee established in RCW 70.116.040 shall participate in the development of a coordinated water system plan for the designated area. Such a Plan shall incorporate all water system plans developed pursuant to subsection (1) of this section. The plan shall provide for maximum integration and coordination of public water system facilities consistent with the protection and enhancement of the public health and well-being. Decisions of the committee shall be by majority vote of those present at meetings of the committee.	<ul style="list-style-type: none"> • Old interpretation was that decisions had to be made by a majority vote of the entire committee. This was changed to require that decisions could be made by a majority vote of those present at the meetings of the committee.
70.116.050 (3) (f) (g)	(f) Include satellite system management requirements consistent with RCW 70.116.134. (g) Include policies and procedures that generally address failing water systems for which counties may become responsible under RCW 43.70.195.	<p>New Subsections</p> <ul style="list-style-type: none"> • Required that SMA provision be addressed in the CWSP. • Required that policies and procedures addressing failing water systems be addressed in the CWSP.
70.116.050 (6)	The committee established in RCW 70.116.040 may develop and utilize a mechanism for addressing disputes that arise in the development of the coordinated water system plan.	<p>New Subsection (replaced old subsection (6) which is now subsection (7))</p> <ul style="list-style-type: none"> • Allowed the WUCC to develop and utilize a dispute resolution process during the development of the CWSP.
70.116.050 (7)	Prior to the submission of a coordinated water system plan to the secretary for approval pursuant to RCW 70.116.060, the legislative authorities of the counties in which the critical water supply service area is located shall hold a public hearing thereon and shall determine the plan's consistency with subsection (4) of this section....	<p>Subsection was moved from (6) to (7)</p> <ul style="list-style-type: none"> • Deleted the specific direction for DOH to approve "design of the proposed facilities." (Since many aspects of the plan are policy or process related)

		<ul style="list-style-type: none"> Expanded the county consistency review process from interoffice to include a public hearing.
70.116.060 (2)	The secretary shall review the coordinated water system plan and, to the extent the plan is consistent with the requirements of this chapter and regulations adopted hereunder, shall approve the plan, provided that the secretary shall not approve those portions of a coordinated water system plan that fail to meet the requirements for future service area boundaries until any boundary dispute is resolved as set forth in RCW 70.116.070.	<ul style="list-style-type: none"> Limits DOH approval of the plan to those portions of the plan which are consistent with RCW 70.116. Allows DOH not to approve parts of the CWSP related to areas of dispute.
70.116.060 (3)(b)	No other purveyor shall establish a public water system within the area covered by the plan, unless the local legislative authority determines that existing purveyors are unable to provide the service in a timely and reasonable manner, pursuant to guidelines developed by the secretary. An existing purveyor is unable to provide the service in a timely manner if the water cannot be provided to an applicant for water within one hundred twenty days unless specified otherwise by the local legislative authority. If such a determination is made, the local legislative authority shall require the new public water system to be constructed in accordance with the construction standards and specifications embodied in the coordinated water system plan approved for the area. The service area boundaries in the coordinated plan for the affected utilities shall be revised to reflect the decision of the local legislative authority.	<ul style="list-style-type: none"> Puts burden of determining timely and reasonable upon the County. Requires DOH to develop timely and reasonable guidance. Defines timely and reasonable as the purveyor being able to provide water within 120 days unless specified otherwise by the County. Puts the burden on the County to require the design of new public water systems to meet the requirements of the CWSP. Allows for counties to make boundary changes when a new system is developed.
70.116.060 (5)	The affected legislative authorities may develop and utilize a mechanism for addressing disputes that arise in the implementation of the coordinated water system plan after the plan has been approved by the secretary.	<p>New Subsection</p> <ul style="list-style-type: none"> Allows counties to develop and utilize a dispute resolution process for addressing disputes that arise in the implementation of the CWSP, once the CWSP has been approved.
70.116.060 (6)	After adoption of the initial coordinated water system plan, the local legislative authority or the secretary may determine that the plan should be updated or revised. The legislative authority may initiate an update at any time, but the secretary may initiate an update no more frequently than once every five years. The update may encompass all or a portion of the plan, with the scope of the update to be determined by the secretary and the legislative authority. The process for the update shall be the one prescribed in RCW 70.116.050.	<p>New subsection</p> <ul style="list-style-type: none"> Once the CWSP is adopted, the County or DOH may require update. The County may require update at any time, DOH can only require update no more than once every 5 years. The update may address all or a portion of the CWSP. The update must follow the process found in

		RCW 70.116.050.
70.116.060 (7)	The provisions of subsection (3) of this section shall not apply in any county for which a coordinated water system plan has not been approved under subsection (2) of this section.	<p>New subsection</p> <ul style="list-style-type: none"> The rules of subsection 3 of this section do not apply in areas where a CWSP has not been approved by DOH.
70.116.060 (8)	If the secretary initiates an update or revision of a coordinated water system plan, the state shall pay for the cost of updating or revising the plan.	<p>New subsection</p> <ul style="list-style-type: none"> If DOH requires an update of the CWSP, DOH must pay the cost of updating the CWSP.
70.116.070 (1)	The proposed service area boundaries of public water systems within the critical water supply service area that are required to submit water system plans under this chapter shall be identified in the system's plan. The local legislative authority, or its planning department or other designee, shall review the proposed boundaries to determine whether the proposed boundaries of one or more systems overlap. The boundaries determined by the local legislative authority not to overlap shall be incorporated into the coordinated water system plan. Where any overlap exists, the local legislative authority may attempt to resolve the conflict through procedures established under RCW 70.116.060 (5)	<ul style="list-style-type: none"> Foregoes the requirement for systems to sign written agreements between purveyors and approved by the County. Requires that systems propose a service area boundary in their WSP and for the County to determine if those proposed boundaries overlap. If the boundaries do not overlap, requires the County to incorporate them into the CWSP.
70.116.070 (2)	Any final decision by a local legislative authority regarding overlapping service areas, or any unresolved disputes regarding service area boundaries, may be appealed or referred to the secretary in writing for resolution. After receipt of an appeal or referral, the secretary shall hold a public hearing thereon. The secretary shall provide notice of the hearing by certified mail to each purveyor involved in the dispute to each county legislative authority having jurisdiction in the area and to the public....	<ul style="list-style-type: none"> Allows appeal of the County's decision on overlapping boundaries to be appealed to DOH. The request for appeal must be in writing. Eliminates the need to notify all purveyors of the dispute. Allows DOH to notify only those purveyors involved in the dispute.

97-1068

Exhibit 2-3
BEFORE THE BOARD OF COUNTY COMMISSIONERS OF
SPOKANE COUNTY, WASHINGTON

**IN THE MATTER OF ADOPTING THE WATER UTILITY)
COORDINATING COMMITTEE'S RECOMMENDATIONS) RESOLUTION
RELATIVE TO THE UPDATE OF THE SPOKANE COUNTY)
COORDINATED WATER SYSTEM PLAN)**

WHEREAS, pursuant to the provisions of the Revised Code of Washington (RCW) Section 36.32.120(6) the Board of County Commissioners of Spokane County (the "Board") has the responsibility for the care of County property and the management of County funds and business; and

WHEREAS, pursuant to the provisions of Chapter 36.70, the Board of County Commissioners must adopt a comprehensive plan for the orderly physical development of all the unincorporated areas of Spokane County or portions of the same; and

WHEREAS, pursuant to Resolution No. 82-0946, the Board of County Commissioners adopted a Coordinated Water System Plan (CWSP) as the General Water Plan for the County; and

WHEREAS, pursuant to Resolution 90-0009, the CWSP was last updated and adopted by the Board of County Commissioners; and

WHEREAS, pursuant to the provisions of Section 70.116.040 RCW, the Board designated, by Resolution No. 78-0221, areas within Spokane County as Critical Water Supply Service Areas; and

WHEREAS, pursuant to Section 70.116.040(1) RCW, the Board appointed, by Resolution No. 78-1185, four Water Utility Coordinating Committees (WUCCs); and

WHEREAS, pursuant to WAC 246-293-280, the WUCC shall periodically review and update the CWSP; and

WHEREAS, the WUCC has convened to update the CWSP and has submitted the attached Recommendation to the Board (Attachment "A"), which recommends:

- (1) That the external boundary of the Critical Water Supply Service Area, adopted by the Board by Resolution No. 88-0376, and as reflected in Attachment "B" hereto remain unchanged; and
- (2) That the four existing Water Utility Coordinating Committees be abolished and a single Water Utility Coordination Committee be formed to update the Spokane County CWSP in a manner consistent with all appropriate rules and guidelines.

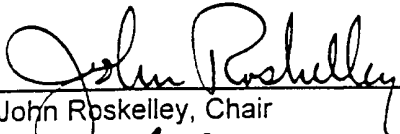
NOW, THEREFORE, BE IT RESOLVED by the Board of County Commissioners of Spokane County, that the Board, pursuant to Chapter 70.116 RCW, does hereby adopt the

Exhibit 2-3 (cont)

recommendations of the Water Utility Coordinating Committee, as reflected herein relative to the update of the CWSP.

PASSED AND ADOPTED this 18th day of November 1997.

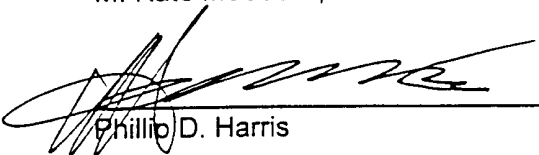
BOARD OF COUNTY COMMISSIONERS
OF SPOKANE COUNTY, WASHINGTON



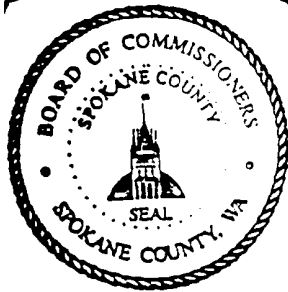
John Roskelley, Chair



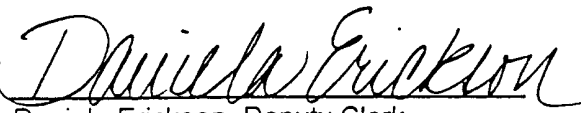
M. Kate McCaslin, Vice Chair



Phillip D. Harris



ATTEST:
William E. Donahue
Clerk of the Board

By: 

Daniela Erickson, Deputy Clerk

97-1068

Exhibit 2-3 (cont)
BEFORE THE SPOKANE COUNTY
WATER UTILITY COORDINATING COMMITTEES

**A RECOMMENDATION TO THE BOARD OF)
COUNTY COMMISSIONERS IN THE MATTER) RECOMMENDATION
OF THE SPOKANE COUNTY COORDINATED)
WATER SYSTEM PLAN)**

WHEREAS, pursuant to the provisions of the Revised Code of Washington (RCW) Section 36.32.120(6) the Board of County Commissioners of Spokane County has the responsibility for the care of County property and the management of County funds and business; and

WHEREAS, pursuant to the provisions of Chapter 36.70, the Board of County Commissioners must adopt a comprehensive plan for the orderly physical development of all the unincorporated areas of Spokane County or portions of the same; and

WHEREAS, pursuant to Resolution 82~946, the Board of County Commissioners adopted a Coordinated Water System Plan (CWSP) as the General Water Plan for the County; and

WHEREAS, pursuant to Resolution 90-0009, the CWSP was last updated and adopted by the Board of County Commissioners; and

WHEREAS, pursuant to the requirements of RCW Section 70.116.050(2) a committee shall participate in the development of a CWSP for a study area defined as a Critical Water Supply Service Area; and


WHEREAS, four Water Quality Coordinating Committees were established for development of the previous CWSP Update to address the separate needs and interests within the urbanizing Spokane area.

NOW, THEREFORE, BE IT RESOLVED that the members of the four existing Water Utility Coordinating Committees recommend to the Board of County Commissioners of Spokane County that the external boundary of the Critical Water Supply Service Area be unchanged from the previous CWSP.

BE IT FURTHER RESOLVED that the four existing Water Utility Coordinating Committees be abolished and a single Water Utility Coordinating Committee be formed to update the Spokane County CWSP in a manner consistent with all appropriate rules and guidelines.

ADOPTED by the Spokane County Water Utility Coordinating Committee at its meeting held on the 23rd day of October 1997.

SPOKANE COUNTY COORDINATED
WATER SYSTEM PLAN WATER UTILITY
COORDINATING COMMITTEE



Steve Skipworth, WUCC Chair
Vera Water and Power

Section 3

Water Utility Service Areas

3.0 Introduction

There have been no major changes in the Public Water System Coordination Act (Coordination Act) laws, since the 1989 Coordinated Water System Plan (CWSP) Update, which influence the selection of service areas by water utilities. However, changes have occurred in the allowable levels of service within those areas and how disputes are settled in the event of disagreements between utilities and applicants for service requests. These changes affect the Utility Service Review Procedure (USRP) which is described in Section 5. Much of the information presented below, therefore, is a reiteration of the intent and purpose of having well defined service areas, the related responsibilities of service areas, and the process of their selection.

The establishment of service area boundaries carries with it two obligations. The first obligation is that County and State governments recognize an identified utility as the responsible agency for providing all public water service within a designated area. The second obligation is that the designated purveyor assumes responsibility, within its service area, for planning and implementing water system development and proper utility management. For those areas which are not within any utility's service area, the USRP gives the Spokane County Division of Utilities (SCDU) the authority to refer an applicant to service by an adjacent utility, followed by an approved Satellite Management Agency (SMA) or, if neither of these is available, by a newly formed utility.

The Coordination Act provides the legal mechanism, for municipalities and private water utilities alike, to establish an exclusive service area within unincorporated areas of the county. This procedure provides utilities with the assurance that their planning, capital improvement programs, and financial commitments are consistent with State and County requirements.

From the County's perspective, service area means a specific utility has accepted responsibility for development of cost effective and efficient service to accommodate the future growth that this area will experience. Growth management objectives established for these areas by the County's Comprehensive Plan must be accounted for in each utility's water system plan and actual improvements.

The Coordination Act requires that service area boundaries be established among the purveyors based on a variety of factors including: topography, readiness and ability to serve, local franchise areas, legal water system or municipal boundaries, future population projections, and sewer service areas. It also specifies that these service areas be developed in conformance with the land use policies of the County.

Service areas include those areas in which the utility expects adequate customer growth, within a reasonable period of time, to support an established plan for system development.

The 1982 and 1989 CWSP efforts enabled utilities to select their service areas. Subsequently, some conflicts have been identified due to mapping irregularities. Most of these conflicts have been resolved. During this Update, some adjustments have been made in previously identified boundaries. In some instances, boundaries have been reduced to coincide with placement of the GMA Interim Urban Growth Area (IUGA) boundary. Other systems anticipating growth enlarged their boundaries during this update.

It is important to note that this Update process focused heavily on two inadequacies from past efforts. The inaccuracy of past service area maps and the poorly documented changes in service area boundaries have created confusion. This Update used Geographic Information System (GIS) technology to generate parcel-level accuracy for delineating service area boundaries. In addition a structured service area change procedure was implemented by the WUCC which provides for more citizen input and public notice. These improvements are described in this section.

3.1 Service Area Commitments and Procedures

The service area defines the area within which all customers will be provided retail water service by the designated purveyor. An important distinction is that a utility's water facilities, such as sources of supply and reservoirs, can be located outside the utility's service area. These facilities can be located within another utility's retail service area provided the facilities are not used for direct retail service without the written concurrence of the designated purveyor.

Once adopted as part of this CWSP, the service area is the exclusive service area of the identified utility, giving the utility first priority for serving future customers. As a condition of being granted a service area, the utility shall meet certain obligations and commitments, as described below:

3.1.1 Service Area Designation

All Group A and Group B systems approved to reach Group A status that are located within the Critical Water Supply Service Area (CWSSA) were contacted by letter and asked to review, reaffirm, or revise their service area boundaries. Maps of the current boundaries were provided to utilities for their review at several Water Utility Coordinating Committee (WUCC) meetings, and at the SCDU. Input received from the utilities, either in writing, at several WUCC meetings, or through meetings at SCDU offices, was utilized to modify service area boundaries and the official CWSP maps. Those utilities not responding were assumed to have no boundary changes.

Exhibit 3-1 provides a map of the CWSSA as well as a composite of Group A and Group B systems approved to reach Group A status along with unclaimed areas. Contested service areas occur where adjacent utilities both desire to serve the same area. Although no such occurrences are known at this time, the area in dispute would be denied additional service until the dispute is resolved. Uncontested service may occur where an adjacent utility has a written agreement to serve within a designated purveyor's service area. The service area maps and GIS digital files for the maps are on file at the SCDU, and is referred to in Appendix A.

The nature and small geographical size of Group B systems make it difficult to accurately map their location. Those Group B systems approved to reach Group A status were included in the mapping effort discussed above. The remaining Group B systems were located on maps to within $\frac{1}{4}$ - $\frac{1}{4}$ section accuracy based upon data obtained from the Department of Health (DOH) Water Facility Inventory database information. A copy of this map is included as Appendix B, and is also available from SCDU. This information is useful to assist larger utilities in coordination of possible mergers. It also aids in emergency notification in the event of an accidental spill or other nearby activities that may impact water quality or the groundwater resource.

In addition to providing copies of maps to each utility, SCDU has, as its responsibility, provided a complete set of maps along with any subsequent updates to the DOH, the Spokane County Health District, Planning Department, and Boundary Review Board (BRB).

3.1.2 Service Area Agreements

Previous CWSP update efforts were successful in receiving input from utilities to establish service area boundaries on official CWSP maps. However, these past efforts were not as successful in getting utilities to submit their Service Area Agreements confirming these boundaries. Therefore, it was decided that a goal of this update would be to have all utilities review their service area boundaries and resubmit a Service Area Agreement.

The WUCC also reviewed the Service Area Agreement signature process. In the past some confusion had occurred when the agreements were signed by individuals who did not have the full authority of the water utility. The WUCC recommended that some documented evidence be presented with Service Area Agreements verifying an individuals authority to sign. This documentation may be in the form of a resolution by boards of commissioners or councils, copies of minutes of meetings where such authority is acknowledged, or other suitable means to ensure that a utility is aware of their commitment to the specified service area. Exhibits 3-2 and 3-3 provide

copies of the Service Area Agreement and a suggested resolution authorizing signature of the agreements.

The Service Area Agreement allows for the utility to agree with the boundary of its service area as it is shown on the official County map. In so doing, the utility acknowledges adjacent utility boundaries also shown on this map, and thus avoids entering into separate agreements with each adjacent utility.

Where understandings concerning service in a neighboring utility's service area, transfer of service, or common boundaries require more specific terms than are provided in the Service Area Agreement, the affected utilities address the specific conditions in a supplemental agreement. It is likely that more instances of these special situations exist than those mapped. Therefore, in order for these agreements to be recognized in implementing the CWSP, the utilities must place them on file with SCDU as an addenda to the Service Area Agreement.

3.1.3 Service Area Adjustments

The service area boundaries may be subject to change as time passes. The maps are, therefore, intended to be dynamic, and may be revised, as necessary, to accurately reflect service area boundary changes.

In the future, service boundaries can be revised if a utility determines that its service area is either too large or too small, or if a utility determines that it is unable or unwilling to serve a specific request. Changes in utility service area boundaries will occur when one or more utilities wish to expand or reduce their service areas and will be approved only if a new conflict in service areas is not created by the modification. Service area adjustments must be approved, as prescribed herein, and incorporated into a utility's water system plan.

The WUCC spent considerable time establishing a procedure to request, document, and implement such service area changes. Exhibit 3-4 provides a summary of these service area adjustment procedures. The essence of these procedures requires that a utility initiate a change by submitting a request to amend its Service Area Agreement to the SCDU, as illustrated by the example in Exhibit 3-5. The SCDU ensures that proper notification occurs for public input through local newspapers as well as on the County web-site. Adjacent utilities are notified of the change and the WUCC Executive Committee reviews the request to ensure no conflicts are created. A Certificate of Completion of the change procedures, as shown in Exhibit 3-6, is executed by the Chair of the WUCC and the Director of the SCDU. Subsequently, the affected service area maps are revised and distributed to the appropriate entities. Copies of all Service Area Agreement amendment

documents and related correspondence will be date stamped and kept on file for each participating utility by the SCDU.

Recognition of these new and altered utility service areas and Service Area Agreements should be incorporated into the County utility franchise process by revising the franchises. The BRB shall also be provided copies of the new and revised service areas for their information. Service area boundaries in the CWSP must be consistent with a utility's WSP in order for a system to grow beyond its service area.

3.1.4 Conditions of Service by Designated Purveyor

Water service can be provided by the designated purveyor either through direct connection to the utility's existing water system, or as a "remote" system. In either case, the utility will identify for the applicant all the conditions of service which must be agreed to prior to the provision of water service. These conditions would include engineering, financial, managerial, or other requirements deemed appropriate by the utility. The CWSP requires that the utility be willing to provide service in a timely and reasonable manner. Once the applicant agrees to these conditions, and submits a Certificate of Water Availability to the County, which has been signed by the designated purveyor, a building permit or preliminary plat approval can be issued. It is the responsibility of the utility to work with DOH in determining what information is required in planning and construction documents.

Certain conditions of service which are not technically related to the provision of service may be imposed under the sole discretion of the utility. An example of this would be a municipal utility which requires annexation prior to provision of service. In such case, the applicant may be required either to annex or agree not to oppose future annexation in order to receive service. Such a requirement is neither supported nor rejected by the objectives of the CWSP.

Section 8.2 provides an explanation of the Appeals Process available to the applicant if it is felt that the utility is not providing "timely or reasonable" service.

3.1.5 Remote Systems

"Remote systems" are those which may be located within a utility's service area but which can not be reasonably connected initially. This creates a stand-alone system that requires the utility to provide ownership and/or management, maintenance, and operational services. In those instances where utilities are not able to provide a direct connection but do not choose to

relinquish their service area, the utility must meet all criteria for a SMA as identified in WAC 246-295. A utility must meet these requirements upon the update of its WSP. This will allow the utility to serve the remote system by ownership, or management and operations.

3.2 Contested Service Areas

The Coordination Act provides for a mediation procedure to resolve contested areas at the local level. The procedure specifies that if there are any contested service areas which are not resolved within one (1) year of the establishment of the External Boundary, DOH may conduct a public hearing in regard to the contested service area. At the termination of that hearing, DOH may either establish a service area line or delay approval of new water service extensions to a Contested Service Area pending resolution of that conflict. This delay in approval would be limited to the area in question and is not extended to the entire service area of the utilities involved.

At completion of the 1999 CWSP Update, it appears that no contested service areas exist. However, should one be discovered at a later date, further development in the area would be delayed until the dispute is resolved.

3.3 Boundary Review Board

Representatives of the WUCC and BRB met several times during the update process. The BRB raised issues of concern that focused on the procedures of modifying service area boundaries and the relationship between service area boundaries and individual water system plans. Of particular concern was a lack of public input during these change procedures.

The BRB perceived that there could be several inconsistencies in the service area boundaries designated on the official CWSP maps versus maps in individual WSPs. In cases where irregularities in boundaries exist or when individual WSPs did not clearly identify all capital improvements, the BRB felt that a Notice of Intention may be required for any extension of water facilities. Another concern was that public input and notice is achieved only when the CWSP and individual WSPs are adopted through public hearings, meetings, and other public notice procedures. However, any modifications to service area boundaries and individual WSPs prior to a CWSP update occurs without public notice or scrutiny.

Under BRB law, a Notice of Intention must be filed for certain activities and public hearings and BRB determinations are conducted before activities proceed. Revisions to RCW 36.93.090 by the legislature in 1995 changed BRB responsibilities for the extension of water or sewer systems outside of an existing corporate boundary. In essence, the change in law clarifies that applicants must file a Notice of Intention with the BRB whenever there is to be an extension of permanent

water or sewer service outside of the service area of a city, town, or special purpose district. The definition of “service area” includes all of the area within an entity’s corporate boundary plus, for extensions of water service, the area outside of the corporate boundaries which it is designated to serve pursuant to an approved Coordinated Water System Plan.

In order to address these issues, the WUCC established the following understanding and procedures which have been used during this Update and will continue to be implemented after adoption of the CWSP Update:

3.3.1 Filing of Notice of Intention

All purveyors will file a Notice of Intention with the BRB, if:

- Annexation of additional municipal area is proposed.
- A permanent water line extension is proposed outside of the purveyors service area, which is defined as “Service Area” in Substitute Senate Bill No. 5209.
- An interim water line extension is proposed outside of the purveyors service area, which is defined as “Service Area” in Substitute Senate Bill No. 5209.
- If service area boundaries are inconsistent between the CWSP Regional Supplement and the purveyor’s approved and current WSP.

3.3.2 Public Notification of Service Area Adjustments

All purveyors will follow the procedures for Service Area Adjustments as prescribed in section 3.1.3 of the CWSP, which provide for public notice in local newspapers and the Spokane County web-site.

3.3.3 Interim Procedures

Until adoption of the CWSP Update occurs and individual WSPs are also updated, the following procedures will be implemented jointly by the purveyors, DOH, BRB, and SCDU:

- Purveyors are to notify DOH and SCDU of adjustments to service areas which are known or anticipated prior to completion of the CWSP Update.
- If the BRB has reason to question whether a project is within a purveyors service area, the BRB will check with DOH and SCDU to ensure that the CWSP and individual WSP service areas are consistent.
- A Notice of Intention will be filed with the BRB if any of the circumstances identified in paragraph 3.3.1 are proposed and/or if a

- purveyors service area boundary is inconsistent between the CWSP and the individual WSP.
- The DOH may require an amendment to the purveyors individual WSP to clarify technical issues associated with any service area adjustment.
 - The focus of the BRB in this process will be on service area boundary consistency, as identified in the CWSP and individual WSP, and not on facility sizing or alignment.

3.4 Water System Plan

Designation of the service area to the utility is conditioned upon having met the WSP requirements and obtaining DOH approval. The WSP must utilize the same service area boundaries as those identified in the CWSP Update or the utility must pursue the service area adjustment procedures described in Section 3.1.3.

DOH recommends that all system purveyors prepare a WSP. However, purveyors of the following categories of community systems are required to have WSPs approved by DOH, pursuant to WAC 246-290-100:

- Systems with 1,000 or more service connections;
- Systems in areas utilizing the Public Water System Coordination Act, Chapter 70.116 RCW and Chapter 246-293 WAC as required in WAC 246-293-230 (see definitions);
- Systems experiencing problems related to planning, water quality, financing, operation and/or management as determined by DOH;
- Any system proposing to use the document submittal process in WAC 246-290-125; and
- Any new or expanding system.

All Group A systems which are not required to prepare a WSP are required to develop a Small Water System Management Program pursuant to WAC 246-290-105.

Representatives of DOH met with the WUCC on various occasions during the Update to explain the WSP requirements. Individual utilities are responsible for contacting DOH and establishing their level of planning requirement and a suitable schedule of WSP preparation.

The approval authority for individual WSPs lies with DOH. However, DOH also asks for input from the County during this process. The County's role in the WSP review process is to ensure that the proposed plan is consistent with the service

areas identified in the CWSP and with County land use policies. Therefore, the steps for approval of individual WSPs is as follows:

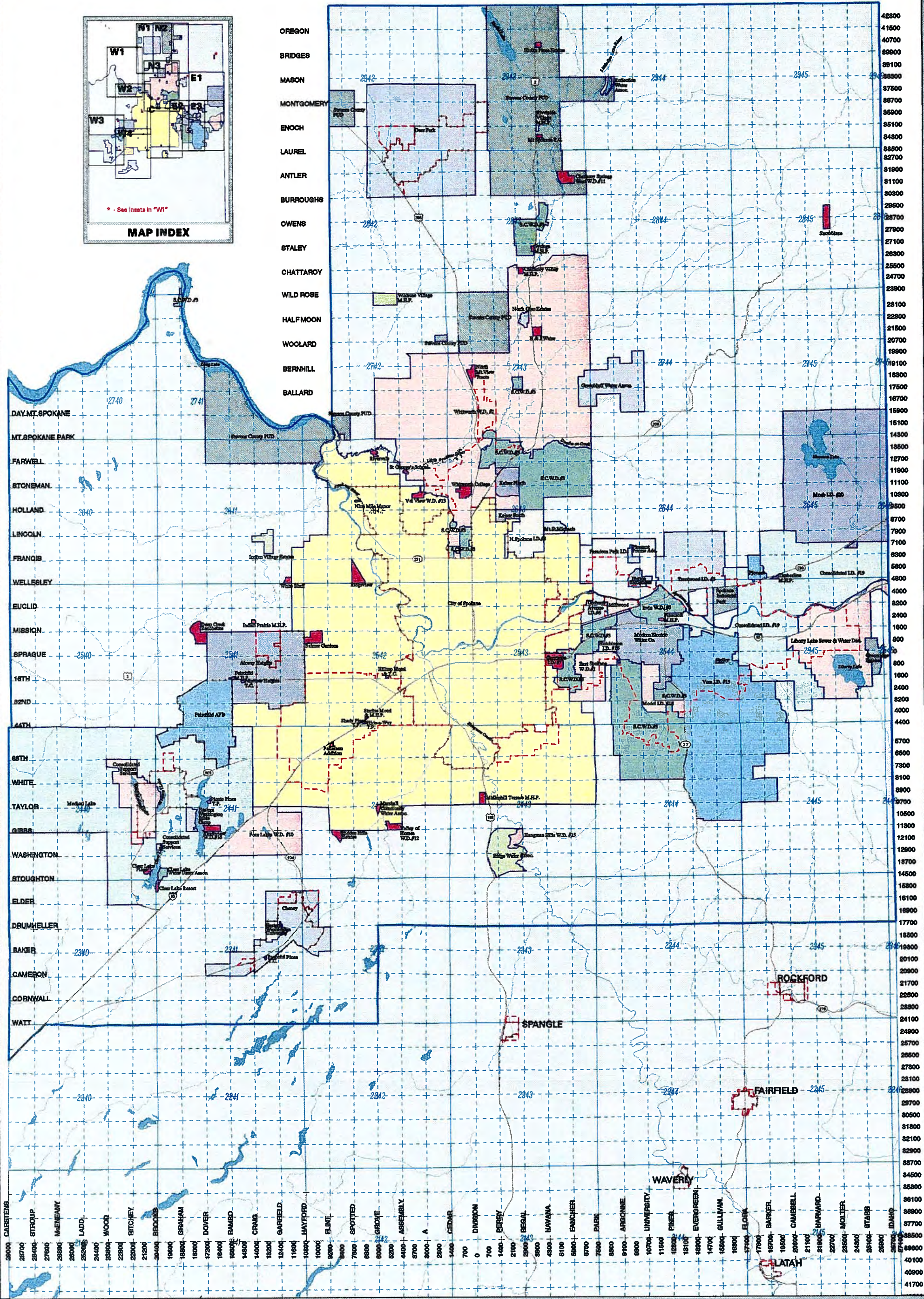
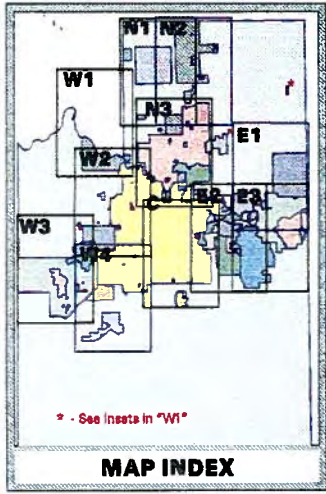
1. DOH receives WSP and initiates review of the document for compliance with WAC 246-290.
2. DOH provides a copy of WSP to SCDU to ensure its review by appropriate County departments and staff.
3. SCDU coordinates County comments back to DOH regarding inconsistencies with the CWSP regional supplement or other County planning policies.
4. DOH issues a comment letter to the water system regarding any deficiencies in the WSP and includes County comments in that letter.
5. The water system makes any necessary corrections required by DOH for compliance, and resubmits to DOH until regulatory acceptance is achieved.
6. The governing board or legislative body of the water system adopts the WSP and provides DOH verification of the adoption and a copy of the final WSP to DOH and SCDU.
7. DOH approves the WSP and notifies the water system and SCDU.

3.5 Department of Health Action

Once a utility has an approved WSP and current service area agreements, the service area will be designated to that utility. If, at any time, DOH determines that the utility has failed to comply with the standards or provisions of its WSP, approval of planned construction activities may be delayed pending compliance.

Further, unless a documented health-related problem is involved, a utility's failure to submit a Service Area Agreement will result in DOH's delay of planned construction activities until a valid Service Area Agreement is in effect. For utilities with contested service area conflicts, delay of DOH approvals will be limited to proposed activities within the contested service area pending resolution of the dispute.

Exhibit 3-1
CWSP Service Area Map
Group A and
Expanding Group B
Systems



LEGEND

- Water District Boundaries
- Municipal Boundaries
- Interm Urban Growth Area Bndy
- Critical Water Supply Service Area
- Township Boundaries
- Section Lines

- M.H.P. = Mobile Home Park
- T.P. = Traller Park
- T.C. = Traller Court
- W.D. = Water District
- I.D. = Irrigation District
- S.C. = Spokane County
- PUD = Public Utility District

SPOKANE COUNTY
Coordinated Water System Plan
EXHIBIT 3-1: SERVICE AREAS



Spokane County Public Works, Division of Utilities
 Product of the Spokane County Geographic Information System
 Printed: July 19, 1999



Notes: Service Area Boundaries are valid when a current, signed Service Area Agreement is on file with Spokane County Public Works, Division of Utilities. The information shown on this map is compiled from data maintained by Spokane County Public Works, Division of Utilities.

Exhibit 3-2

**WATER UTILITY SERVICE AREA AGREEMENT
SPOKANE COUNTY COORDINATED WATER SYSTEM PLAN**

This Service Area Agreement, submitted by _____ confirms that the attached map, dated _____, accurately identifies the service area that the water utility is willing and able to serve unless regulatory constraints do not enable the utility to do so.

The intent of this agreement is to define service areas in a manner which assures that time, effort, and money are best used by avoiding any unnecessary duplication of service. Spokane County and the Washington State Department of Health will recognize these boundaries as the exclusive service area of the undersigned utility, giving the utility right of first refusal for service.

As a condition of being granted this designated service area, the utility will be required to ensure that the same boundary is utilized for preparation of its individual water system plan. The utility agrees to adhere to the Service Area Boundary Amendment procedures specified in the Spokane County Coordinated Water System Plan (CWSP). The utility will also provide service in a manner consistent with its own individual water system plan and service policies. The utility also fully recognizes that this Service Area Agreement is developed in fulfillment of the Spokane County CWSP.

It is further agreed that neighboring utilities may provide water service to customers within the service area boundary of an adjacent utility only if a mutually acceptable agreement is developed to specify the conditions and term of such service. Existing service on boundary streets shall remain as connected unless transfer of service is agreed to by the neighboring utilities. Depth of service on boundary streets identified on the attached map shall be limited to one platted lot if the adjacent area is unclaimed.

The person signing below assures that he or she has been authorized to sign the Service Area Agreement on behalf of the utility. Attached is documentation verifying this authority.

Water Utility

Receipt Acknowledged By:

Authorized Representative

Spokane County, Division of Utilities

Date

Date

Exhibit 3-3

RESOLUTION NO. _____

A RESOLUTION OF THE BOARD OF (Name of Water Utility), SPOKANE COUNTY, WASHINGTON, AUTHORIZING EXECUTION OF WATER UTILITY SERVICE AREA AGREEMENTS WITH SPOKANE COUNTY TO ESTABLISH WATER SERVICE AREA BOUNDARIES IN ACCORDANCE WITH RCW CHAPTER 70.116, THE PUBLIC WATER SYSTEM COORDINATION ACT

BE IT RESOLVED BY THE BOARD OF (Name of Water Utility), SPOKANE COUNTY, WASHINGTON, as follows:

WHEREAS, (Name of Water Utility) hereafter referred to as the UTILITY is organized under the laws of the State of Washington; and

WHEREAS, the UTILITY and Spokane County are desirous to establish boundaries for the UTILITY's water service areas as outlined in the attached and incorporated Service Area Agreements; and

WHEREAS, the Board of Commissioners deems it to be in the best interest of the UTILITY to enter into these Agreements and to participate in the Spokane County Coordinated Water System Plan now, therefore,

BE IT FURTHER RESOLVED by the Board of (Name of Water Utility) as follows:

(Name and Title) is hereby authorized and directed to execute the attached and incorporated "Water Utility Service Area Agreement Between Spokane County and (Name of Water Utility)."

ADOPTED BY THE BOARD OF (Name of Water Utility), SPOKANE COUNTY, WASHINGTON, AT A MEETING THEREOF this _____ day of _____, _____.

(Name of Water Utility)

Chair

Commissioner

Commissioner

ATTEST:

Secretary
(SEAL)

Exhibit 3-4

SPOKANE COUNTY COORDINATED WATER SYSTEM PLAN SERVICE AREA BOUNDARY AMENDMENT PROCEDURE

Application: Amendments in water utility service area boundaries will occur when a utility or adjacent utilities wish to expand or reduce their service area and will be approved by the procedures defined herein only if a new conflict in service areas is not created by the modification.

Potential Stakeholders: Utility proposing the Amendment; Adjacent utilities; Spokane County Division of Utilities (SCDU), Planning Department, and Boundary Review Board (BRB); Spokane County Health District; Washington State Department of Health (DOH); and the Chair of the Water Utility Coordinating Committee (WUCC).

Procedures:

1. The water utility requesting the service area boundary amendment shall submit their request in writing to SCDU along with a map identifying the existing and requested boundaries. The written request shall specify the reason or justification for the change.
2. SCDU will also insure that written confirmation is obtained from any adjacent utilities, at least within 1/4 mile of the proposed boundary change, and that the proposed change does not create a service conflict.
3. If a conflict exists, then no further boundary modification occurs until the conflict is resolved between the impacted utilities. The remaining procedural steps are followed once it is established that there are no conflicts.
4. SCDU will ensure that the water utility requesting the service area boundary amendment seeks public input regarding the requested amendment through a public notice in the County's official newspaper which specifies a time and place for comments to be submitted to the utility. SCDU will also provide a similar notice on the County's web-site. SCDU will take no action on the requested boundary change until an affidavit of publication is submitted and the comment period has expired. All comments will be directed to the affected utilities for appropriate action. All costs associated with the public notification procedures are the responsibility of the utility requesting the boundary amendment.

Exhibit 3-4 (cont)

5. SCDU prepares two copies of revised service area map and an Amendment to the Service Area Agreement and submits them to affected utilities for their review, signature, and return to SCDU of one signed copy with the remaining copy kept in their files. Special working Agreements, if they exist, between all affected utilities shall be submitted as attachments to the Service Area Agreement Amendment.
6. All submittals of requests for amendments (Procedure No. 1), confirmation of non-conflict (Procedure No. 3), and signed Service Area Agreement Amendments (Procedure No. 5) must bear the signature of an official authorized to represent the respective utility. Some form of written confirmation of this authority and/or agreement with the requested boundary amendment by the utility's governing body must be submitted to SCDU.
7. Convene WUCC Executive Committee to review change request and once all issues of interest are resolved authorize the WUCC Chair to concur with the Amendment.
8. Once the above documentation is received, a Certificate of Completion following the format of Exhibit 3-5 is executed by the Director of the SCDU and the Chair of the WUCC. The Certificate formally acknowledges that the Service Area Boundary Amendment Procedures, described herein, has been completed and approves the requested change. A copy of the Certificate will then be transmitted to the affected utilities.
9. The "official" service area maps are updated on GIS and hard copy, and shall be reviewed and updated with all changes at least quarterly and kept on file by SCDU.
10. Copies of updated "official" service area maps are transmitted to the Spokane County Planning Department, Spokane County Health District, BRB, and DOH.
10. SCDU directs the applicant and all adjacent utilities, whose service area boundaries are adjusted, to the DOH for modifications required to their individual Water System Plans.
11. Copies of all signed Service Area Agreement Amendments and related correspondence shall be date stamped and kept on file for each participating utility by SCDU.

Exhibit 3-5

**AMENDMENT NO. _____
WATER UTILITY SERVICE AREA AGREEMENT
SPOKANE COUNTY COORDINATED WATER SYSTEM PLAN**

This Amendment documents a change in the water service area boundary for the (Name of Water Utility) as established in accordance with the Service Area Agreement, dated _____, for the Spokane County Coordinated Water System Plan.

The amended water service area boundary is accurately reflected on the attached official map prepared by the Spokane County Division of Utilities. No changes, other than those attached to the Amendment, have occurred in either boundaries or special working agreements between affected utilities. Other provisions of the Service Area Agreement have not been altered by this Amendment.

The (Name of Water Utility) acknowledges that it will coordinate with the Washington State Department of Health any modifications to its individual Water System Plan as a result of this Amendment.

IN WITNESS WHEREOF, the undersigned has executed this Amendment acting as the authorized or designated representative of the (Name of Water Utility) on (date).

Designated Representative

Receipt Acknowledged:

Title

Spokane County, Division of Utilities

Water Utility

Date

Exhibit 3-6

**CERTIFICATE OF COMPLETION
SERVICE AREA ADJUSTMENT**

THIS CERTIFICATE OF COMPLETION ACKNOWLEDGES AMENDMENT OF SERVICE AREA BOUNDARIES; (fill-in blank describing type of requested change)

WHEREAS, the Spokane County Coordinated Water System Plan, hereinafter "CWSP," provides for the establishment and adjustment of service area boundaries for the purveyors of public water service in Spokane County and;

WHEREAS, (number of purveyors(s)) public water service purveyors, (Name No. 1) and (Name No. 2, etal) have agreed to ("fill-in blank" with description of requested type of change and reference to location and any agreements between adjacent utility(ies)):

WHEREAS, the CWSP provides for approval of all Service Area Amendments by the Spokane County Division of Utilities (SCDU) and the local Water Utility Coordinating Committee (WUCC) and;

WHEREAS, it appears there is no reason not to approve the wishes of the utilities concerned and no conflict is created by said modification;

NOW THEREFORE, BE IT CERTIFIED BY THE SPOKANE COUNTY WATER UTILITY COORDINATING COMMITTEE AND THE SPOKANE COUNTY DIVISION OF UTILITIES:

That the service area change procedures have been completed and boundaries for the (Name of Utility(ies)) be changed and amended to ("fill-in blank" with description of change), subject in addition to such terms and conditions as the two parties may now or hereafter mutually agree.

PASSED and adopted by the Water Utility Coordinating Committee and Spokane County Division of Utilities this _____ day of _____, _____.

("Name")
Chair,
Water Utility Coordinating Committee

N. Bruce Rawls, P.E.
Director
Spokane County Division of Utilities

Section 4

Minimum Design Standards

4.0 Introduction

The Public Water System Coordination Act requires development of minimum standards applicable to water system improvements within the Critical Water Supply Service Area (CWSSA). The Department of Health (DOH) approval procedure for water system plans encourages the development of standard construction specifications by the water utility. Construction specifications are more detailed than the design standards included in this Coordinated Water System Plan (CWSP) Update. This, however, also places the water utility under the obligation to use these as minimum construction standards, unless amended.

The Growth Management Act (GMA) specifies that local governments are required to develop and implement levels of service and capital facility plans which differentiate between “urban” and “rural” levels of service. Based on these appropriate levels of service, jurisdictions are required to develop capital facilities plans which identify the financing strategy to implement the first 6 years of capital improvements in order to implement the GMA.

4.1 Rural and Urban Levels of Standards

“Urban” levels of service are provided within the Urban Growth Area (UGA) boundaries, and conversely “rural” services occur outside the UGA. Without further definition by local government, the legislature has determined that “rural services include those public services and public facilities historically and typically delivered at an intensity usually found in rural areas, and may include domestic water systems, fire and police protection services,.....”.

The GMA also mandates that each county develop County-wide Planning Policies (CWPP) which shall serve as ..”written policy statements used solely for establishing a county-wide framework from which county and city comprehensive plans are developed and adopted...”. These interim policies are companion to any existing non-conflicting land use policies already in place. At least nine categories of interim policies are required, including public water and fire protection. For these two services, Spokane County developed interim CWPP for the provision of water and fire protection as components of the urban service. These interim policies are compatible with the design standards embodied within this CWSP Update. In fact the policy statements make several references to the CWSP and the DOH standards. However, the CWPP are silent regarding water service into the rural area. By omission from the CWPP this lack of clarity infers that the

County's existing Comprehensive Plan governs the appropriate level of water service in rural areas.

The County's existing Comprehensive Plan, last adopted in 1981, has a land use element regarding water facilities. Among its many principles, is a quote still endorsed by the Water Utility Coordinating Committee (WUCC) which states "It is important that the CWSP is coordinated with the Comprehensive Plan and its Land Use Element. Water facilities should be provided in a manner consistent with the planned land use and development policies. The Land Use Element should not "follow" the location of utilities and facilities but should be the "lead" factors in determining future service needs." The WUCC members feel strongly that the provision of water service should be in response to land use policies and not to use water as a mechanism to make land use decisions.

The Comprehensive Plan continues in Goal 24.1, Objective 24.1.a and 24.1.b, Decision Guideline 24.1.5 by stating "If "Transmission Only" water facilities are authorized within the unincorporated area of the County, no service connections should be allowed for new developments which are inconsistent with the Comprehensive Plan. Existing development may be connected provided the health authorities have determined that a "need" for water related public health or safety situation exists for the existing land use." It is this statement, coupled with the lack of guidance in the CWPP over which the WUCC has concern. The concern is centered on the fact that there are already several miles of "non-transmission" water lines already in use by purveyors outside the Interim Urban Growth Area (IUGA). The continued construction of similar lines along with new water reservoirs is included in water system plans for many utilities serving outside the IUGA. The intent of WUCC members is to provide service to parcels which comply with approved local land use zoning and density policies. In addition, the provision of adequate fire protection service is contingent upon the construction of adequate water lines. The fire storm years of the early and mid-1990's have emphasized the importance of adequate fire protection services throughout the County. The potential of critical projects being delayed due to this inconsistency could lead to unnecessary legal conflicts, interruption of service, or unacceptable health and safety risks.

In conversations with County Planning staff, it appeared unlikely that the CWPP process could be revised in a timely manner to address the issue of water service in rural areas. Therefore, the WUCC unanimously instructed its Chair to direct a letter to the Board of County Commissioners requesting that the Planning Commission be requested to amend the existing Comprehensive Plan as soon as possible and not wait for completion of the GMA process. The amendment would change current language to enable distribution piping and other water supply facilities to be constructed outside of IUGA boundaries provided that such construction was not predicated on a change in currently approved land use densities for financing or other reasons. A copy of this letter is included as Exhibit

4-1. The CWSP endorses the recommendations of the WUCC and the action requested in that letter.

4.2 Minimum Design Standards

Since the 1989 CWSP Update, a new set of minimum design standards has been enacted by the County. These Standards are embodied in Spokane County Title 3, Chapter 5, Uniform Fire Code. Revisions to these standards since 1989 created more stringent fire protection conditions. These new standards were reviewed by the WUCC and found to be consistent and no less stringent than the standards adopted in 1989 pertaining to: material specifications, construction practices, utility location, distribution facilities, metered services, fire flow requirements, etc. The contents and application of these standards were reviewed at various times within the WUCC meetings. In addition, the County Fire Marshal's office was included in the review of these standards.

Exhibit 4-2 provides a copy of the minimum water system design standards currently in effect. The WUCC noted that subsequent changes in the Safe Drinking Water Act should be tracked to determine if further changes to the CWSP standards are necessary at a future date.

The WUCC did conduct discussions regarding fire suppression systems endorsed by the water utilities. The utilities reaffirmed their commitment to provide adequate fire protection infrastructure initially in place as a life saving measure, as well as to reduce liability of the water utilities. The WUCC reiterated their preference that the following factors be key to Implementation of the standards:

- Six-inch minimum diameter or larger piping along with fire hydrants must be installed initially in areas which require fire protection.
- Fire suppression provided by adequate water flow and pressure is the ultimate fire suppression technique, regardless if temporary suppression systems are allowed as an interim measure.
- If a subdivision or development cannot be initially connected to a larger water utility and a temporary fire suppression arrangement is proposed, the fire authority, with the concurrence of the affected water utility, shall select the temporary suppression system.
- The fire flow requirement will always be identified by the County at the onset of a land use application and provided in writing to the water utility during initial discussions between the developer and the utility.
- Close coordination and communication should occur jointly between the fire authority, developer, and water utility prior to the issuance of any approval or building permit.

The WUCC also felt strongly that maintenance and testing agreements are needed between the fire authorities and the water utilities. As stated previously, this is more critical in the unincorporated areas and/or where County Fire Districts exist with dynamic boards of commissions and local fire district chiefs. Therefore, the model agreement developed in 1989 was felt to be an adequate template to delineate responsibilities between the utilities and fire authorities regarding the clearing of obstructions around fire hydrants and standardized procedures for the operation of fire hydrants. A copy of the agreement is again included as Exhibit 4-3.

4.3 Variance Process

The standards represent the minimum performance and design criteria for use by new or expanding water systems in the CWSSAs. Each water utility has the authority to require more stringent standards. The WUCC reiterated the same position as in 1989, that in some instances they should also have the authority to reduce these minimum standards for new services.

A variance process is available through the WSP for circumstances where the Minimum Design Standards create undue hardship. This consideration relates primarily to pipe size criteria in short plat or smaller sized developments. Numerous examples exist where two or three lot water systems are created. Many times these arrangements are to accommodate relatives living adjacent to each other. Technically, these are public water systems which would require 6-inch diameter pipe. The WUCC agreed that unless fire flows were required or continued subdivision of the property is to occur, the sizing of pipe could conform to DOH criteria. It is anticipated that this variance will be utilized primarily when the proximity of a smaller system will benefit from larger nearby facilities planned for future installation by the designated purveyor. In the future, when the smaller system is connected to the designated purveyor and/or fire protection services are required, the smaller piping may need to be replaced. This risk and the responsibility for replacing the substandard piping must be clearly identified for the property owners if a variance is granted.

Therefore, the CWSP allows that within service areas, the designated purveyor has the sole authority to allow the installation of facilities for remote systems which conform with DOH requirements but are less stringent than the Spokane County CWSP Minimum Design Standards. In this instance, lesser standards can only be granted to new systems with four or fewer service connections which meet DOH requirements and where fire flow is not required. The acceptance of lesser standards should be noted on the Certificate of Water Availability by the designated purveyor and the cost responsibility for future upgrades should be included in a service area contract with the applicant.

Section 5

Utility Service Review Procedure

5.0 Introduction

The Water Utility Coordinating Committee (WUCC) agreed that the Utility Service Review Procedures (USRP) established in the 1989 Coordinated Water System Plan (CWSP) Update were satisfactory and effectively applied with the exception of the designation of fire flow requirements. The WUCC and its Executive Committee met several times with representatives of the Spokane County Division of Building and Planning (SCBP) to examine and revise these procedures. As a result, the explanation within this section is similar to that for the previous CWSP. The USRP has been modified, however, to clarify that parcels already having County plating approval and are now requesting water service or formation of a new water system, are included in the USRP.

One additional modification to the USRP, in addition to the responsibilities for fire flow assignment, has been development of separate Flow Charts for “Land Use Actions and Water Service Requests” and “Commercial Building Permit”. The SCBP noted that these two categories of requests for service were distinctly different and warrant separate clarification.

Revisions to the County’s Preliminary Plat and Short Plat Applications have been modified to embody the changes referenced above and the procedures explained within this section. In addition Exhibits 5-1 and 5-2 have been developed into hand-outs to accompany application forms and graphically explain the USRP process. These procedures, developed by the WUCC, have been based on the requirements necessary to comply with the Coordination Act and the County Services Act.

5.1 Utility Service Review Procedure

The Coordination Act requires that no new public water system be established within the CWSP study area unless it is determined that existing purveyors are unable to provide the service. This section summarizes the administrative procedures, as amended by the CWSP Update, for reviewing applications for public water supply development in order to identify existing purveyors who are willing and able to extend this new water service. The procedures are to guide local officials, citizens, developers, and State and Federal regulatory agencies in identifying the necessary facilities for providing adequate water service.

The USRP applies to all proposed land use actions requiring approval by the County, including formal subdivisions, large lot divisions, short subdivisions, land

use permits and approvals, and the issuance of building permits as well as development proposals requesting water service. At the time an application is submitted for permits or approvals for land use actions, SCBP will initiate the USRP. They will coordinate the review before the issuance of any approvals. Water service requests occurring within the service area of a utility that does not have an approved individual Water System Plan or Service Area Agreement will be denied unless the request is related to a documented health problem.

The USRP also applies to parcels with previous County platting approval. In some cases, especially on old approved plats, the provision of water service may still be unclear. It is likely that the DOH or Spokane Regional Health District (SRHD) may be the point of first contact for parcel owners desiring water service. In these instances, DOH and/or SRHD will coordinate with the County to utilize the USRP procedures for referral to a designated purveyor, if one exists.

An explanation of the USRP follows:

5.1.1 Service Area Assignment

The USRP is intended to identify an existing water purveyor willing and able to provide water supply facilities and to include an applicant for new development or request for water service within its service area. In effect, the result of the USRP is to assign an applicant to the service area of a specific water utility. The service area assignment can take place as one of the following types, in order of priority:

- (1) The applicant is within the service area of a utility, and will be connected directly to the designated purveyor.
- (2) The applicant is within the service area of a utility, but a direct connection is initially not possible. Therefore, an interim remote system will be created as provided by an agreement with the designated purveyor.
- (3) The applicant is outside of approved service areas and the Spokane County Utilities Division of Utilities (SCDU) will refer the applicant requesting service to an adjacent utility, with the appropriate service area adjustments.
- (4) The applicant is outside of service areas and SCDU will refer the applicant to an approved Satellite Management Agency (SMA) for service.
- (5) If none of the above options are available, a new utility may be created, along with the necessary service area adjustments and planning requirements.

5.1.2 Land Use Proposals in Conformance with the County Comprehensive Plan

When applications occur for land use activities or requests for water service that conform with the County-wide Planning Policies established under the Growth Management Act (GMA) and the local zoning ordinance, the USRP will follow the sequential steps outlined in Exhibit 5-1 and Exhibit 5-2. Exhibit 5-1 pertains to applications for Land Use Actions and Requests for Water Service, and Exhibit 5-2 pertains to Commercial Building Permits. These procedures are described by the following:

- (1) A development application is filed with SCBP who initiates the USRP process.
- (2) The SCBP reviews the proposed water service request. Before contacting the designated purveyor, the SCBP will meet with the developer and, based on the nature of proposed activity, assign the fire flow requirement. The Application forms will have these fire flows clearly identified prior to review by the water purveyor. Fire flows must be provided to the designated purveyor before completion of the Certificate of Water Availability.
- (3) SCDU is responsible for the referral of the applicant to a designated purveyor.
- (4) When water service is requested within a water utility's service area, the utility shall specify its intent to implement one of the following options, subject to the applicant making suitable financial arrangements with the affected utility:
 - (a) The utility will provide direct service to the development by physical extension of existing mains and supply; or
 - (b) A remote water system will be installed within the utilities service area. Utilities responsible for remote systems will be required to be approved by DOH as a SMA as outlined in Section 6. Ownership or Management and Operations of new remote systems must conform with SMA regulations in WAC 246-295.
- (5) If it is determined that the water service will not be provided by an existing purveyor within its service area, or the location is not within a service area, the developer will be referred to SCDU. The SCDU will refer the applicant to existing utilities within $\frac{1}{4}$ mile of the proposed development. An adjacent utility may decide to expand its service area to serve the applicant. Appropriate modifications to the service area

maps and Water System Plan must then be completed by the utility according to the service area adjustment procedures outlined in Section 3.1.3.

- (6) If adjacent utilities decline to serve the applicant, SCDU will refer the applicant to an approved SMA, when one is available. The applicant is responsible for contacting the SMAs and negotiating conditions of service.
- (7) If no existing utility is able to provide water service in a timely and reasonable manner, the establishment of a new utility may be approved. It shall be the burden of the applicant to provide documentation, if requested by SCDU, of correspondence with existing utilities and justification for formation of the new utility.
- (8) Once the water utility to provide service has been determined, the proposed project must be reviewed with that utility to identify the engineering, financial, managerial, and other requirements for the proposed project. The water utility may require more stringent standards than the minimum standards adopted by the CWSP. Designated utilities are also allowed to provide a variance to some design standards for small remote systems, as described in Section 4. Review by the designated utilities will ensure the applicant and purveyor have discussed the requirements of both parties.

If the applicant accepts the conditions of service prescribed by the water utility, the utility shall sign a Certificate of Water Availability, prior to Spokane County's issuance of the required approval/permit. At this time, no standardized format for the Certificate of Water Availability exists and each utility may develop their own format. An example of a Certificate of Water Availability utilized by Whatcom County is included as Exhibit 5-3.

If the applicant and utility are unable to agree on conditions of service, an appeal may be filed with the designated purveyor and the WUCC Executive Committee, as described in Section 8.2. Such an appeal may be initiated by either the applicant or the utility. As reiterated in Section 8.2, issues related to conformance to the State Environmental Policy Act, GMA, County-wide regional planning policies, County and City land use plans, financing policies, and wholesale agreements are not subject to the CWSP appeals process.

- (9) After the preliminary plat or land use permits are approved, a written contract shall be developed between the utility and applicant to formalize the conditions of service and responsibilities prior to approval of final plat or building permits. In addition, the water

facilities are to be installed or bonded for completion prior to issuance of plat approval or building permits.

5.1.3 Land Use Proposals which Require Amendment of the County Comprehensive Plan

If a development proposal requires a zoning change or an amendment of the County Comprehensive Plan, the CWSP specifies that a change be evaluated in regard to its economic effect upon utility services. Each affected utility should be contacted by SCBP and allowed to comment on proposed land use changes within their service area prior to approval of that change. By identifying new or additional utility costs associated with changes in land use or zoning, these costs of development can be integrated into the decision making process. This will allow the assignment of these costs to customers benefiting from the land use change.

5.2 Special Review Considerations

5.2.1 Review of Development Applications Using Individual Wells and Service to Non-Residential Properties

The USRP is structured to give a first right of refusal to utilities in evaluating the proposed use of all individual wells for potable use before the issuance of a building permit. This will allow the utility and applicant to evaluate and discuss the benefits and costs of an immediate connection to the utility's system relative to the use of an individual well by the developer. In the event the utility and individual well proponent are unable to agree to conditions of service, then an individual well may be installed provided it meets requirements of the SRHD and other applicable standards.

Based on the Minimum Design Standards detailed in Section 4 of the CWSP Update, commercial and industrial properties represent a fire flow responsibility that may greatly exceed flows required for residential housing. The flow requirements are critical to the sizing of the storage, pumping, and piping facilities. Due to the costs associated with provision of fire flow capacities, the issuance of building permits to applicants proposing use of private wells to serve non-residential properties within designated purveyor service areas should not be approved without a written acknowledgment by the utility and a program by the developer for financing the required facilities.

Individual wells may be used only for fire protection, single industrial process use, or for private domestic use. Other usage is defined as public water supply and not allowed, except as provided by the CWSP. Interconnection between the public and private water system must also be monitored to prevent cross-connections and possible contamination.

5.2.2 Permit Issuance

The WUCC emphasized the need to improve coordination between the utilities and the review agencies prior to issuance of a building permit. Examples were cited where permits had been issued without confirmation that water facilities had been installed and were functional for the area. Implementation of the USRP by DOH, SRHD, and the County is particularly important for parcels that already have County platting approval.

5.2.3 New Small Public Water Systems - Limited

Except for certain remote locations, the establishment of new small Group B public water systems is not desirable if an existing water system is capable and willing to provide the service. The conditions of “timely and reasonable” service are subject to the appeals process established in the CWSP. Because of their size, most Group B systems are limited in the financial and managerial resources necessary for effective continuous operation. The CWSP Update, while acknowledging the existence of a number of small systems, recommends development of location maps for these systems, but does not attempt to identify service areas for these systems.

The procedures which have been developed for reviewing and approving new small water systems are incorporated into the USRP previously described in this Section. The creation of a new utility would be the last alternative.

Special consideration is required for the expansion of small systems both inside and outside service areas. These issues are addressed below:

Expansion Outside Service Areas

Expanding Group B systems located outside of service areas of existing utilities will be referred by SCDU to adjacent utilities within ¼ mile to evaluate merger options and other technical assistance. This would allow the expanding utility to discuss and evaluate utility service proposals by an adjacent system versus expansion of their system to an independent Group B status. If the decision is made to pursue expansion to a Group B status, the system must establish its service area and submit, to the County and DOH, a completed service area agreement and documentation of its plan for system development.

Expansion Within Service Areas

Expansion of an existing smaller utility located within a designated purveyor service area will not be allowed without approval by the larger utility. The CWSP places responsibility on the review agencies to recognize a specific utility's service; and, in turn, the utility is responsible for effective

management within that service area. The larger utility must provide “timely and reasonable” service through either a direct connection or Satellite Management.

Section 6

Satellite Management and Receivership

6.0 Introduction

Satellite Management and Receivership are two different management options that may be utilized separately ,or together in the case of a failing system

As noted in Section 5, Utility Service Review Procedures, whenever a new water service application is assigned to a utility and a direct connection cannot be made a “remote” system will be created. This level of service constitutes a satellite management condition which is governed by the conditions within this section. In addition, some utilities own and operate a series of water systems that are not connected and provide operation and/or ownership through satellite management.

In the event that a utility’s service area and role as a purveyor are relinquished due to receivership action taken by the state, then a new purveyor must be selected or assigned these responsibilities. These roles may be assumed by an established utility, a Satellite Management Agency (SMA), creation of a new public water system, or by the County as described below.

6.1 DOH Satellite Management Agency Requirements

Prior to 1991, the term SMA was applied loosely to those water utilities that provided service to remote systems.

In 1991, the legislature modified the Coordination Act rules to establish criteria for designating entities as approved SMAs. The current definition of a SMA is:

A person or entity that is approved by DOH to own or operate more than one public water system on an area wide-basis, without the necessity for a physical connection between such water systems.

Currently the laws and policies relating to the provision of satellite management services are embodied in legislation passed in 1995. In that year, the legislature passed Engrossed Second Substitute Senate Bill 5448 (E2SSB 5448) which required all new public water systems to be owned or managed and operated by an ‘approved’ SMA, where one was available. SMAs must meet the requirements of WAC 246-295 to become approved. SMAs which are not approved under WAC 246-295 can not be on the County “approved” list and will not be given referrals of proposed systems.

DOH currently has the following policy regarding SMA service in areas having Coordinated Water System Plans (CWSPs):

If a purveyor has claimed a future served area in a DOH approved Water System Plan (WSP) and identified that it may be served with a remote system, DOH will require that system, in their next WSP update, to include information about their SMA program that satisfies the approval criteria. If the system opts not to submit the SMA information, DOH will not approve the updated WSP until the service area to be served with remote systems is modified.

In regard to objections raised in association with service policies imposed by SMA entities, the appeals process specified in Section 8.2 will apply to resolve “timely and reasonable” disputes. In contrast, conflicts in areas not under the jurisdiction of a CWSP are resolved by court appeal.

6.2 Current SMA Status

Each County is required to maintain a current list of approved SMAs for their area. At the time of CWSP publication only the Stevens County Public Utility District (PUD) has been approved as an SMA within Spokane County. The service area approved for the PUD includes portions of northern Spokane County identified on the service area maps created by the CWSP Update.

All utilities are recommended to contact the DOH-Eastern Regional Planner to coordinate the requirements for their SMA approval. DOH has committed its staff to assist utilities interested in becoming a SMA.

6.3 Receivership of Failing Systems

RCW 43.70.195, enacted by the 1990 State Legislature, provides that whenever an action is brought by the Secretary of Health or a local health officer to place a public water system in receivership, the petition shall include the names of one or more suitable candidates for receiver who have consented to assume operation of the water system. If there is no other person or entity willing and able to be named as receiver, the court shall appoint the county in which the water system is located as receiver.

Failing systems may occur anywhere throughout the County or the CWSP study area. Therefore, it is possible to have viable utilities adjacent to or with service areas enveloping a failing system. In this event, the viable utility may be interested in expanding their service area to encompass the failing system. If a direct connection is not initially possible, then a satellite system management arrangement can occur. The CWSP is concerned that an expeditious solution be determined for failing systems. Therefore, individual water system plans are required to include, along with other DOH criteria, a statement of the utility’s policy regarding its role in assuming responsibility for any failing systems that are located within their service area.

The possibility also exists that approved SMAs may be interested in assuming responsibility for failing systems located in areas not adjacent or otherwise claimed by other purveyors. In these situations, the County may contact SMAs to establish their interest in this role. In the event no existing utility is willing to accept this responsibility, the County will be designated the purveyor for receivership. Details of the ownership, management, and financing of the water system improvements will be specified at that time.

Section 7

Regional Resource Issues

7.0 Introduction

The Coordinated Water System Plan (CWSP) encourages implementation of regional solutions to resource issues commonly shared by water utilities throughout the area. This element of the current update focused on topics of shared facilities and infrastructure, conservation activities jointly benefiting several utilities, source protection strategies, coordinated water quality monitoring activities, development of common data bases for contaminant source inventory information, and water resource protection strategies currently available to utilities. This section summarizes efforts of the CWSP in these areas.

In addition to the requirements of Chapter 39.94 RCW for completion of a CWSP, Spokane County (County) included an additional investigation of regional water resource issues within the plan to address items regarding source protection and water quality. The City of Spokane (City) and a group of purveyors, recognized as the Spokane Aquifer Joint Board (SAJB), have been working on wellhead protection efforts concurrently for the Spokane-Rathdrum Aquifer (Spokane Aquifer). Specifically, the five key issues and their objectives are as follows:

- ❑ Source Water Protection. Determine the effects to known Wellhead Protection Areas that may be influenced by subsurface runoff contributed from hillsides of the Spokane Valley.
- ❑ Water Quality Monitoring. Develop a framework and recommended approach to a Coordinated Water Quality Monitoring Plan for potable water within the Spokane Aquifer.
- ❑ Contaminant Source Inventory (CSI) Program. Recommend a planned approach for updating and maintaining a County-wide CSI Program.
- ❑ Small System Wellhead Protection Template. Develop a Small System Wellhead Protection Template to assist County water purveyors meet regulations of Washington State Department of Health (DOH) and the U.S. Environmental Protection Agency (EPA).
- ❑ Source Protection Strategies. Compile existing groundwater protection policies within the County.

The intent of the CWSP's regional source protection effort was to accomplish three goals: 1) provide a mechanism through which source protection strategies and land use activities would be formally adopted by the Board of County Commissioners; 2) help avoid duplication of effort and assure consistency in programs applying to this

Aquifer; and 3) accrue financial benefits to the participating purveyors through the economies of scale.

A summary of each issue is provided in this section. Detailed reports for each of the five key source protection tasks are provided in Appendices C-G as Technical Memorandums.

7.1 Source Water Protection

A computerized groundwater model has been developed for the Spokane Aquifer under the Wellhead Protection Programs for both the City and SAJB. The results of this model have defined wellhead protection capture zones and time-of-travel (TOT) for recharge. This locates the areas of groundwater contribution to most of the public water supply wells in the Spokane Aquifer.

A “two tiered” source water protection program was examined wherein two levels of protection could be provided across the boundaries of the Spokane Aquifer, also called its Aquifer Sensitive Area (ASA). These protection measures are explained in Appendix C. A “high” level of protection was evaluated for application to Special Protection Areas located closest to the wells. The remaining area inside the ASA would be protected by standards basically the same as existing land use standards, defined in County regulations as “Overlay Zones,” with some enhanced enforcement. However, the discussions of the SAJB and the Water Utility Coordinating Committee (WUCC) did not strongly support this idea at the present time. There was considerable discussion about how to apply public notification requirements of wellhead protection within the two tier system. The group took the fall back position of using the current TOT model delineation boundaries as the protection areas and required notification boundaries. It was decided that further work on establishing a two tier system was not warranted at this time.

The Spokane County Stormwater Utility and the Water Quality Management Program (WQMP) have additional mapping showing areas where contaminants generated on the sidehill areas will recharge groundwater in a localized area. Recently, some of the wells located near the base of the hillsides have experienced degraded water quality during the spring months. A model was used to assess the potential of spring subsurface runoff that may lead to sporadic water quality declines.

Two basins were chosen for the study partly because they represent conditions similar to those in a number of other sidehill runoff areas. Also important was the unexplained water quality conditions at nearby wells that might be clarified by the work.

The results of the model indicate that subsurface water quality could significantly influence the aquifer water quality in localized areas. Recommendations from this evaluation included:

- ❑ Develop a better understanding of the subsurface movement of water from the sidehills to the Spokane Aquifer.
- ❑ Examine additional source protection by expanding the defined wellhead protection areas onto the sidehills contributing water to the Spokane Aquifer.
- ❑ Development of an alliance between water purveyors and the Spokane County Stormwater Utility to further this issue.

7.2 Water Quality Monitoring Plan

For many years, the water quality of the Spokane Aquifer has been monitored by two entities. Samples have been collected by the Spokane County WQMP, and by the water purveyors delivering water from the Spokane Aquifer. By coordinating the sampling of these two entities, it was envisioned that a cooperative, regional aquifer monitoring program could be developed. Preferably, the costs of routine water quality monitoring requirements placed on purveyors by DOH could be combined to provide a source of funding for a broader program. The broader program would provide extra benefits in two areas. The community at large would benefit by providing data for evaluating trends in aquifer quality and assessing the effectiveness of aquifer protection measures. The purveyors would benefit by having information more accessible to them from existing sentinel wells located throughout the Spokane Aquifer.

Discussions with DOH have been initiated to develop this unique program. Although certain details have yet to be finalized with DOH, an agreed framework for the pilot program has been established between WQMP and water purveyors. Preliminary budget estimates for conducting this program may require approximately \$25,000-30,000 per year to conduct the program if all purveyors are participating. This equates to approximately \$50 per well each year of participating utilities. Funding approaches were examined to ensure the utilities initially would be paying no more annually for monitoring than their current obligation. Funding levels should decrease proportionately as additional systems participate.

After much discussion with the utilities, it was decided to retain the intent of achieving economies of scale for monitoring activities, but to not request any revisions from DOH for water quality monitoring requirements. As a result, it was decided to enter into Memorandums of Understanding with utilities that wanted the County to negotiate a group laboratory service fee. Lab results will still be reported directly to the purveyor and DOH. However, the results are also provided to the County who provides a summary of data for participating purveyors as well as results from wells sampled by the County. Information available from the County should aid participating purveyors in preparation of their annual Consumer Confidence Report required by the Safe Drinking Water Act.

A two-year pilot program has begun with partial funding from EPA grant monies devoted to water quality issues for the Spokane Aquifer. A long-term funding program will need to be examined during the pilot program, based on the success of the program and participation by purveyors.

The essence of the monitoring program as outlined in Appendix D recommends:

- Develop a two-year pilot program.
- Providing monitoring for water supply wells operated in the Spokane-Rathdrum Aquifer by participating public water suppliers.
- Testing of public system wells will be for volatile organic compounds and inorganics on a schedule consistent with DOH requirements.
- Selecting 10-15 “sentinel” wells for quarterly testing that include some private wells.
- Sample quarterly from 24 dedicated monitoring well locations.
- Utilize EPA funding for the pilot program and develop a long-term source of funding.

7.3 Contaminant Source Inventory Program

Spokane County has had a CSI Program for several years. Much of the information used as a starting point for the City of Spokane and SAJB programs is based on County data. The City and County currently have a hard-wire connection between their Geographic Information Systems (GIS). The CSI database managers for both programs work together consistently and frequently transfer information. Currently, Spokane County has a contract with Panhandle Health District under which they are importing Idaho CSI data.

For a number of years, the County has been struggling to develop and maintain an up-to-date listing of potential contaminant sources. Potential contaminant sources are those commercial or residential activities which may pose a threat to aquifer degradation and the drinking water. The purpose of this task was to investigate the feasibility of establishing a regional program that could combine purveyor efforts and save time and money in developing updates to their Wellhead Protection Plans. The task was not to develop a program through which the County would take over the purveyors responsibility of establishing and maintaining a CSI for wellhead protection.

The framework for a Spokane County Division of Utilities (SCDU) directed pilot program is described in Appendix E. In addition, a \$30,000 annual grant (for three years) from DOH was evaluated to support the development of this program. Discussions held by the SAJB and WUCC indicated that the purveyors do not currently have funding available to participate in a joint program. If DOH grant

funding is not available, there will be no formal “joint” program. In the absence of DOH support, the County will use available local and EPA funding to complete a “snapshot” CSI database for the region. This database will include all of the information developed for the first round of Wellhead Protection Program notification by the City and the SAJB. It will also include the data from Idaho adapted to the local format. The compatibility of the Idaho data with the local data may be limited by the extent of comparability in the data collected in the two regions. The information included in these databases would be made available to the purveyors who requested it free of charge on a one-time basis.

Extension of the program beyond a three-year grant supported pilot program will depend on the level of value in the program perceived by the purveyors. If purveyors do not perceive adequate value to support the program, they will be given CSI reports based on the latest available information and the regional system will go dormant.

7.4 Small System Wellhead Protection Template

To assist the smaller public water supply systems meet the requirements of wellhead protection, SCDU requested the development of “Small System Wellhead Protection Template.” This generic template, provided as a workbook and diskette, was developed to provide guidance and consistency of source groundwater protection programs throughout Spokane County. An invitation to all small water system purveyors within Spokane County to attend a one-day workshop was provided. This workshop was conducted in June 1998. A copy of the Template is available for small systems from SCDU. The Template is included herein by reference as Appendix F.

7.5 Protection Policies and Strategies

The purpose of this task was to compile existing source protection recommendations and policies developed by the City and SAJB Wellhead Protection Programs, and to incorporate appropriate policies into the programs of the County through adoption of the CWSP. The original work plan anticipated that a set of recommendations for wellhead protection would be available from on-going work conducted for the Spokane Aquifer by the SAJB and the City of Spokane.

Unfortunately, development of these policies by the City and SAJB did not proceed in time to fully accomplish this goal. A Wellhead Protection Citizens Committee has been recently formed to review and provide input on proposed policies. The committee is using information collected from this task to develop their list of recommended protection policies. However, their recommendations were not available at the time of final CWSP preparation

Therefore, the approach of this task was limited to obtaining and compiling existing drinking water (source) protection measures and programs that have been created within the County. Every jurisdiction (city) within Spokane County and the County itself was interviewed for available information. The existing policies that were discovered included:

City of Spokane	Critical Area Report/1994
Spokane County	“208” WQMP Developed/1979
Spokane County	Sole Source Aquifer Designation/1979
Spokane County	Aquifer Sensitive Overlay Zone/1983
Spokane County	Groundwater Management Areas/Various Locations
Spokane County	Septic Tank Elimination Program (STEP)
Spokane County	Critical Aquifer Recharge Areas – GMA/1998
Spokane Aquifer Joint Board	Policy Development Under Advisement/1998-9

Appendix G provides a Technical Memorandum summarizing the recommended policies and procedures that have resulted from the various resource planning program[s] in the County. The goal of this task was to incorporate policies and regulations for wellhead protection into local ordinances. Therefore, the scope of this work was limited to local regulations and policies, because these are the areas over which local legislative bodies have authority. Commissioners and City Councils must abide by State and federal rules but cannot invoke any less stringent standards.

7.6 Interties and Joint Reservoirs

Interties between adjacent utilities are promoted for service either on an emergency or sustained wholesale basis. Utilities participating in the CWSP process were contacted to identify and update their existing interties. Table 7-1 provides a listing indicating that there are currently over 35 interties between utilities within the study area. Table 7-1 indicates the location of the interties, the status of metering, the purpose for the intertie, and designates which of these interties are new since the 1989 Update. It should be noted that there has been almost a 75 percent increase in the number of interties since the 20 recorded in 1989. As in 1982 and 1989, it is recommended that all utilities review their water rights and ensure that existing records reflect a point of use beyond their boundary if they have interties with adjacent utilities.

Construction of reservoirs shared by adjacent utilities has been recommended in all prior CWSPs and, again, in this CWSP Update. As previously elaborated, the successful utilization of shared reservoirs and interties is primarily dependent upon the hydraulic capability of adjacent utilities. The hydraulic capability is largely controlled by reservoir overflow elevations. Therefore, it would be beneficial to standardize reservoir overflow elevations among utilities within defined elevation

ranges. Tables 7-2 through 7-5 were developed to identify their respective overflow elevations and coordinate hydraulic capability for utilization of joint reservoirs. The CWSP encourages continued efforts to develop joint reservoir facilities between adjacent utilities.

7.7 Water Conservation

7.7.1 Introduction

Water conservation can fulfill a variety of differing objectives. Due to the variety of conservation tools now available, conservation can offer a variety of different benefits to utilities and their customers. This is important because the design of conservation programming needs to be carefully matched to the objectives of the utility, so the desired benefits can be achieved.

Some of the objectives that might be achieved from the wise use of water through water conservation are:

- **Manage the Scale and Timing of New Supply and Treatment**

In recent years, it has become increasingly difficult to develop new sources of water supply throughout the west. This trend is likely to continue as growth increases the need for water while at the same time environmental and water quality requirements grow more stringent. Utilities across the nation have found that conservation programming can reduce, or delay, the need for new sources of supply, while increasing public support for new sources of supply if and when they are needed. At the same time, increased regulatory requirements for water treatment have driven up the cost of supplying potable water. By reducing water needed, conservation can also lower the cost of water treatment.

- **Reduce Utility Operating Expenses**

Reducing water consumption and system losses allows a corresponding reduction in chemical usage and energy consumption. This can lead to considerable savings in utility operating expenses. In addition, a comprehensive leak detection and repair program can reduce expenditures on emergency repairs.

- **Reduce or Delay Investments in Wastewater Capacity**

Given the connection between water consumption and wastewater flows, conservation also offers a means to reduce demand on wastewater collection and treatment systems. This in turn can reduce or delay capital expenditures on wastewater collection and treatment capacity.

- Minimize Impacts on Natural Resources

By reducing the amount of water diverted from streams or pumped from aquifers that recharge rivers and wetlands, conservation provides a tool for utilities and their customers to minimize their impacts on the natural environment.

- Conservation as an Ethic

Citizens and public officials acknowledging water as a scarce resource can manage its use efficiently to ensure its continued availability. In this case, conservation may be implemented even though it is not the most cost-effective alternative to other supply development options.

- Giving Customers Tools for Managing Expenditures

The rising costs of water supply and treatment, as well as wastewater treatment, are usually passed on directly to customers in the form of monthly rates. In addition, energy expended on heating water can add up to a significant fraction of the total cost of water use. Conservation techniques can provide tools for managing expenditures. Providing information and conservation devices to allow customers to control their water use can offer significant improvements to reduce personal utility rates.

- Regulatory Compliance

DOH now requires utilities to evaluate a range of conservation options in preparing water system plans. The Department of Ecology (Ecology) requires implementation of conservation measures found to be cost-effective, as a condition on granting new water rights to public water suppliers.

7.7.2 Conservation Packages

The term “conservation” embraces a range of programs of both supply and demand management. Supply elements are often forgotten in discussions of conservation efforts, yet can be implemented readily and may be among the most cost effective tools available for managing water use. Supply management options include, but are not limited to:

- Leak detection and repair
- Main replacement
- Corrosion prevention
- Management of hydrant flushing

- Meter repair, replacement, and calibration

Demand management programs can involve customers in a variety of ways. These techniques can range from supplying information and advice, offering financial incentives for installing water-saving equipment, developing rate structures that build in an economic incentive to reduce consumption, or imposing regulatory requirements on plumbing fixtures, landscaping, or water use. In addition, demand management programs can be designed to reduce base water use, peak use, or both. Some common demand management elements include:

- Broadly packaged information and outreach (e.g., Advertising, billing inserts)
- Narrowly targeted information and outreach (e.g., Free water-use audits for businesses or homeowners)
- Improved metering
- Hardware retrofit programs
- Hardware rebate programs
- Conservation rates
- Landscaping ordinances
- Seasonal outdoor use restrictions
- Recycling or re-use programs

7.7.3 Costs of Conservation

The exact package of supply and demand management measures that is most cost-effective in achieving overall objectives will vary considerably from one utility to another. Table 7-6 provides examples of various residential conservation equipment, their average water savings, their useful life, and a comparison of costs of different devices. Since conservation programs may involve both up-front expenditures and continuing investments over time, it is valuable to develop levelized costs that provide equivalent comparisons. In addition, it is important to consider not only the costs and savings to the utility, but that experienced by the customer as well.

While performing an analysis of expected costs and benefits is important to conservation planning, it should be recognized that in many cases, water savings cannot be projected with precision. Therefore, decisions on conservation programming require careful consideration of the importance of other factors besides cost-effectiveness. For example, as a matter of policy the utility may decide to promote conservation in order to respond to community desires or offer increased protection to an environmental resource. In addition, it is important to consider the impact on a variety of customer classes and income groups in designing a complete conservation package. Finally, utilities contemplating conservation programming need to

fully analyze the revenue implications of reduced water usage. These revenue implications need to be assessed in terms of wastewater system needs as well.

7.7.4 Guidelines, Requirements, and Recommendations

The State of Washington, through DOH and Ecology, has developed policies on water conservation planning. A water conservation plan is required in order to gain approval of water system plans and new water rights. DOH has a publication entitled Conservation Planning Requirements that lays out expectations for water use data collection/reporting, demand forecasting, and conservation programming which are reviewed by both DOH and Ecology.

The State guidelines recognize explicitly the importance of selecting conservation measures on the basis of cost-effectiveness. The guidelines are broken down with differing levels of planning required depending on the size of the utility. Table 7-7 shows the types of conservation measures recommended for different sizes of utilities. Table 7-8 presents a three-tier approach of increasing effectiveness and aggressive conservation measures for various classes of water users.

The CWSP recommends that WUCC members initiate conservation efforts that can be jointly implemented by several utilities and achieve cost savings through combined purchasing. Specific recommendations are for joint contracting of leakage detection analysis and the procurement of public education material. The DOH and American Water Works Association (AWWA) are sources of literature and material, which could be tailored for the Spokane area. This material can also be customized to acknowledge the WUCC organization or specific utilities on brochures and other literature.

Section 8

Plan Implementation

8.0 Introduction

The Coordinated Water System Plan (CWSP) Update was prepared to fulfill the requirements of the Public Water System Coordination Act, Chapter 70.116 RCW, and the County Services Act, Chapter 36.94 RCW. The completed Plan will serve as a CWSP and a Water General Plan, as provided for in the two statutes. This Section briefly outlines the approval process for the CWSP, a process of appealing CWSP procedures, how the CWSP is routinely updated, and provides the environmental review.

8.1 Plan Approval Procedures

As outlined in Section 2, the completed CWSP is presented in two parts: the Supplemental Provisions detailed in this document, and a compilation of individual Water System Plans (WSPs) to be approved by the Department of Health (DOH). Completed plans are on file with DOH and the County. It is the responsibility of each utility to fulfill its water system planning requirements. The level of effort required is based upon the system size, the expansion plans of the utility, and the type of system ownership. Guidelines for preparing water system plans are available from DOH. All individual WSPs are to be submitted and approved on a schedule coordinated with DOH.

Preparation of the supplemental provisions is the responsibility of the County and the local utilities, acting through the Water Utility Coordinating Committee (WUCC). The WUCC identified local needs and gave direction to the development of the CWSP as it related to area-wide issues. Through the efforts of the WUCC and the County agency staff, the procedures, regional policies, and minimum standards have been reviewed and revised accordingly for the combined Critical Water Supply Service Area (CWSSA).

Once approved by the WUCC, the completed CWSP is submitted to the County Commissioners to ensure there are no inconsistencies with existing land use plans or policies. The Commissioners have 60 days upon receipt of the CWSP to hold public meetings and act on the document. Once reviewed, the CWSP is submitted to DOH, which must act upon adoption within 60 days.

Approval of a Water General Plan requires that a County Services Act Review Committee consider this plan and submit their recommendations to the County Commissioners for consideration. The Water General Plan is then submitted to the

County Planning Commission for their review and incorporation into the Comprehensive Plan. Membership on this Review Committee is specified by the County Services Act.

Once assured that the local preparation and review procedures of the Act have been followed, DOH will be able to approve the document as a CWSP. It should be emphasized that DOH may approve portions of the CWSP found to be consistent with adopted plans and policies in effect at the time of their review. This will enable approval of the CWSP Regional Supplement and those completed individual WSPs. As specified in Section 2, requests for system expansion will be denied for those water utilities that have not completed their planning or service area requirements.

By reference herein, any changes requested to individual WSPs or service area boundaries prior to the next update of the CWSP can follow the administrative change procedures specified in the CWSP without additional formal action by the Board of County Commissioners.

8.2 Appeals Process

The appeals process in the prior CWSP has been clarified and revised in this Update. The process developed in the 1999 CWSP has been coordinated with the DOH draft guidelines and is discussed below and illustrated in Exhibit 8-1.

It may be expected that issues of protest or interpretation regarding requirements of the “timely and reasonable” provision of service by a water system or other requirements of the CWSP may be raised by either an applicant or a utility.

As discussed in Section 2, the 1995 Legislature enacted E2SSB 5448. Sections of this bill pertain to the criteria for “timely and reasonable” service. One of the major changes in law defines “timely” service as 120 days, unless specified otherwise by local government. DOH is developing guidelines to assist local governments with this interpretation regarding what issues trigger the appeal process, when the 120 day period begins, and procedures of an appeals process.

A draft of the DOH guidelines, available at the time of this CWSP Update, confirms that only water service issues relating to new requests for retail water service are subject to appeal under the “timely and reasonable” criteria. Issues related to conformance with the State Environmental Policy Act (SEPA), the Growth Management Act, any County-wide regional planning policies, County and City land use plans, financing policies, and wholesale agreements are not subject to the CWSP appeals process.

Until further guidance is provided by DOH regarding “timely” criteria, the CWSP specifies that timely service is unavailable if:

- ❑ The purveyor states in writing that it is unable or unwilling to provide service; or
- ❑ The purveyor and applicant are unable to negotiate an agreement on the schedule and terms of providing service within 120 days.

The 120-day period commences at the first meeting between the purveyor and the applicant pursuant to the USRP process described in Section 5. At the conclusion of this negotiation period, agreement to the satisfaction of both parties must be reached with written confirmation.

If an appeal exists, it will likely occur during the 120-day negotiation period. Therefore, the CWSP's 45-day local "Appeals" procedure, discussed below, will extend the 120-day period by a length of time equal to the time required to resolve the appeal.

8.2.1 Issues Subject to Appeal and Review

Only water service related issues are subject to appeal and review under this process. In most instances such issues will be identified when the applicant requests the Certificate of Water Service Availability from the water utility. Issues subject to review include, but are not necessarily limited to, the following:

- Interpretation and application of water utility service area boundaries.
- Proposed schedule for providing service.
- Conditions of service, excluding published rates and fees.
- Annexation provisions imposed as a condition of service; provided, however, existing authorities of City government are not altered by the CWSP, except where a Service Area Agreement exists between a City and the County or as are specifically authorized by Chapter 70.116 RCW.
- Standards more stringent than the minimum design standards specified in Section 4.

8.2.2 Initiating Appeal

The applicant and utility should exhaust all local utility appeals procedures before pursuing the CWSP Appeals Process. If the applicant and utility are unable to agree on conditions of service, a written appeal may be made to the Spokane County Division of Utilities (SCDU) by either party for review of the issues.

8.2.3 WUCC Executive Committee

SCDU will initiate this appeals review by sending a copy of the appeal to the WUCC Executive Committee. The Executive Committee, as identified in Table 2-1, is composed of the WUCC Chair and four regional members, or their designated representatives, from each of the four original CWSSAs. This membership will be renewed or revised annually. Legal advice will be provided by the County Prosecutor as needed by the Executive Committee. In addition, further development of “Timely and Reasonable” criteria by DOH will be available for guidance in resolving appeals.

The Executive Committee will establish a process for review which achieves the following objectives:

- Determines if the dispute is an appealable issue.
- Provides a forum for negotiation of the issues between the parties.
- Facilitates the negotiations.
- Identifies and evaluates the facts associated with the issues.
- Within 45 days of receipt by SCDU of the appeal, provides a written report which states the conditions of the agreement reached by the parties, or where no agreement was reached, a statement of findings and recommendations for disposition of the issues.

An appeal of the determination rendered by the WUCC Executive Committee can be made to the Superior Court.

8.2.4 Superior Court

After the required 45-day waiting period or upon receipt of a report of findings and recommendations regarding unresolved appeals from the Executive Committee, SCDU will forward any unresolved appeal to the Superior Court for a final determination.

8.3 Coordinated Water System Plan Update

The CWSP no longer requires an update every five (5) years. Rather, periodic updates may be initiated, as required, at the direction of the Board of County Commissioners or DOH. In accordance with Chapter 70.116.060(8) RCW, if DOH initiates an update or revision of the CWSP, the State shall pay for the cost of updating or revising the plan.

8.4 Periodic Committee Review

The WUCC Executive Committee will continue as a standing committee which should meet at least semi-annually to review issues of regional significance and to review implementation issues regarding the CWSP. The Executive Committee may also meet, as required, for issues regarding appeals or design standards. The Executive Committee is charged with convening the full WUCC membership for significant issues other than the CWSP update.

8.5 CWSP Funding

Historically, funding for the preparation and implementation of the CWSP has come from a combination of County funds, in-kind County staff labor, and partial grant monies from DOH. Inherent in these efforts is SCDU's role as the lead on regional water resource and management issues. Although the past CWSP documents have also been adopted as a Water General Plan, Spokane County has not owned or operated potable water systems. It is unknown if the County will ever enter the water business unless they are mandated by RCW 43.70.195 RCW to become the receiver of a failing system.

County funds available for CWSP involvement have come from a combination of revenue sources related to other non-water supply activities. In light of the uncertain future of grant funding or County monies available for the CWSP, SCDU is interested in developing a cost sharing program with the utilities to fund future CWSP activities on a "cost of service" basis. This philosophy will involve the creation of new charges tied to services provided by the County.

An implementation fee schedule is shown in Table 8-1 based on a six-year operating budget prepared by County staff to estimate the level of effort and expense incurred by SCDU in support of the CWSP. This work primarily included the performance of several administrative functions. The premise utilized in the formulation of this Table was that it is fair and reasonable for the party(ies) requesting the action(s) to pay a fee incurred by the service.

In the category of individual WSP review, SCDU staff has estimated that an average of 3.5 hours of staff time is needed for review. This will generate a fee of \$105 to the submitting purveyor. This would be a flat fee charged each time a purveyor updates their individual WSP. SCDU staff estimates that the time spent reviewing any individual WSP will be approximately the same regardless of the size of the water system. The review of minor amendments to an existing, approved WSP shall be charged as time and materials expended by SCDU.

Service area changes, receiverships and appeals shall be billed to the party(ies) requesting the action(s), based on the time and materials expended by SCDU. For example, a purveyor requesting a Service Area change that expands their boundary into an unclaimed area will bear the cost of the action. Conversely, two purveyors making an adjustment to a common boundary will share in the cost. Also note that a water purveyor may not be the entity initiating a given action. In the case of an appeal, as another example, a developer may be the party requesting the appeal through SCDU, not a purveyor. In this example, the developer would be responsible for the costs.

The WUCC believes that water purveyors should not bear the cost for SCDU participation in the Utility Service Review Procedures. Since developers request action in this category, the WUCC suggests that the fees be charged to them. SCDU staff estimates that an average of 20 minutes is spent on review of each application for a proposed fee of \$10. SCDU currently charges a fee for the review of Land Use Actions, according to Sanitary Sewer Ordinance No. 96-0752, and will conduct an analysis to determine whether the existing review fees should be increased to include Water Resource Planning. There is currently no fee in place for the review of Non-residential Building Permits. The analysis should also include investigation of the need for a fee associated with this process.

The final category in Table 8-1 is the CWSP Update. As explained in Section 8.3, the CWSP is no longer required to be updated on a five-year cycle. As further discussed in Section 8.3, only DOH or Spokane County can initiate a CWSP update. However, the WUCC may request the County to initiate an update. In this situation, the WUCC will be expected to fund all, or a proportional share of, the cost incurred in a CWSP update or amendment. A fee structure that includes a flat fee plus a charge per service connection for all participating purveyors was discussed by the WUCC. The details of a CWSP update fee structure will need to be worked out by the WUCC in the future, if needed.

Utilization of the implementation fees presented in this Section shall commence upon final approval of the CWSP Update. SCDU and the WUCC will review these fees on an annual basis to verify that fees equitably reimburse SCDU for CWSP related activities. Further, increases in the costs per hour for SCDU time and materials should also be considered and fees adjusted accordingly.

Table 8-1
Spokane County Coordinated Water System Plan Update
Implementation Fee Schedule

Category	Fee/Action*
Water System Plan Review (3.5 Hr @ \$30)	\$105
Water System Plan Update	
Map Review	
Service Area Agreement Tracking	
Satellite Management Agency Tracking	
County Distribution	
Department of Health Correspondence	
Service Area Change	Time & Material
Receivership	Time & Material
Appeals	Time & Material
Utility Service Review Procedures Review (.33 Hr @ \$30)	\$10
Coordinated Water System Plan Update	Time & Material**

*Notes: * Fees will be allocated based upon party(ies) initiating the action(s).
** Consultant services may be used plus SCDU in-kind services.*

8.6 County Services Act Review Committee

The CWSP will also qualify as a Water General Plan under the County Services Act, RCW 36.94. In accordance with the County Services Act, a review committee must consider this plan and submit a report to the Board of County Commissioners with a recommendation for action. Membership on this committee is specified by the County Services Act. The review requirements for the CWSP are likewise spelled out in the Act. Membership on this committee is identified in Table 8-2.

Table 8-2
County Services Act
Water General Plan Review Committee (RCW 36.94.50)

Category	Subcommittee Membership	Representing
Each City > 10,000 Population	1	City of Spokane
All Other Cities or Towns	1	City of Millwood
Water Utilities > 1,000 Services	16	Various Utilities
All Other Water Utilities, Municipalities	1	Pleasant Prairie Water Users
County Commissioner	1	Spokane County
Total	20	

8.7 Environmental Document

The State Environmental Policy Act (SEPA) of 1971, Chapter 43.21C RCW, requires that all WSPs prepared must be accompanied by an appropriate environmental document. A SEPA Checklist has been prepared for the Spokane County CWSP and its recommended activities. This Checklist is included as Appendix H.

The CWSP Update has been prepared to establish administrative, management, and policy procedures to respond to the needs of existing and future customers in Spokane County. It is intended to address regional concerns within the County which are not ordinarily included in each utility's water system plan. Examples of those regional issues are: potential shared facilities, regional sources of supply, procedures for reviewing and approving future water use activities, minimum design standards, designated water utility service areas, and water utility management policies.

The CWSP contents are referenced in the Checklist. It is anticipated that both negative and positive impacts will occur to earth, water, land use, population, public services, and utilities as a result of implementing the individual water system plans. The CWSP Update has been developed in accordance with the previous Spokane County CWSP, the Growth Management Act, County-wide Planning Policies, and County land use documents to reflect local land use policies and requirements. Therefore, implementation of this Plan and the employment of sound engineering and construction practices during the implementation of each utility's WSP will minimize any adverse impacts.

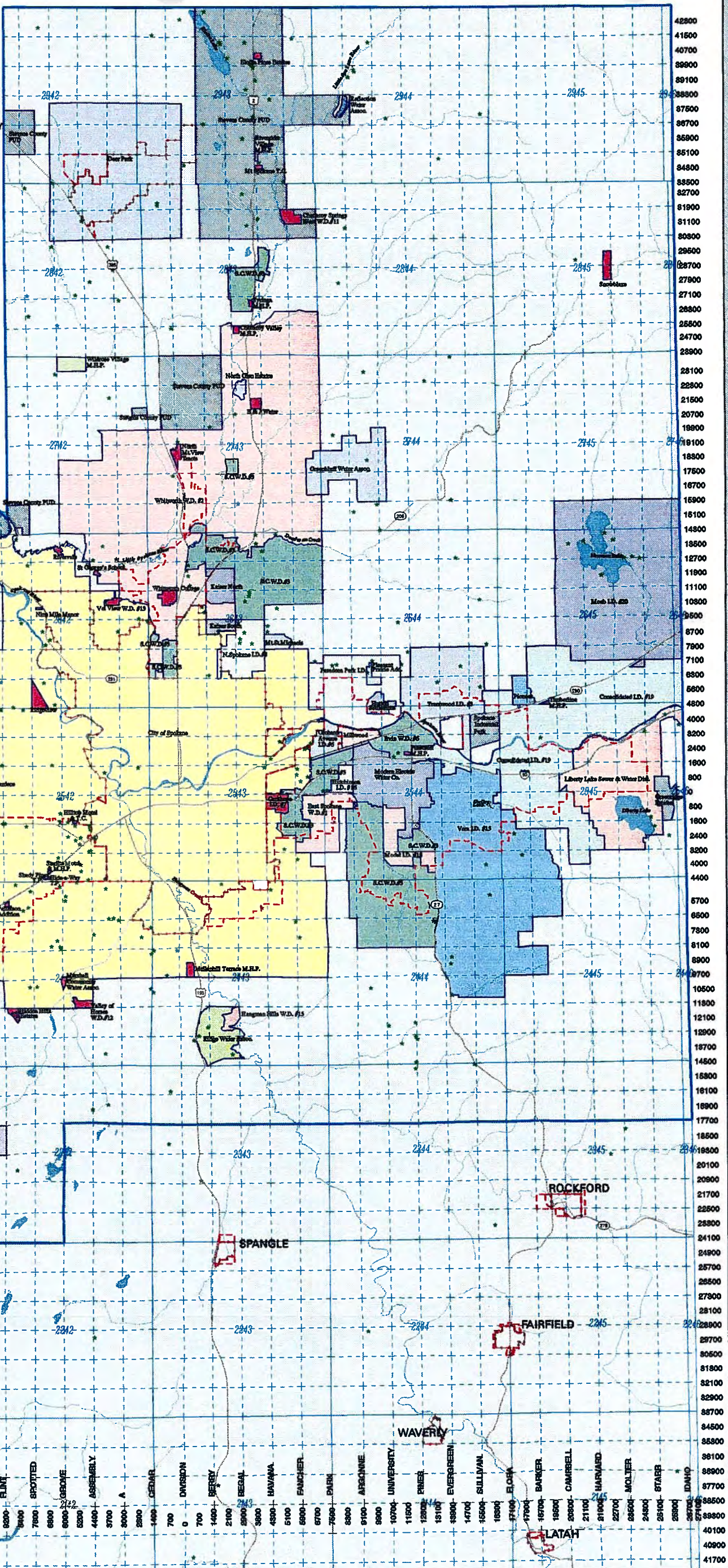
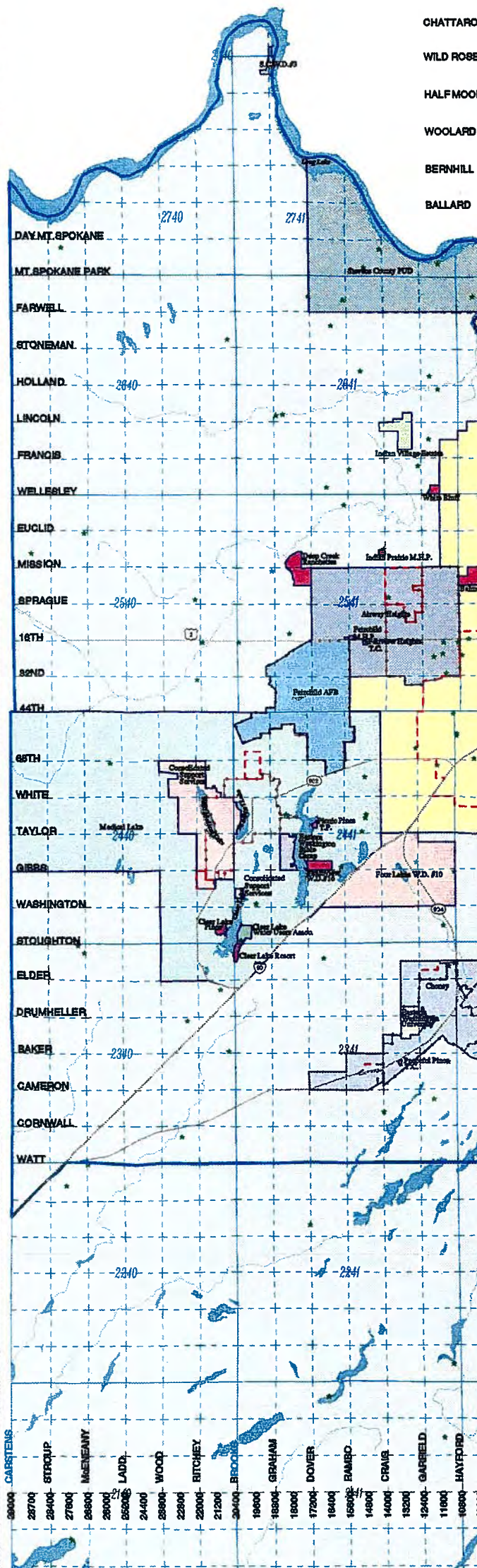
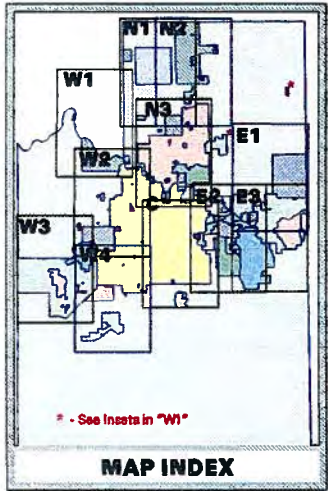
Before the CWSP has been accepted by the County, a final environmental determination will be made. This final determination will be included in Appendix H.



Appendix A

Service Area Maps, GIS Digital Data, and Service Area Agreements

(On file at the Spokane County Division of Utilities)



LEGEND

- Water District Boundaries
- - - Municipal Boundaries
- - - Interim Urban Growth Area Bndy
- - - Critical Water Supply Service Area
- - - Township Boundaries
- - - Section Lines
- * Group B Systems (Approx. loc.)

M.H.P. = Mobile Home Park
 T.P. = Trailer Park
 T.C. = Trailer Court
 W.D. = Water District
 I.D. = Irrigation District
 S.C. = Spokane County
 PUD = Public Utility District

SPOKANE COUNTY
Coordinated Water System Plan
GROUP B SYSTEMS

Spokane County Public Works, Division of Utilities
 Product of the Spokane County Geographic Information System
 Printed: July 19, 1999

Notes: Service Area Boundaries are valid when a current, signed Service Area Agreement is on file with Spokane County Public Works, Division of Utilities. The information shown on this map is compiled from data maintained by Spokane County Public Works, Division of Utilities.

Source Water Protection – Spokane Aquifer

TO: Stan Miller/Spokane County
Gene Repp/Spokane County

FROM: Brad Phelps/CH2M HILL

DATE: June 11, 1998

Introduction

For the purposes of this memo “source water” is water that originates as precipitation outside the Aquifer Recharge Area but flows into the Spokane Valley – Rathdrum Prairie Aquifer either via the subsurface or as infiltration to ground water through sumps at the edge of the saturated zone. The Aquifer Recharge Area is defined in the “sole source” designation of the Spokane Valley--Rathdrum Prairie Aquifer as the land surface area which has a boundary defined by the edge of the saturated zone.

Over the past four years, the City of Spokane and Spokane Aquifer Joint Board have conducted field investigations and technical evaluations to determine physical characteristics of the Spokane Aquifer in support of wellhead protection planning. The purpose of these investigations were to provide information in support of developing a steady state computer simulation model of the aquifer. The model was then used to determine capture areas for the water purveyors potable water supply wells within the Spokane Aquifer. These capture zones provided an indication of the areas of aquifer that supply water to each well.

The distinct time of year that was chosen for delineation of the capture zones was the Fall season. The field conditions that exist for this Fall season include a high level of pumping withdrawal from the aquifer by water purveyors with minimal inflow to the aquifer from surface or sidehill runoff.

During the past few years, certain water purveyors production wells located near boundaries of the aquifer were discovered to exhibit elevated levels of nitrates during the spring. Investigations as to the source of nitrates has been conducted without success of determining the source of contamination. As a result, CH2M HILL was requested to evaluate (using the computer model) seasonal changes in aquifer movement, especially during the spring runoff period.

Purpose

The purpose of this task is to adjust the scale of the delineation model inputs to a high enough resolution that the capture zone delineated for selected wells located near the edge of the aquifer will reflect the potential impact of recharge from the adjacent hillsides. Inputs for time, runoff flow and geographic scale will be adjusted for aquifer sub-basins near and up-gradient from the subject wells. Values for sub-basin flow rate and runoff period, based

on recent research work, will be routed into the specific model elements in which the recharge is known to flow.

The results obtained by modeling capture zones for selected wells will provide the basis for making generalizations about the impact of sidehill runoff on nearby wells. If there appears to be potential negative impacts, these can be handled by one of two methods. First, purveyors could chose the conservative approach and include sidehill basins in the appropriate capture zones. Or, second, they could call for additional flow and recharge data to be collected from sub-basins and the capture zones of well of concern recalculated. If the results show little or no effect of sub-basin recharge or capture zone shape – as the current model suggests – no further action would need to be taken.

Evaluation – Chester Creek

Spokane County Water District No. 3 and Model Irrigation District wells located in the Chester area of the Spokane Aquifer have exhibited elevated nitrate levels in the drinking water supply during the springtime over the past few years. Sources of potential nitrate contributions within this area include septic tanks, farming practices, animal holding areas, Chester Creek, and others.

CH2M HILL utilized the steady state aquifer model to evaluate the potential of runoff entering the aquifer from the end point of Chester Creek between 24th and 40th Avenues. In addition, the model was further used to determine time of travel from the creek to water supply wells.

To develop inflow conditions from the creek, an estimated 206 cubic feet per second (cfs) was allowed to infiltrate into the aquifer at two locations. The value of 206 cfs has been documented as the 2-year return flow in Chester Creek at Shafer Road using the HPSF model developed by CH2M HILL for Spokane County as part of the Chester Creek Basin Stormwater Plan. This is equivalent to applying the average annual flow developed for Aquifer modeling to a one month period. It is further known that all of this flow infiltrates to the ground somewhere in the creek channel upstream of 24th Avenue. Therefore, the infiltration was split into two distinct reaches of the creek channel. The first area of significant infiltration (103 cfs) was assumed to occur where 40th Avenue intersects the creek. The remaining 103 cfs was allowed to infiltrate at 28th Avenue. Further model conditions included WD#3 20th & Balfour well pumping at 1250 gallons per minute (gpm) but the Model Irrigation District wells were not pumped during the simulation.

The model results are displayed in Figure 1. This figure displays the capture zone of the 20th & Balfour well turning to the south. This compares to the Fall condition, where the capture zone is directed nearly due east.

The capture zone displayed for the 20th & Balfour well in Figure 1 is a one-month time of travel. Subjective evaluations indicate that even if 20th and Balfour was not pumping during this runoff period, the water infiltrated from Chester Creek would only increase the travel time by one additional month due to the “mounding” of groundwater caused by the infiltration.

Therefore the model does provide evidence that water infiltrating from Chester Creek near Shafer Road area could travel to the water supply wells nearby. There is a high density of on site sewage disposal systems in the area lower Chester Creek drainage. It is possible that the increased recharge from Chester Creek in the spring mobilizes accumulated nitrate-N and carries it to nearby wells.

Evaluation – South Hill Subsurface Runoff

The City of Spokane's Ray Street Well has also exhibited elevated nitrates in past years. Although a monitoring well located at 4th and Havana (within the defined capture zone for this well) has not exhibited elevated nitrate levels. Sources of potential nitrate contributions within this area include septic tanks (located on the valley floor and along the sidehills), farming practices, animal holding areas, shallow subsurface runoff, and others.

As with the Chester Creek evaluation, CH2M HILL utilized the steady state aquifer model to evaluate the potential of subsurface runoff entering the aquifer from the Eastern South Hill area (Carnahan drainage and the Freya Street drainage).

Currently there is very little information as to the amount of subsurface runoff that may be occurring in these areas. Although, the majority of the South Hill is comprised of shallow basalt formation which would prevent deep percolation from occurring, hence the estimation that runoff in these drainage areas probably occurs as shallow subsurface flow to the aquifer.

To develop an estimation of the subsurface flow rate we estimated 30 cfs drainage from the Freya Street drainage area, and 114 cfs drainage from the Carnahan drainage. These flows were derived by applying the average annual flow assigned to the basin for modeling purposes to a more likely runoff period of 2 months. These values are undocumented flows but were considered a more valid representation of flow for this analysis.

Further model conditions included Ray Street well pumping at 575 gpm; the Carnhope well was off during the simulation.

The model results are displayed in Figure 2. This figure displays the capture zone of the Ray Street well toward the southeast. As compared to the Fall condition, where the capture zone is directed nearly due east.

The capture zone displayed for the Ray Street well in Figure 2 displays a three month time of travel.

Historic water quality data for the Ray Street well shows spring season increases in nitrate-N. Data from the upgradient sentinel wells at 3rd and Havana, located in the Ray Street capture zone, does not show the same variation in nitrate. As displayed in the Figure, the flow component of the subsurface runoff from the South Hill could be the potential source of nitrate in the well.

Summary

Based on the modeling results provided under this task, it appears that point source runoff (either surface or shallow subsurface) can significantly influence the capture zones of production wells (either operating or non-operating) located near the aquifer boundary. It is recommended that the Spokane Area Wellhead Protection Programs become advised of

this condition and determine planning activities for enhancing water quality within these source waters. Further recommendations for wellhead protection planning purposes is to:

- Develop better understanding of the sidehill runoff quantity and quality through monitoring and analysis of these waters.
- Evaluate the potential for expanding wellhead protection areas for production wells along the edges of the aquifer. Perhaps the development of a two-tier management scheme (within aquifer/outside aquifer boundary areas) is appropriate.
- Water purveyors should ally, and provide input to County Stormwater planning issues as they are developed. Stormwater planning is conducted under the direction of the Spokane County Utilities department and is developing a series of management plans for handling stormwater runoff within many of the source zone areas.

DRAFT MEMORANDUM OF UNDERSTANDING
BETWEEN SPOKANE COUNTY PUBLIC WORKS DEPARTMENT
AND
THE CITY OF SPOKANE WATER DEPARTMENT
FOR DRINKING WATER TESTING &
AQUIFER WATER QUALITY MONITORING & REPORTING

Section 1. DEFINITIONS

The term “County” shall mean Spokane County Public Works Department. “City” shall mean the City of Spokane Water Department, a purveyor of drinking water and a department of a first class charter city of the State of Washington. Both the terms “the Aquifer” and “Spokane Aquifer” shall refer to ground waters located within the “Aquifer Sensitive Area” as defined in current City & County code.

Section 2. PURPOSE

The purpose of this Agreement is to supply a mechanism for the County to provide certain drinking water testing and aquifer monitoring and reporting services to the City of Spokane Water & Hydroelectric Services department in exchange for a fee. This testing and reporting will be done in a manner that will facilitate regional Aquifer quality monitoring and reporting while meeting certain purveyor Federal and State drinking water testing requirements. It is further the intent of this agreement to demonstrate a willingness on behalf of both the City and County to cooperate with other area water purveyors in a ‘Coordinated Water Quality Monitoring Plan’ - a wellhead and Aquifer protection effort.

Section 3. BACKGROUND INFORMATION

The City of Spokane currently has some twenty wells located at eight well/well field locations. The eight well/well field locations have various Federal & State testing requirements associated with their use as projected through the year 2000. The actual tests required can change from those projected due to: a) changing regulations and/or policies, and b) changes deemed necessary based on previous test results.

As a part of the wellhead protection portion of the County’s Water Utility Comprehensive Planning effort, and in an attempt to secure future funding for County water quality monitoring programs, County Utility staff volunteered to take certain drinking water samples from area purveyors at current purveyor costs and run them through a County contracted, State Department of Health drinking water certified laboratory. In addition to reporting the results back to the purveyors, the County proposed to produce an annual Aquifer

water quality report. A proposed framework for this “Coordinated Water Quality Monitoring Plan” was presented to the City in the form of a draft document¹ with the aforementioned title.

This Interlocal Agreement is intended to define the City’s & County’s roles and responsibilities in a Coordinated Water Quality Monitoring Plan (CWQMP). As a drinking water purveyor the City has responsibilities for water quality monitoring and reporting that must be fulfilled. Through this interlocal agreement the County and City are assisting each other in meeting public needs.

Section 4. RESPONSIBILITIES OF SPOKANE COUNTY

In keeping with the attached plan, or with at least two weeks advance notice, Spokane County will arrange for the delivery to the City of appropriate sampling containers, preservatives, chain of custody forms, instructions, coolers and “blue ice” sufficient for the projected sampling. Such equipment and supplies shall be delivered to the City at least two working days before the sampling time. Spokane County will accept responsibility for the samples upon collection and will cover the costs incurred in getting the samples to the contract laboratory. Spokane County will send the samples to a Washington State Department of Health accredited laboratory and will insure that the lab is accredited to perform and does perform the analysis in accord with WA-DOH accreditation. The final laboratory report shall be delivered to the City no later than 21 business days from the time the samples are released to the County. In addition the County will insure that City well lab results are sent directly to WA-DOH and the County.

The County agrees to warn the City within 30 days of receipt of **any** CWQMP ground water sample result that indicates a potential chemical threat to City wells or a significant change in aquifer water quality. Within six months of **any** CWQMP sampling event the County will post the results of the sampling in a database that is accessible by all participating utilities.

By 15 March of the following year the County will deliver to the City an Aquifer Water Quality Report that summarizes the “Coordinated Water Quality Monitoring Plan” monitoring results of the previous year. The report will be consumer friendly, Internet accessible, and will be compatible with water utility consumer confidence reports.

Section 5. RESPONSIBILITIES OF THE CITY

The City shall be responsible for notifying the County at least two weeks in advance of any changes in the projected sampling and generally coordinating with the County regarding sampling and testing needs, times, and places. The City shall be responsible for taking the samples at City wells in accordance with Federal, State, and Laboratory guidance. In addition the City will record all relevant field data and measurements and prepare the supplied chain of

¹ Technical Memorandum 7.2 (DRAFT); Coordinated Water Quality Monitoring Plan; Dated 11 June 1998; produced by CH2M HILL under contract to Spokane County

custody forms. The City will transport the samples locally per County direction to insure that shipping times are met and holding times are not exceeded.

The City will pay the County the fees as detailed in Section 9 below.

The City is responsible for required City drinking water testing not covered by this agreement.

The City is responsible for the required annual Consumer Confidence Report.

Section 6. ADMINISTRATION OF THE AGREEMENT

The Director of Water and Hydroelectric Services will administer this Agreement on behalf of the City. The Manager of the Spokane County Water Quality Management Program will administer this Agreement on behalf of Spokane County Utilities and Spokane County.

Section 7. SEVERABILITY

In the event any provision of this Agreement shall be declared by a court of competent jurisdiction to be invalid, illegal, unenforceable; the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

Section 8. SAMPLE SITES

The City shall sample, and the County shall accept samples for laboratory testing, from 8 well sites listed as follows;

<i>Source #</i>	<i>Well name</i>
7	Baxter
8	Central
6	Grace
5	Hoffman
1	Nevada
3	Parkwater
4	Ray
2	Well Electric

Section 9. FEE AND FEE SCHEDULE

The fees for the sampling from the wells cited in Section 8 are as follows;

<i>test</i>	<i>price per test</i>	<i>anticipated number of tests per calendar year</i>	<i>total</i>
Inorganics, Full List (incl. Phase II & V)	\$ 250.00	3	\$ 750.00
Volatile Organic Compounds (incl. Trihalomethanes)	\$ 245.00	10 - 13	\$ 2450.00 - \$ 3185.00
Synthetic Organic Compounds (meth. 515.1, 525.2, and 531.1)	\$ 175 (515.1), \$ 250 (525.2), & \$ 105 (531.1); total \$ 530	6	total \$ 3180.00
EDB / DBCP (504.1)	\$ 65.00	3	\$ 195.00

The preceding table indicates the anticipated testing frequency, which will be scheduled during 4 quarterly sampling periods per year. If any test result causes an increase in testing, due to a regulatory requirement, the County agrees to allow the City to increase the number of tests, at the same price per test, to satisfy the regulatory requirement(s).

Section 10. PERIOD OF PERFORMANCE

Subject to its other provisions, the period of Performance of this understanding shall commence on the date on which this understanding is finalized, and be completed by December 31, 2000 unless terminated sooner as provided herein. The completion date of this agreement may be extended in annual increments for up to two additional years by letter agreement.

Section 11. RECORDS MAINTENANCE

The City and County shall each maintain books, records, documents and other evidence which reflects costs expended in the performance of the services described herein sufficient to meet their legal & regulatory needs. Records will be maintained for a period of at least 5 years. These records shall be subject to inspection, review or audit by personnel of both parties, other personnel duly authorized by either party, the Office of the State Auditor, and federal officials so

authorized by law. As required by RCW 39.34.040, this agreement shall be filed with the Spokane County Auditor.

Section 12. AMENDMENT

Amendment of this Agreement may be made only by written agreement of the parties.

Section 13. ALL WRITINGS CONTAINED HEREIN

This Agreement contains all of the terms and conditions agreed upon by the parties. No other understandings, oral or otherwise, regarding the subject matter of this Agreement shall be deemed to exist or to bind any of the parties hereto. The parties have read and understand all of this Agreement, and now state that no representation, promise, or agreement not expressed in this Agreement has been made to have induced the parties to execute same.

Approved as to form;

Robert Beaumier, Jr., Assistant City Attorney

City of Spokane,

By: _____
XX

Date

Spokane County, Public Works Department

By: _____
XX

Date

Coordinated Water Quality Monitoring Plan

TO: Stan Miller/Spokane County
Gene Repp/Spokane County

FROM: Brad Phelps/CH2M HILL
Marlena Guhlke/CH2M HILL

DATE: June 11, 1998

Introduction

A plan to develop a regional water quality monitoring program for purveyors providing drinking water from the Spokane Aquifer is proposed herein. The plan is recommended as a pilot program for the next two years to ascertain whether a regional program is viable and useful. The pilot program will determine if coordinating water quality monitoring efforts of the water purveyors and the Spokane County Water Quality Management Program office are compatible. Although this plan is a coordinated activity, it is not meant to be wholly encompassing of all water quality monitoring required by the drinking water regulations. This plan initiates water quality monitoring of VOCs, IOCs and SOCs (as necessary). The plan does not include coordination for bacteriological testing, lead and copper testing, and others.

This plan was developed through a series of meetings held between Spokane County, Washington State Department of Health, and the Water Utility Coordinating Committee for Spokane County. This plan is called a coordinated water quality management program (CWQMP). In general the plan will be controlled by Spokane County Utilities with oversight by the WUCC.

Although a framework plan is recommended herein, actual specifics of the plan can be modified once the program is initiated. For example, certain aspects such as which wells are chosen for sampling, the frequency of sampling, the sampling rotation schedule, could be altered.

The Class A (community, and non-transitory/non-community) public water systems within the Spokane Aquifer area that was investigated for the CWQMP are shown on Table 1.

Goals and Objectives

The goals and objectives of the Coordinated Water Quality Monitoring Plan (CWQMP) are as follows:

- To utilize existing upgradient monitoring wells as an early warning to groundwater degradation of drinking water wells
- To potentially reduce funds expended on duplicative monitoring programs between the County and water purveyors

- To coordinate sample collection events for aquifer water assessment
- To establish a “storehouse of water quality data” for future reference
- To provide distribution of water quality information to interested parties (potentially within upcoming consumer confidence reporting)

TABLE 1
Class A Water Purveyors
Serving Water from the Spokane Aquifer

No. of Sources	Public Water System Type	System Name	Service Connections
1	COMM	CARNHOPE IRRIGATION DISTRICT #7	448
11	COMM	CONSOLIDATED IRRG. DIST #19	5,210
5	COMM	EAST SIDE LIBERTY LAKE IMP. CLUB	205
5	COMM	EAST SPOKANE WATER DISTRICT #1	1,083
1	COMM	GREEN RIDGE ESTATES	28
2	COMM	HUTCHINSON IRRIGATION DIST #16	735
1	COMM	HUTTON SETTLEMENT	18
4	COMM	IRVIN WATER DISTRICT #6	836
5	COMM	LIBERTY LAKE SEWER DISTRICT	1,247
3	COMM	MILLWOOD, TOWN OF	700
1	COMM	MOAB IRRIGATION DIST #20	525
6	COMM	MODEL IRRIGATION DISTRICT #18	2,091
9	COMM	MODERN ELECTRIC WATER CO	5,123
2	COMM	NORTH SPOKANE IRR DISTRICT	667
2	COMM	ORCHARD AVE IRR DIST #6	1,190
5	COMM	PASADENA PARK IRR DIST #17	1,289
1	COMM	PINECROFT MOBILE HOME PARK	143
1	COMM	PIONEER WATER COMPANY	52
3	COMM	PLEASANT PRAIRIE WATER USERS	29
13	COMM	SPO CO WATER DIST #3	7,818
7	COMM	CITY OF SPOKANE	68,405
3	COMM	TIMBERLINE MOBILE HOME PARK	107
4	COMM	TRENTWOOD IRR DISTRICT #3	1,400
8	COMM	VERA WATER & POWER	5,231
11	COMM	WHITWORTH WATER DISTRICT #2	7,180
1	COMM	WOODLAND PARK TRAILER COURT	30
1	NTNC	CENTRAL PRE MIX-SULLIVAN RD	4
2	NTNC	JOHNSON MATTHEY	1
2	NTNC	KAISER ALUM - TRENTWOOD WORKS	1
2	NTNC	KAISER ALUM- MEAD WORKS	1
5	NTNC	SPOKANE INDUSTRIAL PARK	158
127			102,250

Data Source: Department of Health - 1997

Memorandum Organization

The concepts of CWQMP are described in the following sections:

- Section 1.0: Introduction
- Section 2.0: Background
- Section 3.0: Mechanics of CWQMP
- Section 4.0: Administrative Management
- Section 5.0: Financial Strategy
- Section 6.0: Funding Approach
- Section 7.0: Program Implementation

Background

Currently, Spokane Aquifer water quality is monitored by two “general” entities. Aquifer samples for VOCs, and IOCs are collected by the Spokane County Water Quality Management Program (WQMP) office on a quarterly basis. Samples for the same parameters are collected by water purveyors as required by State law every three years.

Spokane County WQMP collects samples from various locations including monitoring wells and production wells installed by the City of Spokane and purveyors within Spokane County, many of which are members of the Spokane Aquifer Joint Board (SAJB). Sampling duplication occurs because the County’s program includes sampling from both purveyor production wells and monitoring wells.

By coordinating the sampling efforts of the WQMP and the Purveyors, a more comprehensive understanding of the water quality in the aquifer can be made. In addition, a CWQMP will also create a single database of the aquifer water quality thereby allowing the purveyors and WQMP an overview understanding of the entire aquifer.

Spokane County Monitoring Program

Spokane County’s WQMP was implemented to assess the effectiveness of aquifer protection management programs, (i.e., sewerage, stormwater management, etc.). Samples are collected quarterly for VOCs and IOCs (metals include lead, copper, zinc, chromium and cadmium) from 30-50 sample sites. The frequency of sampling exceeds current purveyor requirements -- VOCs are tested quarterly from 35-50 wells and purveyors usually sample for VOCs once every three years.

County Program Costs

The WQMP monitoring program costs approximately \$80,000/year, \$30,000 for collection of samples by the Spokane County Regional Health District (Health District) and \$50,000 for the sample analyses. The existing program costs approximately \$2,000 per year per sampling site (testing on a quarterly basis). In the past, the County’s program has been funded by EPA appropriations that expire October 1, 2000.

The current budget for this sampling could be reduced if:

- Sampling analysis costs can be reduced
- Fewer parameters are tested
- Sampling frequency is reduced

- Fewer wells are tested
- Other means of sample collection is implemented, (e.g. purveyors provide “in-kind” services by providing labor for sample collection)

RFP for County Laboratory Analyses

Spokane County is currently evaluating the feasibility of reducing sample analysis costs. The WQMP is soliciting Request for Proposals (RFP) for laboratory services. The RFP will provide an opportunity for private laboratories to perform the work currently conducted by Idaho Division of Environmental Quality (IDEQ). The RFP will state the method of testing required for the specific parameters, e.g., the DOH and EPA require method 524.2 for analysis of VOCs, instead of method 601 which has been previously used by the County. In addition, the RFP will require that a state Certified Drinking Water Laboratory will be required to perform water sample analyses. Also, a quick turn-around time (receiving information in less than 4 weeks) will be requested to provide quicker responses to discovered contamination.

Spokane County’s RFP for laboratory services may provide some savings in laboratory costs as compared to conducting the analyses individually by purveyor.

The laboratory review was completed I December 1998. Based on the price quotes received and the price agreements negotiated the County expects substantial savings in analysis costs. The new price agreement for performing inorganic chemical analysis included in the current monitoring program is about \$185 per sample. This compares with \$245 per sample at the Idaho lab. For a full set of Drinking water inorganics including the physical parameters of turbidity and color is about \$370.

State Waiver Program

The Washington State Department of Health (DOH) has recently determined the viability of providing water quality waiver programs. These waiver programs allow a reduction or cessation of water quality sampling frequency for certain constituent parameters, if prescribed criteria is met. The waiver program was initiated by DOH in 1993 and originally dealt with synthetic organic compounds (SOCs).

The SOC waivers allowed reduced or cessation of monitoring in areas which were determined to have both a low susceptibility assessment for SOCs, and no SOC indicators in water quality samples. Many of the Spokane area purveyors received SOC waivers in 1995. The SOC waivers were granted for a 3-year compliance period.

Beginning in 1999, the DOH may grant additional waivers for volatile organic compounds (VOCs) and inorganics compounds (IOCs) excluding nitrates. Coliform monitoring and lead/copper testing will still be required by the DOH.

As discussed during the development of this CWQMP, the DOH may use a criteria of participation in the CWQMP for granting a waiver. Should a purveyor apply for a waiver without being included in the CWQMP, the DOH may deny the waiver application. This would promote cost sharing among all purveyors included in the CWQMP, regardless of size (mobile home parks, schools, industrial purveyors, etc.)

Waiver Costs

To obtain a waiver, the purveyor must pay a fee to the DOH. Fees for waivers range from \$150-\$400 depending upon size of the water system. In some instances, it may cost the same to conduct the analysis as compared to obtaining a waiver. Some purveyors may choose to continue routine sampling and have the detailed monitoring information, rather than to obtain a waiver.

Mechanics of the CWQMP

As noted in the introduction, this is a conceptual plan and the mechanics of the CWQMP can be modified to suit the needs of the region. The following subsections describe the mechanics of the proposed CWQMP that was formulated based on the following considerations:

- Sampling Sectors
- Sampling Locations (Wells)
- Analysis Parameters
- Sampling Frequency
- Rotation Schedule
- Sample Collection
- Follow-up Sampling Procedures

Sampling Sectors

The general concept of the CWQMP is to create five generalized sampling “sectors” within the confines of the Spokane Aquifer. Sampling locations within these sectors will include both monitoring and production wells. The wells within each sector will become part of a rotational sampling program. The rotational sampling program will provide sample analysis of production water quality within the required State time limits. The proposed sectors areas are shown on a map (See Figure 1) and the wells located within each sector are shown in tables (See Attachment 1).

Sampling Locations (Monitoring and Production Wells)

A list of production wells and connections per water system was provided by DOH (See Table 1). Locations that are currently sampled by WQMP were also added to this list to establish sampling locations throughout the Spokane Aquifer.

The following paragraphs describe the differences between Monitoring Wells and Production Wells:

Monitoring Wells: The monitoring wells under Spokane County’s control are shown on the map in Figure 1. These wells serve as upgradient wells and may detect contamination before it arrives at a public drinking water well, if a contaminant exists upgradient from the monitoring well. Some of the WQMP wells can also provide discrete vertical sampling of the aquifer. The primary purpose of these wells has been to demonstrate the water quality benefits gained from storm water management and reduction of septic tanks due to sewer construction.

WQMP monitoring wells have routinely been analyzed quarterly since the early 1970's and can provide a uniform trend analysis of water quality in the aquifer. Since spills or contamination could be introduced into portions of the aquifer between monitoring wells, this contamination may not be detected. Therefore, the water sampled in a monitoring well may not provide a complete representation of the consumers drinking water quality. On the other hand, if contaminants are within the upgradient well monitoring area, concentrations detected may be greater than what could be obtained from purveyor wells where source water is diluted.

Purveyor Wells: The purveyor production wells are also shown on the map in Figure 1. Many of these wells are also included in the WQMP monitoring program. The primary purpose of these wells is to provide drinking water to the customers served by the purveyors. The water quality in these wells represent the quality of the public drinking water.

These wells do not allow sample collection at differing depths though. Without depth selective sampling, contaminants located in the upper portions of the aquifer may not be detected in purveyor wells.

There is concern by the City of Spokane that monitoring wells may not satisfactorily represent the quality of water being supplied to the customer. Therefore, a sector (Sector 4) was established for the City of Spokane that does not currently show any sampling from monitoring wells. Instead, only City production wells are sampled (See Attachment 1, Sector 4 Table).

Wells selected for sampling (See Attachment 1) for the CWQMP were based on the following rationale:

- The upgradient well is located within a defined wellhead capture zone. (Otherwise, analyses information wouldn't be indicative of the water quality anticipated in downgradient drinking water wells.)
- There is a public perception that the well should be sampled, e.g. A well located adjacent to an open pit that exposes the aquifer to contamination.
- The well is a production well (used for public drinking water)
- The well is located on a sector line that defines sectors of the Spokane Aquifer and provides for a good cross section of the aquifer.

The wells (both WQMP monitoring and purveyor production wells) were further prioritized based on production capacity, extent of use, location and susceptibility. Wells not designated as primary were labeled secondary wells, i.e., lower production capacity, seasonal use, poor location (not located in capture zones) and having lower susceptibility.

Parameters

The parameters that will be tested in the CWQMP will include IOCs, VOCs and SOCs. Bacteriological sampling must continue according to individual programs outlined for water systems in the WAC.

Sampling Frequency/Rotation Schedule

A select number (in this case, 20 out of the 50 WQMP wells currently tested) were designated as primary sampling wells and they will be sampled routinely on an annual

basis for IOCs, VOCs and SOCs. The analysis methods will be in accordance with DOH's public drinking water standards. The other 30 WQMP monitoring wells were designated as secondary sampling wells and will be sampled outside of this CWQMP and paid for by funds from Spokane County Utilities.

All purveyor wells (233 of them) were designated as primary sampling sites. These wells will be sampled for IOCs, VOCs and SOCs. A rotation schedule was established so that each purveyor production well will be sampled on either 3-year rotation or on a five-year rotation. Some purveyor wells were given a higher priority and will be sampled on a more frequent basis as a result of their location and priority. Refer to Attachment 2 for a proposed rotation schedule. Nitrate sampling within the CWQMP would occur annually.

Sample Collection Responsibilities

Samples will be collected by personnel employed by both the purveyors and County staff. The larger purveyors may need to assist the smaller ones as resource limitations may exist. The WQMP will discontinue using staff from the Regional Health District and will substitute County Landfill employees who are trained to collect water quality samples.

A water sampling training program should be part of the CWQMP. The DOH or the Regional Health District could assist with this training program.

Follow-up Sampling

Follow-up sampling sites will be determined on a case-by-case basis depending upon whether or not the test results display that the maximum contaminant level (MCL) has been exceeded. In the event a sample result displays that an MCL has been exceeded, follow-up sites will need to be tested to determine the extent of contamination. The sites to be chosen should be determined with the assistance of the Regional Health District and/or DOH. A meeting of the potentially effected downgradient water purveyors should be held within 24 hours if a MCL has been exceeded. The meeting will be conducted by the designated CWQMP manager. For concentrations below a MCL, the follow up procedures would be less drastic, through written quarterly reports.

Administrative Management

Spokane County will be the agency that provides administrative management of the program, and the County will work closely with the Water Utilities Coordinating Committee (WUCC). The WUCC Committee will provide the County guidance for program direction, e.g., assist the County in setting up budgets. The administration tasks associated with the CWQMP are as follows:

- Coordinate sample collection events among purveyors and Spokane County
- Be a "storehouse" for data
- Collect assessments from purveyors and manage the program funds
- Coordinate sample testing with a certified water testing laboratory
- Administer water sampling contract with laboratory
- Provide funding for follow-up testing from assessments collected
- Distribute information to interested parties
- Prepare an annual summary report for distribution to purveyors

The DOH will continue to notify purveyors whenever any MCL is exceeded and assist purveyors in developing a “course of action” for follow-up sampling.

Financial Strategy

The determination of costs for the CWQMP program was analyzed by reviewing laboratory analyses costs and administration costs separately. Follow-up sampling costs or a contingency fund was added to the administration budget for contingency allowance. The following sections explain how the financial strategy was developed.

Laboratory Analyses Costs

To arrive at an estimated value for the costs of laboratory analyses under the conceptual CWQMP, the following formula was used:

Number of sampling wells x number of sampling events x cost of laboratory parameters incurred during five year program, divided by three = laboratory costs/year

The conceptual CWQMP was based on the following assumptions:

- All purveyor production wells will be sampled at least once in a 3-year sampling period.
- A limited number of purveyor production wells will be sampled more than once in five years for various reasons (susceptibility for contamination, location, capacity, etc.).
- Static monitoring wells located along sector lines will be sampled annually.
- The cost for laboratory analysis of Volatile Organic Compounds (VOCs) is \$240, and for Inorganic Compounds (IOCs) \$290, for a total cost of \$530 for both.
- The costs for sample collection were excluded from the determination of the program cost. Sample collection costs of the purveyor production wells will be borne by the purveyors, and all sample collection costs of the monitoring wells will be borne by Spokane County.

Based on these assumptions, the estimated laboratory costs are \$90,000 for the 3-year sampling period or \$30,000/year.

Administration Costs

Annual program administration costs were estimated at \$15,000. Follow-up sampling should be incorporated into the CWQMP to serve as an incentive or benefit for program participants. An additional \$5,000 is recommended, at this time, to offset the costs of follow-up analyses. Therefore, a total administrative cost of \$20,000 is recommended to be budgeted.

Total CWQMP Program Costs

Proposed annual program (testing 139 wells and collecting 275 samples) costs are as follows:

Laboratory Analyses	\$30,000
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Administration	\$15,000
Follow-up Analyses (Contingency)	<u>\$ 5,000</u>
Total Costs	\$50,000

Based on 101,876 connections (throughout the Spokane Aquifer Area), the cost per connection per year would be approximately \$.29/connection for laboratory analyses only, \$.20/connection for administration only, or \$.49/connection for total costs.

Funding Approach

Potential program participants have different concerns in regards to how the program is funded. These differences are the result of water system size or system configuration (number of wells or connections). The following section explains these differences further.

Purveyors Vision

The purveyors want to contribute funding of the CWQMP at no more than what they currently spend per year on monitoring. Based on 127 production wells (Group A, community water systems) that need to be tested every 3 years at \$530 (for the VOCs and IOCs), the total costs are \$67,310 every 3 years or \$22,436/year. With 20 Spokane County monitoring wells included, the number of wells increases to 147 and the cost increases to \$25,970/year or approximately \$26,000/year. Since these projected costs are less than the \$30,000 proposed for laboratory analyses alone, Spokane County may choose to pay the difference if the County wants more monitoring information. Also, Spokane County may desire to sample monitoring wells quarterly instead of only annually, as presented in the current CWQMP, so these increased costs associated with the quarterly sampling would be borne by Spokane County.

City of Spokane's Comments

Assessment of monitoring charges based on connections would place the City of Spokane at a disadvantage because the City has the largest number of connections at 58,700. The city residents would be paying more than what they pay now for monitoring. On the other hand, charging on a per well basis isn't equitable either because the City has only 7 wells, similar to many smaller systems. Using that method of assessment would mean that citizens on smaller systems would be paying much more than those living in Spokane.

Spokane County's Vision

Currently Spokane County conducts a \$100,000/year monitoring program. Funds for this program are provided through EPA appropriations that will expire by 2005.

Because the anticipated costs of the proposed CWQMP exceed the current value monitoring being conducted, Spokane County has offered to initially pay for all sampling and analysis costs which exceed the value that purveyors would have incurred without the CWQMP.

The year, 1998, would be a year of transition and planning, and 1999 would be the first year of implementing the CWQMP. This initial funding offset by Spokane County would occur for only the years 1998, and 1999. If purveyors observe positive benefits of the program, it is recommended that a meeting of the WUCC occur in 1999 to assess the program and whether it should continue. If the County or purveyors cannot continue to support the

CWQMP program for the long-term, the comprehensive program may eventually be discontinued.

Program Implementation

To implement the CWQMP the following needs to be done:

- The CWQMP concept will need to be approved by the DOH.
- DOH needs to promote the CWQMP program by disallowing monitoring waivers for drinking water systems located within the Spokane Aquifer.
- A program director for the CWQMP needs to be defined
- The Health District needs to be notified of change in their role (discontinue sample collection for the County).
- The program needs to be presented and “sold” to the County Commissioners
- The program needs to be presented to the affected water purveyors
- Assessments for water purveyors need to be finalized

Update to the Implementation Element

Since the original memo was drafted several changes in the implementation scheme have been adopted. First, the role of the DOH has shifted significantly. The program as envisioned now does not require approval by DOH. The current plan calls for a phase I program where the purveyors use the CWQMP to acquire the cost benefit of bulk analysis gained through participation but all other aspects of reporting remain as they are now. Also, it has been determined that funding can be achieved without the waiver clause.

The current implementation approach calls for adopting a Memorandum of Agreement between each participating utility and the County. This agreement will detail the sampling schedule for the purveyor and the annual cost for the program. The cost of the program to the utility will be equal to the cost of analyses that they “avoided” by participating. Agreements will be for 2 to 3 years depending on the purveyors compliance monitoring status. Under these agreements the purveyor will receive both compliance monitoring data for their well per DOH requirements and “early warning” data for their production wells that have sentinel wells in the capture zone.

As part of its role in data management, Spokane County will prepare an annual summary of water quality conditions in the Aquifer as a whole. This summary will be made available to the participating purveyors for use in their annual consumer confidence reports.

In renewals of the Phase I MOA participating utilities will be required to pick up a prorated share of the sample collection and analysis cost of sentinel wells located within capture zones of their production wells. Though sentinel wells are sampled quarterly, the total annual cost of analysis is only slightly higher than a single compliance test because tests are not run for many constituents rarely found in Aquifer Water. (Many sentinel wells are within multiple capture zones. The costs would be prorated by splitting the cost among all purveyor utilities receiving information from the well.)

A draft version of the MOA is included as Attachment 3.

As the compliance reporting requirement for each participating utility will vary widely, the proposed schedule in Attachments 1 and 2 will be used only as a guide. Generally the wells noted as annual testing sites will be tested per the schedule – most will actually be tested quarterly. The “loading” i.e. the number of wells tested each quarter will also be consistent with the proposed schedule. And, any purveyor well that is on the proposed schedule at a time consistent with the compliance monitoring requirements will be tested as scheduled.

ATTACHMENT 1

SAMPLING SITES AND FREQUENCY WITHIN SECTORS

ATTACHMENT 2

PROPOSED SAMPLING SCHEDULE BY SECTOR

ATTACHMENT 3

MEMORANDUM OF AGREEMENT

Contaminant Source Inventory Technical Memorandum

TO: Gene Repp/Spokane County
Stan Miller/Spokane County
John Maxwell/Economic & Engineering Services, Inc.

FROM: Marlena Guhlke/CH2M HILL
Brad Phelps/CH2M HILL
Sharon O'Shaughnessy/CH2M HILL

DATE: June 1, 1998

Introduction

The following technical memorandum was prepared in response to Task 7.3 of the Economic and Engineering Services, Inc. (EES) contract with Spokane County related to the preparation of the Coordinated Water System Plan (CWSP) for Spokane County. The overall intent of Task 7 was to provide a mechanism through which some of the policies established by the City of Spokane and Spokane Aquifer Joint Board Wellhead Protection Programs could be incorporated into Spokane County programs. Task 7.3 focuses on one of the more important of the wellhead protection program needs, the development and maintenance of a contaminant source inventory (CSI). A regularly maintained and updated CSI would greatly simplify the work of water purveyors when complying with state requirements for wellhead protection. During the last two years Spokane County in cooperation with the Spokane Regional Health District have explored several situations through which a widely accessible CSI database could be maintained. The general consensus of this work is that Spokane County, with its significant data management capabilities and its general government role, would be a likely candidate for playing a coordinating role in such a program.

In evaluating the operation and maintenance of a CSI, this technical memorandum will address the following:

- Recommend an approach to updating and maintaining the contaminant source inventory (CSI) database
- Recommend financing strategies for contaminant source inventory program (CSIP)
- Provide a template for water system purveyors that provides information on the CSIP and list tasks that purveyors need to perform for the CSIP.
- List CSI product inventory information which utilities need in their wellhead protection program.

Recommendations for CSIP

Background

There were three Water Utility Coordinating Committee (WUCC) meetings (represented by the executive members) held to discuss the CSI program. At the first meeting, held on February 19, 1998, the concepts of the CSI program were presented and the group agreed that a regional CSIP would be of value. At the second meeting, there was more discussion on how the program would work including: who would manage the program, what would the program cost, and who would pay for the program? The third meeting, held on April 16, 1998, focused on funding and how to pay for the program. Based on those discussions the following approach is recommended for the CSIP.

Approach

A model has been prepared that demonstrates the main characteristics of a CSIP (see diagram in Attachment 1). The diagram shows numerous sources of information that would "feed" information to the CSI Coordinator and a data entry person. In some cases, the groups providing information would also request information to fulfill their own obligations, i.e., water system purveyors, fire districts and departments, and possibly emergency services. Information may also be requested by the private sector representing consultants conducting Phase I Site Assessments, Realtors, insurance carriers, banks, credit unions and others interested in property information. The information received by the CSI Coordinator would be entered into a geographical system database and tracked in such a manner that it would be useful to those retrieving it.

The contaminant sources tracked by the CSIP would include two types, 1) Critical Materials or chemicals and 2) Contaminant Sources such as dry wells, septic tanks, pipelines, streets, etc.

CSIP Management

The specifics of the CSIP would be resolved by the coordinator responsible for the program. The Coordinator would need to set-up a data base system that could provide a list of contaminant sources for properties as well as geographical information related to that property. The type of software chosen should be cost effective and have the ability to track different types of information separately or in modules so that specific types of information can be released in a format useful to those who need it (e.g., fire departments/districts). The CSI Coordinator may want to advertise the program to encourage its use by the community. Once the baseline database is established, the Coordinator would want to focus on new businesses, changes in existing businesses and tracking the demise of old businesses. The program would be set-up to provide on-going information instead of information at a "point-in-time" or as a "snapshot". See Attachment 2 for a flow chart and additional narrative explaining Coordinator tasks.

A county-wide agency would be most effective in managing a county-wide program and Spokane County Utilities was selected for coordinating the CSIP. Since the purveyors have a vested interest in this program, the WUCC Executive Committee should function as advisors to Spokane County Utilities Division.

Recommendations on Financial Strategies

Program Costs

It is estimated that \$60,000/year will be needed to fund the entire CSIP pilot project the first year. This would pay for a part-time coordinator (\$20,000), and a part-time data entry person and computer station at \$40,000/year. It is estimated that 1/4 of a FTE would be needed to maintain the database once the baseline was completed, or approximately \$20-25,000/year.

Historic Funding

Spokane County

The majority of the Aquifer Program is funded by federal budget appropriations that will disappear by September 30, 2000. It is unlikely that these dollars will be reinstated since from the federal viewpoint, Spokane County Aquifer's program is far ahead of everyone else and would, therefore, have a lower priority in comparison to others competing for the same dollars. Spokane County initially received \$500,000/year but since 1998 the allocations have been reduced to \$300,000/year. These dollars were used to develop protection measures including the following: providing for wellhead protection, providing public information, monitoring groundwater wells, modeling aquifer water movements and capture zones, and developing a contaminant source inventory data base. For a few years, \$60,000/year of these funds were provided to the Spokane Regional Health District for development of a CSIP.

There is also an Aquifer Protection Area fee that is charged to all those with septic tanks and all those who obtain their water from wells (a \$15.00 fee for aquifer withdrawal and a \$15.00 fee for aquifer discharge assessed annually). Of the money collected approximately 1/3-2/3 is from water withdrawals and the remaining from septic tank discharges. Also, approximately 1/2 of all money collected is from City sources in the form of well water withdrawals because there are no septic tanks within the city (There has been a long standing debate that the City may be contributing more than what they get back -- A new agreement is being negotiated which may provide for a more equitable program.). Two million dollars a year are collected and used for replacing existing septic tanks that are located in the Spokane Valley with sewers. The County assessment program will disappear in the year 2005 unless reinstated.

Others

Recently the City of Spokane paid \$25,000 and the Spokane Aquifer Joint Board paid another \$25,000 to develop their contaminant source inventory lists. Emergency Services has contributed approximately \$3,000 in the past for the CSIP. All of these contributions were supported by grants and were not a long-term commitment.

The following describes grant opportunities that can assist with future program funding.

Future Funding

Washington State Department of Health Grants

The Washington State Department of Health (DOH) is administering the Source Water Assessment Program. Some of the goals of this program are: wellhead protection (locate wells, surface drinking water supplies, and wellhead protection areas on a GPS map), inventory contaminant source data, incorporate susceptibility assessments, update underground injection data in spatial data format, update Department of Ecology's data bases and correct poor information, and provide information as needed to both local and state use.

There are federal dollars available that have been transferred to the DOH for disbursement to local governments/entities according to the DOH's discretion. Approximately \$200,000 is available for disbursement the first year (July, 1998 through June, 1999). Of those dollars, \$30,000/year could be available to the Spokane County area for a pilot project for three years beginning July 1, 1998, or \$90,000 total. These dollars must be augmented with local matching dollars because DOH will not provide 100% funding of a program. To apply for these dollars there needs to be dialogue between interested parties, submission of a proposal, and agreement on an interagency contract. The program would need to include development of a database for the entire county, not just the Spokane aquifer area. Also, it is important that if information is not developed by local land use decision makers, information must be made available to them.

Parties that can apply for these grants include large cities, counties, health districts, county highway departments and other organized groups, although the state prefers contracting with governmental entities. It is recommended that the WUCC apply for a grant and provide these funds to Spokane County's regional CSIP.

A Source Water Protection grant may be available to fund the CSIP for 3 years. This would give time to establish a fee assessment program so that the program could be eventually self-sustaining without grants. Other grant programs should be investigated as well.

Pilot Project

There was discussion on how all parties would work together in the pilot project. The members of the Spokane Aquifer Joint Board (SAJB) could correct their potential contaminant source inventory lists and provide those corrections to the county. Other purveyors and the fire districts/departments would be asked to do the same. The County would be responsible for developing and correcting information for the entire county, not just for the Spokane aquifer area. The corrected information would be passed on to state agencies to correct and update their lists also.

The County would use building permits and business licenses to obtain information on new potential contaminant sources. There would still be a need to gather information on businesses that quit or change the nature of their business. Surveys or other coordinated efforts among purveyors, fire districts/departments, and others would need to be developed to capture this information.

Developing lists are relatively easy. The difficulty is in locating information on a map. For example, the street address of the contaminated site is often different from the mailing

address of the responsible party. Therefore, both the address for the contaminated site and the mailing address for the responsible party must be included in the database.

For efficiency, a coordination of computer software among participants would be helpful. The minimal computer aided contribution needed from the purveyors would be to provide lists to the County in a spreadsheet format.

Approaches for gathering and compiling information should be reviewed. For example, smaller water systems could feed their information to larger water systems or to the City of Spokane who could provide a consolidated list to the County.

There would be a cost to retrieve information from the CSIP. Those fees may vary depending upon the "in-kind" services that were provided to the program from individual purveyors, or depending upon the format of the information retrieved e.g., a map would be more costly than a list.

Who will Pay for a CSIP?

The CSIP, as recommended, will be funded by the purveyors (using a DOH grant at first) and Spokane County. Other sources of funding were explored but are not expected to be a dependable source. These sources are the fire districts/departments, Emergency Services Department, Spokane Regional Health District and Department of Ecology. Fire departments/districts may generate dollars by assessing fees to businesses. The remaining agencies did not have a funding mechanism that could provide additional dollars to their agencies that could be "passed-through" to this program.

Although the private sector may be willing to pay for the costs of retrieving information from the database, they cannot be assessed the cost of collecting, verifying, and organizing the data. Once information is available in the public domain, the public is entitled to that information and can only be charged for retrieval costs associated with the program (report generation costs). Also, the application of the Privacy Act to this program needs to be explored to determine who is entitled to the information. Therefore, the most reliable funding sources for the CSIP are primarily the water purveyors and Spokane County and secondarily, the fire departments/districts (through assessments to businesses).

Operating the pilot program for a year or so will enable the County to develop a more accurate estimation of actual costs to fund the program. Once costs are determined, building permit fees may be increased to help fund maintenance of the CSIP.

Template for Water System Purveyors

A template has been developed for water system purveyors to use that will provide contaminant source information for the CSIP. See Attachment 3.

CSI Product Inventory Information and Biological Affects

A list of CSI product inventory information, which utilities need in their wellhead protection program, is found in Attachment 4, Part A and Part B.

Spokane County Area Small System Wellhead Protection Template

PREPARED FOR: Gene Repp/Spokane County
Stan Miller/Spokane County

PREPARED BY: Sharon O'Shaughnessy/CH2M HILL

COPIES: Marlena Guhlke/CH2M HILL

DATE: June 17, 1998

Introduction

The goal of this task was to provide mid-sized to small water purveyors throughout Spokane County the tools they would need to address their source water supply wellhead protection issues.

The first step in the process was to solicit and organize attendees for the workshop. Through Spokane County, a listing of Group A water purveyors was obtained from the Washington State Department of Health (DOH). Towns and cities on the list were contacted in connection with Task 7.5 "Protection Policies Assessment". During the same phone conversation, these municipalities were asked if they had completed their wellhead protection plans, and, if not, would they be interested in attending a workshop to help them with the process or would they like to receive a workbook to do on their own. In addition to the municipalities, approximately 15 additional purveyors, such as: resorts, water districts and businesses were selected at random, and asked their preferences. A majority of those surveyed preferred to attend a workshop, rather than just receive the materials.

A brochure announcing the date and context of the workshop was developed, approved by Spokane County, and then mailed to approximately 110 Group A purveyors. Twelve brochures were returned because of address problems. This information was given to DOH. The brochure is attachment A.

The date set for the workshop was June 15, 1998. Prior to that date, 28 purveyors had asked to attend the workshop. Three had stated that they were unable to attend but requested that the workshop materials be sent to them. Materials developed for the workshop are in attachment B. They are: workbook, template, speakers overheads, sign-in, evaluation sheet, schedule, contaminant source inventory listing form, worksheets, survey forms, and a computer disk containing sample letters and the template.

Educational materials developed by various agencies were collected and made available during the workshop. These materials allowed attendees to obtain samples of publications that are available to help them during the public information task of their wellhead protection programs. A listing of these publications, and contact phone numbers appear in the workbook. Samples of these publications are in attachment C of the workbook.

The workshop was held on June 15, from 8:30 am to 12:00 noon at Spokane's Public Health Center, at 1101 W. College Avenue in Room 140. Twenty purveyors, representatives from the DOH, Michele Vazquez and Scott Fink, and a representative from Spokane County, Stan Miller, attended the workshop. Subjects and presenters are shown on the workshop schedule. The workshop schedule, sign-up sheet, and purveyor workshop evaluations are in attachment D.

The overall purveyor comments were positive. Additionally, some persons who were unable to attend, called during the following day and asked to be sent the workshop documents.

Protection Policies Assessment

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Cathy Golik/CH2M HILL

DATE: June 2, 1998: Amended February 1, 1999

Introduction

Initially Task 7.5 was to serve as a key element for incorporating recommendations and policies developed by the City of Spokane and the Spokane Aquifer Joint Board Wellhead Protection Programs into the programs of Spokane County. The original work plan anticipated that a set of recommendations for wellhead protection would be available upon initiation of this sub-task. Those recommendations were to be reviewed and those appropriate for adoption by Spokane County as part of the Coordinated Water System Plan (CWSP) would be incorporated by reference.

Even as this cover memo is being written, the anticipated recommendations have not been formalized. In addition to the original research performed by CH2M-Hill reporting on existing regulations applied around Spokane County, this amended memo outlines a direction that may be followed to incorporate future regulations into the CWSP. The new section add at the end of this memo focuses on two ongoing programs; the City of Spokane – Spokane Aquifer Joint Board Wellhead Protection Programs' implementation phase and the County's Critical Aquifer Recharge Area initiative.

In 1979, Spokane County put into policy the '208' Water Quality Management Program, as part of Washington State Department of Ecology's (Ecology) statewide '208' planning requirements. This document's main focus is the Spokane Valley-Rathdrum Prairie Aquifer.

Today, several programs emphasizing the protection of groundwater throughout Spokane County are being developed. One of these programs is the Critical Aquifer Recharge Areas, a sub-element of the County's Comprehensive Plan. Programs aimed primarily at groundwater for drinking water wells are wellhead protection programs, the largest of these are the City of Spokane's and the Spokane Aquifer Joint Board's.

All of the known current groundwater protection policies available from entities within Spokane County, along with programs under development are summarized in this memorandum. This summarization endeavors to provide the Water Utility Coordinating Committee (WUCC) and other local entities with a tool to quickly evaluate present policies that can be used to direct additional policy development. State of Washington and Federal policies are not included in this report.

Objectives

The objectives of the Protection Policies Assessment are stated as follows:

- Collect current source water protection policies from cities, towns, and utilities within Spokane County, and from the County of Spokane.
- Consolidate policies and programs into a single document for future reference.
- Obtain endorsement of policies by the WUCC.

Memorandum Organization

This memorandum contains the following sections:

- Section 1: Introduction
- Section 2: Collection Process
- Section 3: Summary of Policy Search
- Section 4: Consolidation and Summaries
- Section 5: Discussion of Endorsement Process
- Section 6: Future Directions

Collection Process

Because all “Group A” water systems under the Safe Drinking Water Act, must implement certain protection programs, and would benefit from a compiled source of local policies, these systems were chosen as a “starting point” for the collection process.

The State of Washington Department of Health (DOH) designates those public water systems as “Group A” which meet the Federal definition of a public water system. This includes all public water systems that serve 25 or more persons, or has 15 or more connections. Most cities and towns (municipalities) in Spokane County fall into this category of potable water purveyors.

A current list of “Group A” potable water purveyors was obtained from the DOH. Because only cities and towns can enact policies, they were the only “Group A” purveyors contacted by telephone. Entities, such as manufacturing facilities, motels, trailer parks, etc., that were designated “Group A”, but were not a city or town, were not contacted. The following question was asked of each purveyor contacted:

“What policies do you have that relate to the protection of groundwater? These policies may or may not state their direct relationship with groundwater, so please consider policies as they relate to underground storage tanks, storm-water run-off, etc.”

If policies did exist, a copy of the policy was requested. Results of this telephone survey appear in Table 2 - 1.

**Table 2-1 Spokane County Municipalities –
Groundwater Policies**

Municipality Name	Policy Name/#	Year	Municipality’s Comments/Policy Focus
Airway Heights, City of	None	N/A	Uses Spokane County’s guidelines
Cheney, City of	None	N/A	Uses Spokane County’s guidelines
Deer Park, City of	None	N/A	Uses Spokane County’s guidelines
Fairfield, Town of	None	N/A	Uses Spokane County’s guidelines
Latah,	None	N/A	Uses Spokane County’s guidelines
Medical Lake, City of	None	N/A	Uses County standards for storm/sewers. Applies County guidelines where needed
Millwood, Town of	None	N/A	Follows the County’s guidelines where applicable
Rockford, Town of	None	N/A	Uses Spokane County’s guidelines
Spangle, City of	None	N/A	Uses Spokane County’s guidelines
Spokane, City of	Critical Areas Report	1994	Focus is on habitat conservation, geologically hazardous, aquifer recharge, frequently flooded, and wetland areas.
Spokane, City of	Wetlands Protection Program, Phase I Report	1993	Focus is on wetlands
Waverly, Town of	None	N/A	Uses Spokane County’s guidelines
Spokane Aquifer Joint Board and City of Spokane	Wellhead Protection Programs	In process	Focus is on potable water supply from the Spokane Aquifer
Spokane County and City of Spokane	Shoreline Management Programs	1971	Focus is on shorelines
Spokane County	208 Water Quality Management Program	1979	Focus is on non-degradation of the Spokane Aquifer
	Aquifer Sensitive Area Overlay Zone	1983	Focus is on aquifer protection through zoning
	Sole Source Aquifer Designation	1978	Focus is on the Spokane Valley-Rathdrum Prairie Aquifer
	Groundwater Management Areas		Focus is on groundwater protection
Spokane County	Long Lake Phosphorous Management Program		Focus is on the removal of phosphorus from all water
	Septic Tank Elimination Program (STEP)		Focus is on septic tank replacement with sewer service
	Critical Aquifer Recharge Areas (CARA)	1998	Focus is on groundwater recharge
Regional Health District	Long Lake Phosphorous Management Program		Focus is on the removal of phosphorus from all water

Summary of Policy Search

Spokane County and the City of Spokane have put in place specific policies designed to protect groundwater. Other water purveyors within Spokane County currently refer to Federal or State regulations and to the County's policies and guidelines, as they are needed.

The City of Spokane and the surrounding valley support the largest population in Spokane County. The Town of Millwood, the City of Deer Park, and the City of Airway Heights support relatively sizable populations as well. Other municipalities in Spokane County support smaller populations and are located in more rural settings.

Persons interviewed from smaller municipalities stated that policies developed by the County were adequate for their needs, and that a single source of regulations kept the rules consistent within the County. Additionally, this group felt that developing individual policies and guidelines was a costly and unnecessary exercise for entities of their size.

Consolidation and Summaries

As show in Table 2-1, smaller municipalities did not have "special" groundwater policies to contribute to this report. The majority of the policies were obtained from Spokane County, City of Spokane, and Spokane's Regional Health District. The following is a summary of each of the groundwater protection policies compiled.

Established Policies

Sole Source Aquifer Designation requested by County of Spokane

In 1978, as requested by the County of Spokane, the Spokane Valley-Rathdrum Prairie Aquifer was designated as a "sole source" aquifer under the authority of Section 1424(e) of the Safe Drinking Water Act. At that time approximately 340,000 people living in the Spokane area depended on this Aquifer as their only supply of drinking water. The water in the Aquifer was found to be of very high quality, but there was evidence of localized contamination attributed to industrial waste spills, septic tank effluent, and urban runoff.

Upon designation, local agencies were able to obtain financial aid allowing them to implement various monitoring programs and to develop criteria for control measures that would allow for no further degradation of the Aquifer's water quality.

The purpose of "sole source" designations was to ensure that federal financially assisted projects were designed and constructed so as to protect the Spokane Valley Aquifer. After publication of this determination, no commitment of federal funds (grants, contracts, loan guarantee or otherwise) could be entered into for any project which the EPA Administrator determined may contaminate the Spokane Valley-Rathdrum Prairie Aquifer through its recharge zone.

County of Spokane's 208 Water Quality Management Program (1979)

A Technical Advisory Committee and a Citizen Representatives Core Committee developed the Spokane-Rathdrum Aquifer Water Quality Management Plan. The committee's

recommended a policy of “non-degradation” as a basic planning goal and principle of control of activities that would produce pollutants. The plan contains recommendations aimed at mitigating specific threats to Aquifer water quality and mitigating current pollutant loads to allow additional development without increasing the potential of increased pollutants on the land situated above the Aquifer.

The major policies addressed: non-degradation, water quality management, potential pollutants and their sources, management of Aquifer penetrations, solid waste and sludge disposal, stormwater run-off, agricultural practices, commercial and industrial pollution sources, sanitary wastewater handling and controls, and land use controls.

Recommended policies developed under the 208 program are summarized as follows:

I.IA - Aquifer Water Quality Management - Support ground water quality measures that seek to achieve a goal of no further degradation. This approach would be similar to the federal goal for surface waters of “No Discharge of Pollutants by 1985”.

1.2A - Aquifer Water Quality Management -Support further integration through development and adoption of an area wide water quality management plan that is integrated with local Comprehensive Plans, accepted as a part of the state wide plan and coordinated with water quality management planning for the Idaho portion of the Aquifer.

II.1A - Preventing and Controlling Pollution - Support control of known and potential sources of pollution to the Aquifer’s water quality.

II.2A - Preventing and Controlling Pollution - Support protection through area-wide comprehensive planning and land use controls for the Aquifer Sensitive Area. As used in this context Aquifer Sensitive Area is defined as the aquifer recharge zone and its immediate drainage area.

III.1A -Rehabilitation of Existing Gravel Pits after Their Usefulness has been Depleted -Support productive but non-polluting utilization and rehabilitation of worked-out pits. Provide incentives to owners to undertake non-polluting rehabilitation and adopt new regulations that require owners to police and control pits so as to minimize potential for pollution, including penalties for non-compliance.

III.1B - New Gravel Pit Operations - Support regulations that would allow pits but would limit operations to no penetrations into the Aquifer without phased-in rehabilitation programs. Support the regulations, which require owners to police and control pits to minimize potential for pollution, including penalties for non-compliance.

III.2A - Solid Waste Disposal - Support long-range development of sites and disposal methods that will mitigate environmental concerns. Update the Solid Waste Management Plan as soon as possible with strong emphasis on alternative disposal methods and site selection for the protection of the Aquifer; the prohibition

of new solid waste disposal sites in the Aquifer Sensitive Area; and the institution of monitoring and assessment studies at existing and abandoned sanitary landfill sites. (Note: The Spokane County Solid Waste Management Plan was updated in February, 1997.)

III.2B – Sludge Disposal - Support the best practicable sludge management strategy which minimizes environmental and public health risks.

III.2C – Septic Tank Pumpage Disposal - Support strategies that eliminate the disposal of septic tank pumpage to the ground in the Aquifer Sensitive Area, by phasing out existing disposal sites, prohibition of new disposal sites, and recognizing that the solution for disposal is municipal treatment plants.

III.2D – Commercial Animal Waste Disposal - Discourage disposal of commercial animal waste by methods other than those which utilize the material for soil application and nutrient uptake by growing crops, and discourage storage that promotes aquifer degradation.

III.3A – Overall Runoff Management - Support management of waste-loads in runoff to protect water quality throughout the Aquifer Sensitive Area.

III.3B – Runoff Management in *Developing Areas* - Support measures to reduce the input of contaminants from runoff as well as reducing volume and peak flow in new developments to prevent aquifer water quality problems.

III.3C – Runoff Management in *Developed Areas* - Support cost effective operational changes in stormwater system management in developed areas to protect water quality.

III.4A – Agricultural Sources - Support management strategies to protect water quality through education and selective controls.

III.5A – Spill Control - Support local and other regulations to control all potential spill activities. This would require existing and new operations to develop spill prevention control and cleanup plans. Support local and other regulations to encourage all commercial and industrial activities that handle, store, or use large amounts of critical substance to locate outside the Aquifer Sensitive Area.

III.5B – Transport of Critical Substances - Support regulations requiring transport activities to have control, cleanup, and reporting plans with sanctions for non-compliance. Support education efforts for operators to better understand potential critical substances spill threats and encourage good practices. Support restrictions on transport of highly toxic substances and coordinate with the State of Idaho on requests for Department of Transportation (DOT) action.

III.5C – Storage and Ground Disposal of Wastes - Support educational efforts and development of regulations to control both existing and new operations with sanctions for non-compliance.

III.6A – Wastewater Handling and Controls - Support collection of all sewage and treatment for discharge in such a manner that the pollutants cannot enter the Aquifer.

III.6B – Wastewater Handling and Controls in the *North Spokane Area* - Support current procedures to pursue a sewer collection system (North Spokane Sewer Plan) as soon as possible.

III.6C – Wastewater Handling and Controls Within the *City of Spokane* - Support development of city policies, programs and plans that speed up removal of on-site systems, provides sewerage service to annexed areas, and promotes expansion of the existing system.

III.6D – Wastewater Handling and Control for the Spokane Valley Area - Support central sewer system planning for the Spokane Valley area. Support interception of interim industrial, commercial, multi-family and housing wastewater facilities as soon as possible. Support procedures that require all new subdivisions to make provisions for sewers. Initiate sewer proposals for existing home owners' consideration in the developed areas.

III.7A – Land Use Controls - Support development that encourages in-fill development of existing urbanized areas, thus making ultimate sewerage more feasible, and require new unsewered development to be of low density. Use land use controls to assist in implementation of recommended policies and actions for specific sources of potential pollutants.

V.1A – Management System - Support the establishment of a local management agency to coordinate the implementation of the '208' plan recommendations and with the North Idaho program.

IV.1B – Institutional Framework - Support improvements in the institutional framework for water quality management, in particular the coordination or consolidation of management agencies to avoid fragmentation or duplication of services, and include coordination with the North Idaho programs.

IV.2A – Sewer System Financing - Support the application for full Federal and State funding of all eligible portions of sewer interceptor and treatment facilities costs.

IV.2B – Other Control Measures - Support the distribution of water quality protection costs to potential polluters to be regulated.

The '208' Spokane Aquifer Water Quality Management Plan provides the basis for the policies and programs that have been initiated in the Spokane County area.

Spokane County Planning Department's Aquifer Sensitive Area Overlay Zone

An Aquifer Sensitive Area Overlay Zone is designated "to provide supplemental development regulation in the area so designated so as to permanently protect the source of metro-

politan Spokane's water supply from additional long-term contamination originating from man's activities on the earth's surface. Due to the extraordinary vulnerability and sensitivity of the Aquifer resource to contamination, these regulations contain extraordinary protective measures." These measures "apply to any person, firm, or corporation within the Aquifer Sensitive Area that establishes or proposes to establish a new or different land use or activity." Essentially, these measures are designed to protect the Aquifer from long-term water quality degradation due to land-use changes.

The Aquifer Sensitive Area is defined and typically includes all areas that contribute groundwater recharge to the Spokane Aquifer.

An administrative guide was prepared for implementation of Aquifer Sensitive Area Overlay Zoning ordinances. These ordinances cover the application of standards within the Aquifer Sensitive Area as they relate to residential development, mining operations, solid waste and septic tank sludge, penalties, and critical materials. These ordinances have been in effect since 1983.

Spokane County's Groundwater Management Areas

The concept of a groundwater management area is included throughout the Washington Administrative Code. Under the provisions of the Code, Ecology designates a groundwater management area after petition by local government. The local government then develops a groundwater protection plan using new and existing data.

The underlying premise of groundwater management is anti-degradation of water quality. This program states that no discharge to water will lower its existing quality, unless there is an overriding public benefit. And in no case will a discharge that would degrade existing water quality be permitted without the application of all known, available, and reasonable technology (AKART) measures. In addition to the anti-degradation policy, groundwater management establishes numerical standards for drinking water, groundwater, and surface water.

Under this same policy, unincorporated Spokane County adopted guidelines for Stormwater Management in 1980 that require new developments to have management plans that will handle additional peak runoff that occurs because of the development. If the development is within the Aquifer Sensitive Area, then stormwater must be treated to mitigate the potential for groundwater degradation. The guidelines also require erosion protection when design flow-velocities in construction channels are high. Where excessive filling or grading disturbs the natural ground surface, the guidelines require that measures be taken during and after the construction period to reduce erosion and silting.

Spokane County's and the City of Spokane's Shoreline Management Programs

The Shoreline Management Act of 1971 was adopted to preserve, protect, and restore shoreline areas and to manage shoreline utilization. Both the City and Spokane County prepared shoreline master programs and administer Shoreline Permit Programs. These programs define shorelines as the area 200 feet landward from the ordinary high water mark. The Shoreline Master Programs address economic development, public access, circulation, recreation, land use, conservation, historical preservation, cultural development

and restoration. Proposed development or alterations to the shoreline must be consistent with the Master Program and with the adopted shoreline use regulations.

City of Spokane's Critical Areas Report

Washington State's Growth Management Act (GMA) (1990) requires certain cities to classify and designate their critical areas. GMA defined critical areas as:

- Fish and wildlife habitat conservation areas
- Geologically hazardous areas
- Aquifer recharge areas
- Frequently flooded areas
- Wetlands

The City of Spokane appointed a Critical Areas Task Force (CATF) that was composed of citizens representing a variety of interests. The CATF guided the development of the Critical Areas Report.

The purpose of the report is to help fulfill needed stewardship for Spokane's critical areas. The report contains policies, goals, and implementation action items for each type of critical area.

Stated recommended critical areas goals and policies are as follows:

A. Existing Policies Fundamental to Critical Areas-Generalized Land Use Plan

POLICY:

1. Limit the types of uses and establish comprehensive performance standards for proposed development of areas containing steep slopes.
2. Establish construction practices and land management regulations to protect native plant communities and natural drainage courses and minimize erosion.
3. Develop standards and criteria for use in various lands use regulations, establishing the limits of adverse environmental impacts.
4. Modify or condition development proposals to avoid or mitigate identified adverse environmental impacts.
5. Maintain the Environmental Inventory for the City of Spokane in an up-to-date condition, reflecting most recent available data. Identify specifically those conditions and areas which represent natural hazards.
6. Utilize the procedures of the Washington State Environmental Policy Act and City Environmental Policy Ordinance to evaluate the potential impacts of proposed development.

B. Planning Process for Critical Areas

POLICY:

1. Manage critical areas in a way that includes protection, preservation, enhancement, mitigation, and education.

2. Manage critical areas through a variety of mechanisms, including regulatory and non-regulatory mechanisms.
3. Consider the cumulative effects of land use activities on critical areas in land use decisions.
4. Develop and implement a critical areas checklist process to identify proposed land uses that may impact critical areas.
5. Include public participation as a vital element of critical areas regulations and management programs. The City should actively seek individuals and local groups to assist in identifying and protecting critical areas.
6. Periodically review and update the City of Spokane's critical areas program.
7. Recognize the critical importance of cooperative and coordinated land use planning between the City of Spokane and Spokane County.
8. Where private development of critical areas is not in the public interest, measures--such as donations, easements, or purchase of land--to acquire development rights should be pursued. Private property shall not be taken for public use without just compensation having been made.

C. Overall Critical Areas Goals and Policies

PRIMARY GOAL:

Protect critical areas and public health, safety, and welfare and enhance the quality of life of citizens by controlling the adverse impacts of growth and development. Areas covered by these goals and policies are: restoration, vegetation, wildlife habitat, and natural features.

POLICY:

1. Regulate development in critical areas to ensure protection of the critical area and the public's health, safety, and welfare.
2. Minimize the impacts of development that occurs in critical areas; however, favor prevention of problems over mitigation of problems.
3. Evaluate the potential environmental impacts of proposed development as early as possible in the development proposal process, at the beginning of site analysis.
4. Prohibit development in critical areas where development impacts cannot be mitigated; where all reasonable use of a property is denied; recognize the potential need for public purchase of the area.
5. Acquire under public ownership areas containing sensitive natural features or maintain them as private open space within developments.
6. Educate the public about the importance of sustaining plant and animal life, why it should be preserved, and the need for sensitive development in and adjacent to critical areas.

GOAL--RESTORATION: Restore damaged areas within critical areas to a rehabilitated condition, when the opportunity arises.

POLICY:

1. Evaluate the condition of the critical area and integrate rehabilitation in the development proposal site analysis and site planning.

GOAL--VEGETATION: Recognize the importance and value of native plant communities and encourage its preservation and use.

POLICY:

1. Treat all site components--soil, rock, water and plant communities--as resources, not waste products.
2. Minimize site disturbance.
3. Incorporate native plant communities in developments within critical areas and their buffer areas. The native vegetation planted in buffers should be the same as and/or complement (naturally progress) that found in the adjacent critical area.
4. Promote use of native plant communities throughout the city.
5. Control noxious weeds (non-native, highly destructive, and competitive plants) to protect native plant communities, control erosion, and preserve wetlands, open spaces, and wildlife food sources, shelter, nesting areas, and other habitat. Use the least intrusive control approach necessary to achieve the needed control.

GOAL--WATER: Protect the Spokane-Rathdrum Aquifer, Spokane River, Latah Creek, Marshall Creek, waterways, watersheds, springs, seasonal ponds, wetlands, and other water areas to safeguard water quality and riparian habitats.

POLICY:

1. Adopt comprehensive watershed planning and protection.
2. Maximize natural water storage and infiltration opportunities within drainage basins.
3. Manage storm water and surface water to prevent flooding and stream channel erosion.
4. Protect the predevelopment hydrology, hydrodynamics, and water quality in surface bodies of water.
5. Require water resource protection during site planning and construction of new development.
6. Stimulate public awareness and value of water resources to establish protective attitudes in the community.
7. Manage urban impacts on bodies of water.
8. Bring existing developments up to standards that now apply to new developments.

One of the five critical areas designated under the Growth Management Act is "aquifer recharge areas". These areas have been defined as areas where an aquifer, which is an essential source of drinking water, is vulnerable to contamination that would create a significant hazard to public health.

City of Spokane's Wetlands Protection Program, Phase I Report

The City of Spokane developed the Wetlands Protection Program, which is designed to guide local implementation of the State and Federal policy of "No Net Loss of Wetlands Area and Functions". With the aid of a state grant, the City of Spokane, the City Plan Commission Wetlands Planning Task Force (WTF), and consultants completed the Phase I Wetlands Protection Plan, which includes the following elements:

1. City Wetlands Protection Goals and Policies that provide a framework for future regulations and an action program;
2. A Comprehensive Citizen Participation/Education Program to guide education and citizen participation activities.
3. A Wetlands Status Report that summarizes 1. The local, state and federal policy and legislative background, 2. Local history of wetlands conversion, 3. Wetlands values and functions, and 4. Needs and potential for a city wetlands protection program; and
4. A detailed Wetlands Inventory, which maps and describes all wetlands found within the City limits and City owned part land west of the City limits at Indian Canyon and Palisades Park.

The stated recommended Wetland Stewardship goals and policies are as follows.

OVERALL WETLANDS MANAGEMENT

GOAL:

Develop standards, criteria, and incentives that achieve “No Net Loss” of existing wetlands.

POLICY:

- Establish appropriate wetlands classification and corresponding buffers to maintain wetland functions and values.
- Establish criteria and incentives to control wetlands access and use.
- Maintain a city wetlands inventory, and monitor achievement of the “No Net Loss” goal.

WETLANDS SITE MANAGEMENT

GOAL:

Establish an ongoing wetlands stewardship and management system for the City’s wetlands.

POLICY:

- Establish joint public/private stewardship for policy development and program implementation.

RECOVERY

GOAL:

Encourage enhancement, improvement, or restoration of wetlands that have been lost or are endangered during development.

POLICY:

- Offset losses or degradation created by new development by restoration or enhancement and develop criteria for doing so based on wetlands classification.
- Provide criteria to determine if a degraded wetland should be salvaged and provide incentives for its restoration.

PUBLIC COSTS

GOAL:

Have a balanced program of wetlands education, regulation, incentives, and preservation.

POLICY:

- Enhancements, improvements, and related protection and development costs to be borne through joint public/private endeavors.
- Use an education/participation program and survey to solicit ideas for wetland preservation.

WETLANDS VALUES

GOAL:

Balance values between preservation and development.

POLICY:

- Educate on wetland values and promote public interaction, i.e., "adopt a stream", and promote non-traditional values such as outdoor education classrooms.
- Wetlands regulations should include development review processes such as planned unit development and special permit review.
- Retain native vegetation and natural features whenever possible.
- Restore or enhance other (off-site) wetlands whenever development impinges on or degrades a wetland.

IMPACTS OF DEVELOPMENT

GOAL:

Achieve "No Net Loss" by avoiding or minimizing impacts of new development on all existing wetlands within the City of Spokane.

POLICY:

- As a condition of newly permitted activity, wetlands degraded by past development may be enhanced or rehabilitated where impacts of new development may justify mitigating measures.
- Require buffer zones between wetlands and existing or planned developments.
- Establish a wetlands mitigating measures document so developers know up front what they can and cannot do, (i.e., how close to build fencing, etc).
- Write regulations to prevent expansion of non-conforming areas and uses and provide incentives to protect wetlands.

COMPENSATION/LANDOWNERS RIGHTS

GOAL:

Clearly define compensation mechanisms for wetlands preservation and restoration.

POLICY:

- Establish guidelines and criteria for fair and reasonable landowner compensation.
- Involve all affected parties in developing compensation mechanisms.

CITIZEN EDUCATION AND PARTICIPATION

GOAL:

Improve the understanding of the public and business so that wetlands protection is balanced and reflects/serves all public interests.

POLICY:

- Maintain a strong and on-going education program on the values of wetlands for the common good.
- Create an ongoing "public interest" group to foster continued education/participation and to implement on a continuing basis, the wetlands citizen education/participation program developed during phase one of the program.
- Work out (organize, develop) "projects" with existing groups - "adopt a wetland", etc.
- Encourage active public involvement, membership, and keep wetlands issues in the public arena.

IMPLEMENTATION TOOLS

GOAL:

Establish a series of regulatory and non-regulatory implementation options that will satisfy established wetland protection goals and policies.

POLICY:

- During Phase II, design a balanced wetlands protection program of regulatory and non-regulatory elements in response to these goals and policies and the unique characteristics of the city wetlands.

MULTI-JURISDICTIONAL REGULATIONS

GOAL:

- Develop wetland protection regulations that fit, complement, and meet or exceed existing local, state, and federal regulations.

POLICY:

- Develop a “One-Stop” system for environmental permitting information.
- Create a development manual to educate developers and landowners on regulations and procedures.
- Ongoing citizen education and participation will occur throughout the regulation development process.
- The Wetlands Protection Goals and Policies will become an element of the City of Spokane’s Comprehensive Plan to amend and provide specific policies. The Wetlands Inventory element satisfies the critical areas inventory requirements for wetland in the state Growth Management Act.

Regional Health District’s Long Lake Phosphorous Management Program

Washington Department of Environmental Quality developed water quality standards for determining total maximum daily load (TMDL) for phosphorus and other nutrients. The Spokane River Phosphorus Management Plan was adopted to reduce nutrient discharge from a variety of sources and the Spokane River Phosphorus Technical Committee was formed to advise a direct implementation of the Management Plan. The Management Plan consists of structural and non-structural phosphorus reduction measures to be implemented by municipal and industrial discharges.

A phosphate detergent ban and phosphate removal technology installed at the Spokane Waste Water Treatment Plant have maintained the TMDL under 259 kg/day, the maximum established by the Long Lake Phosphorus Management Program. The Spokane River Phosphorus Technical Committee predicted that more stringent treatment could reduce phosphorus TMDL by 85% by the year 2003.

Spokane County’s and the City of Spokane’s Septic Tank Elimination Program

The City of Spokane and Spokane County have developed strategies to eliminate septic tanks in the most urbanized areas that are in aquifer recharge areas. The Septic Tank Elimination Program works in conjunction with the planned expansion of sewer service to these areas. This \$200 million sewer construction program is financed through \$75 million in grants, excise tax revenues, sales tax revenues, Aquifer Protection Area fees, and assessments or capital facilities rates. Spokane County’s “Comprehensive Wastewater Management Plan provides a 20 year priority plan for areas identified that will need sewerage.

Policies Under Development

City of Spokane’s and the Spokane Aquifer Joint Board’s Wellhead Protection Programs

The federally mandated Wellhead Protection Program was created by the Safe Drinking Water Act amendments of 1986. The intent of the legislation is to develop a basic pollution prevention program to reduce or eliminate the threat of contamination to the public drinking water supply wells.

Both the City of Spokane and the Spokane Aquifer Joint Board (19 water purveyors from the Spokane Valley and northern area) have completed the technical phase of their reports by

conducting research to assess the Aquifer's dimensions and vulnerability, and have completed identification of individual purveyors' wellhead protection areas.

Part of their technical tasks included the development of a potential contaminant source inventory, and individual purveyor contingency plans to provide alternate water sources in case of a contamination event.

Both are now working together to increase public awareness. A policy development group and focus groups will be formed, which will review various potentially dangerous activities and allow the public to let local governmental agencies know how much risk they are willing to take with their water.

Spokane County's Critical Aquifer Recharge Areas (CARA)

Portions of Spokane County act as critical recharge areas for potable water supply aquifers that are used by County residents. Critical Aquifer Recharge Areas are designated based on their geologic characteristics and the potential for these areas to transport contaminants to an aquifer that serves as a potable water supply. A task force commissioned by Spokane County is currently developing Critical Aquifer Recharge Areas policies and guidelines to preserve and protect Spokane County's groundwater resources.

Future Implementation Actions

Since this memo was first drafted, progress has been made on two of the primary sources of new policy and regulation relating to water supplies. Even so neither the Wellhead Protection Program nor the Critical Aquifer Recharge Areas programs have been completed. The following sections describe methods to follow to meld the results of these programs into the CWAP and/or County policy as appropriate.

Wellhead Protection Policy Development

It was originally expected that the information presented under this task would summarize the results of the policy development phase of the City of Spokane and Spokane Aquifer Joint Board Wellhead Protection Program's. Presenting the recommendations in this memo attached to the Coordinated Water System Plan would provide a means through which elected officials could endorse the Aquifer protection needs of Wellhead Protection. In fact the process of developing recommendations for purveyor/community directed protection measures fell behind schedule; the work presented here is in fact "ground work" being used to provide ideas regarding the form and potential content of Wellhead Protection recommendations for the Citizens Wellhead Committee and their attendant "focus groups."

Though not complete at this time the recommendations should be available as the CWSP is going through final approval. The recommendations should be added to the CWSP as an addendum . If the addition occurs before final action on the CWSP by elected officials it will be incorporated into the Plan as originally intended. Creating an addendum to the CWSP after its adoption will insure that the recommendations are revisited when the CWSP is next updated.

Spokane County's Critical Aquifer Recharge Areas (CARA)

The Critical Aquifer Recharge Area Advisory Committee has completed its work, produced recommendations and forwarded them to the Planning Commission for adoption. In essence these recommendations take existing ground water protection measures adopted for the Spokane Valley Aquifer and applies them to susceptible aquifers County – wide. When the Planning Commission and the Spokane County Board of County Commissioners adopt the final draft, these regulations and policies will become laws that will be enforceable by the County.