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**Working Paper**

## The Sacramento area water forum: A case study

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The Sacramento Area Water Forum: A  
Case Study

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# The Sacramento Area Water Forum: A Case Study

## Abstract

The Sacramento Area Water Forum was a consensus-based collaboration among multiple parties having interests in the water resources and ecological health of the lower American River in northern California. Beginning in the fall of 1993, individuals representing nearly 15 stakeholder organizations worked to develop an agreement on water management in the lower American River region. In the course of the process, additional stakeholders were brought in, and several other entities that were not official members of the Forum participated in the development of some elements of the agreement. In six years and at a cost of nearly \$10 million, more than 41 entities developed and committed to carrying out a plan for regional water management for the next 30 years. The large number of stakeholder organizations and participants represented the many and diverse interests touched by issues of water management and river protection. The effort was sponsored primarily by the two largest water purveyors in the region—the City and the County of Sacramento—and included the many smaller urban and agricultural water purveyors also serving the region, along with organizations representing businesses (including developers); taxpayers', citizens' and neighborhood groups; and environmentalists.

Over the course of six years, these parties worked together within their own stakeholder organizations, and in the wider community, to develop the Water Forum Agreement, which they entered into by signing a memorandum of understanding in the spring of 2000. The Water Forum described its agreement as a comprehensive package of linked actions that will achieve two co-equal objectives:

- (1) Provide a reliable and safe water supply for the region's economic health and planned development to the year 2030; and
- (2) Preserve the fishery, wildlife, recreational, and aesthetic values of the lower American River.

The “comprehensive package of linked actions” sets forth provisions to increase surface water diversions; reduce diversions during the dry years; assure a water flow regime that more closely matches the needs of fish; monitor and restore fish habitat; improve recreation opportunities; conserve water; and manage ground water and surface water in an integrated manner. The agreement also creates a successor effort responsible for overseeing and monitoring the implementation of

the agreement. The successor effort will provide a forum in which any disputes or new needs can be addressed as they arise.

In addition to the formal outcomes articulated in the written agreement, the Water Forum has produced a number of other results, including the development of productive working relationships among former foes and the development of a stronger culture of collaboration within the Sacramento region.

Working Paper 2006-06

The Sacramento Area Water Forum:  
A Case Study

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This case study of the Sacramento Area Water Forum is excerpted from the dissertation entitled “The Use of Collaborative Processes in the Making of California Water Policy: The San Francisco Estuary Project, the CALFED Bay-Delta Program, and the Sacramento Area Water Forum,” by Sarah Connick (Spring 2003).

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# The Sacramento Area Water Forum: A Case Study

Sarah Connick, Ph.D.

## The Sacramento Area Water Forum

The Sacramento Area Water Forum was a consensus-based collaboration among multiple parties having interests in the water resources and ecological health of the lower American River in northern California. Beginning in the fall of 1993, individuals representing nearly 15 stakeholder organizations worked to develop an agreement on water management in the lower American River region. In the course of the process, additional stakeholders were brought in, and several other entities that were not official members of the Forum participated in the development of some elements of the agreement. In six years and at a cost of nearly \$10 million, more than 41 entities developed and committed to carrying out a plan for regional water management for the next 30 years. The large number of stakeholder organizations and participants represented the many and diverse interests touched by issues of water management and river protection. The effort was sponsored primarily by the two largest water purveyors in the region—the City and the County of Sacramento—and included the many smaller urban and agricultural water purveyors also serving the region, along with organizations representing businesses (including developers); and taxpayers', citizens' and neighborhood groups; and environmentalists.

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1. Provide a reliable and safe water supply for the region's economic health and planned development to the year 2030; and
2. Preserve the fishery, wildlife, recreational, and aesthetic values of the Lower American River.<sup>1</sup>

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<sup>1</sup> Sacramento Area Water Forum (SAWF). January 1999. *The Water Forum Action Plan*, p. 1.

The “comprehensive package of linked actions” sets forth provisions to increase surface water diversions; reduce diversions during the dry years; assure a water flow regime that more closely matches the needs of fish; monitor and restore fish habitat; improve recreation opportunities; conserve water; and manage ground water and surface water in an integrated manner. The agreement also creates a successor effort responsible for overseeing and monitoring the implementation of the agreement. The successor effort will provide a forum in which any disputes or new needs can be addressed as they arise.

In addition to the formal outcomes articulated in the written agreement, the Water Forum has produced a number of other results, including the development of productive working relationships among former foes and the development of a stronger culture of collaboration within the Sacramento region.

## **Background**

The Water Forum effort did not arise out of any specific dispute or crisis. It emerged in a region that had a history of considerable conflict in regard to water, and in which several previous attempts at regional water planning had been unsuccessful.

The American River basin has a rich history of legal wrangling over water supplies and the health of the river.<sup>2</sup> In one landmark case, a water utility from outside the region—the East Bay Municipal Utility District (EBMUD)—sought to obtain American River water. The case was initially filed in 1972 and ultimately decided nearly 20 years later in 1990.<sup>3</sup> Among other things, the court established minimum flow levels that would have to be met in the river in order for EBMUD to divert water. These flow levels have come to be known as “Hodge” flows, after the judge who decided the case. Judge Hodge also appointed a special master to oversee the implementation of his ruling, which included additional studies on fish, wildlife, and habitat issues.

A number of other conflicts were also linked to the resources of the lower American River. Sacramento County, which has an extensive park system along 23 miles of the river, had established itself as a protector of

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<sup>2</sup> Note: The lawsuit that led to the 1884 ban on hydraulic mining in California was originated by agricultural landowners along the American River.

<sup>3</sup> *EDF v. East Bay Municipal Utility District* (Superior Court, Alameda County, 1990, No. 425955). For a procedural history of the litigation, see Somach, S. L. 1990. The American River Decision: Balancing Instream Protection with Other Competing Beneficial Uses. *Rivers* 1(4):251–263.

the river, and in connection, had long fought an expansion of the City of Sacramento's water treatment plant. The County had also joined environmental organizations in the aforementioned lawsuit against EBMUD. The City of Sacramento was prevented from expanding its water treatment plant as a result of challenges by the County and environmentalists to the environmental impact report, whereupon the court had ordered it to better describe the proposed project in terms of the regional water-supply needs. Similarly, Sacramento-based environmentalists had long fought a number of other water districts seeking to develop new water supplies.

The City of Sacramento is located at the confluence of the Sacramento and American Rivers and lies in a flood-prone region. Figure 1 illustrates the greater Sacramento region; the shaded portion shows the area included in the Water Forum Agreement. Probably the bitterest conflict that continues today is over flood-control planning and the construction of the Auburn Dam. Originally authorized as a flood-control reservoir in 1965, construction on this federal project began in 1967 and was halted in 1975 over concerns about earthquake safety. Since then, numerous battles have been fought between environmentalists and Auburn Dam proponents. In 1990, the Sacramento Area Flood Control Agency (SAFCA) was formed by a joint powers agreement and charged to develop and implement a regional flood-control program.<sup>4</sup> SAFCA convened a stakeholder group to develop a riverbank and levee protection plan in 1994. Since then, with input from stakeholders, the agency has developed a flood-control plan that does not involve construction of the Auburn Dam. Pro-dam advocates, including an elected representative from the region who chairs the congressional committee overseeing such projects, have voiced substantial opposition to this proposed plan.

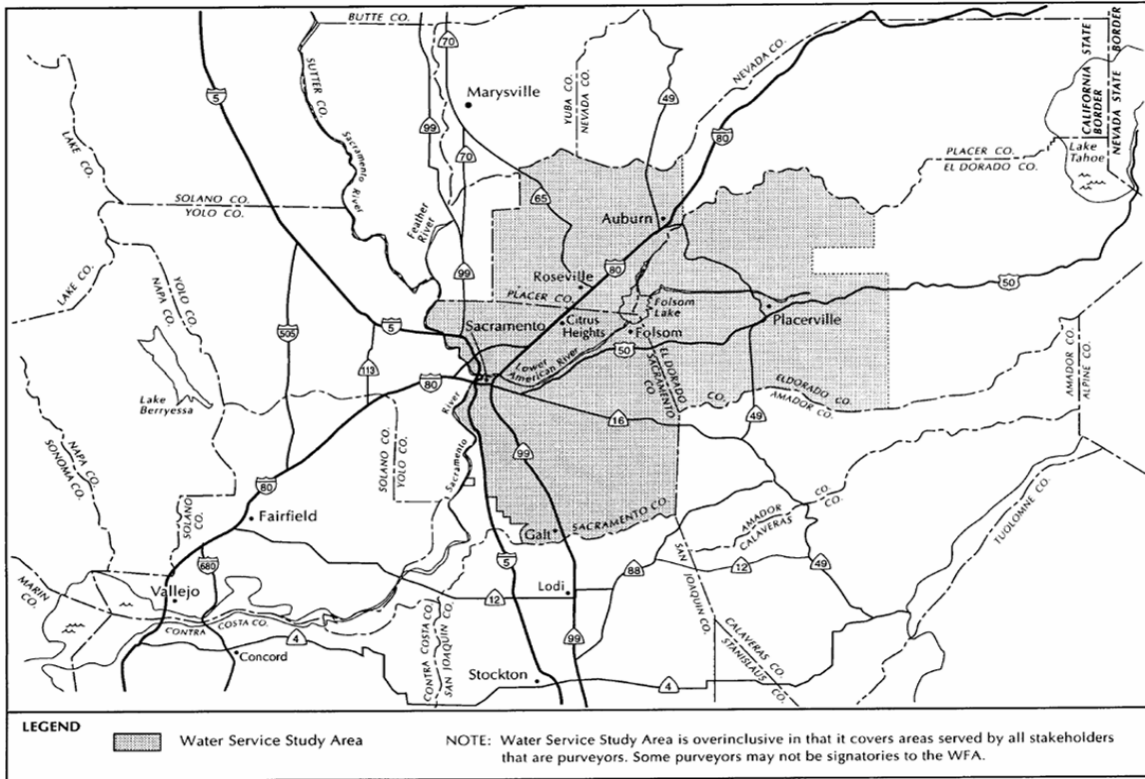
### Previous Planning Efforts

In addition to these legal and political controversies, several related planning efforts preceded the formation of the Water Forum. The Sacramento County General Plan underwent a revision process completed in 1993. Although that process was not organized as a collaborative effort, over its course, several individuals from the development and

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<sup>4</sup> Dundon, M. L. January 1997. "Confluence of Interest: Flood Planners Get Together Over the Lower American River." Unpublished paper. Berkeley: University of California.

**FIGURE 1.**  
**The Greater Sacramento Region, with shaded portions**  
**indicating the area covered by the Water Forum Agreement**



environmental communities were able to build productive working relationships. When the plan was finalized, it contained several provisions on which these communities agreed. In regard to growth, the General Plan established a new urban services boundary, beyond which new growth was not permitted.<sup>5</sup> The plan required that new growth within the County be served by “supplemental” surface water—that is, new developments could not simply tap into the ground water placing additional demand on the already overdrafted ground water supply. This latter provision meant that, in order to carry out the General Plan, developers and the County would have to seek new surface water supplies.

<sup>5</sup> Of course, the Board of Supervisors has the authority to grant exceptions to General Plan requirements.

In regard to regional water planning efforts, City and County water planners had worked together to develop regional water plans as early as the 1970s. These planners saw that the region was heading down a path that would lead to severe water-supply problems in the future. At the same time, projections showed the region would experience some of the fastest population growth in the state. Although the problems were not imminent, in the words of one City staff member, the region was “so broken into water districts with everybody doing their own thing, ... [and] if we put our long-term vision on, [we could see] it’s not going to always be like this.” City and County staff recognized that increasing water demand would eventually affect their ability to continue operating as they had been.

The first regional water resources plan prepared by the City and County was presented to other purveyors in Sacramento County in the late 1970s. The purveyors who had not been involved in the development of the plan balked at the plan that they’d had no hand in creating. The City and County then started a new planning process engaging the other purveyors in the development of a new regional plan. That process resulted in general agreement on a plan, but lacked adequate financing mechanisms. Thus, when it came time to pay for the proposed programs, many of the smaller purveyors in the region viewed the costs as prohibitive and refused to participate, once again leaving the region with numerous agencies pursuing separate water-supply agendas with little coordination.

In the early 1990s, the City of Sacramento, which had been planning a project to expand its Fairbairn water treatment plant for nearly ten years, issued an environmental impact report (EIR) for the project. The EIR was challenged in court by several environmental groups and the County of Sacramento, who were concerned that the plant’s increased diversions would “dry up the river.” Rather than fighting in court, the City decided to drop its plans and go back to the drawing board. It, too, did not want the river to run dry, and now, more so than in the past, the City clearly needed for there to be a concrete understanding of water supply at a regional level.

Thus, prior to the initiation of the Water Forum process, three significant institutional actions had taken place resulting in an alignment of interests and the establishment of conditions that provided fertile ground for the emergence of a collaborative water planning process. The Hodge decision established that environmental protection and instream flows were significant interests that would be protected under the law. The revised Sacramento County General Plan established water-supply requirements for new growth. Several parties had participated in this

process and already agreed on the plan's growth projections and boundaries. (The significance of this latter point became clear later in the process when the purveyors in the nearby Foothills of the Sierra Nevada came into the process, but were not able to get the support of the environmental community as a result of continuing disputes related to the General Plans for their counties.) And finally, the challenge to the City of Sacramento's Fairbairn expansion clarified the need for a regional understanding of water-supply needs and illustrated how opponents of water projects could likely block future efforts to develop new water supplies.

### **The Emergence of the Water Forum**

The Water Forum took shape through an organic process in which various organizations and individuals explored possible opportunities for coordinating their actions.

### **Creation of the City and County Office of Metropolitan Water Planning**

In 1991, the City Manager and County Executive proposed that the City and County create a combined staff to jointly develop an area-wide water plan. Although the two local governments had coordinated on regional water planning issues in the past, this was the first time a single staff would be working toward joint planning goals. In the aftermath of the County's lawsuit against the City's expansion of its water treatment facility, with the County's new requirement for supplemental surface water to support new development, and continuing problems of ground water overdraft, the City and County sought to develop mutual understandings that would enable them to move forward with water-supply projects. With the approval of the City Council and County Board of Supervisors, they entered into a memorandum of understanding to create the City-County Office of Metropolitan Water Planning (CCOMWP). The CCOMWP's mission was:

To formulate an area-wide plan for providing a safe and reliable water supply in a manner that protects the environment. The plan shall include the sound and efficient management of available surface water, groundwater, and reclaimed water resources and water conservation. The institutional arrangement necessary to

insure successful implementation of the plan shall also be identified.<sup>6</sup>

The City and the County split the costs associated with the CCOMWP evenly. The Assistant City Manager was appointed to serve as Executive Director of the CCOMWP (30 percent time) and the County's Deputy Director of Public Works was appointed to serve as the Deputy Director of the CCOMWP (80 percent time). Three additional technical and administrative staff positions were filled by City personnel. The office staff were supposed to be neutral in regard to the City's and the County's interests. But because the County would be the beneficiary of any new surface water that became available as a result of the planning effort, the administrative side of the office's work was placed more heavily in the City's hands. The CCOMWP Executive Director reported jointly to the City Manager and County Executive, giving the CCOMWP a high level of attention in the City and County governments.

### Joint Planning

From the beginning, the CCOMWP aimed “to use the consensus process to the maximum extent possible in identifying and obtaining agreement on a comprehensive plan to obtain and deliver to existing water purveyors, adequate water to accommodate growth, and reduce or eliminate the existing overdraft of ground water.”<sup>7</sup> The plan did not spell out what was meant by “the consensus process.”

Among the first things the staff did was draft a work plan for a comprehensive, area-wide water resources planning effort. They divided their mission into technical and institutional issues, with the latter addressing the question of what sort of entity—a new agency or a joint powers agreement—would be needed for the long-term implementation of the plan they were to develop. According to the CCOMWP,

This separation of technical and institutional issues has been proposed so that the Office and the participating water purveyors can develop a working relationship while dealing with technical matters, and because it should be easier to

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<sup>6</sup> City-County Office of Metropolitan Water Planning (CCOMWP). April 27, 1992. “The Work Plan.” Sacramento, California.

<sup>7</sup> CCOMWP Work Plan.

agree on institutional questions when there is an agreement as to what must be done.<sup>8</sup>

The work plan identified five technical task areas. Staff anticipated the entire planning process would take 7½ years and cost nearly \$12 million. First, the work plan identified a need for the City and County to develop a common policy regarding the location of future diversions on the lower American River, and proposed that they work with the Bureau of Reclamation to petition the State Water Resources Control Board to establish a new instream flow standard. It identified a need to determine under what conditions the City's existing water entitlements could be used to serve areas outside of the City's boundaries—i.e., the conditions under which the City might be able to make some of its surface water available to the County.<sup>9</sup> A third task was to determine long-term water needs for the region, based on the growth projected in the County General Plan, and identify the cost and availability of additional supplies to meet that demand. Within this task, water conservation and conjunctive use of ground water were to be considered as new supplies. Once these three tasks were completed, a fourth task was to develop a plan to provide the funding and infrastructure that would be needed to implement what was anticipated to be a system of surface water supply and ground water management zones. A fifth task—to be completed very early in the planning process—was determining what short-term needs would have to be met as the 7½-year planning process proceeded. The staff expected that additional water-supply capability would have to be developed to meet particular needs before the comprehensive plan would be finished.

### Advisory Committees

As the staff developed the work plan, they also began to reach out to other water districts in the county to engage them in the effort. The CCOMWP staff consulted with and sought comments from the smaller purveyors on the work plan. Once the plan was approved by the City Council and County Board of Supervisors, a memorandum of agreement was drafted, which specified the roles of the CCOMWP and other purveyors in the process. The area purveyors would participate in the CCOMWP planning effort as members of a technical advisory committee

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<sup>8</sup> City-County Office of Metropolitan Water Planning (CCOMWP). May 5, 1992. Memorandum to the City Council and Board of Supervisors. Sacramento, California.

<sup>9</sup> The water rights held by the City are associated with a place of use (POU). That is, water diverted by the City can only be used to serve areas within the area defined by the POU. With several exceptions, the City's POU corresponds to its boundaries.



(TAC), which consisted of representatives of all the water purveyors in Sacramento County,<sup>10</sup> plus a representative of the Sacramento Metropolitan Water Authority (SMWA).<sup>11</sup> The memorandum of agreement also specified those task elements that would be presented to the TAC for the purposes of information only, those for review and comment, and those on which agreement would be sought. For tasks on which agreement would be sought, CCOMWP staff were to solicit review and comments on data and other work products they prepared, and seek the approval of the TAC, which required ratification by the governing body of each TAC member's agency or district. Similarly, any opposition a TAC member had would also require ratification by that member's board.

In July 1992, the CCOMWP held its first full meeting with the other purveyors, explaining and engaging in discussions regarding the work plan, the proposed TAC, and the memorandum of agreement. They presented the water issues for Sacramento as a three-legged stool that is balanced upon the City, the County, and the other purveyors in the county. A mission statement prepared by the CCOMWP was discussed and subsequently modified to reflect more involvement on behalf of the other purveyors. Generally, the other area purveyors were leery about entering into a formal memorandum of understanding with the City and the County. However, they agreed that a regional planning effort was sorely needed and committed to participating in the CCOMWP process. At least one water district representative expressed the concern that the whole effort was designed to aid the County in taking over all the other smaller water districts.

A subgroup of the TAC was selected to serve as the steering committee and began meeting regularly to address how the TAC would

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<sup>10</sup> The Sacramento County water purveyors include the City of Sacramento, County of Sacramento (Sacramento County Water Agency), Arcade Water District, Arden Cordova Water Service, Citizens Utilities, Del Paso Manor County Water District, Elk Grove Water Works, Florin County Water District, Fruitridge Vista Water Company, Natomas Mutual Water Company, Sacramento County Water Maintenance District, Tokay Park Water Company, and the members of the Sacramento Metropolitan Water Authority, which include the Carmichael Water District, Citrus Heights Irrigation District, City of Galt, City of Folsom, Clay Water District, Fair Oaks Water District, Galt Irrigation District, Northridge Water District, Omochumne-Hartnell Water District, Orange Vale Mutual Water Company, Rancho Murieta Community Services District, Rio Linda Water District, and San Juan Suburban Water District.

<sup>11</sup> The Sacramento Metropolitan Water Authority was created as a joint powers authority in 1990, when its 13 member water districts joined together to jointly engage in water planning, development, and management activities.

operate, including how interested parties would be informed and what information would be made available for public review. The steering committee drafted a statement of purpose and a statement of principles to guide their work, both of which were later reviewed, modified, and adopted by the TAC. As the TAC got up and running, the CCOMWP proceeded with the work plan. The TAC was briefed on the status of the various tasks, and its input was sought as the work proceeded.

Meanwhile, the CCOMWP established another advisory group consisting of members of the environmental and business sectors, which became known as the Advisory Committee. The Deputy Director invited individuals from those sectors with whom he had worked on the update of the General Plan. Thus, on the environmental side, they were people who were primarily concerned with land-use issues. The environmentalists in the region who dealt with water issues had yet to be brought into the process.

### Need for Greater Collaboration

The work of the TAC and the Advisory Committee proceeded along parallel tracks for a while. However, as the TAC got into discussing the issues before it, its members began raising questions about whether other parties who were not at the table should be consulted. For example, while discussing the possible use of development fees to fund a conjunctive use program, one of the purveyors suggested that maybe they also should be discussing the issue with the developers in the region. During another discussion regarding possible State Water Resources Control Board (SWRCB) hearings on a new in-stream flow standard for the lower American River, another purveyor suggested that perhaps they should be sitting down with the environmental community, or that the TAC and the advisory committee should be meeting together. The TAC members discussed whether they should be sitting down with the development and environmental communities together or separately. One purveyor noted that he had recently heard about a consensus-based water planning process that had been facilitated, and suggested that facilitator might be able to help them sort through these issues.

### The Water Forum Proposal

Thus, CCOMWP staff began investigating consensus-building processes. After reading up about how to build consensus,<sup>12</sup> staff designed

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<sup>12</sup> The Water Education Foundation pointed them to Water Education Foundation & Edmund G. "Pat" Brown Institute of Public Affairs, ed. 1992. *Achieving Consensus*

a process and presented their recommendations to the TAC and the Advisory Committee. As can be seen from the memorandum shown in Figure 2, the consensus-building process was viewed as a potential way to succeed where legislation and litigation had failed. There was also a sense of urgency in the problem statement: what they were proposing might be a one-time opportunity. Over the course of the next six months, the TAC and the Advisory Committee continued to meet separately with the CCOMWP. Progress on the work plan continued at the same time that they proceeded with the development of the plans for a consensus process. Objectives and principles were developed for the proposed process, which by then had become known as the “Sacramento Area Water Plan Forum Process.” And possible additional stakeholders were identified, including environmentalists who dealt with water issues and public interest groups such as the League of Women Voters and the Alliance of Neighborhoods. At this point, the Forum was expected to take place in three stages—an organization phase, an education phase, and a resolution of issues phase.

The CCOMWP staff developed the concept of a Working Group to help manage the large number of stakeholders having an interest in lower American River water-supply issues. They explained,

The Forum process will only be successful if all parties with a stake in the issues have “bought in” to the process and recommended solutions. However, because of the large number of stakeholders in this process, it is recommended that the stakeholders select representatives to act on their behalf in a smaller “Working Group” setting. The role of the Working Group will be to: serve as the “core” of the Forum Process; fully participate in the process; communicate with and seek support of those they represent; and formulate a SACRAMENTO AREA WATER PLAN as stated in the FORUM OBJECTIVE.<sup>13</sup>

Following the framework laid out by Carpenter and Kennedy,<sup>14</sup> the staff suggested the stakeholders could be divided into four categories or

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*on Water Policy in California*. Los Angeles: California State University. In addition, they relied on information from the Institute for Mediation at Harvard University and Carpenter, S. L., & W. Kennedy. 1988. *Managing Public Disputes*. San Francisco: Jossey-Bass Publishers.

<sup>13</sup> City-County Office of Metropolitan Water Planning (CCOMWP). April 8, 1993. Sacramento Area Water Plan Forum Process (Draft). Sacramento, California. Emphasis in original.

<sup>14</sup> Carpenter & Kennedy, 1988.

**FIGURE 2.**  
**CCOMWP Memorandum Proposing a Consensus**

December 10, 1992

TO: TAC STEERING COMMITTEE MEMBERS  
SUBJECT: WATER ISSUES CONSENSUS PROCESS

The purpose of this memorandum is to provide a short overview of a possible Water Issues Consensus process.

**PROBLEM**

Achieving progress on water issues through legislation and litigation has not been successful.

Some tough policy questions related to environmental protection, facility construction, and the provision of an adequate, reliable, quality water supply need to be addressed and dealt with.

There are a limited number of opportunities for progress (maybe only one more) and therefore we need to make the most of this chance.

**A POSSIBLE APPROACH = A CONSENSUS BUILDING PROCESS**

This approach may provide for the Stakeholders to achieve more through the process than can be assured by the status quo.

There is a need to address a number of concerns and issues – environmental protection – water supply – water use – flood protection – and through the consensus approach we can achieve progress on all, not just one vs. another

The consensus approach is a positive one since it centers around identifying and meeting needs rather than preserving positions.

**THE GOALS OF A WATER ISSUES CONSENSUS PROCESS**

To identify a course of action which meets the American River related goals and objectives of environmental, water, and flood protection interests

To be able to effectively compete for political support and funding for projects (will be more successful if there is a community/regional consensus)

To be better able to deal with outside influences because we will have a community agreement

To identify and agree on our regional water needs through 2030 (including storage and transfer needs)

To preserve the vitality of the American River as a valuable community asset

...

caucuses—water interests, development and business interests, environmental interests, and public interests—and that four representatives from the first three and two from the public interests could form the Working Group. They also recommended that each of the four stakeholder communities select their own representatives. Later, after consultation with the TAC, the process of identifying representatives was modified so that the stakeholder boards would approve the representatives. This later change brought more formality and organizational commitment to the process. The intention was that the effort would be staffed by the CCOMWP.

The CCOMWP and the TAC held a meeting to which all the water purveyor board members were invited and explained to them what the Forum process would entail. At the same time, the CCOMWP reached out to the other stakeholder communities seeking their participation. The CCOMWP staff also envisioned that they would need some additional assistance in getting the process started. As one staff member explained, they knew the interest-based negotiation process was “different” from other types of negotiation; however, never having done it before, they didn’t know exactly how it was different or how “to get people into that mind-set.” Thus, the staff sought a professional to teach them and the Working Group members how to do interest-based negotiation. Although the CCOMWP staff thought at first they would probably run the rest of the process on their own, they also asked applicants to describe in their proposals how they would run such a process. Ultimately, they selected Susan Sherry, a facilitator/mediator with the California Center for Public Dispute Resolution based at California State University at Sacramento, who had experience with other regional growth management processes.<sup>15</sup>

Among the first things the facilitator did was conduct a conflict assessment. She interviewed the key leaders on water issues in the broader Sacramento community to see if the conditions at hand were favorable for a consensus-based process and to assess the range of interests involved in the conflict. She found that although the CCOMWP staff had not done a formal conflict assessment, the stakeholders they had identified were the ones she, too, believed needed to be involved in the process, and that the caucuses that had been identified were, for the most

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<sup>15</sup> See Innes, Judith. 1994. “Growth Management Consensus Project.” In Innes, J. E., J. Gruber, M. Neuman, and R. Thompson. *Coordinating Growth and Environmental Management through Consensus Building*. A Policy Research Program Report. Berkeley: California Policy Seminar, University of California.

part, well grouped according to the stakeholders' interests. As a general rule, in her assessment, she sought to bring to the table "those who are directly affected by the issue, those who could make change happen, and those who could block change." The one area in which she recommended an adjustment was the membership of the water-interests caucus. In her interviews, she found that, because they are local governments, the City and the County of Sacramento share broader public interests in addition to their water-supply responsibilities. She recommended that they be placed in a caucus with the other public interest groups, rather than with the water purveyors. This change was made at the beginning of the process and accepted by all of the stakeholders.

## **The Stakeholders**

Out of this process emerged a list of organizations representing four sets of stakeholder interests. The organizations either were directly involved in water management; represented customers, neighborhoods, and ratepayers; were concerned about the role of water supply in allowing new development and more generally in maintaining the region's economic health; or represented the environmental community that sought protection of the lower American River.

## **Existing Stakeholder Relationships**

Historically, many of the relationships among the parties had been adversarial. Environmentalists had long engaged purveyors through the California Environmental Quality Act (CEQA) environmental review process and related lawsuits. In these conflicts, environmentalists sought ways to limit growth and new water diversions from the American River. Development pressures were increasing in the region, and environmentalists frequently challenged developers' plans, as well as proposals to build the Auburn Dam. For years, the County had sued the City to prevent it from expanding its water treatment plant and increasing its diversion capacity. The taxpayers' group had fought against new taxation or service charges for things for which they felt they were already paying. Business groups were concerned about the reliability of the water supply in the future as the region grows.

Even within these general categories of interests, opinions about what needed to be done and how were not homogeneous. For example, some of the more water-oriented environmentalists found their land-use-oriented counterparts to be overly accommodating of growth. And among the purveyors, who might be expected to have relatively uniform interests, there was a range of interests. Differences in perspectives arose among those purveyors who supplied agricultural water versus those who

supplied municipal and industrial users, those who relied primarily on ground water supplies versus those who relied on surface water supplies, those who contracted for water from the Bureau of Reclamation versus those who did not, those who were privately owned versus those who were publicly owned, etc. In addition to these differences, based on the history of earlier planning efforts from which they felt they had been excluded, many of the area purveyors were somewhat suspicious that the City and County had some kind of ulterior motive in developing a regional water plan.

### Previous Experiences in Collaborative Processes

Some parties, however, had experience in other collaborative processes, and several parties had some experience collaborating with one another on related issues in the region. For example, as noted above, in the most recent redrafting of the Sacramento County General Plan, developers and environmentalists gained some experience in working with one another constructively. In the effort to address flood-control issues—a major regional concern—the Sacramento Area Flood Control Agency (SAFCA) had been created as an elected body to address regional needs. Along with it, the Lower American River Task Force (LARTF) was formed to develop consensus-based community input to SAFCA. The experience that members of the TAC and Advisory Committee had been having in working with the CCOMWP had been positive thus far. Not all such previous efforts had been successful, however. One environmentalist recounted a story of a process he felt was a complete waste of time. And even the City and County who were spearheading the effort had recently called off a joint effort to develop an integrated, regional solid-waste management plan.

### Stakeholder Interdependence

In the context of regional water-supply issues, however, each of the parties had something it needed or wanted from the other. The City is flush with surface water rights, but was being blocked on the expansion of its water treatment plant by lawsuits from the County and environmentalists, who wanted protection for the river. The County, which is primarily dependent on ground water, needed access to new surface water to meet growing demands. Developers were interested in getting supplemental surface water supplies for the County as required in the General Plan to serve new growth. The regional ground water table had been subject to extensive and continuing overdraft. In addition to increased pumping costs, this was causing subsidence and water quality problems, both of which can permanently harm an aquifer's ability to store

and provide drinking water. The purveyors who rely on ground water were concerned about the long-term stability of the ground water basin. Nearly every purveyor in the region had plans for new projects it hoped to build to meet the growing demands of the region, most of which would be required to go through a CEQA or National Environmental Policy Act (NEPA) environmental review process, and/or a State Water Resources Control Board hearing process. As they have done historically, environmentalist groups seeking to protect the river would likely oppose the new projects. Taxpayer, neighborhood, and business groups were concerned about increasing costs, the reliability of future supplies, and assuring that public funds were spent on the things for which they had been raised.

Another set of interests that was identified early on, but not brought into the process initially, was the water purveyors upstream of Sacramento County, in Placer and El Dorado counties, which are referred to as the “Foothill interests.” At the outset of the Forum process, the CCOMWP and most members of the Working Group felt that they already had enough on their hands in dealing with the in-county issues. About eighteen months into the process, however, the extent to which potential increased diversions upstream could affect their long-term plans was becoming apparent. At about the same time, the Foothills purveyors “were aware that there was a big confab” where “the City and County and Sacramento water purveyors were meeting with the environmentalists and the business community, and that they were dreaming up some plan,” and wanted to be a part of the process. They were primarily concerned that the Sacramento group would be making decisions about Foothill water facilities without them. The Foothills interests organized themselves as a group and began their own separate meetings in early 1995, and began attending Forum meetings later that spring. Because this group was brought in partway through the process, however, it was only the purveyors from those areas that joined the Forum. The Water Forum considered whether the environmental and business interests from those areas should also be invited to join, but the purveyor interests assured the existing Water Forum members that they were in alignment with the related business and environmental interests, and thus were allowed to join the Forum on their own.

### Other Interests

Within the basin, a number of other issues continued to swirl, including flood control and the Auburn Dam controversy. The U.S. Bureau of Reclamation is a critical in- and out-of-basin interest. It is responsible for operating the Folsom Dam, and thus controls the flow and



temperature conditions on the lower American River (within physical constraints). Folsom Dam is a piece of the larger federal Central Valley Project (CVP), and its operation affects and is affected by what is happening in other basins through the state. The users of CVP water are agricultural interests located primarily south of the Sacramento-San Joaquin Delta and have an interest in how the project is operated. Other interests from outside the American River basin include EBMUD, which has been seeking to arrange water deliveries from the Folsom Reservoir under the contracts it held for more than 20 years with the Bureau.

A number of other issues loomed in the future. Potential statewide water conservation requirements might force purveyors to install meters within a specified timeframe. The State Water Resources Control Board's hearings on the Bay-Delta water quality standards and CALFED's Bay-Delta restoration efforts might result in new requirements on the American River. The Bureau of Reclamation's Anadromous Fish Restoration Program (AFRP) could affect flows on the American River. And, of course, the inevitability of severe drought, in which there would be insufficient water to meet everyone's needs, was an ever-present concern.

### Deciding to Come to the Table

The willingness of the parties to participate varied. The City and the County were eager to get a regional consensus on water supply, but other purveyors in the area had varying levels of interest. Some, like the Foothills interests, came to the table initially simply because they did not want anything to be done that might affect them without being there. Some came because they saw it as a good opportunity to address the regional ground water problems or simply to help get their projects built. Some of the purveyors who depended on ground water were concerned that if the region did not develop a plan for ground water management, it would be done for them at the state level through legislation, or at a larger regional level through litigation. Over time, a few purveyors left the process for varying reasons, but primarily because they did not have projects that needed building and Water Forum participation was not helping them. One water district, the Placer County Water Authority, had a secondary goal in participating: they wanted to sell water. In the end, their ability to sell water to other purveyors has turned out to be an important element of the Water Forum Agreement. Development interests also saw the Water Forum as a good opportunity to bring more surface water into the county.

On the environmental side, there was a range of opinion about the wisdom of participating in a consensus-based planning process. The

Sacramento area environmental groups were more accustomed to operating in an adversarial legal mode through CEQA, NEPA, and other environmental lawsuits, and in a political mode through the County Board of Supervisors. In the Sacramento region, as is often the case, the environmental organizations had much fewer financial and technical resources available to them than do the developer and purveyor interests. The environmentalists were concerned that energy and resources spent in the Water Forum would mean energy and resources taken away from other activities where they could have greater impact. Once they weighed their options, they agreed to participate, but with a caveat—in a now-famous letter, they notified the other Water Forum members that they would leave the process if, at any time, they determined that it was not leading in a productive direction. Of course, everyone else had that prerogative, too.

### Organizations and Individuals

All of the key stakeholder interests identified were already represented by existing organizations. They were entities that had some type of a governing body, most often a board of directors, whose approval is necessary for the organization to formally enter into any kind of an agreement. For example, some water districts are operated by a city or county government, so in the case of the cities of Sacramento, Folsom, and Roseville, any actions they may want to take or policies they might want to adopt must be approved by their respective city councils. Similarly, actions taken by the Sacramento County Water Agency require approval of the County Board of Supervisors. Other public water districts in the region are governed by elected boards of directors. The private water districts are also governed by boards of directors selected by their investors. The non-profit organizations, such as the Taxpayers League, Sacramento County Alliance of Neighborhoods, Environmental Council of Sacramento, and Chamber of Commerce also have governing boards and constituencies to which the organizations are responsible. In addition, two of the local environmental groups—Friends of the River and the Sierra Club Mother Lode Chapter—were part of larger state and national organizations, respectively. They not only had to get the approval of their local boards, but also had to remain attuned to their larger organizational interests.

For the purposes of the Water Forum, it was important to engage individuals who could participate and negotiate on behalf of their organizations. In the case of the water purveyor organizations, participants were generally high-level staff members in their organizations. In the case of the nonprofit organizations, such as the Building Industry Association and Sierra Club, the representatives were

active members who had worked on these kinds of issues before. In some cases, however, having a particular individual involved was as important as having the organization with which they were affiliated. For example, one environmentalist was the driving force behind the 1972 lawsuit against EBMUD, and having him participate actively in the Water Forum was seen as critical for the potential long-term success of the effort. Elected officials and board members of the organizations were welcome to participate and some did, especially when an issue of particular importance to a particular official was being considered. For example, the Mayor of Roseville became very involved in negotiations over assurances. However, it was generally staff or particularly knowledgeable members of the organizations involved in the process who had the time and expertise necessary to work out the specifics of agreements.

## Lawyers

Initially, the lawyers for the organizations were asked to meet separately from the regular Water Forum meetings. The idea behind separating them was that lawyers are generally trained to function in an adversarial mode, whereas the aim of the Water Forum was to do interest-based negotiation. The aim was to allow participants to work together in a creative mode to see what solutions they might be able to develop to their shared problems. There was a concern that legal experts, as their profession often requires, would tend to shift the focus of the discussions onto reasons why things could not be done rather than figuring out how they could be done, and that the discussions would become dominated by legal issues. Later in the process, however, several lawyers from different organizations began participating in the Working Group and task teams, and worked effectively in an interest-based mode. One of those lawyers reflected,

I think I've always been a believer in working through problems and, like with the regulators, I like to present them with solutions. So it's been pretty consistent with the way I look at things. You know other lawyers are circling the wagons [in how they approach these things].

## Time Commitments

For all of the Water Forum members, participation in the process required a huge commitment of time and energy on top of their normal day-to-day routines. Representatives of most of the participating environmental, business, and citizens' organizations served as volunteers and participated in the Water Forum in their spare time. Even those who

were paid staff members of environmental organizations still served as volunteers in the Water Forum since their organizations were unable to obtain sufficient funding to support their salaries in that activity. Many of the Water Forum meetings were scheduled during evening hours to accommodate those who had other jobs and were unable to meet during daytime hours. The remaining Water Forum members, who participated in the process as a part of their regular jobs, did the Water Forum work in addition to their normal work responsibilities.

## **Staffing and Consultants**

The staff and consultants to the Water Forum also put a vast amount of time and energy into the effort. Although it varied over time, depending on what was needed for particular parts of the effort, the core Water Forum staff consisted of about two and a half full-time technical positions, three and a half administrative positions, and one full-time facilitator. Although the original plan had been to bring the facilitator in to conduct the training in interest-based negotiation, the CCOMWP staff found the facilitator's expertise to be extremely useful and the Working Group approved of keeping her involved in the process. As the process proceeded and the facilitator learned more about the issues involved, she began to operate more as a mediator, and working with the staff, she became the de facto leader of the project. In addition to the core staff, a part-time consultant was brought in to mediate two of the work groups. A number of other technical consultants were hired to develop technical information, such as ground water and surface water modeling data, and prepare the environmental documentation.

## **Staff Roles**

The staff took on a variety of roles through the course of the process. Staff members, including the facilitator, were responsible for planning meetings, strategizing, anticipating issues, engaging in shuttle diplomacy, drafting documents, thinking through all the interests and personalities, and making sure that they did not let any details fall through the cracks. Staff often drew things out longer than participants might have, just to make sure that participants really had a clear understanding to what exactly they were committing themselves and their organizations.

One interesting aspect of the staffing for the Water Forum was how individuals' backgrounds influenced their work. Although the role of the staff was to serve as neutral parties, early on in the process it became clear that, because of their backgrounds and experiences, particular staff were sometimes viewed as being more aligned with particular interests.

The water purveyors felt most comfortable with the engineer who had extensive experience with water planning for the region. Meanwhile, the environmentalists felt more comfortable with the individual who had formerly worked for some environmental causes, although he had also worked for several water agencies. At one point, many purveyors were very distrustful of that staff person's role—they considered him to be “more green than blue.” In response, the facilitator and staff met the issue head-on by scheduling a meeting with the purveyors at which they voiced their concerns and at which the staff were able to allay concerns that there was a bias against the purveyors' interests. After that meeting, the purveyors began to gain an increasing appreciation of that staff member's contributions to the effort.

In general, staff members were assigned to issues in their areas of expertise, as well as to managing communications with particular caucuses. In conversations with staff members, however, each one reported that they viewed their job as being able to see issues on which they were working from a variety of perspectives, to be able to identify what the particular interests might be, and to assure themselves that all the Water Forum stakeholders were aware of theirs and others' interests. One staff member reported her own surprise when, despite many years as a professional with a utility, she became quite adept at identifying and articulating the interests of the neighborhoods' organization. Across the board, the staff maintained a high level of self-awareness in regard to their professional biases and sought to manage them. As time went on, the stakeholders developed a deep level of trust in their expertise and balance.

One area in which staff was not always as transparent in managing their biases related to their efforts to diffuse proposals that were adverse to the City and County. The City and County were paying for the project and staff worked to make sure that proposals that were adverse to the City and County were taken off the Water Forum's agenda quickly. It could be argued that perhaps the staff didn't need to do that, the process could have dealt with it; but if they had, it would have taken up more time at the table.

## Outside Consultants

Outside consultants were drawn upon for a variety of reasons. An additional professional facilitator was brought in to handle the ground water negotiations. Hydrologic consultants were brought in to provide assistance with the ground and surface water modeling and to conduct the analyses studies for the environmental impact report. In the case of the surface water modeling, the Water Forum relied on consultants who were well known and respected in the region, and who had a great deal of

experience in working with the surface water model developed by the Bureau of Reclamation. (The information provided by these consultants in presentations at meetings was at times too complicated for everyone in the group to follow, but people seemed to trust them because they knew others who did, including the Bureau of Reclamation.)

A team of outside consultants and City and County staff was assembled to develop the EIR. The City and County staff were involved more directly in part because they would be the lead agencies for the EIR.

Finally, an outside public relations firm was contracted to assist the Water Forum in working with stakeholder boards and the public. These public relations professionals assisted the Water Forum in working with the media and the communities to develop an awareness of the work being done. They helped put together public workshops and stakeholder briefings, developed press releases, held media training sessions for Water Forum representatives, assessed concerns in the community with regard to impacts of the plan, and helped the Water Forum shape its message regarding how the plan would affect the region. At one point, the public relations consultants even conducted a poll to determine how a change in water metering requirements would be met in the community. This piece of information proved useful in the negotiation phase when water metering was being discussed.

## **The Water Forum Process**

The Water Forum process entailed five overlapping phases—planning, organization, education, negotiation and resolution of issues, and implementation.<sup>16</sup> The planning and organization phases began effectively when the CCOMWP started bringing key parties together to explore their interest in participating in the process. The organization phase entailed training in interest-based negotiation, and a number of procedural tasks such as defining ground rules, establishing meeting schedules, conducting deal-breaker analyses, and developing communications strategies. The organization phase blended into the education phase, in which stakeholders met to review information regarding water-supply issues and the lower American River, and educated one another about their perspectives on the issues. Toward the end of the education phase, the separate caucuses developed their interest statements, and all the Water Forum representatives identified the agenda of issues requiring resolution.

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<sup>16</sup> California Center for Public Dispute Resolution (CCPDR). February 2000. “Five Stages of Collaborative Decision Making on Public Issues.” Handout. Sacramento, California.

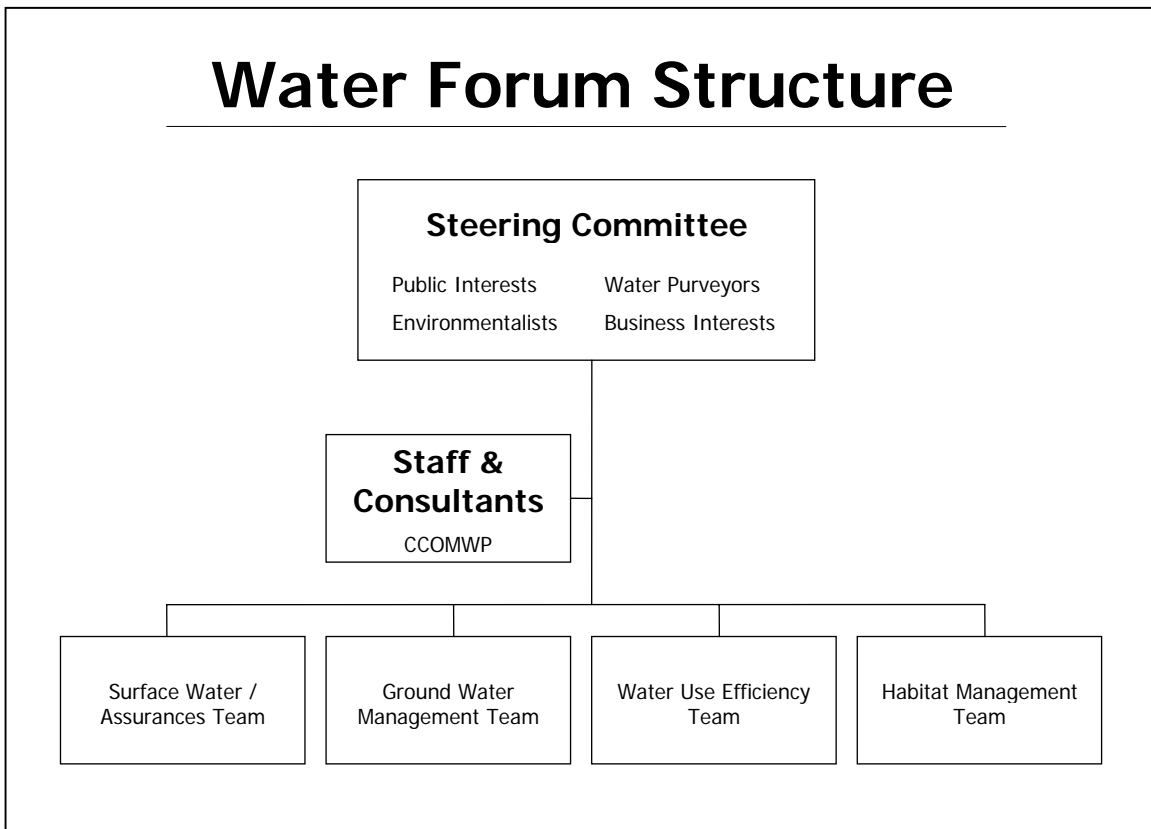
At the beginning of the negotiation phase, the interests that the parties had identified were turned into decision-making criteria for the resolution of issues. The participants organized themselves into several teams to address the substantive issues—the Surface Water Team, the Ground Water Team, the Demand Conservation Team, and the Habitat Management Team. It was within these teams that the bulk of the negotiations took place and detailed agreements were developed. Frequently, when questions were raised within the teams, they would be referred to the larger group, which was called the Working Group. As teams developed agreements, they would recommend them to the Working Group, which had the authority to formally adopt them. The Water Forum organizational structure is shown in Figure 3. The resolution phase was longest and had many subparts. In particular, once participants had come to agreement on fundamental issues, a long process remained of ironing out the many details that arose as the parties came to understand the full implications of their commitments to the agreement—that is, what would be needed to move from having the agreement conceptually to actually “living it.” Although implementation is often thought of as actions taken after a plan is adopted, in the Water Forum, implementation began as soon as the group was able to develop agreements on early actions, and continues beyond the signing of the agreement. A timeline of the Sacramento Area Water Forum is shown in Figure 4.

## Organization Phase

The CCOMWP extended invitations to the stakeholder organizations they had identified with the facilitator’s assistance. The stakeholder organizations were invited to enter into a consensus-based planning process that came to be called the Sacramento Area Water Forum. At the first Water Forum meeting, the overall idea of what the Water Forum process would entail was presented and discussed, and the facilitator ran a training session for the stakeholders to familiarize them with interest-based negotiation principles and techniques. At the time, the CCOMWP staff and facilitator informed the stakeholders that the process would take approximately two years, over which there would be approximately one meeting a month.

At the first meeting and many of the meetings that followed over the next year, the stakeholders sat themselves by interest group blocs around the table. As time went on, however, they got to know one another and became more comfortable with one another. They intermingled at meetings. They joked with one another and learned about each other’s

**FIGURE 3.**  
**Sacramento Area Water Forum**  
**Organizational Structure**



lives and interests outside the Water Forum. Individuals from different caucuses sought one another out and seating along party lines faded away. These meetings became an opportunity for them to catch up with one another on other business and genuinely enjoy trading stories about what was going on in their business and personal lives. The atmosphere of collegiality was enhanced by the presence of food at nearly every meeting, no matter how small, and by the facilitator and staff, who engaged participants in a collegial manner and encouraged it among others.

**Training.** A major component of the first several meetings of the Water Forum was a series of training sessions on interest-based negotiation.



**FIGURE 4.  
Sacramento Area Water Forum Timeline**

ACTIVITY	1993		1994				1995				1996				1997				1998				1999				2000	
	S	F	W	S	S	F	W	S	S	F	W	S	S	F	W	S	S	F	W	S	S	F	W	S	W	S		
<b>Planning</b>																												
Facilitator hired. Conflict assessment conducted	█																											
<b>Organization</b>																												
Working Group organizational and training	█	█	█																									
<b>Education</b>																												
Wkg. Group education sessions & tutorials			█	█	█	█																						
Development of caucus' interest statements			█	█	█	█																						
<b>Negotiations &amp; Resolution of Issues</b>																												
Early Review & Stakeholder Authorization								█																				
Foothills caucus joins the Water Forum								█																				
Surface Water Team Meetings								█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█		
Improved pattern of fishery flows								█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█		
Dry-year alternatives								█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█		
Purveyor specific agreements								█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█		
Habitat management element								█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█		
Assurances								█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█		
Ground Water Management Team Meetings								█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█		
Sustainable yields								█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█		
Governance frameworks								█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█		
North area								█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█		
South and Galt areas								█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█		
Demand Conservation Team								█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█		
Water meters and conservation pricing								█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█		
Urban best management practices								█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█		
Purveyor specific conservation plans								█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█		
Agricultural best management practices								█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█		
Successor Effort								█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█		
Progress Report & Stakeholder Authorization								█																				
Stakeholder review of draft recommendations								█																				
Draft Environmental Impact Report development								█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█		
Discovery of the PROSIM error								█																				

(Figure 4 continued on next page)

**FIGURE 4.  
Sacramento Area Water Forum Timeline  
(continued)**

ACTIVITY	1993		1994				1995				1996				1997				1998				1999				2000	
	S	F	W	S	S	F	W	S	S	F	W	S	S	F	W	S	S	F	W	S	S	F	W	S	W	S		
Addressing newly discovered impacts																												
Meetings with the resources agencies																												
Caveats																												
Bureau of Reclamation model correction																												
Purveyor project-specific EIR negotiations																												
Water Forum Action Plan and DEIR release																												
Responses to comments on the DEIR																												
Water Resources Development Act																												
Stakeholder review & adoption of agreement																												
<b>Water Forum Implementation Actions</b>																												
Support for the AFRP flows																												
Folsom Dam temperature control device on																												
North Area Groundwater Mgt. Authority																												
Support for Fazio water (P.L. 101-514)																												
Revised LAR flow standard																												
Multiagency HME effort																												
Successor Effort																												

The facilitator sent each participant a copy of *Getting to Yes*<sup>17</sup> with instructions to read it prior to the first meeting. At the first meeting, she made presentations on interest-based negotiation, showed the companion video to *Getting to Yes*, and conducted exercises for the participants to get a chance to try the techniques themselves. When new individuals or groups joined the Water Forum, they were also given a copy of the book. A special training session was conducted for the Foothills group, since its members joined later than the other group.

Among the things the facilitator introduced to the participants was the language of interest-based negotiation. In particular, participants were taught about the difference between their positions on issues and their interests. In addition, they were all asked to explore very thoroughly their “best available alternatives to a negotiated agreement,” or BAATNAs. In order for them to be at the table “in good faith” and for the effort to be effective, it was important that everyone felt that a negotiated agreement was their best alternative. Throughout the course of the Water Forum process, staff and the facilitator encouraged participants to weigh the risks and costs associated with pursuing avenues other than a negotiated agreement. For example, if a purveyor were considering proceeding with a project without the support of the environmentalists, what would be the time and financial cost of litigation and what was the probability they could win in court? Similarly, if the environmentalists were not one-hundred percent happy about the commitments a purveyor was willing to make, what kinds of requirements could they be sure the purveyor would have to meet outside of a negotiated agreement?

**Organization and Adoption of Ground Rules.** At the first meeting of the Working Group, each interest group selected one person to serve on an interim committee to draft a mission and goal statement and ground rules, and to address other items in anticipation of the next meeting. This group reviewed and discussed questions regarding who should be at the table, how they should organize themselves within the Water Forum, and the logistics and schedule. With the guidance of the facilitator, they developed the draft ground rules for proceeding, including how decisions should be made, how press inquiries should be handled, the role of observers to the process, and what the roles and expectations would be of the participants. The group also addressed issues of communication and accountability that ultimately resulted in each caucus writing and adopting a detailed strategy for how its members would communicate with

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<sup>17</sup> Fisher, R., W. Ury, and B. Patton. 1991. *Getting to Yes*. New York: Penguin Books.

their constituents, keeping them apprised of Water Forum developments. This latter item was critical in developing participants' confidence that they were working with individuals who were able to negotiate on behalf of their organizations and, to a certain extent, broader constituencies. One fear that some of the purveyors held almost throughout the process was that the environmentalists might enter into an agreement under the auspices of their particular organizations, but then form a new group that was not a member of the Water Forum and then oppose water projects under the auspices of that group.

Over the next several Working Group meetings, participants met with their caucus groups, and as a whole, to review and discuss the mission and goal statement, the ground rules, and each caucus's communications strategy. By the fifth meeting, most of these items were adopted by the group, and an additional representative had been invited to join them—the Sacramento Municipal Utility District, which provides power in the Sacramento region and diverts American River water for cooling purposes.

**Working Group, Caucuses, and Decision-Making Rules.** By the first meeting, the CCOMWP staff and facilitator had identified interest groups within the larger collection of participants and assigned each participating organization to one of four caucuses—the business interests, the environmental interests, the “public interests,” and the Sacramento water interests. Later, when the Foothills interests joined the Water Forum, they did so as a fifth caucus (see Table 1). The only significant change made in the caucus memberships at the outset was the shift of the City and County to the public interests caucus. The facilitator recommended the shift after having completed her conflict assessment, in which she found that as multipurpose local governments, the City and County really had broader interests than did the other purveyors, whose entire function was to supply water. She felt it was in neither the purveyors' nor the City's or County's interests to lump them in the same caucus. At the same time, she also saw that placing the City and County in the public interest caucus would force them to work more closely together and resolve whatever disagreements they might have between them as the Water Forum process proceeded. This later arrangement worked in part because the other parties in the public interest caucus had such disparate interests that they did not end up functioning as a group. Although their interests were important and were met through the process, none of these individual groups were deal breakers.

Initially, each caucus consisted of four representatives and four alternates. Over time, however, the distinction between representatives

**TABLE 1.**  
**Sacramento Water Forum Caucuses and Membership**

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**Public Interests**

City of Sacramento	Sacramento County Alliance of
County of Sacramento	Neighborhoods
League of Women Voters of	Sacramento County Taxpayers League
Sacramento	Sacramento Municipal Utility District

**Environmental Interests**

Environmental Council of	Save the American River Association
Sacramento	Sierra Club—Mother Lode Chapter—
Friends of the River	Sacramento Group

**Sacramento Water Interests**

Arcade Water District	Northridge Water District
Carmichael Water District	Omochumne-Hartnell Water District
Citizens Utilities	Orange Vale Water Company
Citrus Heights Water District	Rancho Murieta Community Service
City of Folsom	District
City of Galt	Rio Linda/Elverta Community Water
Clay Water District	District
Del Paso Manor Water District	Sacramento County Farm Bureau
Fair Oaks Water District	Sacramento Metropolitan Water
Florin County Water District	Authority
Natomas Central Mutual Water	San Juan Water District
Company	

**Business Interests**

Associated General Contractors	Sacramento Metropolitan Chamber
Building Industry Association of	of Commerce
Superior California	Sacramento-Sierra Building &
Business Caucus	Construction Trades Council
Sacramento Association of Realtors	

**Foothill Water Interests**

City of Roseville	Georgetown Divide Public Utility
El Dorado County Water Agency	District
El Dorado Irrigation District	Placer County Water Agency

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and alternates blurred, and eventually alternates became full-fledged members of their caucuses and the Water Forum. The Water Forum Working Group discussed and formally adopted the caucus structure and rules for voting recommended by the facilitator. Although voting is a technique that was rarely used in the Water Forum process, rules for voting were established and provided a framework for understanding how decisions were made. The voting rules recommended by the facilitator and adopted by the Water Forum were that within each caucus, a three-quarters majority vote would be required for an issue to be supported by the caucus as a whole. For an item to be adopted by the Water Forum as a whole, it required the support of each caucus. The facilitator explained that the caucus structure and three-quarters rule are based on the insight that what they were trying to do was find a “governing center” for the process, which would hold the test of time in the face of potential future attempts to destabilize it. She observed,

You have to look at the political and power dynamic and realize that you can empower people’s interests, but not beyond what they are in the real world. You have to do a political analysis of what will hold over time. And what will hold over time is that interests will be satisfied—it’s because the main currents in that society are getting their needs met. What does it mean even when people will be criticizing it, [that] there will be support for it? You build that in—how much unhappiness will destabilize an agreement?

Essentially, the caucus structure and voting rules reflected this idea of empowering interests in a way that reflected their power relations within the region. For example, the requirement that three-quarters of a caucus support an issue meant that no single person or organization could veto something. The facilitator observed that the three-quarters rule meant that there had to be a “predominance of support” among the interests for any particular policy or action. And with that sort of requirement, it was also important that the interests be as similar as possible, “otherwise you are setting up an internal decision structure that doesn’t reflect external political power.”

In the public interest caucus, the City and County each had one vote, and the rest of the interests had another two votes. Thus, neither the City nor the County could block the caucus’s support of something independently. Together, however, they could block the caucus’s support, and hence, the entire Water Forum’s support for any particular issue. In this context, the caucus structure represented the political reality that the City and County were the biggest political players in the Forum. Together

they were influential, but as their previous water planning efforts had taught them, they could not carry out regional water planning without the support of the other regional interests, especially the other water purveyors, environmental groups, and business interests.

When the upstream purveyors joined the Water Forum later in the process, they did so as members of a fifth caucus representing Foothills water interests. When they joined, however, the voting rules were never revised to include them, so it was never clear whether under the formal rules the Foothills interests' concurrence would be required. Again, however, the lack of clarity reflected an important reality of the Water Forum, which was that the interests in Sacramento County could make a deal among themselves, with or without the Foothills interests. In the words of one staff member, "It was never the case that the Foothillers were going to have a veto over this." At the same time, no issue ever came up that tested this unspoken arrangement.

Although the voting rules provided a structure within which Water Forum members understood their decision-making process, actual voting was rarely, if ever, done. In practice, caucus members worked with the facilitator and staff to define their areas of agreement. Often, if a caucus member was not particularly happy about something, the facilitator and staff would get the group to find a way in which the individual could "live with it." If that was not possible, an individual would be asked if he was willing to "stand aside" on the particular issue, meaning that he disagreed with it, but that it was not so important to him that he would oppose it. Thus, in practice, there was little yes-or-no voting, but there were cases where there were varying levels of agreement. Despite those varying levels of agreement to particular items, however, the participants committed themselves to full support of all aspects of the final Water Forum Agreement that emerged from the process. Thus, although an individual might not be enthusiastic about a particular part of the agreement, in recommending the agreement to his board, he would be recommending the entire package as a whole, without reservations in regard to any particular piece.

## Education Phase

The education phase took approximately one year, stretching from the fall of 1993 through the summer of 1994, and involved three types of learning: (1) learning facts and information about relevant water policy and technical topics, (2) understanding the issues important to each caucus, and (3) understanding the reasons why those issues were important for the caucuses.

Technical and Policy Information. An education subcommittee composed of stakeholder representatives from each caucus worked with the CCOMWP staff and facilitator to develop a program of presentations, one per month, addressing a variety of topics on the lower American River, including current and projected water usage, lower American River environmental conditions, in-stream flow requirements, flood control, water rights, water conservation practices, water quality, reservoir operations, ground water, water reclamation, water needs of jurisdictions outside the Sacramento area, and water management options.

The primary purpose of these education sessions was to bring the stakeholder representatives to a common level of understanding on the technical and policy issues they faced, not just from their own interest group's perspective, but also from the perspectives of the other interest groups. The major ground rule operating during this period was that there would be no negotiation of how to achieve solutions. The idea was to provide an environment in which the stakeholders could discuss the data at hand and enrich their understanding of the river and water-supply systems. By separating the education and negotiation phases, it meant that agreement at one meeting that a particular study was reliable did not automatically translate into a particular resolution at the next meeting. It took pressure off the participants as they sought to understand and educate one another about the issues, and it gave them time to bring their constituencies up to speed and consider what new information might mean for them. The education phase provided the opportunity to identify gaps in knowledge about the systems and areas where there were disagreements over the data. The facilitator then assisted the group in negotiations over how data gaps should be filled and in the resolution of data disagreements. In a number of instances, such as the question of where the ground water table should be stabilized, the question was noted and set aside to be addressed in the negotiation phase. The group's common understanding of water resource issues in the lower American River basin then became a common reference point for the negotiation phase. This starting point was not static, however, and new understandings evolved as the process proceeded.

Perhaps one of the most important transformative moments in the education phase occurred around the understanding of the policies that govern river's in-stream flows. The Water Forum education committee assembled a panel of legal experts to address the potential significance of the Hodge decision relative to future flow requirements on the lower American River. The panel included Judge Hodge, Adolph Moskowitz (a well-respected water law attorney who represented many of the purveyors in the region) and several other experts familiar with the EBMUD case.



The Hodge decision regarding the lawsuit against EBMUD, set minimum flow requirements below which EBMUD would not be allowed to divert water from the river. Many of the water purveyors in the region were of the opinion that the Hodge decision only applied to EBMUD diversions, and that it did not constrain their ability to make full use of their water rights. When Moskovitz shared his opinion on the issue, however, he said that although the decision did not apply directly to the purveyors, it set a legal precedent to which they could reasonably expect to become subject in the future. He explained that he did not know how the precedent would be applied to them, but that because the Hodge decision laid out flow conditions that were good for the river, not just EBMUD, it set a precedent for future legal requirements relating to river protection. He added that it was not just the flow standard that was precedent setting, but the entire thinking behind the Hodge decision that had led to the flow standard.

According to the facilitator, when the purveyor interests heard this information from one of their most trusted advisors, it was a transformative moment. The idea that the Hodge decision and its underlying principles could apply to the region's purveyors had not been a part of their existing worldview. To accommodate this new information, the purveyors needed to adjust their paradigm for thinking about their water rights and potential future limits on their ability to divert American River water. The shift did not entail a complete abandonment of the theory that their water rights accorded them a high priority in obtaining water from the river, but that it entailed a richer, more complex understanding of how multiple paradigms can be at work at the same time. The facilitator explained, "It wasn't [that] we were a slave to Hodge, nor were we a slave to all the water rights. It's an interesting public policy mix of all these things."

The Hodge decision was based on reasoning from public trust law that requires a balancing among competing public trust interests—in this case, in-stream flow values and municipal water quality and use.<sup>18</sup> And that the weight of the municipal and water quality and values relative to the in-stream flow values depended on the extent to which there were alternative supplies of water available to those diverters during periods when the in-stream flows were critical to the health of the river, such as droughts. As the Water Forum progressed, the stakeholders interpreted this reasoning to mean that if, during dry years, water purveyors had

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<sup>18</sup> For a more detailed discussion of the public trust doctrine and balancing requirements, see Littleworth, Arthur L., and Eric L. Garner. 1995. *California Water*. pp. 71-111. Point Arena, California: Solano Press Books.

alternatives to taking water from the river, the public trust pressure was that they should avail themselves of those alternatives—i.e., they should “get off the river.” If, however, they did not have alternative water supplies they could use in dry years, they would be allowed to take water from the river in dry years. This conceptual framework later became the foundation for the Water Forum’s dry-year alternatives.

Another key issue that was addressed during the education phase was how the Water Forum would handle the issue of Auburn Dam. The proposed construction of Auburn Dam on the North Fork of the American River upstream from Folsom Reservoir has a long and contentious history in the region.<sup>19</sup> Those who favor the dam, including a congressman from the region, argue that it’s the most cost-effective way to achieve long-term flood control and water-supply benefits. Those who oppose the dam argue that it is unnecessary and expensive, and that it would eliminate invaluable natural and recreational resources on the North Fork of the American River, in addition to the environmental damage it would wreak downstream.

Within the membership of the Water Forum were individuals who held strong opinions on both sides of the debate. One of the environmentalists had dedicated much of his life to fighting the dam. One of the public interests caucus members was the former president of another citizens’ group dedicated to the construction of the dam. The education committee scheduled a four-hour meeting to address the topic. They provided information on the range of options proposed for the dam and a point-counterpoint on the project’s merits. With the guidance of the facilitator, the stakeholders engaged in a spirited discussion of the issues relative to the goals of the Water Forum, and over the course of the following month, developed a strategy for dealing with the issue. Essentially, they agreed to disagree. As a group, the Water Forum took no

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<sup>19</sup> Congress authorized the construction of Auburn Dam in 1965 (P.L. 89-161) as a multipurpose facility that would provide flood-control protection and water supply. “Construction of the originally proposed Auburn dam by the Bureau of Reclamation began in 1967, despite strong opposition. A diversion tunnel and cofferdam to carry the American River past the construction site were completed in 1972. Work on the dam stopped in 1975, however, when an earthquake registering 5.7 on the Richter scale occurred near Oroville, about 45 miles north of Auburn. Subsequent study revealed a fault near the Auburn site. Some evidence suggested that the newly completed Oroville Dam may have triggered the earthquake, and the Auburn dam was put on hold indefinitely by the Bureau of Reclamation.” (National Research Council. 1995. *Flood Risk Management and the American River Basin*. pp. 26-27. Washington, D.C.: National Academy Press.)

position on Auburn Dam.<sup>20</sup> What they were able to agree on, however, was that there were a number of other issues that they needed to address and on which they anticipated they would be able to come to agreement, whether or not the Auburn Dam is built. Thus, although the question of the Auburn Dam continued to be addressed in other local, state, and federal arenas, and Water Forum representatives continued their efforts in those arenas, the issue of the Auburn Dam was “off the table” in the Water Forum.

**Interest Statements.** During the educational phase, the facilitator and staff also convened meetings of each caucus once or twice each month. The purpose of these meetings was to get each interest group to think its interests through thoroughly relative to a regional water plan and then articulate them in a written statement. The facilitator and staff helped the interest groups engage in discussions in which they explored the reasons that they had advocated specific outcomes. The facilitator explained,

People don't know what their underlying interests are, nor do they know what their BAATNAs are, or their alternatives. ... They know what their positions are and they know what they're demanding, but they don't really know what their underlying interests are. And that's not self-evident—it takes meetings and skillful professionals to sit down with the group in a private session and go, ‘What do you really need here?’

For example, at the environmentalists' first caucus meeting, they identified one of their interests as being essentially, “no more diversions from the American River—ever.” Similarly, the purveyor and business interests identified one of their interests as being the diversion of an additional 300,000 acre-feet of water from the American River in all years to meet the water needs anticipated up to the year 2030. In working with the facilitator and staff over the course of several months, both caucuses were able to identify the interests underlying these positions. In the case of the environmentalists, their interest was that the fall-run salmon would be protected in the dry years, the salmon life-cycle would be protected in all years, and that there would be attention paid toward protecting steelhead. Similarly, the business and purveyor representatives found that

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<sup>20</sup> Sacramento Area Water Forum (SAWF). January 2000. *Water Forum Agreement: Developed by Stakeholder Representatives for Adoption by their Governing Boards*. p. 337. Sacramento, California: City-County Office of Metropolitan Water Planning.

their interest was in having certainty of water supply—not necessarily from the American River—in all years and at a reasonable cost.

The complete range of interests for these groups was more complex than just the fisheries and water diversion issues. For example, the water purveyors developed a two-part interest statement<sup>21</sup> that addressed the interests of agricultural water suppliers on one hand and of municipal and industrial water suppliers, on the other hand, separately. In addition to being concerned about being able to provide a reliable water supply at a reasonable cost during any type of water year, all the water purveyors were interested in stabilizing ground water levels and developing surface water supplies in a way that would complement their ground water use. They also all expressed the view that water conservation could be used effectively to increase supply, but that its contribution toward solving water-supply problems was limited by cost and technical feasibility. The municipal and industrial water suppliers also wanted recognition of the water conservation plans a number of them already had in place, which they considered to be comprehensive. These suppliers also had concerns about water quality and wanted recognition of the costs associated with potential future federal drinking water quality requirements. Similarly, the agricultural interests were concerned about the long-term economic prospects for agriculture in the region, and they sought recognition for the extent to which they were bearing the regulatory burden of endangered species legislation. The agricultural interests also noted that each of the agricultural water districts faces very different circumstances. They therefore found that the solution sought by the Water Forum should be tailored for each district. On a related point, the municipal and industrial purveyors, who comprise some 20 water districts overseen by a total of some 90 elected officials and additional private investors, expressed the importance of preserving their organizations' autonomy. Finally, all the purveyors expressed the need to protect and preserve their existing water rights, and a desire to obtain greater certainty in regard to the in-stream flow requirements for the American River.

The City and the County of Sacramento shared a number of the other purveyors' interests. Both were concerned about meeting long-term water demands in a cost-effective manner and improving ground water management through a conjunctive use program. They also felt that a new

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<sup>21</sup> Sacramento Area Water Forum. 1994. "Water Interests Group: Major Issues and Concerns." Sacramento, California: City-County Office of Metropolitan Water Planning.

in-stream flow standard should be established by the State Water Resources Control Board. They had a two-fold interest in the latter: (1) to protect the natural resource and recreation values on the lower American River and (2) to reduce the uncertainty around how much water they might be able to divert from the river in the future. In addition to these common interests, the City and County had some separate interests that reflected their particular circumstances. The City has extensive senior water rights on the American River that, in combination with a contract with the Bureau of Reclamation for storage in Folsom Reservoir, provide the potential for a highly reliable and plentiful water supply. To take advantage of these rights, however, the City needed to expand its diversion and treatment capacity, which would require additional permits. In contrast, the County had no surface water supplies, and had a strong interest in developing or otherwise gaining access to a long-term surface water-supply and treatment plant capacity. Both the City and County expressed an interest in aggressive water conservation. The City noted, however, that “in the past, the City Council has opposed residential water meter retrofit, thus making this a difficult issue for consideration in future negotiations.”<sup>22</sup> This later interest reflected the fact that the City’s Charter prohibits metering requirements. The City also expressed a need to maintain and develop redundancy into its water treatment system to provide for operational flexibility. The County expressed an interest in maintaining a cooperative relationship with the City and in getting recognition of area-of-origin laws that give water users in an area-of-origin a higher priority than users of water exported outside the region.

The other members of the public interests caucus developed their own individual interest statements. The Sacramento Municipal Utility District also had an interest in a reliable water-supply at a reasonable cost to serve its current and future power facilities. They also recognized that they had water entitlements that exceed their anticipated long-term needs and might have an interest in making that water available to others who may need additional surface water. In addition to improved ground water quality and a healthy American River Parkway, the Sacramento County Alliance of Neighborhoods (SCAN) expressed its interest that existing Sacramento neighborhoods retain their high quality of life, which in their view was protected by the growth levels approved in the General Plan. SCAN was also concerned that costs associated with the water plan be

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<sup>22</sup> Sacramento Area Water Forum. March 28, 1994. “City of Sacramento Revised Underlying Interest Statement.” Sacramento, California: City-County Office of Metropolitan Water Planning.

distributed equitably and that they be “clear and credible to the public,”<sup>23</sup> and that neighborhoods and other community groups be involved in water planning and siting issues. The primary concerns of the Sacramento County Taxpayers League were that any new taxes, fees, assessments, or water rates be reasonable, necessary, and equitably distributed. They expressed the principle that “growth pays for growth.”<sup>24</sup> In addition, they expressed a concern about redundancy in local government and a strong interest in eliminating overlapping local government bodies. The League of Women Voters’ interests focused on developing effective water conservation and conjunctive use programs for the Sacramento region. In the interest of “good government,” it was the League’s concern that the Water Forum process work toward setting priorities for meeting local needs.

The environmental caucus expressed its interest in protecting and enhancing the “in-stream values of the Lower American River, including fisheries, related habitat, [American River] Parkway recreation, and aesthetics.”<sup>25</sup> They also did not want protection of the lower American River to result in harm to other waterways in the region or state. Their interests included the need for a reliable urban water-supply at a reasonable cost, which from their perspective meant that environmental values would not be subordinated to costs. Similarly, they were interested in cost allocations that were fair and equitable, and that encouraged environmental protection. They expressed a strong need for a comprehensive water conservation program that included conservation-pricing. They also expressed support for regional ground water management, and conjunctive use programs that “do not make surface water diversions at the expense of environmental values.” They articulated a strong interest in adhering to several components of the General Plan, including the maintenance of the urban services boundary, and protection of designated resource conservation areas. Finally, they expressed the importance that a regional water plan be in full compliance with existing environmental laws and legal doctrines.

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<sup>23</sup> Sacramento Area Water Forum. 1994. “Sacramento County Alliance of Neighborhoods Underlying Interest Statement.” Sacramento, California: City-County Office of Metropolitan Water Planning.

<sup>24</sup> Sacramento Area Water Forum. 1994. “Sacramento County Taxpayers League Issues/Interest Statement.” Sacramento, California: City-County Office of Metropolitan Water Planning.

<sup>25</sup> Sacramento Area Water Forum. April 1994. “Issues and Interests of the Environmental Caucus.” Sacramento, California: City-County Office of Metropolitan Water Planning.

The business caucus's statement centered on the groups' interests in the region's economic health and competitiveness. It saw a reliable and cost-effective water supply as a basic need to attract and support economic growth in the region. At the same time, it noted that the region's quality of life depends on its economic and environmental well-being. The business caucus recognized that the Sacramento region extends beyond the borders of Sacramento County, and that its interests and those of adjoining jurisdictions would be influenced by out-of-county water issues. The caucus was concerned that water supply not be used as a means for controlling growth, and it identified the General Plan process as the appropriate arena for addressing growth issues. Similarly, the caucus was concerned that demand projections be realistic and that "unnecessary or extraordinary capital costs" not be passed along to new homebuyers. It supported water conservation as a way to augment supplies and expressed an interest in the conjunctive use of ground water.

Each caucus developed a document setting forth its interests and toward the end of the educational phase presented the document to the full group. Part of this process involved consultations and briefings with each stakeholder representative's stakeholder organization and larger constituency where appropriate. The interest statements were discussed and became important documents as the group readied itself to move forward in the negotiations. Later in the process during deliberations, participants often referred back to the interests, relating what was being proposed or advocated to the more fundamental interests in the documents. When they couldn't figure out how a stakeholder's particular issue or demand related to their expressed interests, it often raised confusion, but also provided a basis for determining what was really underlying the issue.

## Negotiation and Resolution of Issues Phase

Toward the end of the education phase, the Water Forum facilitator, in consultation with the education committee, drafted a "road map" memorandum outlining a plan for the remainder of the process.<sup>26</sup> This road map was presented to the Working Group, which, after reviewing and discussing the document, approved it. The road map called for the negotiations to last from October 1994 through July 1995, and to take place in two phases. First, the Water Forum representatives would

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<sup>26</sup> Memorandum from Susan Sherry, Mediator, and Forum Education Committee to Working Group representatives, Sacramento Area Water Plan Forum, re: "Road Map for our Negotiations." June 20, 1994.

negotiate a framework agreement—that is, an agreement in principle that would then guide the development of a solution package. The second phase would be the negotiation of the solution package, and it was expected to take six months. In the memorandum to the stakeholders, the facilitator provided guidance for the negotiations:

Think of the negotiation as building a house. You need to lay the foundation and construct the frame before you can work on the plumbing, electrical system, floors, dry walls, and roof. During this step, we'll be laying foundation and constructing the frame. Then, with a common framework in hand, in the next step we can turn our attention to brainstorming and developing a specific solution package.

To carry out the negotiations, the facilitator recommended the Working Group create three teams to address the three issue areas in which it had become apparent they needed to focus their efforts: surface water diversions, ground water management, and demand conservation. Later, a fourth team was added—the Habitat Management Team. The membership of each team was drawn from each caucus. The teams consisted of Working Group members, as well as additional individuals having relevant expertise and connected with the Water Forum organizations. The additional participants were generally people who had technical expertise, some of whom were consultants hired by the water districts specifically for the purpose of working on the teams. Like the caucus meetings, all of the team meetings were facilitated. An additional professional facilitator was brought in to assist the ground water management and demand conservation teams.

The facilitators and staff worked together and in consultation with key team members to develop the agendas for the meetings, and technical consultants were brought in to provide the teams with information. The facilitators and staff worked to anticipate the teams' needs and make sure that they would have the information they would need to engage in productive discussions at the meetings. An important function of the staff and facilitators was to put into writing the ideas expressed by the participants in meetings. Between meetings, staff would go over their drafts in consultation with team members and bring the new material back to the team at its next meeting. One technique the staff and facilitators used frequently was to present to the group a "trial balloon"—an idea that was being proposed that might meet their collective needs. Typically when a trial balloon would be presented to the group, the facilitator would seek out individuals' comments and concerns. Those comments and concerns then became items that would have to be addressed by the team and in caucus meetings if necessary. According to the facilitator, the trick



is to break each item down into pieces, and then deal with each piece one at a time.

Once the teams were able to come to an agreement, they would make a recommendation to the Working Group. The Working Group would then consider the recommendation, and sometimes raise additional issues for the team to address. Ultimately, the Working Group was the entity that had final say about what would be formally adopted by the Water Forum. And of course, the boards of the member organizations had the final say in whether they would adopt the recommendation of the Working Group.

**Early Review and Authorization to Proceed.** From October 1994 to April 1995, the Water Forum representatives worked in their caucuses, in teams, and in the Working Group with guidance from facilitators and staff to develop a framework for their agreement. They discussed and negotiated over two types of information. One was the facts the group was willing to use as its operating assumptions that had not been agreed on during the education phase. For example, after careful consideration and review, all the caucuses agreed on the methodology they would use to arrive at projections of water demand. The second type of information they sought to develop was those areas in which they could arrive at agreements in principle—that is, things they agreed should guide the development of the solution agreement. For example, they agreed that, “The Hodge flows are an important reference point to begin discussing in-stream flow standards for the LAR [lower American River].”<sup>27</sup>

In April 1995, the Water Forum produced a briefing paper for its stakeholder organizations containing a list of 65 such agreements on fact and agreements in principle. The document provided a foundation for more detailed future agreements on surface water, ground water management, and water conservation. It articulated the notion that a solution to the region’s water problems would have to be a multipart package, and that it would have to provide for a certain water supply, protection of the lower American River, water quality, ground water management, water conservation, and reasonable and equitably distributed costs. It also recognized that regional cooperation, including cooperation with adjacent counties and EBMUD, might be advantageous in the development of a water plan.

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<sup>27</sup> Sacramento Area Water Forum. April 1995. “Early Review and Authorization to Proceed.” Sacramento, California: City-County Office of Metropolitan Water Planning.

The document was the subject of a series of briefings held for the boards and constituents of each caucus. The Water Forum asked each stakeholder organization to review the document and provide any comments it might have. In addition, it requested that each stakeholder board pass a resolution authorizing the Water Forum members to proceed with the development of a draft solution package. The resolution did not require that the organization embrace the agreements in principle, but it was a reaffirmation of the organization's commitment to the Water Forum Process.

**Adding the Foothills.** The Foothills caucus joined the Water Forum in the spring of 1995, about six months into the negotiation phase. When the Foothills purveyors joined, however, they came without their environmental, community, and business interests, but provided solid avowals that they did not have substantial disagreements with them and could negotiate in good faith without them. They hired Jonas Minton to staff their caucus, and he gradually became an important staff member to the Water Forum as a whole.

**Progress toward a Solution.** Although it had been anticipated that the Water Forum could develop an agreement within a year of completing the education phase, the issues proved more complicated and difficult to address than the facilitator, staff, and participants had predicted. Despite the slow progress, the stakeholders remained committed to the process. And though the Water Forum consumed large amounts of the stakeholder representatives' time and was a relatively expensive undertaking for the City and County Office of Metropolitan Water Planning, those involved in the process and their stakeholder organizations continued to see it as a valuable way to address their problems.

Following the development of the agreements in principle, the stakeholder representatives continued to work in the three teams to further develop their agreements. The staff and facilitator also continued to convene meetings of the caucus groups in which each caucus could work through the issues within the context of its interests. They also worked through strategies in terms of what kinds of agreements would be reasonable in the context of what they might be able to achieve outside the Water Forum. The Working Group continued meeting approximately every three months to address issues that had arisen and provide guidance to the negotiating teams.

Although the Water Forum had not met its self-imposed deadline for completing an agreement, the facilitator and staff worked hard to make

sure that the group marked and memorialized its achievements. In January 1996, the Water Forum produced another progress report<sup>28</sup> in which the framework for the agreement could be clearly seen. One of the key principles that they had agreed to was the so-called “co-equal objectives,” in which providing a safe and reliable water-supply and protecting the American River were considered as equal priorities. The articulation of these two objectives as co-equal meant that any proposal set forth in the process had to meet both of these objectives equally. Although there was never any quantitative determination made of how well any individual piece of the agreement fared in this regard, all of the participants made these determinations in their own minds and in consultation with their colleagues. When the parties came to agreement, they all felt comfortable that the co-equal objectives would be met.

### **Building the Water Forum Agreement**

Building the Water Forum Agreement proved to be a painstaking task. With the facilitator’s guidance, each issue was carefully broken down into its various parts. Stakeholders identified sticking points and worked to find solutions part by part. In the language adopted by the participants, they floated “trial balloons,” identified “zones of agreement,” worked around “sticking points,” engaged in “mature conversations” and “disciplined discussions,” learned to have patience for when they would arrive at agreements “in the fullness of time,” and developed “agreements-in-principle.” As they found the solutions, each was added into the agreement piece by piece, creating, as one participant described, “a carefully packed box.” Although the agreement is a total package of many interrelated pieces, it is also a robust and complex web of understandings that takes into account the limitations of knowing what the future may hold.

The Water Forum negotiations required patience, listening skills, creativity, and leadership on the part of the stakeholder representatives. The process was frustrating for everyone at times when some sort of action by an outside party or the discovery of new information affected the conditions around a tentative agreement that the Water Forum had developed. For example, at one point when the Surface Water Team had completed negotiations on all of the purveyors’ diversion agreements, the group discovered that the urban intakes were taking water from the “cold

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<sup>28</sup> Sacramento Area Water Forum. January 1996. Progress Toward a Regional Water Agreement. Sacramento, California: City-County Office of Metropolitan Water Planning.

water pool,” water in the lower portion of the dam that can be released when fish require cooler water temperatures. The problem for the Water Forum Agreement was that if the water purveyors depleted the cold-water pool, the water remaining for the fish would be too warm. Without a cold-water pool available for fishery releases, the Water Forum’s diversion agreements and proposed flow pattern would not protect the fish. Rather than abandon the agreements, however, the Water Forum members sought a way to make the agreements work. They came up with the idea of installing a temperature control device (TCD) on Folsom Dam that would allow the purveyors to take warmer water from the upper part of the reservoir, leaving the cold water for releases that would be made for fish. They worked with the Bureau of Reclamation and the region’s congressional delegation to get the TCD authorized and funded. Remarkably, they were even able to persuade local Congressman Doolittle, who was neither a fan of the Water Forum nor a supporter of environmental causes, to sponsor the legislation funding the expensive project in Congress. Construction of the device was completed in 2001.

Several events forced Water Forum members to revisit tentative agreements during the negotiating process, and the Water Forum participants began to recognize that changes they could not predict would inevitably occur in the future. They began to develop agreements that recognized that future contingencies might change members’ abilities to meet their commitments. They understood that none of them wanted their hard work to evaporate if a significant change occurred after the signing of the agreement. They developed the principle of “changed conditions,” where, in the event that such a change occurred, they would seek a solution and develop a new agreement relating to the change. They agreed to “mediate before you litigate.” They also developed the concept of a Water Forum Successor Effort, through which they could collectively address changed conditions and monitor progress on the implementation of their agreement.

The bulk of the Water Forum negotiations took place within the three negotiating teams. The work of the Surface Water Team was the most critical for the agreement. What follows is an explanation of what the Surface Water Team did in building its parts of the agreement. The work of the Ground Water Team and Demand Conservation Team are also described, but in less detail.

### Surface Water Negotiations

The surface water negotiations were the most contentious and complicated of the Water Forum. The team worked with a variety of

consultants and outside experts to develop the key agreements that would enable the environmentalists to agree to increased surface water diversions and the purveyors to support programs to protect the river's recreational and fishery resources. They first worked out agreements in principle and then looked to see if they could work out details to produce a specific agreement. The Surface Water Team negotiations themselves involved hundreds of meetings and thousands of hours from staff, consultants, and Water Forum representatives. In describing how complicated it was, the facilitator said,

It was a 17-ring circus. All these things were going on in parallel. We would have 17 major negotiations going on any one week. You know they were all their own little thing. It's crazy.

**Fish Flow Pattern.** The Surface Water Team began by looking at the river flows with the aim of developing an updated flow standard for the lower American River. At the beginning, the team had in mind that they would come up with a prescriptive standard much like the existing State Water Resources Control Board requirement (D-893) and the Hodge flow requirement, setting minimum flows for particular times of the year. To do this, they determined they needed “operational studies”—that is, studies showing how Folsom Dam could be operated, or “re-operated,” to achieve various flow levels during different types of water years. In addition to the operational studies, however, the Surface Water Team needed to know what river conditions are favorable to fish. To this end, they assembled a team of fish biologists having extensive experience on the lower American River<sup>29</sup> and asked them to identify the flow conditions that are favorable to fish populations and those that are not.

The team of fish biologists consisted of representatives of the U.S. Fish and Wildlife Service, California Department of Fish and Game, State Water Resources Control Board, U.S. Bureau of Reclamation, several Water Forum members, and several consulting fish biologists hired by the Water Forum. The team met over a period of several months. They agreed among themselves that the fall-run chinook should be given the highest priority when water availability is constrained. They then developed a “fish-friendly flow pattern”—a flow regime that called for water to be released from Folsom Reservoir so that the water flows and

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<sup>29</sup> That there were both significant data available on the river and fish conditions and knowledgeable professionals was in part due to the years of litigation over diversions from the river.

temperatures in the river would be favorable for salmon spawning and rearing.

The fish biologists recognized that existing minimum flow standards were out-of-date relative to the current understanding of fish biology. The problem for the American River salmon was not just that the flow standard had been set too low—in fact, the Bureau of Reclamation had operated the river at the minimum flow levels only during the most severe drought on record. Rather, the problem for the fish was that the Bureau had operated the river with the primary goal of meeting its water delivery schedules.<sup>30</sup> It released relatively high amounts of water during the summer months for agriculture and other uses, and relatively low amounts at other times. The Bureau's operations also resulted in large daily fluctuations in flow levels depending on delivery schedules. In addition, it released water to the river from the warmer upper levels of the reservoir, resulting in increased temperatures in the river.

Meanwhile, the salmon and other fish populations that have lived in the river for thousands of years depend on the cold water from the Sierra snowmelt and on the variations in natural flows that occur over the course of a year. The fall-run chinook salmon spawn in the American River gravels from October to February. When river flows are higher, more gravels are submerged in water and available to the salmon for spawning. The eggs hatch in the spring and the juvenile salmon rear in the river from March to June. In the late spring and early summer, when historical flows were high with the spring snowmelt, the fish move down the river, through the Delta, to the Pacific Ocean where they spend three or four years before returning up the river to their spawning grounds.

Unlike the minimum flow requirements established by D-893 and the Hodge decision, the biologists' recommended flow pattern took into account the dynamic nature of the river system and, in particular, the salmon's needs. They recommended a flow pattern that better reflected the natural system to which the fish are adapted. Rather than specifying minimum flow levels for specific times of year that would apply regardless of how much water was available, they recommended that flow levels and temperatures be varied according to water availability and fish needs. Cold-water releases would begin in October and continue through the winter, depending on water availability. If the fall months are dry, the flows would be decreased slightly through February, so as to preserve water in storage to provide for in-stream flows in the spring. At the end of

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<sup>30</sup> Beginning in 1996, the Bureau of Reclamation began releasing water in a manner more consistent with fish protection objectives.

May, the flows would be established for the remainder of the water year, with an aim toward preserving sufficient water to provide spawning habitat in the fall. Thus, in comparison to the historical operations of the river, the flow pattern would provide for higher flows in the winter and spring, and lower flows in the summer, and large fluctuations in flow would be eliminated. In addition, during wet years when more water was available, higher flows would be required than in dry years when less water was available.

When the biologists' recommendations were brought to the Surface Water Team, the main issue raised by team members was whether it was appropriate to create conditions that would be weighted so much in favor of the salmon, which are listed as an endangered species, over the steelhead in times of water scarcity. Because of their somewhat different lifecycles, the pattern of releases that would improve conditions for the salmon would also further degrade the conditions for steelhead. Most of the historic habitat for steelhead in the American River is upstream of Nimbus Dam in cooler waters that are no longer accessible to the fish. Despite these unfavorable conditions, some steelhead continue to spawn in the lower American River. Upon hatching, the juvenile steelhead will rear and remain for a year or two before migrating to the ocean. Under the fish flow pattern first proposed by the biologists, the cold water pool in the reservoir would be reserved for fall and winter releases for the salmon, and summertime river water temperatures would be higher, which would worsen conditions for steelhead.

The Surface Water Team agreed that, in general, the flow pattern concept recommended by the fish biologists was the path they should be taking. However, the environmentalists felt that in order to meet their co-equal objective of preserving the fishery values of the lower American River, conditions would have to be improved for the steelhead as well as the salmon. Although the lower American River is not prime steelhead habitat, the environmentalists did not want the Water Forum Agreement to result in worsened conditions for the steelhead in the river. Not only were they uncomfortable with potentially worsening conditions for the steelhead, they felt they would not be able to get the support of their broader constituency for an agreement that included degrading steelhead habitat, albeit low-quality habitat in the first place, while lowering summertime river temperatures would mean less cold water would be available for the salmon in the fall.

Similarly, the water purveyors and business interests were concerned that additional commitments to in-stream flows would potentially limit additional water development. This piece of the debate continued for some time while the Surface Water Team turned its attention

to other pieces of its work. Eventually, in consultation with the biologists, the Surface Water Team was able to agree on a fish flow pattern that improved overall conditions for the salmon and improved the summertime temperatures for the steelhead.

In retrospect, the approach the team took sounds straightforward and even perhaps obvious. However, at the time, this was not the case. The facilitator explained,

We spent a good six months trying to conceptualize what operational studies needed to be done, and at that point, is when we brought in some of the fish biologists and some of the modelers. ... We were sort of still groping in the dark, but we knew that we had to figure out—because of the underlying interests of the environmentalists—what minimum flows would still be okay for the fish? And what minimum flows would be okay for the fish even in wet or dry years?

In 1996, just as the Surface Water Team had a good handle on how the fish flow pattern would work, the Bureau of Reclamation announced it would re-operate Folsom Dam for fishery protection as a part of the Anadromous Fish Restoration Program (AFRP) they were implementing under the 1992 Central Valley Improvement Act. When the Water Forum learned of the Bureau's plans, it was one of the first big, mid-negotiation situations of "changed conditions" they faced. Water Forum members were very worried that all the work they had done to date would become meaningless—not just the fish-flow pattern work, but the dry-year alternatives and other elements they were beginning to put together. As it turned out, however, the Bureau's AFRP flow pattern and the one developed by the Water Forum were nearly identical.

The Bureau's announcement of its AFRP plan for the American River presented a bigger issue for the negotiations, however. With the implementation of the AFRP policy in the middle of the negotiations, the baseline against which the Water Forum had to measure impacts under CEQA changed, and the change was in the environmentalists' favor. The facilitator explained,

The fact that the AFRP was implemented mid-stream of the Water Forum Agreement was very much a disadvantage to the water purveyors in terms of how the world saw [what was happening]. Because the environmentalists were saying, at minimum, the fish have to be as good in the future as they are in the baseline. That was their mantra—the fish have to be as good in the future as they are in the



baseline. Well, when the baseline ... [gets] higher, and therefore that meant that the baseline that the environmentalists were gonna compare the 2030 condition to, and that we had to compare the 2030 condition to in the EIR, the technical document [got higher]. So this wasn't just the environmentalists' [view], ... this now got institutionalized in CEQA that we had to use the AFRP as a part of the baseline.

The announcement of the AFRP policy also raised the opportunity for the Water Forum to make a statement supporting it. This proved difficult for the purveyors because, as the facilitator explained, it

would give the environmentalists a "get" before the purveyors had any of their facilities—even their EIRs—done, much less the environmentalists' support for that. So the purveyors had to take a risk and support the AFRP when they would be giving the environmentalists a give when maybe they were never going to get their projects. Because we were only halfway through the negotiation. So that was a whole thing of a conscious discussion around, 'Do you know you are raising the bar?'

Ultimately, however, the purveyors threw their support behind the AFRP, and the Water Forum issued a statement of support. The details of how they worked through the issue were a model of how the Water Forum negotiations were conducted. The facilitator explained,

I think what works in these negotiations is honesty, clarity, transparency, and everything on the table. We talked about it all. We talked about that it was. I think part of what allows people to make good decisions is that you don't sweep anything under the rug, and you talk about the bitter truth. This is going to raise the baseline. The environmentalists are getting something before you're given a thing. You've got to realize that this is what's going on here, and environmentalists ... you're getting something before an agreement, but keep that in mind in the future—the purveyors are doing a really generous gesture, don't forget that. ... It's part of going into things with open eyes, having the professional staff that knows the implications that—back whenever we decided this—that this means we're going to have to do the EIR differently. ... The purveyors, to their credit and they're really good people around the table, knew it was the right thing to do.

You don't damage a resource because you're trying to make sure that you protect yourself for some future EIR. I don't think our purveyors even gave it a second thought; they knew that it was the right thing to do. But we had to make sure that they really did it with their eyes open because there were major consequences to it—the EIR, and in terms of the environmentalists' BAATNA being strengthened.

So we did it, and life just went on from there. But when we would come back in 1998 and talk about these impacts, and the environmentalists would be upset about the impacts, the purveyors did have to remind the environmentalists that they're impacts, but it's impacts to a higher baseline.

**Dry-year Alternatives.** Once the Surface Water Team agreed on the general concept of a fish flow pattern, the members looked at the effect the pattern would have on the surface water diversions out to the year 2030. Prior to breaking into teams, the Water Forum members had agreed on how the water demand estimates would be calculated for the purveyors. In Sacramento County, the demand estimates were based on the growth projections in the General Plan. In Placer and El Dorado counties, the basis for the growth projections was different, but they were made with the involvement and agreement of the Water Forum environmental and business representatives.

With the demand estimates in hand, the Surface Water Team asked a team of consulting hydrologists and biologists to determine how much water would be available for water-supply diversions if the river were run according to the flow pattern. Since the amount of precipitation that falls each year varies widely—as the saying goes, there is no such thing as an “average” year in California—the consultants modeled the river flows using rain and snowfall information from the 70-year historic record. The model results showed that if Folsom Reservoir were operated using the fish flow pattern, in about 40 percent of the years the river flows would be below the Hodge threshold—in about half those years there would be insufficient water to meet the fish flow pattern and the projected water-supply needs. And in about 3 percent of all years, there would be insufficient water in the river to meet all of the water purveyors' 2030 demand, even when strict conservation measures were in effect and regardless of how much or little water was needed for the fish. The Water

Forum members began referring to these types of water years as “the drier and driest years.”<sup>31</sup>

With this information in hand, the Surface Water Team tried to figure out how to get alternative water supplies to purveyors so that they could decrease their diversions from the river during the drier and driest years. They understood the magnitude and timing of cutbacks that would be required in aggregate, but had yet to figure out who would have to cutback, when, and by how much. As they began to address this issue, one of the staff members developed the idea that the solution to the problem could be found in the principles underlying the Hodge decision. The Hodge decision provided that EBMUD could not divert water from the Nimbus Dam when flows were below certain levels<sup>32</sup> because it had “feasible alternative diversion sites.” That is, EBMUD could take water from the mouth of the river or further downstream in the Delta, which would allow the water to flow the full length of the lower American River where it would provide benefits to the fish. Thus, the reasoning was that if a purveyor had a feasible alternative, it, too, probably would not be allowed to divert when the river flows were below the flow levels established by the Hodge decision. But that, if a purveyor did not have a feasible alternative, they would likely be allowed divert “below Hodge.”

This reasoning invited two important questions: what is a “reasonable alternative” and which of the purveyors had one? The staff member thought that reasonable alternatives to diverting water from the American River included being able to divert water from the Sacramento River and being able to use ground water instead of surface water. He also recognized that some purveyors might have stronger legal entitlements to surface water diversions than others. Using these criteria, he grouped the purveyors into three categories—upstream purveyors with water entitlements, upstream purveyors without water entitlements, and

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<sup>31</sup> Driest years are defined as “when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 400,000 acre-feet,” which is equivalent to about 740 cubic-feet per second (cfs). For some diverters, drier years are defined as “when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 950,000 acre-feet,” which is roughly equivalent to 1750 cfs, the minimum flow level established from July to October 15 by the Hodge decision. For others, drier years are defined as “when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 1,600,000 acre-feet,” which is roughly equivalent to about 3000 cfs or the minimum March to June flow level established in the Hodge decision. The wet/average years for these purveyors are when the projected March through November Unimpaired Inflow to Folsom Reservoir is greater than 950,000 acre-feet and 1,600,000 acre-feet, respectively.

<sup>32</sup> The Hodge flow levels are 2000 cfs from October 15 through February, 3000 cfs from March through June, and 1750 cfs from July through October 15.

downstream purveyors. The downstream purveyors—those who diverted below Nimbus Dam—had easy access to the Sacramento River, and also had ground water supplies. The upstream purveyors—those who diverted from Nimbus or further upstream—did not have ready access to the Sacramento River and those located at higher elevations did not have ground water supplies. He developed a general framework in which those purveyors without entitlements would be the first to have to cut back on surface water diversions. Next, those who could go to the Sacramento River would have to do so at any time the American River flows were below Hodge. Finally, the upstream purveyors would have to begin cutting back their surface water diversions when flows are below Hodge. Also, since the modeling showed that the conditions got worse for the fish the drier it got, the cutbacks would be proportional to the dryness of the year.

The staff presented this framework to the Surface Water Team as a trial balloon, and as might be expected, the Surface Water Team members had a variety of responses and lots of questions. Generally, the environmentalists were pleased with a framework that would result in diversion cutbacks, but were concerned about the precedent that might be set by allowing any purveyor to divert below Hodge during dry years. Meanwhile, the purveyors with surface water rights chafed at the idea that they would not be able to use them even though there would be water in the river. Water Forum members hashed out these issues and others in great detail over the next several months in caucus meetings, lawyers' meetings, and ad hoc meetings of key representatives.

In the course of this process, participants' understanding of what it would really mean to have an agreement deepened. Several staff members recalled how the discussions around the dry-year alternatives really shifted the way many Water Forum members engaged in the process. In a number of caucus meetings, the staff laid down the law with both purveyors and environmentalists. These discussions were more frank and often blunt, and the facilitator and staff helped the caucuses work through the issues by helping them better understand their own interests as well as that of the other caucuses. For example, when purveyors asked why they should get off the river when they had water rights, staff pointed out that the operational studies showed that in the driest years there wouldn't be enough water to meet everyone's 2030 demand.

We showed them figures that there isn't any water there in some of the years. I mean, you can pretend like you have water rights, but because of the 2030 demand, your need exceeds what's coming down the river. ... Even if you

wiped every environmentalist off the face of the Earth, the river goes dry.

In addition to the physical reality, there was the issue of whether the purveyors would be able to carry out their planned projects without the environmentalists' support. Staff explained,

If you screw up the fish, we can't do this deal. So, we have to meet the environmentalists' underlying interests, and the only way we know to do that is for you guys to get off the river in drier years. ... And if you want to do this negotiation, we have to figure this out because they're not going to give you your water if it's going to make no more fall-run salmon.

One staff member observed that as the purveyors came to realize, "Gee, what we want to do won't work; the unbridled exercise of our water rights doesn't work," it opened up a new set of possibilities.

They had to shake their heads a couple of times, clear out the cobwebs, ... and say, 'Oooh, well what else? What else could we do?' And that allowed them to come up with things ... on these so-called dry-year alternatives, ... things that were not on their minds.

Over time, all the participants came to realize that they would not be able to make a deal with one another unless everyone's interests were met. As they worked through issues in meetings, individuals suggested ways they might solve different problems. In one meeting over the dry-year alternatives, one purveyor offered an idea. Before any of the environmentalists had a chance to respond, another purveyor pointed out that, if he were an environmentalist, he would have a problem with the suggestion. Similarly, environmentalists began factoring in purveyors' needs as they sought to shape solutions for the river.

Once the Water Forum members came to a general agreement over the framework for the dry-year alternatives, it took another year to work out the details for each purveyor. Initially, meetings were held with the groupings of purveyors that would be held to similar cutback schedules. Soon, however, it became clear that each of the purveyors' situations was sufficiently unique that a separate plan would have to be tailored for each one. Water conservation was a part of all the purveyors' dry-year alternatives, the details of which were being worked out in the Demand Conservation Team meetings. Beyond that, however, the purveyors came up with a wide range of ways to reduce surface water diversions in dry years. And each one came up with its own combination of techniques to

meet its dry-year cutbacks. Many of the surface water users adopted conjunctive use policies, where they will use more surface water in wetter years and less ground water, to allow the ground water basin to refill, and then more ground water and less surface water in dry years. Some of the purveyors—such as the San Juan, Citrus Heights, Fair Oaks, and Orange Vale water districts—have ground water supplies. Others, such as the City of Folsom, which does not have ground water supplies of its own, entered into agreements with districts having ground water. These agreements would enable Folsom to divert surface water in exchange for those districts pumping an equivalent amount of ground water in lieu of surface water. The City of Roseville, which anticipated one of the greatest increases in water needs in the region between 1995 and 2030, intended to contract with the Placer County Water Authority for water it could make available through the re-operation<sup>33</sup> of its reservoirs, and to construct a water reclamation facility. The City of Carmichael discovered that, with the installation of water meters, they could prevent their 2030 demand from growing beyond the 1995 demand baseline, obviating the need to develop a dry-year alternative.

Perhaps one of the hardest agreements to work out was the one with the City of Sacramento. The City was one of the biggest advocates and financial supporters of the Water Forum, and it has significant senior water rights. The difficulty arose from the solution framework, in which the City fell into the category of purveyors who would be held to the most stringent schedule of cutbacks. The City is a downstream diverter and already has a diversion facility on the Sacramento River. Even though it would cost them more to develop additional Sacramento River diversion, conveyance, and treatment capacity, according to the reasoning of the Hodge decision they would not be allowed to divert below Hodge. For the County of Sacramento, having to go to the Sacramento River when flows were below Hodge was a slightly less bitter pill to swallow, because it had expected to have to go to the Sacramento River for additional surface water supply anyway.

**Habitat Mitigation Element.** With the fish flow pattern and dry-year alternative issues settled to the point where specific details needed to be worked out, the Surface Water Team moved on to discussing what they then called the habitat mitigation element. Under the California Environmental Quality Act (CEQA), project proponents are required to

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<sup>33</sup> Reservoir operators normally maintain a minimum pool of water in storage. Reservoir re-operation, or “re-op,” is taking the normal carryover storage volume and using it to move water from wet years to dry years.

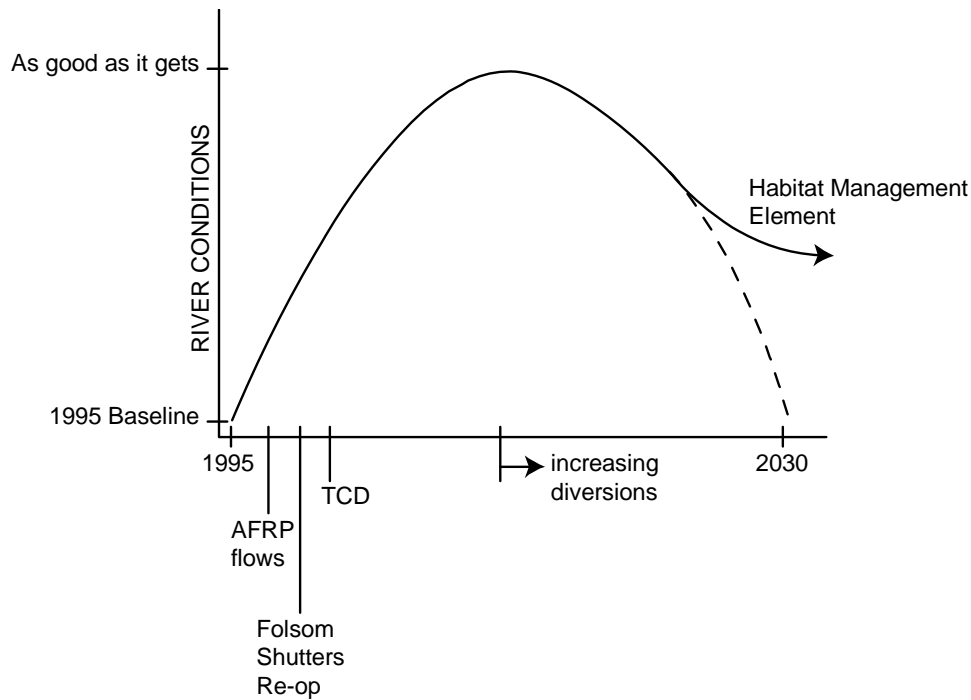
undertake mitigation efforts to avoid or lessen, to the extent reasonable and feasible, all the significant impacts that would result from a project. In the case of the Water Forum, mitigation would be required for the increased surface water diversions included in the agreement.

The surface water modeling showed that as various steps were implemented—re-operating the shutters and installing the temperature control device at Folsom Dam, and instituting the fish flow pattern—the river environment would improve. However, as the new water diversions were to come on line, conditions would begin to degrade, and by 2030 they would be back to the 1995 baseline conditions. One of the environmental caucus members drew a diagram of what would happen, which became known as “Clyde’s Glide Chart” (see Figure 5).

The environmentalists were concerned that the fishery benefits achieved from the river improvement actions not all be lost to increased water diversions. The consulting biologists explained that the impacts of increased diversions could be slowed if specific river restoration actions were taken to improve in-stream fish habitat. That is, doing things like increasing woody debris habitat where fish can hide from predators, adding spawning gravel to increase spawning habitat, and increasing overhanging riparian vegetation to help keep the water cool would prevent the river conditions from falling below the 1995 baseline levels. The environmentalists also recognized that the lower summertime flows would reduce river recreation opportunities, and they sought to have recreational projects included in the mitigation element.

At the same time, however, the purveyors were concerned about the increasing costs they would be facing with what they felt was “yet another Water Forum requirement.” The Placer and El Dorado County purveyors especially chafed at the idea of paying for river restoration activities that would take place in Sacramento County, outside of their ratepayers’ communities. Purveyors who purchase water from the Bureau of Reclamation felt they were already paying for whatever habitat restoration was needed through required payments into the Central Valley Improvement Act (CVPIA) Restoration Fund. Others felt that if the Bureau did not spend restoration fund money on projects on the lower American River, then those purveyors still had an obligation to pay for such mitigation. In Sacramento County, the taxpayers’ association representative was concerned that a new revenue stream would be generated for something for which funds were already available. He pointed out that many Sacramento County Zone 13 ratepayers’ property tax assessments already included payments for countywide water

**FIGURE 5.**  
**Clyde's Glide Chart**



management activities.<sup>34</sup> He argued that those funds should be used to pay for the planning and management pieces of the habitat management element, rather than charging those ratepayers more.

A number of the upstream purveyors opposed the habitat mitigation requirements on a more fundamental level. They did not believe the additional impacts that would result were really their fault. Many of them had water rights on the American River well before the Bureau of Reclamation built Folsom Dam. These purveyors felt that if the dam weren't there and the Bureau weren't making use of its junior rights,<sup>35</sup>

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<sup>34</sup> Zone 13 includes the Sacramento County Water Authority, Carmichael Water District, Citrus Heights Water District, Citizens Utilities in Sacramento County, Clay Water District, Del Paso Manor County Water District, Fair Oaks Water District, Florin County Water District, Galt Irrigation District, Natomas Mutual Water District, Northridge Water District, Omochumne-Hartnell Water District, Orange Vale Water Company, Rio Linda/Elverta Community Water District, Sacramento Municipal Utility District, and San Juan Water District in Sacramento County.

<sup>35</sup> Under California's system of appropriative water rights, water rights are allocated on a first-come, first-serve basis. Those who obtained their rights before others have



their own increased diversions would not cause any problems. In their worldview, the impacts were the Bureau's. These senior water rights holders didn't want to have to mitigate something for which they did not feel responsible. In other Water Forum members' world view, however, the water diverted by the upstream purveyors decreased the volume of water that would be available for release from Folsom Reservoir, and thus under CEQA, the upstream purveyors would be required to mitigate the impacts of their increased diversions. The discussions were not always a model case of interest-based negotiation. At one point, an upstream purveyor suggested that the environmentalists should be paying for the habitat mitigation element since it was their part of the project.

Through hours of discussions, it became clear that, despite the opposing and untested legal theories, the habitat mitigation element filled an important niche in the overall Water Forum plan. The mitigation proposals were critical to meeting the environmentalists' objective of preserving the environmental and recreational values along the lower American River. As time went on, habitat mitigation came to be seen as an important assurance for the environmentalists that the overall plan would meet their needs.

Over time, it also became clearer to the purveyors that the habitat mitigation element likely would also help them meet endangered species requirements as they pursued their individual projects. Although the habitat mitigation element would not include project-specific mitigation actions, such as the installation of fish screens on diversion facilities, the purveyors' participation in the habitat mitigation element could be a significant benefit as they went forward with their project-specific EIRs. For example, if actions taken under the habitat mitigation element improved river habitat, it likely would be easier to get permits. The significance of the mitigation element to the purveyors became even more clear in later in 1997 and 1998 when several endangered species entered the Water Forum spotlight. These issues, and how they highlighted the importance of the habitat mitigation element, are discussed below.

Meanwhile, the Water Forum members struggled with the questions of what should comprise the habitat mitigation element, how much would it cost, and how costs would be apportioned. As they often had done, staff helped the Water Forum members break the problem out into its component pieces. First, they worked out a framework for the kinds of things that should be included in the habitat mitigation element,

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“senior” water rights (as opposed to “junior” rights). In times of scarcity, senior rights take precedence over junior rights.

and helped develop estimates of how much each one would cost. They also began to identify other organizations having similar river restoration interests and to look for ways they could leverage the Water Forum efforts with those other entities. Along the way, the Water Forum applied for funding from CALFED Bay-Delta Program (CALFED) to develop a habitat restoration plan for the lower American River, but did not receive support. (In February 2000, however, the Water Forum was awarded \$250,000 from CALFED to develop such a plan in collaboration with SAFCA.)

Questions of who would benefit from the habitat mitigation element and when they would receive those benefits also arose. Some purveyors were to increase their surface water diversions relatively soon, while others were to increase their diversions only after a number of years. Not surprisingly, those purveyors who were to increase their diversions sooner did not think they should have to bear all the initial costs of the plan, whereas those who were to increase diversions later did not think they should have to make payments until they would start receiving benefits. Another question that arose was whether the purveyors who rely on ground water should contribute to the habitat mitigation element, since they benefit from other purveyors taking surface water rather than ground water.

Over time and through more discussions, the Surface Water Team shaped a set of principles for allocating the costs for the habitat mitigation element around the interests and concerns people had expressed. Taking into account the concerns the taxpayers' association had about Zone 13 funds, the County proposed that all the funds it would commit to the habitat mitigation element (HME) would come from Zone 13 funds rather than rate increases. In a sense, this decision solved two problems at the same time because the area covered by Zone 13 includes most of the other smaller water districts in Sacramento County that divert surface water and/or ground water, and some of whom contract with the Bureau of Reclamation for water from the Central Valley Project. Thus, with the County contributing Zone 13 funds, in a sense, they were also contributing on behalf of those other districts, without those districts having to raise any additional funding.

With these districts covered, only five other American River diverters remained, including the City of Sacramento. Both the City and County intended to increase their surface water diversions as soon as they could get their projects, and saw committing to the HME as a way to speed things along. In addition, they both recognized that the HME was important to them beyond the importance to the Water Forum effort. As managers and stewards of the lower American River, each of them had a

broader interest in protecting and restoring its environmental and recreational values. The City and County joined forces and each agreed to contribute funding to get the habitat mitigation effort up and running.

Most of the four remaining purveyors had plans to increase their American River diversions by acquiring water from the CVP or another purveyor. Since these purveyors were already paying into a restoration fund through their CVP contracts, it was agreed that they would not have to make additional contributions to the Water Forum HME. To make sure this CVPIA restoration money would be used on the American River, the HME plan was modified to require that in implementation there would be “effective advocacy to achieve a ‘fair share’ of CVPIA Restoration Funds allocated to American River improvements.”<sup>36</sup>

Finally, that left those purveyors who planned increased diversions using non-CVP water. In this case, the City and County felt it was important that these purveyors’ contributions be on a financial par with what the City and County were paying for their new water, which was approximately \$3 per acre-foot. However, these purveyors still resisted the idea that they would begin to pay into the HME fund before they started their increased diversions. Thus, it was settled that they would pay the \$3 per acre-foot only for the water they diverted.

The finishing touches on this agreement included the addition of a cost cap that protected the City and County from the potential for an open-ended budget item. There were also provisions written identifying the types of events that would constitute changed conditions and trigger the need for the Water Forum members to come together to renegotiate these provisions of the agreement.

**Assurances.** With the fish flow pattern, dry-year alternatives, and habitat management element fleshed out relatively well, the Surface Water Team turned to the subject of assurances. It was nice that the environmental interests had said they would support the purveyors’ projects if they did the things required of them in the Water Forum agreement. But how could the purveyors be sure that they really would provide their support? Similarly, it was nice that the purveyors had said they were going to cutback during dry years, but how could the environmentalists be sure they really would? In addition, a number of the Water Forum elements required actions by agencies outside the Water Forum. For example, the improved fish flow pattern depended on how the

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<sup>36</sup> SAWF, January 2000.

Bureau of Reclamation would operate Folsom Dam. How could any of them be sure the Bureau would maintain the fish flow pattern over the next 30 years?

Timing was critical. Most of the purveyors' projects were to be completed within the first few years of the agreement, whereas a number of the elements that were important to the environmentalists would take longer to implement, or they needed to occur throughout the entire period of the agreement. In the environmentalists' world view, "plumbing is destiny" so once the purveyors got their projects built, how could the environmentalists be sure that they would continue to contribute to the habitat mitigation program? What would happen to their understandings as the people who had been negotiating around the table moved on to new jobs?

The Surface Water Team considered a wide variety of ways to answer these questions of assurances and timing. First of all, they considered how the Water Forum Agreement would be invoked. They had talked about "signing" and "entering into" the agreement, but what form that would take required consideration. Some members suggested the agreement could be done in the form of a memorandum of understanding (MOU) among the parties. Others thought that a MOU would be too weak a legal instrument to ensure that the parties would really do what would be in the agreement. They suggested that instead the agreement should be entered into in the form of a contract. After one meeting with the lawyers, however, it became clear that the time and legal effort required to transform the entire agreement into a legally binding contract made that option virtually impossible.

Thus, the Water Forum stakeholders agreed to enter into the agreement by signing an MOU. They also agreed that they needed to figure out additional mechanisms for ensuring that all the elements of the agreement would be carried out. The Surface Water Team went through the agreement as it had been drafted to date and identified each of those actions that required an assurance, and what the timing of the assurance needed to be relative to other Water Forum elements. For example, the purveyors needed assurances that the business, citizens', and environmental groups would support their projects for increasing diversions. But those groups' support would depend on whether they had assurances that the purveyors would cut-back during dry years, implement the agreed-on water conservation measures, participate in ground water management, and support the HME. It also would depend on whether they had assurances that the improved fish flow pattern would continue to be implemented by the Bureau of Reclamation.

All of the negotiated elements were interlinked. A few of the recommended actions—such as the formation of the Sacramento North Area Groundwater Management Authority—could move forward without others. But for the most part, the elements were so interdependent that few could proceed without the others. Over a nine-month period beginning in February 1997, the Surface Water Team, the Working Group, and staff developed what the facilitator described as “a web of agreements that get people in this mutually and bounded web that creates for the assurances.”

The ways in which participants were willing to become bound in the web of agreements varied. For example, the environmentalists wanted the purveyors’ water rights amended to reflect the diversion agreements. In their minds, water rights amendments would be the strongest legal instrument for limiting purveyors’ surface water diversions. The purveyors adamantly opposed any Water Forum action that would result in a reduction or forfeiture of their existing surface water entitlements. Although some purveyors have water rights well in excess of what they intended to exercise in 2030, the rights were still quite valuable to them. With a water rights amendment off the table, the Surface Water Team sought other options that might serve as a surrogate for limiting purveyors’ diversions to the agreed-on limits without affecting their surface water rights. Thus emerged several pieces of the complex web of agreements. The upstream purveyors agreed to enter into contracts with the Bureau of Reclamation that stated the conditions under which they would increase their diversions and implement dry-year cutbacks. The only downstream purveyor that was to increase its diversions was the City of Sacramento. Since it diverts water downstream from the Bureau’s facilities, a contract with the Bureau would not make any sense. Instead, the City agreed to ask the State Water Resources Control Board to condition its permit for the Fairbairn treatment plant expansion according to the provisions of the City’s Water Forum diversion agreement.

Even with the dry-year cutbacks tied to legal instruments, the environmentalists and purveyors still needed assurances that the Bureau of Reclamation would use the improved pattern of releases in operating Folsom Dam. The AFRP flow objectives are required under the CVPIA, which is a federal law. But the AFRP will not be fully in force until the Department of Interior completes its Programmatic Environmental Impact Statement for the CVPIA, which may take years. And even once the AFRP is in full force, Congress or the Department of Interior could potentially take actions to change it. To further strengthen the web of commitments around the improved fish flow pattern, Water Forum

members sought another way to guarantee the Bureau would operate according to the AFRP objectives.

One option the Surface Water Team explored was to have the Bureau sign the Water Forum agreement. That tack was abandoned, however, when it became clear that the Bureau, at the level of the Department of Interior, was reluctant to set a precedent of entering into a regional agreement. With all the levels of review and approvals that would be required, it could be years before the Bureau signed on.

Another option was to look at how the Bureau's permit for operating Folsom and Nimbus dams could be conditioned. The Bureau's operations are regulated by the SWRCB under a permit that includes the lower American River flow standard.<sup>37</sup> The Water Forum members reasoned that if the SWRCB updated the lower American River flow standard to include the new fish flow pattern, it would be legally binding on the Bureau. Having the AFRP flow objectives codified in the flow standard would provide a stronger assurance that the objectives would be met. An update of the flow standard also provided the opportunity to incorporate other important flow-related features into the flow standard, including the purveyors' dry-year cutback commitments, and the conference year principles.

A number of questions were raised around how to get the SWRCB to update the flow standard. Who would petition the Board? Who would pay for the studies that would be required? And most importantly, what was the Bureau's perspective on the issue? The Surface Water Team and Water Forum staff had already been working closely with the Bureau. Bureau representatives attended the Surface Water Team and Working Group meetings, and participated in a number of technical team meetings regarding the development of the fish flow pattern. The Bureau was not a member of the Water Forum, but it was active in the Forum in making sure people understood the Bureau's needs and interests. And its collaboration was necessary to implement a number of aspects of the Water Forum Agreement.

At the recommendation of the Bureau, the Surface Water Team incorporated additional features into the flow standard. The Bureau's greatest concern was that it would have sufficient flexibility to respond to unforeseen conditions. It did not want to get locked into rigid operating requirements that would result in penalties if something happened that was

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<sup>37</sup> The flow standard is also a part of the City of Sacramento's permit for diverting American River water at its Fairbairn treatment plant.

beyond their control—such as a summertime gate failure that might prevent them from meeting the fall flow requirements. Or, if the fish were late in their arrival in the river in the fall, the Bureau wanted the flexibility to delay the start of the cold-water releases until the fish could use the water. The environmentalists' concern with the Bureau's call for flexibility was that too much flexibility would eliminate their assurance that the AFRP objectives would be met. Thus, the Surface Water Team and Bureau worked out a section of the agreement that called for the development of "tolerances" for variations in flow, real-time consultations with a team of resource experts, and exceptions for unforeseeable events.

The flow standard recommendation developed by the Water Forum is completely different from any other flow standard in force in the State of California today. Rather than providing simple minimum flow requirements, it is based on the idea that in-stream flow levels should reflect the state's natural wet and dry cycles. Thus, the amount of water that needs to be in the river at any time depends on the how much water there is that year and when the fish need it. The standard also includes dry-year cutback commitments that do not affect purveyors' long-term water entitlements. As one Surface Water Team member described it,

We're not changing the minimum stream flow requirement essentially. What we're doing is instead of concentrating on the tail behavior—i.e., the extreme event rules—we're concentrating on the rules for the entire distribution of events in water years.

In addition, during the extreme drought years, the standard calls for the affected parties to "conference" when, even with cutbacks and conservation, not all the water needs can be met. The facilitator noted how unique this approach is:

It's very different, a very policy-oriented lower American River flow standard that will call for people to pull together in conference years and figure out what to do. Well, that's an interesting way of writing a standard, that thou shalt talk, thou shalt get together and figure out what you're going to do in conference.

Initially, since the lower American River standard is a part of the Bureau's permit, the Water Forum reasoned that the Bureau would petition the Board to update the standard. Over time, however, it once again became clear that it would take a very long time for the Bureau to act. Among other things, the Bureau would need to complete its CVPIA Environmental Impact Statement and additional CVP-wide operational analyses. Eventually, in cooperation with the Bureau and the Water

Forum, the City of Sacramento petitioned the SWRCB to update the standard. In conjunction with the permit revisions necessary for the expansion of its Fairbairn permit, the City of Sacramento asked the SWRCB to carry out expedited processing of the Water Forum's recommended flow standard in November 1999.

Perhaps the most important assurance the Water Forum developed was that for dealing with unforeseen events in the future, which in the language of the Water Forum came to be known as "changed conditions." From their experience with the AFRP flows and the cold water pool diversions, members learned that there would be pieces of their agreement that would be affected by future events, some of which they could anticipate and some of which they could not. For example, no one knew for sure if the fishery would do as well as the models predicted. And no one could guarantee that ground water needed for the dry-year supplies would not become contaminated. Thus, they agreed that if conditions changed, the affected parties would come back to the table and talk. They would figure out a way to address the change and amend the Water Forum agreement to reflect the new conditions. Of course, if they were unable to work out the issues, they had the option to pursue other ways of getting their needs met. But the underlying principle they agreed on was to "mediate before you litigate."

### Ground Water Team Negotiations

Ground water is a critically important piece of the water-supply picture in the Sacramento region. Although the more intense conflicts have been over surface water supplies, ground water amounts to nearly 60 percent of the region's water supply. From all the Water Forum stakeholders' perspectives, it was absolutely necessary that the Water Forum find a way to protect and maintain that supply. The Ground Water Team put its energy into figuring out how to manage the region's ground water—that is, how to maintain the basin at a sustainable level, provide for conjunctive use, and reliably meet users' needs. As a part of these issues, the team also needed to address what kinds of institutional arrangements would best achieve stakeholders' objectives, and how ground water management programs would be financed.

A number of the ground water purveyors were concerned that if they did not develop a regional solution to their ground water problems, a solution would be imposed on them by an outside entity. Under California law, if a ground water basin becomes critically overdrafted, some parties may lose their overlying ground water rights. Plus, in the areas of California where ground water basins have become critically overdrafted,



the result has been “divisive, expensive, and protracted litigation and adjudication.”<sup>38</sup> To avoid this fate, the Ground Water Team needed to figure out how the ground water basin could be managed to prevent basin-wide pumping in excess of sustainable yield.

One other feature of the Ground Water Team that was unique to the Water Forum process was that it involved collaboration with the Ground Water Committee of the Sacramento Metropolitan Water Authority (SMWA).<sup>39</sup> SMWA and its member agencies had tried for nearly a decade to develop a regional ground water management plan. SMWA and many of its members joined the Water Forum with the hopes of joining their forces to finally accomplish this long-standing objective.

First, the team sought to determine the basin’s sustainable yield—that is, the amount of water that can be pumped from the aquifer on a long-term average annual basis. Although the ground water basin is one major hydrologic unit, it consists of three sub-basins. One—the “north area”—underlies the area north of the American River and extends into Placer County. The other two are south of the American River—the “south area” lies between the American and Cosumnes rivers, and the “Galt area” is on the southern side of the Cosumnes River. The sub-basins are interconnected so what happens in one can affect what happens in the others, but at the same time they are sufficiently distinct so that each can be managed for ground water yields somewhat differently. The Ground Water Team worked with a team of consulting hydrologists who had developed a computer model of the ground water basins in 1993 under contract to the CCOMWP. Working through iterations of the model under a variety of scenarios, the Ground Water Team came to agreement on average annual sustainable yield levels of 131,000 acre-feet for the north area, 273,000 acre-feet for the south area, and 115,000 acre-feet for the Galt area.

Having determined recommended sustainable yields for each sub-basin, the team turned to the question of how the basins could be managed. In California, the laws governing ground water use are quite different from those governing surface water.<sup>40</sup> Whereas there is a statewide permit system for surface water use, the regulation of ground

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<sup>38</sup> Sacramento Area Water Forum (SAWF). January 1997. Draft Recommendations for the Water Forum Agreement. p. 63. Sacramento, California: City-County Office of Metropolitan Water Planning.

<sup>39</sup> For a description of SMWA, see footnote 10.

<sup>40</sup> For more detail on California ground water law, see Littleworth & Garner, 1995, pp. 47-57 and 247-250.

water use is primarily a local government responsibility. Ground water rights also have different terms. Landowners overlying a ground water basin share its use with other overlying landowners. Extractions are limited only to the amount of water necessary for reasonable, beneficial uses on the overlying property. Overlying water rights come with land ownership and are not lost if unused. When there is more than enough water in a basin to meet the overlying landowners' needs, ground water can be appropriated and used away from the overlying property. Most municipal water suppliers who use ground water have appropriative ground water rights. Generally, exercised and unexercised ground water rights are superior to appropriative rights, except in cases where the appropriative rights are held by a municipal supplier. In the event that a ground water basin becomes critically overdrafted, however, the rights in the basin may be adjudicated, which may lead to the loss of rights by current and future users.

The Ground Water Team's objective was to find a way to manage the basin into the future and avoid getting into a situation where the basin might be adjudicated. The team discussed and agreed on several criteria to guide their deliberations. They sought to create a management framework that:

- (1) allows current users to continue to exercise their rights;
- (2) recognizes that both exercised and unexercised overlying rights are vested rights in the sense that they pass from owner to owner with the sale of the land;
- (3) provides that similarly situated present and future groundwater users will be treated the same; and
- (4) creates certainty for all current and future users by ensuring that the basin is maintained at its sustainable yield.<sup>41</sup>

Two fundamental principles underlying these criteria were fairness and the ability of the water purveyors to maintain their autonomy as water districts.

To address these complex and interdependent concerns, the Ground Water Team sought the advice of outside consultants. In the fall of 1994, the team, together with the SMWA, commissioned a study of institutional frameworks that could be used to implement an area-wide ground water management program. When the study was completed in

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<sup>41</sup> SAWF, January 1997, p. 64.

October 1995, the Ground Water Team reviewed the findings and weighed how each possible framework might work for them. Among the options considered were the implementation of provisions in the Sacramento County Water Agency (SCWA) Act,<sup>42</sup> possible amendments to the act, special legislation in the State Assembly and Senate, and the use of a joint powers agreement. Later in their deliberations, the team also considered developing a voluntary ground water management plan under the provisions of a state ground water planning law that is referred to as AB 3030.<sup>43</sup>

In addition to asking whether the potential frameworks would meet their needs, the team members established three criteria for evaluating the practicality of each option. They asked, “What is simplest, what is most efficient and, given political realities, what can be implemented most expeditiously?”<sup>44</sup> The team found that, under the SCWA Act, the Sacramento County Board of Supervisors could form “zone councils,” to which it could delegate authority for developing water planning and budgeting proposals. The role of these councils would be advisory only, however, and regulatory authority would remain with the Board of Supervisors. Under this institutional framework, the decision-making role of ground water purveyors and users other than SCWA would be diminished relative to that of SCWA. The team agreed that this framework would not “allow for the participation of other ground water purveyors and users in the kind of collaborative arrangements envisioned by the Water Forum Agreement.”<sup>45</sup>

At the same time, however, the SCWA Act provides SCWA with the authority to levy a benefit assessment to protect the ground water basin. The Ground Water Team viewed this authority as an important potential way to raise funding to support whatever ground water management authority they would select and to pay for the facilities necessary to carry out a conjunctive use program. In fact, they considered this authority so important that they recommended against asking the Legislature to amend the SCWA Act to allow for the delegation of regulatory authority to zone councils, for fear that the authority to levy

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<sup>42</sup> The Sacramento County Water Agency was established by an act of the legislature in 1952 to provide water in Sacramento County. The agency is a part of the county government and is overseen by the County Board of Supervisors, which acts as the agency’s board of directors.

<sup>43</sup> For more information on AB 3030, see Littleworth & Garner, 1995, pp. 57 and 250.

<sup>44</sup> SAWF, January 1997, p. 68.

<sup>45</sup> SAWF, January 1997, p. 67.

benefit assessments would be rescinded “given the current political climate.”<sup>46</sup>

Of all the options the Ground Water Team evaluated, they found the joint powers agreement the most promising. A joint powers agreement allows public agencies to enter into an agreement to jointly exercise their existing, independent powers. In the case of ground water, the two key types of powers are the authority to manage ground water and the authority to establish a regulatory fee for ground water management. In Sacramento County, the entities having these powers are the cities of Sacramento, Folsom, and Citrus Heights, and the County of Sacramento. The advantage of the joint powers agreement over the zone councils discussed above is that it establishes an authority—i.e., a ground water management authority—to which the signatory entities appoint members as specified in the agreement. Thus, the agreement could specify that the members of the authority be selected from each of the water agencies. It also could specify that the water agencies were each to recommend a representative from its board of directors to be appointed to the authority. In addition, it could specify the voting structure for decision making. And once established, the authority would have the ability to enter into memoranda of understanding with water agencies in adjacent counties to coordinate management of the basin. Thus, unlike the “zone council” option, the joint powers agreement could establish a ground water management authority having the legal powers needed to manage ground water, and with a governance structure allowing the full participation of all the relevant purveyors and water users in a fair and co-equal manner that would be more reflective of the collaborative decision making used in the Water Forum itself.

As the team members examined the various options, another thing that became apparent to them was that the north, south, and Galt areas differ significantly in terms of their existing water management institutions. Although all three sub-basins are largely located in Sacramento County,<sup>47</sup> almost all of the north area, including agriculture, is served by organized purveyors, while the south and Galt areas have more of a mix of individual landowners and organized water purveyors using the basin. In addition, the north area is more developed and has more extensive existing and planned infrastructure for surface water diversions and deliveries, which are necessary for developing conjunctive use programs. Finally, eight of the twelve purveyors in the north area had

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<sup>46</sup> SAWF, January 1997, p. 67.

<sup>47</sup> A portion of the north area sub-basin extends into Placer County.

participated in SMWA's earlier efforts to develop a ground water management plan, and were quite eager to get a management framework in place.

Thus, the north area was ready to move forward with a joint powers agreement earlier than the other two. In August 1998, the cities of Sacramento, Folsom, and Citrus Heights, and the County of Sacramento signed a joint powers agreement establishing the Sacramento North Area Ground Water Management Authority (SNAGMA). At the same time, the Ground Water Team continued to examine options for developing ground water management systems in the south and Galt areas. Because of the differing conditions, the team agreed that the north area joint powers agreement should not serve as a template for the other two sub-basins. As of the signing of the Water Forum Agreement in the spring of 2000, efforts were continuing to develop an appropriate governance structure and financial arrangements for these areas.

The assurances for the ground water management element of the Water Forum Agreement were less complex than those for the surface water elements. For the North Area, the central assurance was SNAGMA itself. Signatories to the Water Forum Agreement who wanted to use ground water in the north area would have to participate in SNAGMA. Although negotiations were still underway for the south and Galt areas, the Water Forum Agreement clearly states that support for additional surface water diversions in these areas is contingent on continued progress in the development of effective ground water management programs.

### Demand Conservation Team Negotiations

The Demand Conservation Team worked in parallel to the surface and ground water teams, and tackled one of the most challenging issues in regional water supply: water metering. The City of Sacramento was settled at the confluence of the Sacramento and American Rivers, at the edge of the largest river in California and its most significant tributary. More often, too much water—in the form of floods—has been a greater worry than not enough water. Historically, Sacramentans have viewed a plentiful water supply as their birthright, and their City Charter bans the use of water meters. Although the ban applies only within the city limits, similar attitudes toward water meters prevailed throughout the County's other water districts until very recently. Even though California has required the installation of water meters in all new construction since 1992, in the Sacramento region many of the new meters have remained unread.

**Water Meters.** At the outset of the conservation team meetings, many purveyors also were skeptical about the practicality of water meters and other water conservation measures. The benefits of plumbing retrofits are hard to measure—it's tough to measure water not used—and public education programs don't translate into directly measurable water savings either. In these purveyors' view, water conservation meant costly programs, large increases in water rates, and lots more customer complaints, with little benefit. Many of them thought metering and other measures would be relatively ineffective in reducing water demand, and that the cost of the programs would be greater than the cost of developing new water supplies. The environmental groups, on the other hand, were adamant about metering requirements, and they could not see how they could agree to any new water diversions when so many customers were using as much water as they wanted, all for one flat monthly charge. They wanted every customer to face the real price of water in their bills so that he or she would understand its value and use it more wisely. In the environmentalists' eyes, if the fish would have to go with less water, people should too. That meant not just that people should have to pay for what they actually use, but also that they should be using water-efficient plumbing fixtures, appliances, and landscaping.

To work through these issues, the Demand Conservation Team first requested the staff develop concrete estimates of how much water would be conserved by meters and other conservation measures, and how much it would cost to implement them. In regard to water meters, the findings surprised both the environmentalists and the purveyors. It turned out that it is very expensive to implement water meters if one has to do it on a short timeframe. If, for example, a district were to install all its meters within five years, ratepayers would face huge increases in their monthly bills. But if implementation is spread over 15 or 20 years, the billing impacts are much less dramatic. As for water savings, experience from other areas of California showed that metering, coupled with volumetric pricing, produces substantial cutbacks in customers' consumption. Of all the measures the team evaluated, the water meters were projected to produce some of the greatest water savings.<sup>48</sup>

It also helped that a number of the purveyors already had metering programs and could share their experiences. Five purveyors already were

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<sup>48</sup> Under the Water Forum Agreement, by the year 2030, metering of new and existing residential connections is expected to conserve 8.9 percent of the existing demand. By comparison, nonresidential landscaping measures are expected to produce an 8 percent savings; distribution system improvements, a 4.5 percent savings; and residential plumbing retrofits, a 0.5 percent savings.

fully metered, and several others were partially metered.<sup>49</sup> Among those with an ongoing installation program was the San Juan Water District, which had begun installing meters nearly ten years ago on its own initiative when the district manager recognized the water savings they could achieve. In the region, this man was well known and respected by others in the purveyors' community. In the Water Forum, he emerged as one of the leaders of the water purveyors' caucus, and on the Demand Conservation Team, he shared his experiences with metering. Even though metering was an unpopular topic among many purveyors, he became an advocate for it among his peers. As the facilitator described,

He'd be always the person saying, 'You can do this.' And he'd have all these creative ways of how you can do it; and use this kind of person for installation; and it's not too expensive; and you can do it here and you can do it there. He had all this stuff worked out about how you could do it and not make the customers mad at you.

Despite an increasing willingness to consider metering and volumetric pricing, many of the water purveyors were still concerned about doing something that would anger their customers. After all, it's the customers who elect most of the water districts' boards of directors. Similarly, the Sacramento City Manager and County Executive were concerned that the meters issue was so volatile it could sink the Water Forum Agreement. Although the Water Forum involved all the regional stakeholders, there was a sense that, if the agreement included metering, it might be opposed by the general populace. Thus, the Water Forum sought the advice of consultants having expertise in public opinion and information campaigns. The consultants conducted a poll to assess public attitudes about meters and about processes like the Water Forum. They asked questions such as whether people favored water meters, and if they did not, whether they would reconsider their views if a group of diverse community leaders recommended them. People reported they would have a high degree of trust in findings of a group of traditional adversaries, and that they would likely reevaluate their opinion if it differed from the group's recommendations. This finding helped ease some of the purveyors' fears, and it emphasized the need for the Water Forum to get its message out clearly.

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<sup>49</sup> Of the five fully metered districts, two (El Dorado Irrigation and Georgetown Divide) are in El Dorado County and one (Placer County Water Authority) is in Placer County. The other two (Rancho Murieta and Rio Linda/Elverta) are small districts in Sacramento County that depend on ground water.

At the same time, however, the polling results showed that voters in the City of Sacramento—where a mandatory meter program would require voter approval—would reject meters by a large majority. Even if all of the City’s elected officials supported meters, a Charter amendment would fail. The environmentalists still wanted mandatory metering for the city and all the other purveyors, however. And although the City water officials saw benefits in metering, they did not think it made sense to commit themselves to a program their customers would veto. On this point, the Demand Conservation Team reached what the facilitator termed a “sticking point”—that is, an issue on which the Water Forum members were having an extremely difficult time coming to agreement. In separate meetings with the City and the environmental caucus, the facilitator and staff helped them think through the situation and explore their best available alternatives to a negotiated agreement (BAATNAs). The City considered itself between a rock and a hard place—given the City Charter, there was no way it could require meters. It could, however, implement a voluntary metering program for those residents who wanted meters. For the environmentalists, metering is a matter of principle, but the staff sought to get them to focus on their practical alternatives. The facilitator explained that the staff told them:

We have polling information that said you can rant and rave all you want here, but if you put this out to a vote of the people, which you must do for a Charter amendment, it’s going to fail. So you can be as upset as you want over this, but what do you do?

In hours and hours of discussions over the course of months, the environmentalists and City finally came to agreement on the metering issue. The environmentalists did not want to be seen as condoning the City’s lack of meters by their signing of the Water Forum Agreement. The solution was to write the agreement in a way that preserved the environmentalists’ interest in being able to continue to advocate for meters at the same time that it preserved the City’s interest in adhering to its Charter. The debate boiled down to one short paragraph in the agreement:

The City of Sacramento has a provision in its Charter prohibiting mandatory residential meters. It is recognized that it would be very difficult to amend the Charter. Going as far as possible within the limitations of its Charter, the City of Sacramento would implement a voluntary meter retrofit program. It is also recognized that environmental signatory organizations prefer and will continue to advocate that all connections be metered.



As the Demand Conservation Team continued its discussions around metering, a new issue emerged. Under the CVPIA, the Bureau of Reclamation was starting to require that its contractors implement water conservation programs, including meters. The Bureau required that meters be installed within five years of one's contract renewal. It also developed a set of best management practices for water conservation with which contractors would have to comply. Seven of the Water Forum purveyors had Bureau contracts that would require metering and water conservation programs.<sup>50</sup> Environmentalists and some of the purveyors disagreed at first, however, about whether the Bureau requirements would apply to entire districts or only those areas served by Bureau water.

As was often the practice in the Water Forum when a dispute could not be resolved immediately, the Demand Conservation Team members noted this disagreement but continued working on other aspects of the metering issue. As a part of the philosophy underlying the Water Forum process, the members continued their work in good faith, and under the expectation that eventually they would be able to come to an agreement. They looked at the meter implementation schedule required by the Bureau, and the costs associated with other possible implementation schedules. They also looked at metering costs and water savings for nonresidential<sup>51</sup> water accounts, and ways that facilities with large areas of landscaping might be metered separately for indoor and outdoor use. Based on the cost and water savings information, and the purveyors' assessments of what would be feasible, the team recommended that 85 to 90 percent of the nonresidential customers be retrofitted with meters within ten years, and that residential retrofit programs achieve a 3.3 to 5 percent annual rate of retrofitting of unmetered connections.

But agreeing to a retrofit rate was only part of the metering issue. To make the meters effective, they would have to be read and customers would have to be billed based on their water usage. Although on the face of it, this issue may seem simple, the team had myriad details to work out. Among them, the environmentalists and neighborhoods group wanted the bills to show customers exactly how much water they were using in units they could relate to—they wanted the bills to report *gallons* used. In the water-supply industry, however, water is commonly measured in hundred-

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<sup>50</sup> The seven purveyors who are also Bureau contractors are: the Citrus Heights Water District, City of Folsom, City of Roseville, Fair Oaks Water District, Orange Vale Water District, Sacramento County, and San Juan Water District

<sup>51</sup> For the purposes of the Water Forum, non-residential accounts are defined as those other than single-family or duplex customers. (SAWF, January 2000, p. 90)

cubic-feet. Most billing systems do not convert usage to gallons. Although this was not a huge issue in the grand scheme of the Demand Conservation Team’s deliberations, it is an example of the kinds of details that required attention throughout the Water Forum. Similarly, the realtors were concerned about metering costs being shifted onto them through mandatory “retrofit on resale” or similar such requirements. The team discussed the issue and agreed that metering program costs should be recovered through customer billing. It recommended that only voluntary “retrofit on resale” programs be instituted, which would not burden real estate transactions.

Once the team had agreement on the metering schedules and billing practices, they were able to revisit how these requirements would apply to the various purveyors. The Water Forum metering schedules would allow purveyors to install meters over a longer timeframe than would the Bureau requirements. Under the Water Forum Agreement, purveyors had to begin residential retrofitting within three years, and achieve 63 percent retrofit within 30 years, whereas the Bureau required 100 percent residential retrofitting within 15 years. Thus, the disagreement over whether the Bureau’s requirements would apply to a district’s entire service area or only that part served by Bureau water could be resolved easily—if any part of its service area would not be subject to the Bureau requirement, it would at least be subject to the Water Forum requirement. This way, the Water Forum members could leave it up to the Bureau to decide how to apply its own requirements, but could also be sure that the needs of the Water Forum stakeholders were being met.

Of the remaining water purveyors, three agreed to the metering and volumetric pricing requirements recommended by the Demand Conservation Team.<sup>52</sup> Three others—the City of Galt, Del Paso Manor County Water District, and Florin County Water District—are small, ground water-dependent districts that will not receive any immediate water-supply benefits from participating in the Water Forum. In the future, however, these districts plan to make use of surface water supplies. These districts agreed to implement the recommended mandatory metering requirements when it comes time for them to seek approvals for expanding their water supplies. In the meantime, they each agreed to voluntary metering programs similar to the City of Sacramento’s.

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<sup>52</sup> Carmichael Water District, Citizens Utilities, and Northridge Water District.

Three small water districts<sup>53</sup> left the Water Forum in large part because of the metering requirements. Each of these districts uses a combination of surface and ground water supplies, but considered the Water Forum metering program to be too burdensome relative to what they would get out of it. In the spring of 2000, however, one of these districts—Arden Cordova Water Service—reconsidered its opposition to meters and began negotiations to become a signatory to the Water Forum Agreement.

**Best Management Practices.** In regard to nonmeter-related water conservation practices, the Demand Conservation Team relied on the California Urban Water Conservation Council’s Statewide Memorandum of Understanding Regarding Urban Water Conservation Best Management Practices.<sup>54</sup> Developed in 1991 and revised in 1997, this document sets out sixteen so-called “best management practices” (BMPs) for water conservation. It covers everything from toilet replacement to public education programs. The team reviewed each BMP and developed specific implementation guidelines and criteria for assessing whether a BMP has been implemented adequately. For example, one of the BMPs deals with providing water conservation information to the public. The team specified three ways in which a purveyor could meet the public information needs, two of which linked to an existing water conservation public outreach program.<sup>55</sup> In addition to the public information requirements, the team added a unique criterion that reflected the philosophy of the Water Forum—they specified that each purveyor should develop a citizen involvement program to advise them in the design, implementation, and marketing of water conservation programs.

**Purveyor-Specific Water Conservation Plans.** Once the team identified the basic ingredients for water conservation planning, it asked each purveyor to prepare and submit a plan describing its specific water conservation program. The team then reviewed each of the plans. In the first round of reviews, it asked for revisions from a number of purveyors. Eventually, however, it approved plans for each of the purveyors, all of which were included in the Water Forum Agreement. The team took its work quite seriously—when it came time to review the conservation plans, the team invited the general manager and whoever prepared the actual plan to meet with them face-to-face and discuss the plan’s merits. In

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<sup>53</sup> The three small districts were Arden Cordova Water Service, Elk Grove Water Works, and Tokay Park Water Company.

addition to the team's efforts, Water Forum staff spent many hours assisting representatives from each purveyor with the development of their plans.

The BMP criteria negotiated by the team provided a template from which the purveyors could work. If a purveyor wanted to adopt the criteria as developed, its plan would receive immediate approval. However, a number of the purveyors had special circumstances and different needs. To accommodate them, the Demand Conservation Team developed two strategies. First, if a purveyor simply wanted to modify a BMP to better suit its needs, the team would agree to it if the modification were "at least as effective as the negotiated criteria."<sup>56</sup> The other way a purveyor could tailor a plan to better meet its needs is if in aggregate the changes made across all the BMPs led to a program that "would provide functional equivalency to the full implementation of the BMPs using the negotiated criteria."<sup>57</sup>

The primary assurance for the conservation commitments is an annual reporting requirement. In addition, all of the purveyors' water conservation plans will be included in the Water Forum EIR as a part of the mitigation and monitoring requirements, and all the purveyors agreed to include their conservation plans in their project specific EIRs. An important part of those plans is the purveyors' commitment to report annually on their conservation program activities, and to share that information with the Water Forum successor effort. Any significant differences between what occurs and what was planned may be addressed as changed conditions. Thus, the ongoing monitoring and oversight of the conservation plans through the successor effort will be an important part of assuring the water conservation objectives are met.

**Agricultural Water Conservation Practices.** Although the Demand Conservation Team also addressed conservation measures that could be taken by the agricultural water purveyors and users, specific conservation plans remain to be worked out with those purveyors.

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<sup>54</sup> The California Urban Water Conservation Council consists of more than 200 urban water suppliers who are signatory to the Statewide Memorandum of Understanding, as well as environmental organizations and other interest groups.

<sup>55</sup> The Sacramento Area Water Works Association Conservation Committee operates a public outreach program in which purveyors can participate based on a per connection fee. (SAWF, January 2000, p. 358)

<sup>56</sup> SAWF, January 2000, p. 348.

<sup>57</sup> SAWF, January 2000, pp. 348-349.

Agricultural water use accounted for nearly 48 percent of the total demand in the region in 1990; but it is expected to drop to 29 percent by 2030 as a result of increasing urbanization and water conservation. In the northern part of the county, where rice is the predominant crop, surface water is supplied to farmers by the Natomas Central Mutual Water Company, under a contract with the Bureau of Reclamation. On its own initiative, beginning in 1986, and under subsequent Bureau requirements, Natomas Mutual has adopted conservation practices that have resulted in a 26 percent reduction of water use. Additional conservation plans are expected to result in an additional 5 percent savings.

In the southern part of Sacramento County, irrigated agriculture is supplied primarily by ground water. As ground water levels have dropped, pumping costs have increased. As a result, farmers began instituting conservation practices as early as the 1950s, which have resulted in an estimated 50 percent savings. Estimates indicate that another 5 percent savings could be achieved with the implementation of additional conservation practices. Despite these reductions, however, the ground water management team concluded that South and Galt areas will require new surface water supplies to stabilize the ground water table over the long term. In collaboration with the Surface Water Team, these areas have been seeking additional surface water supplies, which most likely will come from the Bureau of Reclamation and therefore be subject to the CVPIA agricultural water conservation requirements.

The south county agricultural water interests have yet to complete their water conservation plan. In signing the Water Forum Agreement, however, all the stakeholders have committed to continue working out these and other related details. Other signatories' support for the south county agricultural interests' new American River diversions are contingent on them being able to work out agreements on ground water management and water conservation. The Water Forum members continued working on these issues even as other events began to take over the more controversial elements of the process.

### A Carefully Packed Box

By January 1997, the Water Forum members had arrived at a well-developed overall framework for the agreement along with a substantial set of interrelated agreements-in-principle. More than a year behind schedule, they compiled the 285-page *Draft Recommendations for the Water Forum Agreement*<sup>58</sup> and presented it to the stakeholder boards' and

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<sup>58</sup> SAWF, January 1997.

organizations' members and the public-at-large. The agreement had seven elements—increased surface water diversions, alternative dry-year supplies, improved fishery flows, habitat mitigation, ground water management, and a successor effort. Layered on top of those seven elements were a set of “other important agreements,” that included the group's understandings on assurances and timing, water rights, and the relationship of the proposed agreement to land-use decision making. And layered on top of those agreements were the purveyor-specific agreements for surface water diversions, water meters, and water conservation, along with another set of agreements specifying the commitments of the business, environmental, and citizens' organizations.

The Water Forum members and staff conducted a series of briefings for stakeholder boards and organizations, the general public, and interested state and federal agencies. Members from each caucus attended the briefings so board members could hear what those parties had to say about the agreement. The Water Forum did not ask the stakeholders' boards to approve the draft recommendations. It asked the boards to review and comment on the recommendations and to pass a resolution endorsing the general direction in which the process was heading and authorizing representatives to continue with the development of the final recommendations for a Water Forum agreement. The facilitator explained that these kinds of resolutions were an important part of bringing the organizations fully into the process and making sure that they were aware of the commitments involved in an agreement.

Part of our technique was always you get people to adopt a resolution. Particularly when you are dealing with public bodies, get them to go on record with a resolution. It was really important to do that—force people to go on record.

The resolution process also clarified the point that although the details of agreements were being worked out among the Water Forum members, a successful agreement would require the wholehearted commitment of all the stakeholder organizations. In the end, whether the agreement would succeed would depend on whether all the stakeholders saw signing and adhering to the agreement as something that would be in their best interest.

At the first meeting of the Working Group following the briefings, members related how their organizations and constituencies responded to the draft recommendations. Going around the room from one person to the next, the facilitator asked the members to tell their stories. Most of the concerns arose around costs, metering, ground water management, and how much longer it would take to complete the agreement. Several

members elaborated on the difficulties their organizations had with certain issues. For example, one business representative shared his organization's concerns:

I am not going to loosen my shirt because I don't want you to see my bruises. Our meeting was very contentious. It was unfortunately on the heels of the *Bee* editorial on Auburn Dam. When they saw the dam was mentioned in the appendix, people hit the ceiling ... Some people thought there was misrepresentation of costs in the executive summary that showed up in the thick document. There was teeth gnashing over meters as additional costs, but it surprised me as they are mostly metered. There were other usual issues about areas north of here, about Auburn Dam being shoved under the carpet, about the costs and the meters. It was a lively and stimulating meeting.

One of the citizens' group representatives explained, I took the licks on the meters. I have the taxpayers' league on one side and the seniors on the other. The seniors are more vocal and they are adamant. ... They went to work on the meters. Many of them live in the City and they don't want to see meters, period. There is no rationale. I threw in all the arguments, but they just stared and said, "No." The taxpayers are more worried about it becoming a mechanism to elicit more money from them, so the approach of the two is different. The seniors had no problem with ground water management, but the taxpayers worked me on that from the standpoint of additional people and more money. They instructed me I was to prepare a document on exactly what they wanted. These are knowledgeable people ... We are like the environmentalists, we have factions. ... So, I am handling diverse groups within an organization. They recognize the work we are doing is necessary. They realize that if there is growth there will be new costs, but they want people to pay their own cost of service. They oppose the ground water council, and they do not want a new entity formed called the Water Forum.

Many of the water purveyor organizations also were reluctant to embrace metering. One purveyor explained the rationale as, "If the City of Sacramento is not going on metering, why should we?" At the same time, however, some purveyors who were already metered had an easier time with the recommendations. One Foothills purveyor reported,

We got unanimous support for continuing. We have board members talking about this almost in the past tense. They know there will be costs. The only concern is where there is creative language where both sides of the issues are described. At best it is confusing, at worst it is duplicitous.

The environmental organizations also had difficulty with the agreement. One environmental caucus member explained, “Some of the environmentalists are afraid we are giving away the store, and some feel there is not enough representation of a wide enough array of groups.” Another environmentalist elaborated that their organizations had concerns around the assurances. He explained, “We cannot sign off on a million more people and 500,000 acre-feet more water unless we can be damn sure this agreement will stick.”

Similarly, the water and development interests were concerned that the environmentalists would not stick to their commitments. One business representative remarked, “We are asking the environmentalists to make the same type of irrevocable commitments, but realistically, they cannot do that.” The same environmentalist responded,

But we have boards at nonprofits, and they keep their commitments. The hard thing [is] there is a lot that will increase the demand in this area. Our boards are not going to be able to back out of that commitment—the houses will be sprouted, the concrete will be in the ground. I am taking heat on allowing this. It is hard for our boards.

At the same time that there were myriad details to work out on the assurances, meters, and other aspects of the agreement, the City and County were becoming increasingly concerned with the costs and results of the Water Forum process itself. One representative explained,

There was a lot of talk about the Forum process and its cost, and, ‘Could we shut it off?’ They were wondering how this was going to be paid for. This has gone on a year or two longer than they expected, and we have spent three or four million bucks.

In fact, the City and County’s funding for the Water Forum, which had already been extended once, was due to expire in June. It was not only the City and County who were getting antsy—a number of the purveyors had projects on which they wanted to get started. Many of them had put their projects on hold pending the outcome of the Water Forum, and as a result, were facing increasingly tight project schedules. One purveyor remarked,



We need to go ahead and realize we cannot get agreement on every detail even in a couple of years, but we need to go forward on what we can. The successor organization will do some. ... I think we have the momentum going to do this. I think collectively we are going to be able to do it.

At the facilitator's suggestion, they worked out a plan to get a six-month extension from the City and County and to complete the agreement by December. The City and County agreed and established the end of the year as the deadline. After that point, an agreement would have to be signed and they would no longer underwrite nearly the entire process.<sup>59</sup>

For the remainder of the year, the staff, facilitator, and Water Forum members worked furiously. They negotiated purveyor-specific agreements on water diversions and conservation programs. They solidified the major components of the habitat management program and settled on how it would be funded. They worked on the assurances, figuring out how to make it as certain as possible that the agreement would be kept through the year 2030. And they developed the framework for the successor effort.

At the same time, Water Forum members worked with their own constituencies to make sure they understood the elements of the agreement and to make sure the agreement met their needs. In describing how they paid painstaking attention to each and every detail in crafting the agreement, one staff member explained,

It worked for people, and I think that when they went back and tested it with their peers, people would ask them, 'Well, what about this?' And they would say, 'Oh no, see, it's covered right here—that's the phrase that covers us; we are taken care of.'

## **From an Agreement on Paper to Action**

With work proceeding on the agreement, one of the last things that remained to be done was the final analysis for the Draft Environmental Impact Report (DEIR). In early 1997, the Water Forum staff assembled a team of consultants to conduct the analyses and prepare the document. Some of the team members were the same modelers and fish biologists who had helped with the development of the improved pattern of fishery flows. Others were professional EIR preparation consultants who had

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<sup>59</sup> At some point, PCWA and possibly Roseville contributed small sums of money in support of the Water Forum.

previous experience working for the City and County. Together the team went about organizing and analyzing all the information on the potential impacts of the proposed Water Forum agreement. Since the modeling that would be used in the EIR analyses was the same as that used to develop the improved pattern of fishery flows and dry-year cut-backs, no one expected there would be any surprises. The plan was to complete the DEIR and forward the Water Forum recommendations to the stakeholder boards at the same time. That was before a serious changed condition cropped up.

### The PROSIM Error

While doing the analysis, the Water Forum's consultants discovered a major error in the surface water model they had been using. The PROSIM model is the one developed and used by the Bureau of Reclamation to estimate water availability within the Central Valley Project system. It turned out the model overestimated the amount of water in the American River by as much as 800,000 acre-feet per year. As a result of the error, the consultants discovered that the water diversions and flow pattern to which the Water Forum members had agreed would have more significant adverse recreational and environmental impacts than had previously been thought. In addition, some of those impacts would be produced outside of the American River basin, in the lower Sacramento River and Delta.

With the discovery of the greater than anticipated impacts, the Water Forum environmentalists could no longer support the Water Forum agreement. They felt they were in no position to sign an agreement that would lead to impacts outside of their region without consulting with the environmental groups active in that area. It had also become clear that the agreement did not provide the level of protection of the recreational and aquatic resources that they had been seeking to achieve. Thus, at the beginning of 1998, rather than moving on with a successor effort or walking away from the process, the parties to the Water Forum returned to the negotiating table.

### Casting About for Solutions

Although the full consequences of the PROSIM error were still unknown, the Water Forum members and staff looked upon the new situation as a changed condition that they needed to address. Stakeholders and staff set about assessing the extent of the model error and newly identified impacts, and they began exploring possible avenues for proceeding. From a rough estimate, the modelers and fish biologists

informed them the error would mean that water levels in Folsom Reservoir would be low in more years than had been predicted previously. In the American River, there would be greater impacts on steelhead and salmon. And finally, in the Sacramento River and Delta, beyond the American River basin, there would be impacts on salmon, which by then had been listed as an endangered species.

Among the first ideas considered was to reopen the negotiations around the dry-year cutbacks. From a number of the purveyors' perspective, however, this idea was a nonstarter. In their worldview, they were not responsible for the impacts—the Bureau of Reclamation was. Their thinking was that as a junior water rights holder on the American and Sacramento rivers, the Bureau is responsible for the diversion impacts that were beginning to show up as senior water rights holders began to exercise their rights by diverting water. Even those purveyors with Bureau contracts felt that they had given as much as they could in the Water Forum agreement. They did not see how they could commit to additional dry-year cutbacks.

**Modeling Concerns.** Another concern that crept into the issues around the EIR analyses was that they did not take into account all the good things that the Water Forum had already done and some of the actions that were planned (e.g., the habitat management element) but could not be quantified in the model. Under CEQA, the baseline condition must include the conditions as they are at the time of the preparation of the EIR, and as planned in the immediate future by parties other than the project proponents. Thus, the purveyors pointed out that the baseline conditions shown in the analyses included the AFRP flows and the temperature control device, both of which were being implemented by the Bureau of Reclamation. The AFRP flows had received support from the Water Forum, and the temperature control device was becoming a reality in large part because of the Water Forum. In addition, the purveyors pointed out, the PROSIM model was developed by the Bureau for planning purposes—that is, to see where they would need to develop new water supplies. They argued that the model was designed to show water needs and not sufficiently accurate to make calls on cumulative environmental impacts.

The environmentalists shared a number of the purveyors' concerns in regard to the modeling. They recognized that under the CEQA rules the analysis did not credit the Water Forum plan with the improvements that were already being made. On the other hand, they were concerned about the uncertainties associated with the model, specifically that it might not be sufficiently accurate to identify all the impacts that would occur. In

addition, given the experience with the PROSIM error, they had less confidence in the overall accuracy of the model as a predictive tool.

Despite the problems with PROSIM, the Water Forum stakeholders concluded that it was the only tool available for doing what they needed, and it was important to get the error fixed. The Water Forum, along with its modeling consultants, approached the Bureau of Reclamation with the news of the error. Initially, the Bureau did not want to make any corrections. In their view, the error was not sufficiently large to affect the kinds of analyses they were doing. In addition, they were in the middle of using the model in the preparation of the Draft Environmental Impact Statement (DEIS) on their implementation of the Central Valley Project Improvement Act. Changing the model would mean having to go back and redo a lot of analyses and would further delay the release of their DEIS and implementation of a number of CVPIA requirements.

The Water Forum, on the other hand, was committed to correcting the model. The environmentalists could not and would not support an EIR that was knowingly based on an incorrect model. When the Water Forum staff explained to the Bureau that they planned to go forward with corrections to the model, the Bureau—not wanting to have their own EIS modeling appear out of date—agreed to join them. Because there was pressure from within the Water Forum to get things done quickly, the Water Forum staff ended up taking a very active role in facilitating the dialogues among the Bureau’s modelers. They discovered that within the Bureau, the technical staff was partitioned in different sections and that some of them did not even talk with one another. In true Water Forum style, the staff convened the modelers and facilitated their dialogues. They also brought in U.S. Fish and Wildlife Service staff to come to agreements about what assumptions should be used in the model. The discussions were about difficult technical details that were important to the model outcomes. Over the course of six or seven months, they worked to fix the error and determine what assumptions would be appropriate to use in simulating future Bureau operations.<sup>60</sup>

**Consultations with Resources Agencies.** In looking at the nature of the problem further, the fish biologists determined that further reductions in diversions was not the only way to improve conditions for

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<sup>60</sup> They agreed that all the EIR analyses would include increased Trinity Flows on the Trinity River, the development of an EBMUD project on the lower American River, and increased SWP, CVP, and other demands.

steelhead in the river. They explained that an improved habitat management plan could potentially mitigate the additional impacts on steelhead and salmon. Meanwhile, however, the seriousness of the steelhead issue was hammered home—the U.S. National Marine Fisheries Service (NMFS) proposed placing steelhead on the endangered species list. This proposed listing strengthened the environmentalists' legal standing outside the Water Forum. In terms of the available alternatives to a negotiated agreement, the fisheries issues would have to be addressed in the context of the Endangered Species Act whether or not there was a Water Forum.

Faced with the new potentially significant impacts, the Water Forum turned to the relevant regulatory agencies to see if there would be a way to address the endangered species issues comprehensively, or even a way to bring these agencies into the Water Forum Agreement. The Water Forum convened a series of meetings with the staff from the NMFS, U.S. Fish and Wildlife Service (FWS), and California Department of Fish and Game (DFG). They discussed the possibility of developing a basin-wide Habitat Management Plan (HMP) under the auspices of the Water Forum, or of getting a biological opinion that would apply to the Water Forum plan. The time involved in these possibilities was daunting—at a minimum, under ideal conditions it would take another 18 months. In addition, a basin-wide HMP would need to address terrestrial impacts, which was something the Water Forum did not address.

**Pressing On.** The Water Forum members reflected on what they had learned from their consultations with the resources agencies and decided that a comprehensive HMP was not the way to go. The time that would be involved alone took it off the table as an option. At the same time, however, the discussions with the resources agencies underscored for the purveyors the importance of the Water Forum habitat management element. Whatever habitat improvements could be achieved in efforts coordinated through the Water Forum and its successor effort would put all the purveyors in a better situation when it came time for them to address the endangered species issues related to their specific projects. Thus, the Water Forum members agreed to an expanded focus on the habitat management element they had already negotiated.

Meanwhile, the City and County were increasingly frustrated. They had worked out their agreements relatively early in the process and were tiring of footing the bill for continuing negotiations over aspects of the Water Forum agreement that were less germane to their own interests. They both had projects on which they wanted to move forward. The PROSIM error had caught everyone by surprise and thrust the City and

County back into a position where they were urging the Water Forum staff to find a way to wrap the process up quickly.

However, the PROSIM error had taught the environmentalists how important it was for them to have an environmental impact analysis completed on the Water Forum plan *before* signing the agreement. The EIR would provide them with a rigorous analysis of potential impacts, in addition to which it was a legal document that provided them an important assurance. With impacts and mitigation commitments documented in a certified EIR, the environmentalists would have legal standing on which to challenge the purveyors in the future if they needed to.

It was more than just the EIR that the environmentalists felt they needed, however. They also needed to be sure that their other assurances would come through. The temperature control device on Folsom Dam had been authorized by Congress, but funds for actually building it had yet to be appropriated. In addition, it was unclear how the process to revise the lower American River flow standard would move forward, and the habitat management element was still little more than a plan on paper. The environmentalists understood the pressure the purveyors were under in terms of their need to move forward on their water-supply projects, but they wanted to make sure their assurances did not get lost by the wayside. Moving from the basic agreement on paper to a signed agreement in action proved to be one of the most difficult hurdles in the Water Forum.

### Making Two Worlds into One

Over the course of their time together, the Water Forum members often referred to their negotiating circumstances as “living in two worlds.” What they meant was that while working collaboratively to figure out what their commitments would be to one another in the future, they continued to reserve their prerogatives to challenge one another if the occasion arose wherein they needed to. For example, if a water purveyor were to move forward with a project outside of the Water Forum, it could expect a legal challenge from the environmental community on the basis of CEQA. Similarly, on the issue of Auburn Dam and flood control, many of the same parties who were active in the Water Forum continued to oppose one another on these other issues outside the Water Forum.

The problems of timing of assurances and projects needing to move forward became a question of how the Water Forum could bring the two worlds in which the members were living together as one. The answer was found in what became known as the “caveats.” In the agreement, the caveats are explained as follows:

The *Water Forum Agreement* includes linked actions based on many “quid pro quos” (i.e., something for something received.) Some of the actions will require future approvals or implementation by local, state, and federal agencies.

In addition, some things cannot be known with certainty at this time. For instance, results of Endangered Species Act consultations for specific projects will not be available for some time.

Therefore, in order to have a durable *Agreement* it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.<sup>61</sup>

Thus, while the assurances section describes conditions and actions that “are needed to ensure that specified future actions will occur,”<sup>62</sup> the caveats section specifies in detail the conditions under which the agreement remains operative.

**The Caveats.** The most important caveat that emerged in the wake of the PROSIM error addressed the endangered species question. While the environmentalists wholeheartedly supported an improved habitat management element, they were worried that their endorsement of the Water Forum could potentially put them in an awkward situation. In no way did they want their signing of the agreement, and associated support for a purveyor’s project, to require them to support a project that might have endangered species problems. The environmentalists did not want to be in a situation where they would potentially be advocating a standard lower than that required by the regulatory agencies. Thus, the stakeholders agreed that support for a water-supply project would be contingent on “Project-specific compliance with the California Environmental Quality Act, and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.”<sup>63</sup> This condition addressed the environmentalists’ concerns around potential endangered species problems associated with individual purveyors’ projects. Another contingency addressed their concerns with the cumulative impacts of the increased

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<sup>61</sup> SAWF, January 2000, p. 144.

<sup>62</sup> SAWF, January 2000, p. 146.

<sup>63</sup> SAWF, January 2000, p. 145.

water diversions proposed by the Water Forum. It conditioned stakeholder support for individual projects on whether there was “adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with the implementation of the *Water Forum Agreement*.”<sup>64</sup>

The caveats section articulated several other conditions on which stakeholders’ support for projects would be contingent. The problem of timing, wherein purveyors may get their projects before the environmentalists get all their assurances, was addressed by the purveyors agreeing to put their Water Forum Agreement commitments—including their purveyor-specific agreements and support for updating the lower American River flow standard—into their project-specific EIRs. By including those commitments in the EIRs, the purveyors provided environmentalists with a stronger, more legally binding commitment that they would stick with the agreement even after their projects are in place. Another condition was that the upstream purveyors who were planning to enter into diversion agreements with the Bureau of Reclamation would have to do so before the environmentalists and other stakeholders would support their projects. And the diversion agreements would include a provision designating the other stakeholders as “third party beneficiaries.” This later requirement meant that if the Bureau of Reclamation did not hold a purveyor to the agreement, other Water Forum stakeholders, including the environmentalists, could.

Thus, the caveats section clarified that stakeholders’ support for a water-supply project included in the Water Forum would not be a done deal as soon as the agreement was signed. Rather, for individual projects to receive support, each would have to meet certain conditions in addition to the ones already specified in the seven elements of the agreement. Before other stakeholders would support the project, environmental documentation required by CEQA would have to be complete and it would have to include the purveyor’s commitments as embodied in the Water Forum Agreement. And, if applicable, diversion agreements with the Bureau would have to be complete. In addition to these requirements, the environmentalists felt that it was important that there be adequate progress made on the construction of the temperature control device, which by then had been authorized and funded by Congress, and the updating of the lower American River flow standard.

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<sup>64</sup> SAWF, January 2000, p. 146.



The water purveyors also had concerns around the timing of their projects and the signing of the agreement. In particular, if for some reason they did not get all the approvals they needed to undertake a project, they did not want to have to still do everything required by the Water Forum, such as the water conservation programs or paying into the habitat management program. Some purveyors suggested that their Water Forum commitments be prorated, so that if, for example, they only got approvals for half of the water supply provided for in the Water Forum, they would only have to pay for half of their habitat mitigation element commitment. The Surface Water Team hashed this issue out during hours and hours of meetings. The solution on which they settled was that if a purveyor received project support from the other Water Forum signatories and received all necessary approvals for a project covered by the Water Forum, then the purveyor would “fully support and participate in the ... provisions of the *Water Forum Agreement*.”<sup>65</sup> If, however, a purveyor received support from other Water Forum signatories but did not get all necessary approvals for a project, it “would constitute a changed condition that would be considered by the Water Forum Successor Effort.”<sup>66</sup>

Finally, the caveats section specifically stated two other contingencies that could affect the operability of the Water Forum Agreement. The first addressed the commitments of the parties who were not water purveyors. It stated,

All signatories agree that business, citizens, and environmental signatories’ obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

The inclusion of this condition in the caveats was effectively a formal articulation of the underpinnings of the Water Forum process. The whole approach of the Water Forum had been to make sure that the stakeholders were able to meet one another’s interests. For the Water Forum agreement to continue into the future, stakeholders’ needs would have to continue to be met. Thus, the final caveat listed takes into account that, despite the Water Forum members’ best efforts, they may face the same issues again in the future. It provides,

If the future environmental conditions in the lower American River environment are significantly worse than

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<sup>65</sup> SAWF, January 2000, p. 144.

<sup>66</sup> SAWF, January 2000, p. 145.

the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort.<sup>67</sup>

Thus, by the fall of 1998, the basic framework for the caveats was in place. With improvements in the habitat management element, the Water Forum had addressed the new impacts that had been discovered in the American River basin. The caveat concerning compliance with state and federal endangered species took care of the environmentalists' concerns on out-of-basin impacts.

### **Moving Ahead with Projects Before the Agreement is Signed**

In developing the caveats, the Water Forum members drew the road map for moving from two worlds into one. The caveats laid out the steps they needed to take to make the Water Forum agreement operative in the real world, not just their meeting rooms. As they worked out the caveats, the pressures to move forward with water-supply projects continued to increase. The City of Roseville, for example, was growing rapidly and would soon outgrow its existing water-supply capacity. Thus, the staff, water purveyors, and environmentalists sought ways they could allow projects to move forward in advance of the signing of the Water Forum agreement. Much of the staff and Water Forum members' energies shifted away from tasks needed to complete the DEIR and agreement, toward negotiations with individual purveyors on their projects.

### **Project-by-Project Negotiations**

Those who participated in these negotiations describe them as among the most contentious of the process. The challenge was to see how individual purveyors could move forward with projects<sup>68</sup> before the completion of the Water Forum EIR and the signing of the agreement. To do so, they would have to make sure they met the needs of the environmentalists. From the environmentalists' perspective, these purveyors would have to comply fully with CEQA and include their Water Forum commitments in their EIRs. Neither of these items would be as simple as it appeared, however. Because the Water Forum DEIR had yet to be completed, it was not available for use by the purveyors. Instead, they were moving forward with EIR analyses conducted by their own

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<sup>67</sup> SAWF, January 2000, p. 146.

<sup>68</sup> The purveyors were the City of Roseville, County of Sacramento, Folsom, Northridge, and San Juan.

consultants. Similarly, because the Water Forum agreement was not yet totally complete, the question came up of how to incorporate purveyors' commitments into their EIRs.

**Commitments.** Again, it was a question of timing and who would stick his neck out first. The purveyors were reluctant to make the Water Forum commitments in their EIRs if the agreement was going to change before it was signed. Similarly, the environmentalists were wary of any changes in wording that might change the meaning of the commitment. Logistically, the facilitator explained,

We couldn't dump a 400-page document into the EIR, so some things had to be extracted and referenced. ... It had to be really tracked. That was more difficult than you can imagine it was. It was tough.

In addition to the extracted parts of the Water Forum agreement and references, each of the purveyors agreed to include the word-for-word version of their purveyor-specific agreement in their project-specific EIRs. Thus, even if for some reason they would not become a signatory to the Water Forum agreement, the environmentalists had their substantive commitments in the legally binding EIRs. Similarly, having complied with CEQA and their Water Forum commitments, the purveyors could expect the environmentalists and other stakeholders to support their water-supply projects as they sought the necessary approvals from the regulatory agencies.

**Full Disclosure of Impacts.** The question of full compliance with CEQA exposed another case of differing worldviews, however. When it came to cumulative impacts, the environmentalists' perspective was that the analyses should include all the planned diversions, not just that of the individual project proponent. From the purveyors' perspective, however, they did not think they should have to take responsibility for impacts that would result from projects other than their own. In their worldview, full disclosure meant full disclosure of the impacts of their project. The facilitator explained,

This is where it got very complicated because the purveyors felt like they had disclosed all the impacts in a totally appropriate way with integrity, and had very expensive consulting firms do all this stuff. They felt like they had done a really good CEQA analysis. Well, then they would come forward with their CEQA analysis, and the environmentalists in their worldview felt it wasn't

adequate. Now this was after the purveyors had spent all this money doing the draft CEQA document. Our environmentalists would look at it and go, ‘Well, I don’t think I like that.’ Now they weren’t doing it cavalierly; it’s just the clash of two worlds of how you see a CEQA document should be done.

According to a staff member, “There’s a perception among water purveyors that if they disclose a significant unavoidable adverse impact, that they will not be able to get their project approved.” On a more fundamental level, these two different worldviews reflect how the purveyors tend to see the EIR analyses as a means to an end, whereas for the environmentalists, the analyses are an end in themselves.

In each of the five negotiations, the question of full disclosure of impacts came down to a near breaking point. Once again, the staff helped the purveyors and environmentalists explore their BAATNAs. The environmentalists concluded they would prefer to mount a legal challenge to the purveyors’ EIRs rather than accepting what they felt was a less-than-complete analysis. The same staff member explained the situation that presented for the purveyors.

At the end, it was a choice—‘We just went over to talk to them, and if you do this, they will sue you. What are you gonna do?’ And in each case, the purveyor said, ‘Well, it’s already at the printer.’ They’d always say it’s at the printer. We’d say, ‘Well, you can issue it or you can not [issue it].’ And in each case, they said, ‘Okay, we’ll meet one more time.’ And in each case, they went through it, didn’t print it, came to agreement, and went ahead. Incredibly wise of them.

## **Water Forum Environmental Impact Report**

The issue of full disclosure of cumulative impacts spilled over into the Water Forum’s EIR analysis too. Although a number of the purveyors did not believe an EIR was legally required for the Water Forum agreement, the environmental interests were adamant that they would not sign the agreement without one. According to a staff member, “The City and County, however, felt it would be necessary to meet the requirements of CEQA, and even if it was a sort of close question, they wanted to be covered.” For the environmentalists, the staff member explained, the EIR was important “both procedurally, because CEQA is an important tool to protect their interests, and substantively because, at its best, an EIR is supposed to examine the alternatives and show what happens.”

For other purveyors, however, many of the same concerns they had expressed earlier remained. They considered the impacts outside the watershed to be the Bureau of Reclamation's responsibility. Overall, they believed the model overstated the impacts since it included the improved pattern of flows in the base condition and did not include other future beneficial actions that would occur outside of the Water Forum, such as the augmentation of flows by the Bureau of Reclamation through water acquisitions.

Early in the fall of 1998, the Surface Water Team was convened to address the approach to take for the EIR analyses. The environmentalists and purveyors both persisted in their differing perspectives. The facilitator observed, "They both thought they were right, and they were right on both—it was just a clash of worldviews." To accommodate both those views, the stakeholders agreed it would be appropriate to do the analysis both ways. That is, the purveyors were to include one that showed just the Water Forum agreement actions imposed on existing conditions, and another that showed the Water Forum agreement and "all foreseeable future (2020) projects" imposed on the existing conditions.

A disagreement also arose over the question of what scenarios to analyze as project alternatives. Under CEQA, a project proponent is required to analyze the potential environmental impacts of possible alternatives to the proposed project. Typically, a "no action" alternative is included, which is to reflect what would happen if the project did not happen. In the case of the Water Forum, the no-action alternative could be a future scenario in which all purveyors developed their projects independently and none of the Water Forum mitigation elements (e.g., water conservation, habitat improvement, and dry-year cutbacks) were instituted. This scenario also became known as the "let it rip" scenario. From the environmentalists' perspective, however, that scenario was not realistic since they did not believe that future water development could occur in an unconstrained manner. They believed that in the future, even without the Water Forum, they would be able to obtain a range of constraints on diversions and other environmental protections through court or legislative actions. As a group, the Water Forum agreed to include both no-action alternatives in the analysis.

## Plan of Action

By December 1998, the Water Forum stakeholders had worked through the numerous issues that had been raised a year earlier, and their DEIR was nearly ready to be released. Once again, however, the environmentalists were uncomfortable with signing the agreement. They

had allowed most of the purveyors to move forward with their projects. But while staff focused their attention on the project-specific negotiations and DEIR preparation work, progress on two of the environmentalists' critical assurances was lagging. The habitat management element still remained little more than a plan on paper, and no concrete road map had been laid out for petitioning the SWRCB to update the lower American River flow standard. In addition, having already been through the experience with the PROSIM error, the environmentalists had no intention of signing the agreement until the final EIR was complete. They wanted to wait and see what the environmental impacts were going to be and to give their colleagues in the Bay Area and other parts of the state ample chance to review the document before proceeding. In fact, when the document was released, it included disclosure of some additional impacts that the parties agreed to negotiate further.

Meanwhile, however, the Water Forum was under even greater pressure from the City and County to finish things up. Although they viewed the process as valuable, it seemed to be going on way too long. Plus, the Water Forum staff and members were becoming concerned that the perception in the broader community was that the Water Forum agreement might never be closed. One high-level federal official remarked that while the Water Forum process seemed like an interesting project, "it hasn't done anything yet." Staff and members knew they would not be able to sign the Water Forum right away, but they wanted to demonstrate how much they actually had accomplished.

In January 1999, at a press conference and celebration luncheon to which all the stakeholder board members and political leaders were invited, the Water Forum released its Draft Environmental Impact Report along with the *Water Forum Action Plan*. The plan was to respond to the comments on the DEIR and release the final EIR by June, and the formal signing of the Water Forum agreement would take place shortly thereafter.

After the release of the DEIR, the Water Forum staff and stakeholders began working on the implementation of the habitat management element and the updated lower American River standard. And as comments on the EIR began coming in, they addressed those, too. One set of comments came from the state Department of Parks and Recreation (DPR), which has responsibility for managing the recreation areas around Folsom Lake. DPR was unhappy with the extent of the recreation impacts and requested additional mitigation measures. In the tradition of the Water Forum, the staff and members invited the DPR officials to sit down with them to work out an agreement. Together, they developed a plan in which the Water Forum purveyors would work to secure up to \$3 million of federal funding for addressing the recreational

impacts. If they were unable to secure the full \$3 million, the Water Forum purveyors would make up the difference.

### Yet Another Twist

As these activities got underway, however, the Water Forum process was disrupted by two other external events. One was that the EBMUD had applied for an amendment to its contract with the Bureau of Reclamation, which included the opportunity to do things the Sacramento interests opposed—that is, diverting water from the Nimbus Dam during dry years and reselling the water to third parties. The other was Congressman Doolittle’s sponsorship of a bill that included water projects for Foothill purveyors that went far beyond what was being contemplated in the Water Forum agreement.

**EBMUD’s Request for a Contract Amendment.** By 1999, any agreements or negotiations with EBMUD and the City and County were taking place completely outside of the Water Forum. The agreement in principle they had developed several years earlier to develop a joint project had fallen apart, and the relations between the agencies were strained. The City was concerned about the disruption that would be involved in constructing the project and had not been able to work out a satisfactory agreement with EBMUD over the operations of the Fairbairn treatment plant. The County was concerned about increasing costs and also about what it felt were difficulties in working with EBMUD. On the other hand, EBMUD felt that it had been let down by the Sacramento interests and had set about pursuing its American River diversion project on its own.

When EBMUD applied for an amendment of its contract with the Bureau of Reclamation, many of the Water Forum stakeholders had concerns. If EBMUD were to attempt to divert from the Nimbus Dam during the dry years, much of what they had been working for would be imperiled. Officially, however, the Water Forum stayed out of the issue. The Foothills interests, for example, were upstream of Folsom and had no interest in making enemies. Although the actions of the other stakeholders were not coordinated through the Water Forum, many of them—environmentalists and purveyors alike—joined forces to oppose the contract amendment.

**Water Resources Development Act.** Unlike the EBMUD issue, which affected the parties outside of the Water Forum, the introduction of the Water Resources Development Act in Congress caused

problems in the relationships among the Water Forum members. The environmentalists were upset with the Foothill interests who cooperated in the drafting of the legislation. They were also upset that the City of Sacramento did nothing to oppose the projects that would be inconsistent with the Water Forum agreement. The entire episode also caused the environmentalists to question whether they could count on the purveyors to meet their Water Forum commitments in the future, and whether they should seek additional assurances.

Meanwhile, however, from the perspective of the Foothill interests, they had not yet been able to come to agreements through the Water Forum. Thus, they took advantage of another avenue when the opportunity was presented to them. The Placer County Water Authority was stuck between a rock and a hard place, with Congressman Doolittle opposed to their placement of pumps where they might interfere with a future Auburn Dam, and the environmentalists who preferred the pumps be placed as such. In the case of El Dorado County, the Water Forum environmentalists stopped negotiating with the water purveyors there when they learned that El Dorado environmentalists were engaged in unresolved conflicts regarding growth issues in the county.

With the environmentalists feeling quite distrustful of the purveyors and questioning seriously whether they should sign the Water Forum agreement at all, the staff began engaging in “shuttle diplomacy.” The staff met with the environmentalists, the City, and the Foothills purveyors separately, and sought to broker an understanding. In the meantime, the facilitator concluded that the environmentalists’ trust had been so shaken, that any Surface Water Team meetings should be put on hold until the issue was resolved. Living in two worlds was not going to work when the tensions were running so high.

In August, however, Congress passed the act without the controversial provisions. According to one of the Foothill purveyors, the congressman who sponsored the bill was astonished by the amount of opposition to the projects. The purveyor felt that everyone had learned some important lessons out of the experience. He explained,

It was a great object lesson for everybody who thought we could do something in a closed room ... [thinking that] if we just keep our business secret, then they won't know. But, man, this is a glass world though, isn't it? That little box over there [he pointed to his computer], e-mail, just poof, everybody knows about it. Those days are over.



## **The Final Stretch**

By the fall of 1999, the Water Forum staff and EIR team had completed the responses to comments on the DEIR, and the City and County scheduled joint hearings on the document. One of the environmentalists' assurances still needed additional attention, however. The City, in moving forward with its treatment plant expansion, was in the process of petitioning the SWRCB to update the lower American River standard. They had gone before the board once with the request, but had yet to hear the board's response. If the issue still had been up in the air at the time of the hearings, the environmentalists would have to register their reservations about the agreement moving forward without a process in place to update the lower American River standard. Just one day before the City's and County's hearings on the EIR, the board announced that it would go forward with an expedited approval process as requested. With both the lower American River standard process and the multi-agency habitat management program in place, the environmentalists were fully supportive of the Water Forum agreement.

The City and County certified the EIR in November 1999—at which point, the other stakeholder boards began their final reviews of the agreement. By April 2000, all the stakeholder organizations had signed the agreement; water supply and habitat improvements were moving ahead. The Sacramento North Area Groundwater Management Authority had been operating as a joint powers agency for a year and a half, and construction had begun on the temperature control device.

## **The Water Forum Way**

In April 2000, the Water Forum held a celebration of the signing of the agreement attended by more than 600 people from the Sacramento area. At this gathering, the stakeholders distributed baseball hats they had commissioned to read "The Water Forum Way." In presenting the hats to the audience, the leader of the business caucus explained that the process forever changed him, and that today when a problem comes up, he seeks out the people involved to talk about it.

This change affected participants in the process and beyond. When the Sacramento Area faced the need for a new transportation plan, government leaders convened a process similar to the Water Forum. In El Dorado County, where development conflicts had prevented purveyors located there from signing onto the Water Forum Agreement, the county board of supervisors initiated a collaborative land-use planning process.

In a related example, a leading business stakeholder in the Water Forum became involved in the newly formed collaborative process

regarding transportation issues. At one point, other business interest representatives wanted to pull out of the collaboration. When this leader argued against doing so, his colleagues suggested he had “sold out” to the environmental community. In an eloquent testimonial to the learning process he had been through, he said,

We have no choice. We have to stay at the table. There is no alternative. ... The Water Forum process transformed me. I now understand that collaboration is the only way to solve problems. I do it now in everything I do, including running my business, and dealing with my suppliers, employees, and customers.