

REPORT

TO THE WATER FORUM SUCCESSOR EFFORT AND THE

CALIFORNIA DEPARTMENT OF WATER RESOURCES

CONCERNING

STAKEHOLDER INTERVIEWS

AND

PROCESS RECOMMENDATIONS

RELATING TO A COLLABORATIVE PROCESS

ADDRESSING GROUNDWATER MANAGEMENT

IN CENTRAL SACRAMENTO COUNTY.

The California Center for Public Dispute Resolution

February, 2002

EXECUTIVE SUMMARY

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EXECUTIVE SUMMARY

The Water Forum Agreement which was signed by forty stakeholder organizations in April 2000 requires that, under the aegis of the Water Forum Successor Effort, there shall be discussions involving all interested parties to create a groundwater management plan designed to address the unique circumstances of the central area of Sacramento County. At the same time, the Department of Water Resources' Integrated Storage Investigations Program has as one of its goals the formation of partnerships with appropriate agencies to share data and costs for planning and developing locally controlled and managed groundwater management projects. Given the complementarity of these objectives, the Department has entered into a Memorandum of Understanding with the Sacramento City-County Office of Water Planning, acting on behalf of the Water Forum Successor Effort, in order to support discussions among stakeholders representing all segments of the community that have an interest in developing a groundwater management plan for the central area of Sacramento County.

The California Center for Public Dispute Resolution provided the facilitation and mediation services during the collaborative process that led to the signing of the Water Forum Agreement and is conducting a stakeholder assessment in the central area of the County in order to identify items of concern to potential stakeholders and to formulate recommendations on how a collaborative process addressing groundwater management might be structured. Typically, the Center uses a five-stage problem-solving model that includes planning and assessment, organization, education, negotiation and implementation.

The geographic area to be included in the collaborative process is bounded on the north by the American River, on the east by the Sierra foothills, on the south by the Cosumnes River and on the west by the Sacramento River and Interstate-5. Current conditions in this area which must be taken into account include:

- the area is served by eleven organized water purveyors
- the Sacramento County Water Agency's Zone 40 is funded to provide for the construction of major water supply facilities but much of the necessary infrastructure is not yet in place

- there are more than six thousand residents and businesses that supply their own groundwater and have a vital interest in safeguarding the health of the groundwater basin
- the area is experiencing significant growth and formerly agricultural land is being converted to residential use
- groundwater contamination is a concern at a number of locations including three areas designated as Superfund sites
- several stakeholders in the groundwater basin are already involved in litigation related to groundwater concerns.

The purpose of the stakeholder assessment is to identify the conditions favorable to an interest-based collaborative process and the specific concerns of potential stakeholders as well as to develop a preliminary design for the process. To do so, the assessment has relied upon a review of background materials and interviews with ninety-four stakeholders. During these interviews, the six most frequently mentioned concerns related groundwater were:

- potential over-drafting of the aquifer / declining groundwater table
- water quality / groundwater contamination
- impacts of development
- cost of solving the problem
- equitable sharing of costs
- lack of public awareness of any groundwater problems or concerns.

In addition, the assessment identified four areas of broad consensus: the health of the aquifer should be protected; it will cost money to do so; these costs should be shared equitably; a regional effort is required.

The recommendations regarding the collaborative process which emerged from the assessment are:

- the Water Forum Successor Effort and Department of Water Resources should initiate a collaborative process to be known as the Central Sacramento County Groundwater Forum
- six interest groups should be represented in the process including agriculture, agricultural/residential groundwater users, business, environmental / community organizations, local government / public agencies and water purveyors
- each interest group should be represented by five individuals
- these representatives should participate in the design of the process

- the education phase of the process will be especially important
- the negotiation phase should focus on creating a mechanism(s) that will allow the interest groups to work collaboratively on problems of common concern.

The Groundwater Forum is not a decision making body and has no independent authority. Its purpose is to develop mutually agreed upon recommendations which will be presented to Water Forum Successor Effort for review and approval and forwarded to the relevant public agencies for implementation, as appropriate.

No collaborative process can provide a guarantee of success. However, four important pre-conditions for success can be identified: participants are willing to commit the necessary time and energy; participants are willing to meet the challenges associated with each phase of the process; participants are willing to work together; the process has adequate resources and support. Assuming these conditions are met, the Central Sacramento County Groundwater Forum can be an important step in protecting the groundwater basin for current users and future generations.

I. INTRODUCTION

The Water Forum Agreement

The Water Forum Agreement (WFA) addresses two co-equal objectives: provide a reliable and safe water supply for the region's economic health and planned development to the year 2030 and preserve the fishery, wildlife, recreational, and aesthetic values of the Lower American River. The Agreement contains seven major elements designed to facilitate implementation of these objectives:

- Increased surface water diversions
- Actions to meet customers' needs while reducing diversion impacts in drier years
- Support for improved pattern of fishery flow releases from Folsom Reservoir
- Lower American River Habitat management Element
- Water conservation element
- Groundwater element
- Water Forum Successor Effort (WFSE) Element.

The Agreement was the result of a six-year collaborative problem-solving negotiation which included agricultural and business leaders, citizen and environmental organizations, water managers and local governments in Sacramento County. (Water managers from Placer and El Dorado Counties became part of the negotiations in 1995.) In April of 2000, the agreement was signed by forty stakeholder organizations/agencies. The WFA provided for the establishment of the Water Forum Successor Effort which is responsible for overseeing, monitoring and reporting on the implementation of the Agreement. The Successor Effort, composed of representatives of the stakeholder organizations that are WFA signatories, continues the interest-based collaborative process that was used in developing the Agreement. The Successor Effort has no independent governing or regulatory authority.

Recognizing that the groundwater basin supplies over half the water used in the region, the Groundwater Element of the Agreement sets out specific recommendations designed to protect the viability of this resource for both current and future users. Among the most important of these, were recommendations concerning sustainable yield in the three sub-areas of the basin and a groundwater management governance structure.

- Sustainable yield is defined as the amount of groundwater that can be safely pumped from the groundwater basin over a long period of time while maintaining acceptable groundwater elevations and avoiding undesirable effects such as increased pumping costs, accelerated movement of underground pollutants, etc.
- Recommendations for a groundwater management governance structure in the North Area of the County (i.e., in the area between the American River and the Sacramento - Placer County boundary) were spelled out in some detail. These

recommendations were subsequently implemented by Sacramento County and the Cities of Citrus Heights, Folsom and Sacramento and led to the creation of the Sacramento North Area Groundwater Management Authority (now know as the Sacramento Groundwater Authority).

- With regard to groundwater management governance in other areas of Sacramento County, the Agreement recommended: "...Discussions involving all parties interested in the negotiation of groundwater management arrangements in the (Central) area and the (Galt) area will continue. These discussions, employing the principles of interest-based negotiation, are part of a public process designed to provide all community interests the opportunity to participate in tailoring a groundwater management plan to fit each area's unique circumstances."

California Department of Water Resources (DWR): Integrated Storage Investigations

The goal of the DWR's Integrated Storage Investigations / Conjunctive Water Management Program is to increase water supply reliability statewide through planned, coordinated management and use of groundwater and surface water resources. The program's emphasis is on forming partnerships with local agencies and stakeholders to share technical data and costs for planning and developing locally controlled and managed conjunctive water management projects.

During the past two years, the Program has concentrated its efforts on assisting local agencies with basinwide planning to meet in-basin water needs, basin monitoring, and practically and economically managing their groundwater and surface water resources. Toward this end, the Program has, among other activities, executed Memoranda of Understanding (MOUs) with thirty local agency partners and provided technical and financial assistance to study groundwater basins and assess opportunities for conjunctive water management.

Cooperation between the Water Forum Successor Effort and the Department of Water Resources

The goal of the Integrated Storage Investigations Program (ISIP) is to create partnerships with local agencies in order to plan and develop locally controlled water management programs. One of the objectives of the Water Forum Successor Effort is to continue a public process designed to provide all community interests the opportunity to participate in developing a groundwater management program which takes into account local needs and circumstances. Given the complementarity of these objectives, the Department of Water Resources has entered into a Memorandum of Understanding with the Sacramento City-County Office of Metropolitan Water Planning acting on behalf of the WFSE.

The MOU calls for the parties to work cooperatively to:

- Identify and convene stakeholders representing all segments of the community that have an interest in developing a groundwater management plan
- Conduct an educational effort among the stakeholders to establish a common understanding of the groundwater basin conditions
- Negotiate a groundwater management program, including identification of basin management objectives and some form of governance, if appropriate.

Role of the California Center for Public Dispute Resolution

The California Center for Public Dispute Resolution (CCPDR) is a joint program of California State University Sacramento and the McGeorge School of Law of the University of the Pacific. The mission of the Center is to enable public agencies and stakeholder groups to use collaborative problem-solving strategies and techniques to develop innovative solutions to intractable public policy issues. The range of tools and techniques offered by the Center in these consensus-building situations include such things as feasibility assessments, strategic consultations, facilitation, mediation and training and coaching in collaborative skills.

CCPDR provided the facilitation and mediation services during the six-year collaborative process which led to the signing of the Water Forum Agreement. Under contract to DWR, the Center is conducting a stakeholder assessment in order to:

- identify community interests related to groundwater in the central area of Sacramento County and items of concern to these potential stakeholders, and
- formulate recommendations on how a collaborative process might be structured.

Based upon research on collaborative problem-solving as well as more than a decade of intensive experience across a broad range of public policy issues, the Center often employs a five stage model in decision-making on public issues. These stages may be briefly describe as:

❖ PLANNING AND ASSESSMENT

- What groups/interests should be represented?
- What are the issues and concerns of the participants?
- What level of staffing / support will be necessary?

❖ ORGANIZATION

- Secure participation of group/interest representatives.
- Determine meeting logistics and schedule.
- Develop preliminary agenda for Education Phase, including training in interest-based collaboration.

❖ EDUCATIONAL

- Review history, context, legal framework and develop common information base.

Develop common understanding of problems and issues, a thorough knowledge of one's own interests *and* the interests of the other parties. Determine framework for negotiation, including range and order of issues to be addressed.

❖ NEGOTIATION / RESOLUTION

Option generating / brainstorming / inventing, not deciding.
Developing / refining trial balloons.
Linking and packaging agreements.

❖ IMPLEMENTATION

Connect agreements to external decision-making.
Monitor implementation to assure compliance.
Respond to changed conditions as needed.

These stages are not necessarily, and in fact seldom are, discrete. The process is not always linear. The unique circumstances of each situation will influence the process and the structure of the process must be flexible enough to be able to respond to the needs of the participants. Finally, it should also be noted that this report represents one of the milestones in transitioning from the assessment and organizational phases to the education stage of the process.

BACKGROUND

Geographic area addressed in this process

The Groundwater Element of the Water Forum Agreement states: “The hydrology of the Sacramento region suggests three groundwater sub-areas within the basin, each with different problems and conditions.” The Agreement further directs that: “Groundwater management...should recognize these differences and provide for local control in each sub-area of the basin so as to address these varying problems and conditions more effectively.”

These three sub-areas can be broadly defined as the area north of the American River, the area between the American and Cosumnes Rivers and the area south of the Cosumnes. The current assessment and negotiation process addresses the central portion of the basin, that is, the area between the American and Cosumnes Rivers and is bounded on the east by the Sierra foothills and on the west by the Sacramento River and Interstate-5. (The area west of Interstate-5 is not addressed in the Water Forum Agreement and is considered to be outside the developed metropolitan area of the County.)

NOTE: At the time the WFA was being negotiated these three sub-areas were referred to as the North Area, the South Area and the Galt Area following the long-established practice of the County Water Agency. However, in order to avoid possible confusion by referring to the central sub-area of the basin as the South Area, for purposes of this collaborative process the three sub-areas will now be described the North Area, the Central Area and the Galt Area.

Current conditions

In considering a collaborative process to address groundwater and groundwater management in the central area of the County, the following important factors must be taken into account.

1. The area is currently served by eleven organized water purveyors: Arden-Cordova Water Service, California-American Water Company, City of Folsom, City of Sacramento, Elk Grove Water Service, Florin County Water District, Fruitridge Vista Water Company, Omochumne-Hartnell Water District, Rancho Murieta Community Services District, Sacramento County Water Agency and Tokay Park Water Company.
2. The Sacramento County Water Agency’s “Zone 40” is funded by fees collected at the time of development and by utility charges. The purpose of Zone 40 is to provide for the construction of major water supply facilities in the urban and urbanizing areas of the Laguna, Elk Grove and Vineyard communities. However, the infrastructure to deliver water in much of the area is not yet in place.
3. Large portions of the central area are not served by any organized purveyor. As a result, there are more than six thousand agricultural/residential

groundwater users: i.e., residents and businesses that pump their own groundwater. Though not represented by any purveyor, agency or organization, these groundwater users have a vital interest in safeguarding the health of the groundwater basin.

4. Sacramento County is experiencing significant growth in population. Between 1990 and 2000, population rose from 1,041,219 to 1,223,499, an increase of 14.7%. Much of this growth is taking place in the Central Area of the County, leading to the conversion of what was formerly agricultural land (irrigated and non-irrigated) to residential use.
5. The area between the American River and the Cosumnes River contains three sites designated as Superfund sites by the U.S. Environmental Protection Agency. These sites, Aerojet General Corporation, Mather Field and the Sacramento Army Depot, have been placed on the National Priorities List because of groundwater contamination. In addition, groundwater contamination is also a concern at the Kiefer Landfill, operated by Sacramento County, at the Union Pacific Railyard and at other source-localized contaminant areas.
6. Several of the agencies or organizations that have an interest in the Central Area of the groundwater basin are already involved in litigation related to groundwater issues and concerns.

II. STAKEHOLDER ASSESSMENT

Purpose

The purpose of a stakeholder assessment is twofold.

- Determine whether the conditions favorable to an interested-based collaborative process are present. This requires answering such questions as:
 - Are the issues negotiable?
 - Are there potential areas for agreement?
 - Can the primary parties in interest be identified?
 - Are they willing to participate?
 - Does any party have assurance of a much better deal elsewhere?
- Identify the specific concerns of potential participants in order to understand the scope of the problem and the range of issues to be addressed and to develop a preliminary process design.

Methodology

The assessment relied primarily on two sources of information.

1. Interviews

One hundred face-to-face interviews have been completed. The initial list of names was drawn from such sources as Water Forum Successor Effort participants, the Office of Supervisor Don Nottoli and the Sacramento City-County Office of Metropolitan Water Planning. Those individuals who were interviewed were also asked to suggest additional names of agencies or organizations which might have an interest in conditions in the groundwater basin and/or groundwater management. The goal was to obtain information from people representing a wide range of interests including agriculture, agriculture/residential groundwater users, the business community, environmental organizations, citizen groups, water purveyor and public agencies. (See Appendix 1 for a list of individuals interviewed as well as those consulted to date.)

The interviews focused primarily on seven broadly stated and open-ended questions designed to elicit the respondents' most important issues and interests. (See Appendix 2 for a list of the interview questions.) Interviews were conducted on a one-on-one basis or in a small group setting and ranged in length from forty-five minutes to two hours.

2. Review of background materials.

The review of written materials included:

- A. Sacramento County Groundwater Model (SCGM)
- B. SCGM Phase II Baseline Conditions for Groundwater Yield Analysis
- C. Water Forum Agreement
- D. Sacramento County Water Agency Zone 40 Water Master Plan.

III. SUMMARY OF ASSESSMENT RESULTS

Items of concern

During interviews, stakeholders identified more than thirty items of concern. (See Appendix 3.) The six most frequently mentioned items include:

POTENTIAL OVER-DRAFTING OF THE AQUIFER / DECLINING WATER TABLE.

There is no overall agreement on whether the groundwater basin is currently at or may be approaching a state of overdraft. In some parts of the Central Area, groundwater users have noted a drop in water levels of more than seventy feet over the last fifty years. Other users have experienced a much slower rate of decline. Nonetheless, there was widespread concern that continued pumping on a "business as usual" basis would certainly increase the risk of driving the basin into overdraft.

WATER QUALITY / GROUNDWATER CONTAMINATION.

Existing groundwater contamination, the consequences of movement of plumes of contamination from sources such as Aerojet and Mather Field and other man-made causes of contamination such as urban run-off were cited as items of concern by a large majority of those interviewed. Generally, the degree of concern was directly related to the respondent's proximity to a known source of contamination or contaminant plume.

IMPACTS OF DEVELOPMENT

The rapid urbanization of large sections of the Central Area of the County and the consequences of this trend were widely discussed. Some respondents view development as necessary, desirable and benefiting the community at large. Others see it as excessive, heedless of impacts on the natural environment and disruptive to the community. Regardless of their perspective on the matter, however, respondents recognized the need to protect the groundwater from adverse impacts that could endanger the health of the basin in the long term.

COST OF SOLVING THE PROBLEM

Many of those interviewed expressed concern about the potential costs associated with protecting the groundwater supply. These concerns varied depending upon the respondent's experience and point of view. Some worried about the "huge" costs associated with building the infrastructure necessary to deliver surface water to areas where it is not currently available. Others talked about the cost of having to deepen their own wells. Still others commented on the costs that will inevitably be incurred if nothing is done.

EQUITABLE SHARING OF COSTS

Closely related to the costs of solving the problem but, at the same time a distinct issue, was concern about how costs might be equitably shared by all segments of the community. A number of complicated questions arise under this heading such as how to divide costs between existing rate-payers and new residents, at what point would increased water costs for agriculture drive land out of production, what is a realistic cost given a water purveyor's revenue base, etc.

LACK OF PUBLIC AWARENESS OF ANY GROUNDWATER PROBLEMS OR CONCERNS

A number of respondents expressed concern over the lack of public awareness that there are *any* issues or concerns related to groundwater. Some of those interviewed stated that the first challenge in any collaborative process will be to "prove to me that there is a problem". Others did not question the existence of groundwater concerns

but noted that “people are unwilling to do anything until there’s a crisis and until they turn on the tap and no water comes out, there is no crisis”.

Areas of agreement

Despite a wide divergence of concerns and perspectives on a number of issues related to groundwater and groundwater management, there is a broad consensus among the stakeholders interviewed on four important points:

- #1. The health and viability of the groundwater aquifer should be protected for both current and future users.
- #2. It will cost money to do so.
- #3. These costs should be shared in some manner that is equitable to all segments of the community.
- #4. No single political jurisdiction, agency or organization can assure the protection of the groundwater basin. A cooperative regional effort is required.

IV. RECOMMENDATIONS FOR THE COLLABORATIVE PROCESS

Introduction

More than thirty items of concern related to groundwater and groundwater management were mentioned by those interviewed. Some of these items were brought up by a significant majority of those contacted. For example, potential over-drafting of the aquifer / declining groundwater table was cited as an item of concern by more than 75 % of those responding. Other issues, such as the ownership of treated water, were referred to by only a few of the stakeholders who were interviewed. However, the number and breath of these items of concern is an indication of:

- the complexity of groundwater issues in the Central Area of the County
- the challenge of implementing a collaborative process which will address those issues that can be resolved through a consensus-building effort and will also identify those issues which either must be dealt with in other venues or should be addressed only when some appropriate and acceptable groundwater management arrangements are in place
- the need to safeguard the process so that it is not drawn off course by issues or events completely outside of its purview or control.

Recommendations

In order to establish a collaborative process which will bring together the requisite stakeholder interest groups and can work productively to develop recommendations on groundwater and groundwater management in the Central Area of Sacramento County, the California Center for Public Dispute Resolution makes the following recommendations.

1. CENTRAL SACRAMENTO COUNTY GROUNDWATER FORUM

The Water Forum Successor Effort and the Department of Water Resources should enter into a jointly sponsored program to create a collaborative process to address groundwater related matters in central portion of Sacramento County. This process would be known as the Central Sacramento County Groundwater Forum.

2. INTEREST GROUPS TO BE REPRESENTED

The following six interest groups should be represented in this collaborative process: agriculture, agricultural / residential groundwater users, business, environmental / community organizations, local government / public agencies and water purveyors.

3. REPRESENTATION

Each interest group should be represented by five individuals. These representatives should be appointed by their stakeholder organization / entity (where appropriate) or clearly identifiable as a member of the interest group. Thirty participants will allow for both diverse representation of each interest group and reasonably efficient operation.

4. REPRESENTATIVES SHOULD PARTICIPATE IN DESIGN OF THE PROCESS

The participants should be a part of the design of the process from their involvement in the Organization Phase onward (see page 5 above). Therefore, one of the first orders of business when the process convenes will be for interest group representatives to adopt a Mission and Goal Statement, Guiding Principles and Ground Rules under which they will operate and to engage in setting the agenda for the Education Phase that follows.

5. IMPORTANCE OF THE EDUCATION PHASE

Given the wide disparity in knowledge and experience among participants with regard to both collaborative decision-making processes and substantive groundwater issues as well as the differing views on the current status of the groundwater basin, it will be critically important for all participants to work together in good faith to arrive at a common understanding of what are the *facts* concerning the basin and to achieve a thorough grounding in the principles of interested based negotiation.

6. PREPARATION FOR THE NEGOTIATION / RESOLUTION PHASE

One of the by-products of the Education Phase is agreement on the Range and Order of Issues to be addressed in the Negotiation / Resolution Phase. In this collaborative process, it will be particularly important in developing the Range and Order of Issues for participants to focus on what actions with regard to groundwater management might be taken as the necessary and practical first steps toward addressing conditions in the basin. In other words, interest group representatives must focus attention not so much on hammering out specific solutions to specific problems but on how to create a mechanism(s) that will allow these interests groups to work collaboratively on an on-going basis to reach mutually agreeable solutions to problems of common concern.

Relationship of the Central Sacramento County Groundwater Forum to public policy decision-making

The Groundwater Forum is not a decision-making body and it holds no independent governing or regulatory authority. Its purpose is to develop recommendations that are mutually agreed upon by the interest groups represented in this collaborative process. These recommendations will be presented to the Water Forum Successor Effort for review and approval and forwarded to the relevant agencies for implementation. As with the recommendations contained in the Water Forum Agreement, these agencies would then be urged to take whatever actions may be necessary to implement the recommendations be it regulatory, administrative, voluntary, etc.

Process requirements

No collaborative process can provide a guarantee of success. There are simply too many variables. However, certain pre-conditions for a successful outcome can be identified.

- Participants must be willing to commit the time and energy necessary to work through a labor-intensive process. This means, especially, the time and energy necessary to attend monthly meetings on a regular basis.
- Participants must also be willing to meet the challenges presented by each phase of the process. For example, in the Education Phase this means willingness to devote the time necessary for this phase and to resist the temptation to jump to negotiating / resolving.
- Progress toward solutions depends upon positive working relationships among the participants. Data alone does not solve problems. Parties in disputes have to be willing to set aside past differences and take a first step, to share information, make agreements and keep their word.
- Finally, the process must have adequate support in terms of financial backing, staff time and other appropriate resources.

V. CONCLUSION

Assuming that these process requirements are met, a public consensus-building effort such as that envisioned in the Central Sacramento County Groundwater Forum can be an important step in protecting the health and viability of the groundwater basin as a sustainable resource for current users and for future generations.

Lawrence Norton
California Center for Public Dispute Resolution

APPENDIX 1

Individuals Interviewed / Consulted

(including agricultural interests, agricultural/residential groundwater users, business interests, environmental and community organizations, local government / public agencies and water purveyors)

<u>Name</u>	<u>Affiliation (at time of interview)</u>
Gil Albiani	Vice-President, Lyon and Associates Realtors, Elk Grove
Constantine Baranoff	Assistant Superintendent, Elk Grove Unified School District
Rick Bedal	General Manager, Florin County Water District
Charles Berrey	Remediation Project Manager (Aerojet), U.S. Environmental Protection Agency
Louis Blodgett	Farmer, Sloughouse Area. Board of Directors, Reclamation District 800
Pat Braziel	Administrative Assistant, Office of Don Nottoli, Supervisor, Fifth District, County of Sacramento
James Carson	District Manager, Southern California Water Company
Jeff Chandler	President, South County Citizens for Responsible Growth
Mindy Cecchettini	Secretary, South County Citizens for Responsible Growth
Robert Cook, Jr.	General Manager, Fruitridge Vista Water Company
Jim Cooper	City Council Member, City of Elk Grove
John Coppola	Principal Engineer, Department of Water Resources, County of Sacramento
Gary Cortopassi	Chair, Cosumnes Community Planning Advisory Council
Edie Costa	President, Silver Springs Homeowner Association

Kent Craney	Associate Civil Engineer, Sacramento Regional County Sanitation District
Edward Crouse	General Manager, Rancho Murieta Community Services District
Keith Demetrak	Vice Chair, Cosumnes Planning Advisory Council
Mary Disken	President, Vineyard Area Citizens for Responsible Growth
Michael Eaton	Director, Cosumnes & Delta Projects, The Nature Conservancy
Darrell Eck	Senior Engineer, Department of Water Resources, County of Sacramento
Phyllis Evans	Secretary, South Sacramento Community Planning Advisory Council
Jerry Fox	Deputy Administrator for Parks, Facilities and Development, Elk Grove Community Services District
John Green	Board of Directors, Silver Springs Homeowners Association
Curt Haven	CEO/Executive Director, Rancho Cordova Chamber of Commerce
Stuart Helfand	Chair, Vineyard Community Planning Advisory Council
Janis Heple	Chair, Community Advisory Group – Aerojet Superfund Issues
William Hetland	Director of Public Works, City of Elk Grove
Douglas Hillblom	Board of Directors, Silver Springs Homeowners Association
John Hodgson,	President, The Hodgson Company. Chair, Land Use/Natural Resources Committee, Sacramento Metropolitan Chamber of Commerce
Philip Hollingshead	Chief of Planning and Design Services, Elk Grove Community Services District
John Hopkins	President, Institute for Ecological Health. Board of Directors, Environmental Council of Sacramento
Bruce Houdesheldt	Director of Governmental Affairs, Building Industry Association of Superior California

Walter Hoppe	Board of Directors, Florin Resource Conservation District
Jan James	Agricultural landowner, Sloughouse Area
Mary James	Senior Civil Engineer, Sacramento Regional County Sanitation District
Cecilia Jensen	Water Recycling Program Manager, Sacramento Regional County Sanitation District
David Jinkens	City Manager, City of Elk Grove
Mel Johnson	Consultant, Department of Utilities, City of Sacramento
Toby Johnson	Farmer, Southwest Area. Former Supervisor, Fifth District, County of Sacramento
Michael Kenny	General Manager, Elk Grove Water Service
Michael Leary	Mayor, City of Elk Grove
Denny Lewis	Executive Director, Sacramento County Farm Bureau
Carl Lischeske	Chief, Northern California Region, Department of Health Services, State of California
Alvin Livingston	President, Laguna West Association
Ronald Lowry	Board of Directors, Omochumne-Hartnell Water District
Alexander MacDonald	Senior Water Resource Control Engineer, Regional Water Quality Control Board, Environmental Protection Agency, State of California
Tony Machado	Farmer, Southwest Area.
Frank Maita	President, Elk Grove Old Town Merchants Association
Daniel Macon	Owner, AgResource Solutions
Sharan Marker	Board of Directors, Silver Springs Homeowners Association
Jeannette Mitchell	Community Manager, Vierramoore Association Management
Jess Moorehouse	District Engineer, Sacramento District Office, Department of Health Services, State of California

Herbert Niederberger, Jr.	Manager of Operations, Citizens Utilities of California
Paul Olmstead	Water and Power Resource Specialist, Sacramento Municipal Utilities Department
Melvin Oneto	Farmer, Southwest Area. President, K.L.M. Ranches, Inc.
Ken Oneto	Farmer, Southwest Area
Tony Ouellette	Superintendent, Elk Grove Water Service
Gary Page	Sacramento County Alliance of Neighborhoods
Paul Peters	Sheldon Homeowners Association
Shirley Peters	President, Sheldon Homeowners Association
Jim Ray, Jr.	Building Industry Association of Superior California. Vice President, MacKay and Soms, Civil Engineers
Gary Reents	Engineering Services Manager, Department of Utilities, City of Sacramento
David Riddell	Vice President, Laguna West Association
Judyth Robinson	Planning & Facilities Manager, Southgate Recreation & Park District
Peter Rooney	Agricultural landowner. President, The Rooney Group
Aimee Rutledge	Executive Director, Sacramento Valley Open Space Conservancy
Richard Samara David Sander	Crystal Brook Vineyards Chair, Rancho Cordova Community Planning Advisory Council
Anthony Saracino	Principal, Saracino, Kirby & Snow
Randy Sater	Vice President, Teichert Aggregates
Joseph Scalmanini	Principal, Luhdorff & Scalmanini Consulting Engineers
Leland Schneider	Farmer, Sloughhouse Area. Board of Directors, Omochumne-Hartnell Water District
Eric Schroeder	President, Lakeside Homeowners Association

Paul Schubert	Water Supply Superintendent, Arden Cordova Water Service, Southern California Water Company
A. Jane Smith	Chief of Staff, Office of Don Nottoli, Supervisor, Fifth District, County of Sacramento
Edwin Smith	Chair, Board of Directors, Southgate Recreation and Park District
Kenneth Stroth	Sheldon Hills Homeowners Association
Darren Suen	Franklin-Laguna Community Planning Advisory Council
Joseph Sullivan	Executive Director, Sacramento County Tax Payers League
Gerald Swanick	Director, Environmental Remediation, Aerojet
Janet Toppenberg	Executive Director, Elk Grove Chamber of Commerce
Gordon Tornberg	Assistant Director of Public Works, City of Folsom
Will Trowbridge	Board of Directors, Clay Water District
Eleni Tsakopoulos-Kounalakis	President, AKT Development
Mike Tudesko	Farmer, Sloughhouse Area. President, Tudesko Ranches. Board of Directors, Sacramento County Farm Bureau
Alta Tura	Chair, Urban Creeks Council
Kate Vasquez	Director, Silver Springs Homeowners Association
Tony Van Stein	Farmer, Southwest Area
Jason Vine	Civil Engineer, Willdan Associates, Engineers & Planners
Barbara Wackford	Administrator, Department of Parks & Recreation, Elk Grove Community Services District
Becky Waggell	The Nature Conservancy
George Waggell	Farmer, Sloughhouse Area
Mike Wakeman	Farmer, Southwest Area. Board of Directors, Sacramento County Farm Bureau

Steve Weaver	Farmer, Southwest Area. Executive Director, Sacramento County Fair. Board of Directors, Sacramento County Farm Bureau
Nick West	General Manager, Valley Hi Country Club
Galen Whitney	Farmer, Southwest Area. Board of Directors, Florin Resource Conservation District
Ward Winchell	Assistant General Manager, Southgate Recreation & Park District
Edward Winkler	Executive Director, Sacramento Groundwater Authority
Evan Winn	Farmer, Sloughhouse Area. Principal Surveyor, Willdan Associates, Engineers & Planners
David Zuccaro	Associate Sanitary Engineer, Department of Health Services, State of California

I. Individuals Consulted

Philip Carter	Interim Public Works Director, City of Elk Grove
Rod Cooper	General Manager, Southgate Recreation and Park District
John Danielson	City Manager, City of Elk Grove
Graham Fogg	Professor of Hydrogeology, University of California, Davis
Jon Goetz	Supervising Engineer, MWH Americas Inc.
Ruben Robles	Senior Civil Engineer, Sacramento Regional County Sanitation District
Robert Roscoe	Manager of Sacramento Operations, California-American Water Company
Ramona Swenson	Project Ecologist, The Nature Conservancy

APPENDIX 2

II. Interview questions

- What is your interest in adequate groundwater management?
- With regard to groundwater, what are the major problems of concern to you?
- How would you rank these problems in order of importance?
- What are the main issues that should be addressed in any collaborative process concerning groundwater?
- What other agencies/organizations must be included in any collaborative process?
- What do you anticipate may be the major sticking points?
- Are there any items, which from your point of view, must be “on” or “off” the table? Why?

APPENDIX 3

Items of Concern Identified by Stakeholders

- Potential overdrafting of the aquifer / declining groundwater table.
- Water quality / groundwater contamination.
- Impacts of development.
- Cost of solving groundwater related problems.
- Equitable sharing of such costs.
- Lack of public awareness of any groundwater problems or concerns / discounting problems exist.
- Future viability of agriculture in Sacramento County.
- Distrust of / anger at Sacramento County.
- Opposed to restriction on groundwater pumping / concerned about loss of right to pump.
- Opposed to a pump tax.
- Resistance to regulating a previously unregulated resource.
- Increasing cost of groundwater pumping.
- Concerned about the influence / power of development money.
- Health of the Cosumnes River / fishery.

- Difficulty of getting the agricultural/residential groundwater user to recognize that groundwater concerns exist or to buy into any proposed measures to address these concerns.
- Challenge of creating an equitable governance / management structure that protects the interests of all stakeholders.
- Public acceptance of recycled water.
- Lack of political will to address groundwater concerns.
- Potential chilling effect of pending litigation regarding groundwater.
- Need for greater conservation / conservation education.
- Flood protection concerns.
- Fire protection concerns.
- Increasing cost of water (as a commodity).
- Lack of *long-term* (*i.e.*, 50 years +) water supply planning.
- Opposed to imposition of a moratorium on building.
- Lack of accurate data concerning current status of the groundwater basin.
- Impacts of the conversion of dry farming land to irrigated farming / development.
- Denial of access for the Sacramento Regional County Sanitation District to the Sacramento River.
- Need for a regional approach to address groundwater concerns / lack of coordination among public agencies and jurisdictions.
- Allow investor-owned utilities to expand their areas of service.
- Concerns related to the ownership of treated water.

- Concerns related to pumping water for treatment could accelerate the movement of contaminant plumes and/or lower water table levels.