

May 14, 1986

INTRODUCED BY: LOIS NORTH

PROPOSED NO.: 86-321

MOTION NO. 6555

A MOTION accepting the Scope of Work for the South King County Coordinated Water System Plan.

WHEREAS, the King County council passed Motion 6407 on December 16, 1985 authorizing the executive to enter into an Interlocal Agreement with the Regional Water Association of South King County, and

WHEREAS, King County entered into that Interlocal Agreement on December 31, 1985, and

WHEREAS, the Interlocal Agreement states that King County shall approve the Scope of Work for the South King County Coordinated Water System Plan, and

WHEREAS, planning and community development, health department, and council staff have reviewed the Scope of Work and recommend approval;

NOW, THEREFORE, BE IT MOVED by the Council of King County:

The Scope of Work for the South King County Coordinated Water System Plan is approved as generally described in the attached document.

PASSED this 27th day of May, 1986.

KING COUNTY COUNCIL
KING COUNTY, WASHINGTON

Andrey Luyker
Chair

ATTEST:

Janet M. Owens
Clerk of the Council

SOUTH KING COUNTY REGIONAL WATER PLAN

May 8, 1986

The Scope of Work includes three distinct parts: Part A - preparation of the Coordinated Water System Plan (CWSP), Supplementary Provisions for the Public Water System Coordination Act and Water Supply Reservation, and preparation of individual Water System Plans for selected water systems; Part B - a Ground Water Management Plan (GWMP); and Part C - a Joint Agreement with the USGS for development of groundwater data. These products are distinguished from one another by separate but related objectives, and/or by accountability to different agencies for the completion of each product. However, the tasks involved in the efforts are closely associated, and will be integrated into a single plan.

PART A - SOUTH KING COUNTY COORDINATED WATER SYSTEM PLAN

Task I - Coordinate King County Declaration of Study Area as CWSSA, Establish Water Utility Coordinating Committee (WUCC), and Adopt External Critical Water Supply Service Area Boundaries

Task II - Refine the Scope of Work and Time and Manpower for the Coordinated Water System Plan

Submit a preliminary budget and list of tasks to the Department of Social and Health Services (DSHS) to request funds for preparing the CWSP. Consultant will work with the King County staff and WUCC/RWA to further define responsibilities, budget requirements, and to integrate the work products into the results of the final CWSP Scope of Work. This work will be reviewed by DSHS to determine grant funding and compliance with the objectives identified in the Preliminary Assessment. The "Related Studies" will be used as local match for grant budgeting purposes and their findings will be incorporated into the CWSP.

Task III - Develop Service Area Boundaries and Proposed Policies for Expansion

- A. The consultant will compile proposed water service area boundaries. This will require:
1. Contact with all water purveyors to verify existing service areas and solicit information on proposed service area expansions.
 2. Drafting a service area map showing proposed future service area boundaries and identification of areas currently not served or that will not be served in the future.

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- B. The Consultant and the WUCC will define criteria for the establishment of future service areas to allow efficient expansion of each utility. Service policy will require input and coordination with the appropriate County staff to ensure compatibility with existing and proposed land use plans.
- C. After identification of proposed future service areas and after the project develops criteria and administrative procedures, future service areas will be identified and conflicts will be addressed and resolved through meetings of affected utilities. If the conflict is not resolved, DSHS procedures will be followed. The information will be forwarded to DSHS for appropriate action.

Task IV - Formulate Minimum Design Standards

- A. The WUCC, assisted by the Consultant, will draft design standards. An initial step is to compile standards currently in use in other urban counties. These include materials specifications, construction practices, utility location, metered services, fire flow requirements, and others. In addition, state and federal standards will be used to establish urban, suburban, and rural water supply design requirements and be coordinated with land use policies identified by the County.
- B. The Consultant will assist the WUCC in selecting a set of acceptable water system design standards which meet existing and future water system needs. This will also include developing a review process for future expansion of water systems.
- C. The WUCC, assisted by the appropriate County staff and consultant, will develop a program for implementation of the standards. It will be necessary to ensure that the implementation process is coordinated with existing County review procedures for fire flow, waste management, and land use permitting activities.
- D. The Design standards should be adopted by the County by a separate ordinance. A draft ordinance will be prepared by the Consultant.

Task V - Identification of Water Service Requirements Based on Projected Land Use

- A. The Consultant will identify the urban and rural service areas for application of minimum design standards.
 - B. County Planning staff and the consultant will identify urban growth areas and designate, where possible, future residential, commercial, and industrial development areas to help establish the potential demand on the supply system. Fire flow requirements will be incorporated in the design requirements.
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Task VI - Assessment of System Capabilities to Meet Existing and Projected Water Service Needs

The RWA contract with the Tacoma Water Division will be a major consideration in this assessment. Preliminary information is required by January 1987 to guide further action by RWA on their involvement in the Pipeline #5 project.

- A. The Consultant will assess the general availability of supply, storage, and transmission capacity to meet existing and future service area needs based on individual plans. They will also identify areas of possible water right conflicts for both the ground and surface water resources.
- B. The consultant will assemble available data from the utilities, DSHS, the Department of Ecology (DOE), and other data to prepare a Water System Plan for Class I and II systems. The WUCC will identify the systems for the Consultant. In the absence of a completed plan for the remainder of the systems, the Consultant will rely on information provided through general surveys.
- C. The Consultant will review the supply and system available to meet the 10-, 15-, and 20-year needs as projected by the purveyors, and will identify potential shortfalls in the existing purveyor plans when the total region is considered.

Because of the importance of water supply reservation to the final plan, DOE will be requested to review the basis for establishing the shortfall. Verification of system capacity and its availability to meet regional needs is essential. A careful review and update of the projections developed in the Tacoma Water System Plan, South King County Water Association Plan, and Seattle Water System Plan will be used to establish validity of findings. The analysis will be based on existing independent findings, and will present the information independent of regional concerns. The objective is to establish a data base and the source development policy of each major purveyor.

- D. The Consultant will identify major system needs to meet project service area requirements. The Consultant will also prepare a matrix evaluation of the individual Class I water system plans and their compatibility with the CWSP supplementary provisions.

Task VII - Identify the County's Future Role in Providing Support Services to Existing Water Purveyors

- A. It is anticipated that the County, will provide background data necessary for water system planning including population projections,

economic trends, land use projections, transportation plans, and updated groundwater data. Puget Sound Council of Governments data will be used to supplement King County data. The Consultant, in cooperation with the County, will select a County base map for County planning activity; i.e., utilities, land use, etc.

- B. The Consultant will identify existing County administrative and regulatory programs beneficial to purveyors. Recommendation will be developed on methods to improve the County's administrative and support program.

Task VIII - Identify Major Area-Wide Water Resources to Supply Future Needs

RWA relies primarily on groundwater and limited amounts of surface water for domestic use.

The Cities of Tacoma and Seattle are completing extensive surface and groundwater studies. It is necessary to integrate these efforts into the South King County Water Supply Development Plan to effectively solve future resource problems.

The integration of the groundwater study and update of the resource management program briefly outlined in the RWA Water Study will be done in two phases. The first phase will be to assemble all available studies and incorporate recently obtained information into the program for reference. The second phase will identify the most acceptable method of a conjunctive use and cooperative management program by the area's water purveyors. The design of the program will depend upon the state's water resource policy decisions associated with regional source development. Development of this plan will seek to provide water in the most economical and efficient manner.

Task VIII differs from VI in that this procedure will seek a regional solution versus independent actions. Task VI information will be used as a base to establish regional resource options.

- A. The Consultant will update water supply options which have the potential for supplying future needs. This will require an update of the analysis of studies which describe current surface and groundwater resources. The surface water development component of the study will update existing assessments of available surface supplies. If the Green River is considered a potential supply for future needs of purveyors beyond the new 1985-RWA contract, the ability of Tacoma to provide water, more water will be assessed along with purchase of water from Seattle.

- B. The Consultant will determine future water needs for the next 10, 25, and 50 years, based on existing studies, population projections, and land use patterns. Population projections beyond the 20-year horizon must be based on accepted forecasting methods.
- C. The CWSP will be developed to comply with the regulations of DOE for water supply reservation. The Consultant and WUCC will identify alternative water reservation boundaries to coincide with the study area or the County boundary. DOE and DSHS staff will be consulted to ensure that the regional resource issues are properly considered and developed to support the Petition for Water Supply Reservation as provided for in Task XI. The environmental studies associated with Water Supply Reservation will be scoped out as an optional task. (If a full Environmental Impact Statement (EIS) is required to complete the DOE review of the Petition for Water Supply Reservation, the EIS would be an addition to the Scope of Work and would include the Maximum Net Benefit Analysis.)
- D. The Consultant will recommend water reservation areas, map the boundaries, identify the resources available, and list existing water rights. Since the reservation boundary may have an impact on nonmunicipal uses, the boundary alignment must also consider other consumptive uses, instream uses, and the results of the water quality studies.
- E. The Consultant, in cooperation with the WUCC, will identify the procedures to be used in guiding the allocation of limited reserved water rights. Development of these procedures will be coordinated with the ongoing King County Comprehensive Land Use Plan effort and related studies. The procedures will be referenced in the Petition outlined in Task XI.

Task IX - Assess the Possibility of Shared Facilities and Develop Intertie and Water Wheeling Contracts

The Coordinated Water System Planning effort requires the identification of larger individual water systems which could share their service capability with other smaller systems. Water supply may also be inadequate as the smaller systems grow, or water quality problems could result in the need to treat or abandon local groundwater supplies. The development of a regional program, which allows for sharing source facilities through interties, will help solve existing and potential supply problems. A conjunctive use program will be considered.

- A. The Consultant and WUCC will identify all potential systems where shared sources could occur. This will identify system capabilities to meet projected water service needs, and will also include an assessment of the availability of supply, storage, and transmission capacity of major systems in relation to projected population growth for the service area.
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- B. The Plan will require establishing formal responsibilities for participation in a shared facility program. The WUCC and Consultant will assess alternative financial and management methods available for such facilities.
- C. The Consultant will develop an approach to financing joint-use facilities and methods to manage those facilities.
- D. Based on the results of a regional hydraulic analysis the consultant will develop a general outline for water wheeling contracts. The outline will include optional provisions to permit the development of several model contracts that recognize the different types of joint projects and/or regional water supply needs of King County utilities.

Task X - Develop and Finalize the County Administrative Support System

The CWSP will assemble WUCC recommended water system policies. An administrative program for carrying out the recommended goals and policies will be recommended by the consultant for review and approval by WUCC and the County.

- A. The Consultant, in cooperation with WUCC, will develop goals and objectives that are common to both good utility planning and operations and more general County resource management needs, such as hazardous waste design and source protection through environment control, conservation, etc.
- B. The Consultant and WUCC, will evaluate short-term versus continued levels of effort required by County staff to achieve the identified goals and objectives and to administer the provisions of the CWSP, including the coordination of land use and UTRC review procedures.
- C. All parties will establish the role of the County Health Department, Planning, and Public Works Departments in the administrative process. The process will be integrated with state procedures to minimize conflict and delay.
- D. The Consultant, the County, and WUCC will develop a management system to ensure that utility review procedures are understood and followed for new and existing water systems.

Task XI - Prepare Petition for Water Supply Reservation

The information developed for preparation of the Coordinated Water System Plan - Public Water System Coordination Act will be expanded as required to fulfill the supplementary provisions for Water Supply Reservation. The following tasks will be completed:

- A. Specific boundaries of water reservation areas will be identified by WUCC, DOE, and the Consultant, taking into account non-domestic and instream water needs in the County and adjacent area and the Ground Water Management Area.
- B. Documentation required by DOE for the Petition will be presented in a matrix and cross-referenced to needs, existing systems, and available resources. This will include analysis of DOE's water right record.
- C. A detailed Petition for Water Supply Reservation will be prepared by the consultant in cooperation with the WUCC and GWMAC. The Petition will be based on the findings in Tasks VI and VIII, and on pending water resource issues in the State. Discussion will be included on a recommended conservation program for water utilities in accordance with DOE requirements.

Task XII - Interim Reports, Public Forum, and Draft Coordinated Water System Plan

- A. A minimum of three interim or phase reports will be prepared for review by WUCC and the interested agencies. Reviews will be scheduled for each interim report to help explain the preliminary findings, recommendations and responsibilities of the many agencies and purveyors involved. Particular emphasis will be placed on informing the County legislative and administrative personnel to help ensure the development of an implementable plan.
 - B. The Consultant will be responsible for developing and printing 50 copies of the draft Plan for review by the WUCC and the local agencies.
 - C. A User's Guide will be prepared for the general public and development community. The objective of the guide is to present the administrative procedure the County utility policies, and the major recommendations of the CWSP and GWMP in a public use document.
 - D. Other project deliverables will be the following:
 - 1. A 5-year implementation schedule which will be included in the Users Guide, and
 - 2. A recommendation on a continuing groundwater monitoring program.
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BUDGET
SOUTH KING COUNTY REGIONAL WATER PLAN
April 22, 1986

Task	Direct	In-Direct	In-Kind
PART A - CWSP	\$	\$	\$
I Establish WUCC External Boundary	3,600		
II Refine Scope of Work	4,800		
III Develop Service Area Boundaries	9,600		
IV Minimum Design Standards	8,000		
V Project Water Service Requirements	10,000		
VI Water System Capabilities	142,000	60,000	
VII County Support	4,800		
VIII Future Resources	81,000	40,000	
IX Joint Projects	108,000		
X County Administration	10,800		
XI Water Supply Reservation Petition	12,000		
XII Draft CWSP	12,000	8,000	
WUCC Participation			36,000
Subtotal	406,600	108,000	36,000
PART B - GWMP (not including USGS Joint Funding Agreement)			
I Establish Ground Water Advisory Committee	2,400		
II Prepare GMA Designation Request	2,200		
III Characterize Geohydrology	80,000	20,000	
IV Land Use Impact on Water Quality	80,000	30,000	
V Project Future Ground Water Needs	42,000		
VI Quality and Quantity	12,000		
VII Alternative Management Strategies	57,300	20,000	
VIII Ranking and Recommendations	16,000		
IX Implementation Plan	16,000		
X Additional Field Studies (Optional)			
WUCC/GWMAc Participation			20,000
Subtotal	307,900	70,000	20,000
PART A AND B - COMBINED REPORT			
I SEPA Checklist/EIS	40,000		
II Adoption of the CWSP and GWMP	20,000		
Subtotal	60,000		

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BUDGET (continued)
SOUTH KING COUNTY REGIONAL WATER PLAN
April 22, 1986

Task	:	Direct	:	In-Direct	:	In-Kind
PART C - USGS STUDY (USGS Joint Funding)	:	\$ 579,000	:	\$:	\$
I Geophysics	:		:		:	
II Basic Well Data	:		:		:	
III Geometry	:		:		:	
IV Flow Systems	:		:		:	
V Estimate Recharge	:		:		:	
VI Water Budget	:		:		:	
VII Estimate Major Pumpage	:		:		:	
VIII Water Quality	:		:		:	
IX Design Network	:		:		:	
X Additional Data Needed	:		:		:	
XI Compare Findings/CWSP	:	<u>15,000</u>	:		:	
Subtotal	:	594,000	:		:	
PROJECT ADMINISTRATION	:		:		:	
Meetings, Presentations, Misc.	:	20,000	:		:	
Reports/Computer/Contingency	:	35,000	:		:	
Health Department	:	5,000	:		:	
Planning Department/Legislative	:		:		:	<u>20,000</u>
Subtotal	:	60,000	:		:	20,000
TOTAL	:	<u>\$1,428,500</u>	:	<u>\$ 178,000</u>	:	<u>\$76,000</u>
TOTAL ALL: \$1,682,500	:		:		:	