

## **SECTION THREE: SEVEN MAJOR ELEMENTS OF THE *WATER FORUM AGREEMENT***

### **I. INCREASED SURFACE WATER DIVERSIONS**

#### **A. Intent**

One of the Water Forum's two coequal objectives is to:

***"Provide a reliable and safe water supply for the region's economic health and planned development through the year 2030."***

This element provides for increased surface water diversions that will be needed even with active conservation programs and sustainable use of the groundwater resource.

Population is projected to increase by one million in the Sacramento area over the next 30 years. Unless adequate water supplies are made available, many residents, businesses and farmers will continue to suffer shortages during California's periodic droughts. This would limit our economic development and planned growth.

In this region the biggest stumbling block to balanced water solutions has been that individual groups -- water purveyors, environmentalists, business groups, local governments, and citizens groups -- have been independently pursuing their own water objectives - without much success. Even though millions of dollars had been spent in the past decade pursuing single purpose solutions, there was little to show for these fragmented efforts. In response to this gridlock, the Water Forum has developed a balanced program which includes increased surface water diversions.

The intent of the *Water Forum Agreement* is to have all signatories endorse the agreed upon diversions. Active endorsement from signatories will include endorsement for all entitlements, and facilities needed to divert, treat and distribute the water. In this way the region's need for a reliable water supply will be achieved. Section Five, I, Purveyor Specific Agreements, includes the details of entitlements and major diversion and treatment facilities needed for each purveyor to meet its customers' needs through the year 2030.

The chart entitled, "*Major Water Supply Projects That will Receive Water Forum Support Upon Signing The Water Forum Agreement,*" on the following pages lists projects that Water Forum signatories will support.

#### **B. Summary of Surface Water Diversions**

Each purveyor has its own water supply needs and opportunities. Stakeholder representatives have spent thousands of hours reviewing the needs and opportunities of each purveyor.

The chart, "*1995 and Proposed Year 2030 Surface Water Diversions*," on the following pages summarizes the agreed upon diversions for each purveyor to meet its customers' needs to the year 2030. The column, "1995 Baseline," reflects the historic maximum amount of water that purveyors diverted from the American River in any one year through the year 1995 or in certain appropriate instances other amounts specified in its Specific Agreement.

The column, "2030 Diversion,(wet/ave years)" reflects the agreed upon amount of surface water that purveyors will need to divert in most years to meet their projected needs in the year 2030. This column specifies how much water will be diverted in average and wetter years.

The last two columns, "2030 Diversion (Drier Years)" and "2030 Diversions (Driest Years)," describe the amount of diversions in drier and driest years. How purveyors would continue to meet their customers' needs in the drier and driest years is described Section Three, II, Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years.

### **C. Wholesaling of Water**

Some purveyors signatory to the *Water Forum Agreement* plan to wholesale water to other purveyors within the region. Environmental signatories' support for those wholesale water deliveries is contingent on the purveyors that receive the water signing and implementing their commitments under the *Water Forum Agreement*.

### **D. Federal or State Legislation for Funding for Water Supply Projects**

All signatories to the *Water Forum Agreement* retain the right to support or oppose federal or state legislation for funding of water supply facilities. If requested by an organization signatory to the *Water Forum Agreement*, the Water Forum Successor Effort will expeditiously meet in good faith to determine if that legislation will receive support from organizations signatory to the *Water Forum Agreement*.

### **E. Specific Surface Water Diversion Agreement**

As part of the *Water Forum Agreement*, all signatories will support the diversions agreed to for each purveyor as specified in Section Five, I, Purveyor Specific Agreements and summarized in the chart on the following pages, "*1995 and Proposed Year 2030 Surface Water Diversions*." They would also support all facilities as specified in each purveyor's Specific Agreement needed to divert, treat and distribute this water. Additionally, signatories' support for diversions and facilities is subject to the caveats in Section Four, I (Assurances and Caveats) of the *Water Forum Agreement*. This support is linked to the purveyors' support and, where appropriate, participation in each of the seven elements of the *Water Forum Agreement*.

**MAJOR WATER SUPPLY PROJECTS THAT WILL  
RECEIVE WATER FORUM SUPPORT  
UPON SIGNING THE *WATER FORUM AGREEMENT* (a)**

(Note: This is a partial list of projects which will be needed to accomplish the recommended diversions. Additional facilities may be needed and would be supported to the extent they are consistent with the *Water Forum Agreement*.)

CARMICHAEL WD	Treatment plant, diversion modifications, pump station and piping
CITIZENS UTILITIES	Approval of wholesale agreements w/City of Sacramento Change of Place of Use with PCWA
CITY OF FOLSOM	Relocate & replace raw water conveyance pipeline Diversion facility at Folsom Reservoir Approval of PL 101-514 contract and change in place of use Expansion of water treatment plant
CITY OF SACRAMENTO	Expansion/rehabilitation of the Sacramento River and E.A. Fairbairn Water Treatment Plants as well as rehabilitation (upgrade fish screens) of the diversion structures for both facilities.
CITY OF ROSEVILLE	Long term wheeling agreement with USBR (PCWA water) Renegotiation of USBR contract Raw water supply project Water treatment plant expansion
COUNTY OF SACRAMENTO (includes a portion of the ELK GROVE WATER WORKS)	Expansion of Sacramento River diversion and treatment facilities; expansion of E. A. Fairbairn treatment facilities to treat water diverted from at or near the confluence or from the Sacramento River Approval of PL 101-514 contract and change in place of use and point of diversion Approval of SMUD entitlement transfers
NATOMAS CENTRAL MUTUAL WATER COMPANY	Approval of improvement of diversion facilities
NORTHRIDGE WD	Change of Place of Use with PCWA Warren Act contract with USBR

PLACER COUNTY WATER AGENCY - Support is subject to resolution of remaining issues. See footnote (b)	Permanent pumping plant at Auburn Canyon Change in point of delivery for USBR water
SACRAMENTO MUNICIPAL UTILITY DISTRICT (SMUD)	Approval of transfers to other Agencies
SAN JUAN FAMILY (includes CITRUS HEIGHTS WD, FAIR OAKS WD, ORANGE VALE WC)	Diversion facility at Folsom Reservoir Approval of PL 101-514 contract Water Treatment Plant expansion Change of Place of Use with PCWA
SO. COUNTY AGRICULTURE (includes GALT I. D., CLAY WD, OMOCHUMNE-HARTNELL WD, FARM BUREAU)	Approval of SMUD entitlement or other transfer and Folsom South Canal diversions

a. Note: All suppliers having contracts for Central Valley Project water will be renegotiating those contracts when the CVP Improvement Act Programmatic Environmental Impact Statement is complete.

b. Support for Placer County Water Agency major water supply projects is subject to resolution of these remaining issues: 1) environmentalists' support for PCWA pumps at Auburn, 2) how water conservation Best Management Practice #5 (Large Landscape Water Audits and Incentives for Commercial, Industrial, Institutional and Irrigation Accounts) will be implemented, and 3) environmentalists' support for conditions related to release of replacement water in drier and driest years.

**1995 AND PROPOSED YEAR 2030 SURFACE WATER DIVERSIONS**

Note: The diversions described below, combined with the dry year actions, will meet each supplier's customers' needs to the year 2030.

**AMERICAN RIVER DIVERSIONS--UPSTREAM OF NIMBUS**

WATER SUPPLIER/ ORGANIZATION	1995 BASELINE (1)	2030 DIVERSION (wet/ave years)	2030 DIVERSION (drier years)	2030 DIVERSION (driest years)(2)
City of Folsom	20,000 AF (19)	34,000 AF(3)	Decreasing from 34,000 AF to 22,000 AF(4)	20,000 AF (5)
Northridge Water District (17)	0 AF	29,000 AF(9)	0 AF (10)	0 AF
Placer County Water Agency (6) (7) [Subject to resolution of remaining issues (21)]	8,500 AF	35,500 AF(3)	Continue to divert 35,500 AF, with a replacement to the river equivalent to their drier diversions above baseline. The drier the year, the more water would be replaced up to 27,000 AF (4) (20)	Continue to divert 35,500 AF, with a replacement of 27,000 AF to the river. (20)
City of Roseville (7)	19,800 AF	54,900 AF(3)	Decreasing from 54,900 AF to 39,800 AF with a replacement to the river equivalent to their drier diversions above baseline. The drier the year, the more water would be replaced up to 20,000 AF (4)	Continue to divert 39,800 AF, with a replacement of 20,000 AF to the river.
San Juan WD & Consortium in Sacramento County (Citrus Heights WD, Fair Oaks WD, Orange Vale Water Co)	44,200 AF(8)	57,200 AF(3)	Decreasing from 57,200 to 44,200 AF(4)	44,200 AF

**1995 AND PROPOSED YEAR 2030 SURFACE WATER DIVERSIONS**

Note: The diversions described below, combined with the dry year actions, will meet each supplier's customers' needs to the year 2030.

**AMERICAN RIVER DIVERSIONS--UPSTREAM OF NIMBUS**

WATER SUPPLIER/ ORGANIZATION	1995 BASELINE (1)	2030 DIVERSION (wet/ave years)	2030 DIVERSION (drier years)	2030 DIVERSION (driest years)(2)
San Juan WD ( Placer County)	10,000 AF	25,000 AF(3)	Decreasing from 25,000 to 10,000 AF(4)	10,000 AF
South Sacramento County Agriculture (includes Clay WD, Omochumne-Hartnell WD, Galt ID, & Sacramento County Farm Bureau)	0 AF	35,000 AF(9)	0 AF(10)	0 AF
SMUD	15,000 AF(11)	30,000 AF(3)	Decreasing from 30,000 to 15,000 AF(4)	15,000 AF

**1995 AND PROPOSED YEAR 2030 SURFACE WATER DIVERSIONS - *Continued***

**AMERICAN RIVER DIVERSIONS--BETWEEN NIMBUS & THE MOUTH**

WATER SUPPLIER/ ORGANIZATION	1995 BASELINE(1)	2030 DIVERSION (wet/ave years)	2030 DIVERSION (drier years)	2030 DIVERSION (driest years) (2)
Carmichael WD (18)	12,000 AF	12,000 AF	12,000 AF	12,000 AF
City of Sacramento	50,000 AF	310 CFS (12) (13)	90,000 AF(15)	50,000 AF

**SACRAMENTO RIVER DIVERSIONS**

WATER SUPPLIER/ ORGANIZATION	1995 DIVERSIONS	2030 DIVERSION (wet/ave years) (14)	2030 DIVERSION (drier years)(14)	2030 DIVERSION (driest years)(14)
City of Sacramento	45,000 AF	290 CFS (13)	290 CFS (13)	290 CFS (13)
County of Sacramento	0 AF	up to 78,000 AF (16)	up to 78,000 AF(16)	up to 78,000 AF(16)
Placer County Water Agency (6) [Subject to resolution of remaining issues (21)]	0 AF	35,000 AF	35,000 AF	35,000 AF
Natomas Central Mutual Water Co. within Sacramento County	53,000 AF	45,600 AF	45,600 AF	45,600 AF

## 1995 AND PROPOSED YEAR 2030 SURFACE WATER DIVERSIONS - NOTES

1. Baseline: Baseline means the historic maximum amount of water that suppliers diverted from the American River in any one year through the year 1995 or in certain appropriate instances other amounts specified in a purveyor's specific agreement . Clarifications pertaining to the San Juan Water District, SMUD and the City of Folsom are noted in footnotes 8, 11, and 19.
2. Driest Years (i.e. Conference Years): Years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 400,000 acre feet. Conference years are those years which require diverters and others to meet and confer on how best to meet demands and protect the American River.
3. Wet/Ave Years: As it applies to these diverters, years when the projected March through November Unimpaired Inflow to Folsom Reservoir is greater than 950,000 acre feet.
4. Drier Years: As it applies to these diverters, years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 950,000 acre feet.
5. In the Conference Years the City of Folsom would reduce diversions by an additional 2,000 acre feet below its baseline to 18,000 AF through additional conservation to achieve recreational benefits to Folsom Reservoir and fishery benefits to the Lower American River.
6. PCWA would receive support for an American River diversion of 35,500 AF (8,500 AF existing and 27,000 AF additional) in wetter and average years and a new Sacramento/Feather Diversion of 35,000 AF. PCWA is willing to exchange 35,000 AF of its American River water for Sacramento and/or Feather River water provided the terms of such exchange do not result in any diminution of PCWA's water supply or an increased cost to PCWA.
7. For these suppliers, some or all of their water supply diverted from the American River or Folsom Reservoir in the drier and driest years could be replaced with water released from the Middle Fork Project Reservoirs by reoperating those reservoirs. Reoperation of the MFP reservoirs causes the reservoirs to be drawn down below historical operational minimum pool volumes.
8. The baseline for SJWD and their wholesale service area within Sacramento County is the full amount of their entitlements (CVP contract and water rights) which they exercised in 1995.
9. Wet/Ave Years: As it applies to these diverters, years when the projected March through November Unimpaired Inflow to Folsom Reservoir is greater than 1,600,000 acre feet.
10. Drier Years: As it applies to these diverters, years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 1,600,000 acre feet.
11. The baseline for SMUD is the 1995 diversion amount which reflects the shut down of Rancho Seco Power Plant.
12. Wet/Ave Years: As it applies to the City of Sacramento, time periods when the flows bypassing the E. A. Fairbairn Water Treatment Plant diversion exceed the "Hodge flows."
13. For modeling purposes, it is assumed that the City of Sacramento's total annual diversions from the American and Sacramento River in year 2030 would be 130,600 AF for use within the City limits.
14. As it applies to these diverters, there is no Water Forum limitation to diversions from the Sacramento River.

15. Drier Years: As it applies to the City of Sacramento, time periods when the flows bypassing the City's E. A. Fairbairn Water Treatment Plant diversion do not exceed the "Hodge flows." Within its existing capacity, the City can divert from the American River 155 cfs in June, July and August, 120 cfs in January through May and September, and 100 cfs in October through December.
16. The total for the County of Sacramento (78,000 AF) represents 45,000 AF of firm entitlement and 33,000 AF of intermittent water. The intermittent supply is subject to reduction in the drier and driest years. To reduce reliance on intermittent surface water, the County of Sacramento intends to pursue additional firm supplies.
17. Northridge Water District (NWD) and other signatories have agreed that for an interim ten year period, NWD would be able to divert PCWA water in years when the projected March through November Unimpaired Inflow to Folsom Reservoir is greater than 950,000 acre feet. After the ten-year period, unless the State Water Resources Control Board issues a subsequent order, NWD will divert up to 29,000 acre feet of water from Folsom Reservoir under the NWD-PCWA contract only in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 1,600,000 AF.
18. Carmichael Water District will divert and use up to their license amount 14,000 acre feet . By the year 2030, it is most likely that the water demand for the District will be reduced to their historic baseline level of 12,000 acre feet by implementation of Urban Water Conservation Best Management Practices. Signatories to the *Water Forum Agreement* acknowledge and agree that CWD shall not relinquish control of or otherwise abandon the right to any quantity it has foregone delivery and/or diversion of under this *Agreement*, and shall retain the right (if any) to transfer that water for other beneficial uses, after that water has served its purpose of assisting in the implementation of the Improved Pattern of Fishery Flow Releases, for diversion or rediversion at, near, or downstream of the confluence of the Lower American River and the Sacramento River. The signatories also recognize that any such transfer of water by CWD must be in accordance with applicable provisions of federal and state law.
19. This is an agreed upon amount which is within the historic diversion data and is equivalent to Folsom's treatment capacity as of 1999.
20. Replacement of water to the river as a dry year action as provided in PCWA's specific agreement is contingent on PCWA's ability to sell this water to the Department of the Interior to meet Anadromous Fishery Restoration Program goals for the Lower American River or to other parties for their use after it flows down the Lower American River.
21. Remaining issues which are being negotiated are: 1) environmentalists' support for PCWA pumps at Auburn, 2) how water conservation Best Management Practice #5 (Large Landscape Water Audits and Incentives for Commercial, Industrial, Institutional and Irrigation Accounts) will be implemented, 3) environmentalists' support for conditions related to release of replacement water in drier and driest years.

DRAFT EIR MODELING ASSUMPTIONS FOR AMERICAN RIVER DIVERSIONS  
FOR PURVEYOR THAT HAVE NOT CONCLUDED THEIR NEGOTIATIONS

To meet requirements of the California Environmental Quality Act, the Water Forum Programmatic EIR assessed impacts of all reasonably foreseeable diversions that may occur in the watershed. For the Water Forum EIR, potential diversions of the purveyors shown in the chart below were modeled as part of the Water Forum Proposal based on preferences communicated by representatives of purveyor's listed on this chart.

However, mutually acceptable agreements have not been reached on how Arcade Water District, Rancho Murieta CSD, El Dorado Irrigation District, and the Georgetown Divide PUD would participate in all elements of the *Water Forum Agreement*. These suppliers have entered into Procedural Agreements with the Water Forum to negotiate mutually acceptable agreements in the future. In addition, Arden Cordova Water Service has decided not to participate in the *Water Forum Agreement*.

Modeling does not imply that there is agreement on diversions described below. Nor does it imply that all stakeholder representatives believe that all of these diversions will necessarily occur. Diversions shown on this chart will be included as part of the *Water Forum Agreement* only if there are mutually acceptable agreements.

WATER PURVEYOR	1995 BASELINE(1)	2030 DIVERSION (wet/ave years)	2030 DIVERSION (drier years)	2030 DIVERSION (driest years) (2)
Arcade WD	3,500 AF	11,200 AF	11,200 AF	3,500 AF
Arden Cordova Water Service	3,500 AF	5,000 AF (3)	5,000 AF(4)	5,000 AF
El Dorado ID	20,000 AF	48,400 AF (3)	Decreasing from 48,400 to 38,900 AF(4)	38,900 AF
Georgetown Divide PUD (5)	10,000 AF	18,700 AF (3)	Decreasing from 18,700 to 12,500 AF(4)	12,500 AF
Rancho Murieta CSD	0 AF	1,500 AF (6)	1,500 AF (6)	0 AF

Footnotes (Assumptions included in these footnotes are for EIR modeling purposes only. Modeling these diversions does not imply there is agreement on these assumptions):

1. Baseline: As it applies to these diversions, Baseline means the historic maximum amount of water that suppliers diverted annually from the American River through the year 1995.
2. Driest Years (i.e. Conference Years): For purposes of the *Water Forum Agreement*, years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 400,000 acre feet. Conference years are those years which require diverters and others to meet and confer on how best to meet demands and protect the American River.
3. Wet/Ave Years: As it applies to these diverters, years when the projected March through November Unimpaired Inflow to Folsom Reservoir is greater than 950,000 acre feet.
4. Drier Years: As it applies to these diverters, years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 950,000 acre feet.
5. For this supplier, some or all of their water supply diverted from the American River or Folsom Reservoir in the drier and driest years could be replaced with water released from PCWA's Middle Fork Project Reservoirs by reoperating those reservoirs.
6. As it applies to this diversion, water in Wet/Ave and Drier Years is diverted at the mouth of the American River or from the Sacramento River.

## **II. ACTIONS TO MEET CUSTOMERS' NEEDS WHILE REDUCING DIVERSION IMPACTS IN DRIER YEARS**

### **A. Intent**

This element is to ensure that sufficient water supplies will be available to customers in drier years as well as wetter years. The regional economy is dependent on a reliable water supply being available for our businesses and homes in all years. The intent of this element of the agreement is that purveyors continue to meet their customers' needs to the year 2030 while minimizing diversion impacts in drier and driest years.

It is envisioned that American River diversions by purveyors in the region in average and wetter years above H street would increase from the current level of 216,500 acre feet annually to about 481,000 acre feet annually by the year 2030.

With adequate mitigation, these diversions in average and wetter years can be accomplished while still preserving the fishery, wildlife, recreational and aesthetic values of the Lower American River.

However, the river is already stressed in drier years. The health of the fishery would degrade if Lower American River flows were decreased by these amounts in drier years.

Considerable effort has been taken to identify how purveyors diverting from the American River can implement specific actions to meet their customers' needs in drier and driest years with reduced diversions. Actions include: conjunctive use of groundwater basins consistent with the sustainable yield objectives; utilizing other surface water resources; reservoir reoperation; increased conservation during drier and driest years; and reclamation.

It is recognized that over time changes might be appropriate in the mix of dry year actions selected.

### **B. Dry Year Actions**

In addition to extraordinary conservation in drier and driest years, the *Water Forum Agreement* includes three alternative ways for purveyors to accomplish this objective.

The first is by purveyors limiting their additional American River diversions in drier and driest years. The drier the year, the more the purveyors would limit their American River diversions. By the driest years, purveyors would limit their American River diversions to baseline amounts. "Baseline amount" means the historic maximum amount of water that a purveyor diverted from the American River in any one year through the year 1995 or in certain appropriate instances other amounts specified in a Purveyor's Specific Agreement. Purveyors would continue to meet their customers' needs in drier and driest years through supply alternatives such as increased use of groundwater.

There is a second method by which some purveyors who currently divert upstream from Folsom Reservoir could meet their customers' needs and minimize impacts on Folsom Reservoir inflows and Lower American River fisheries. The signatories to the *Water Forum Agreement* would provide their support to a purveyor that chooses to continue its increased American River diversions in drier or driest years, if in the drier years there was a release of replacement water upstream of Folsom Reservoir. The drier the year, the greater the amount of water that would be replaced. By the driest years the amount of water replaced would be equivalent to the purveyor's increased diversions over baseline or, in certain appropriate instances, other amounts specified in the Purveyor's Specific Agreement.

One source of this replacement water in drier or driest years would be water not normally released in those years from the Placer County Water Agency's (PCWA) Middle Fork Project.<sup>1</sup> Adequate assurances that the replacement water will be released are specific to each purveyor and are included in the Specific Agreements for any purveyors intending to use this method. Any other method of replacing water consistent with the two coequal goals of the Water Forum would be considered.

The third way that purveyors could meet at least a portion of their needs is by diversions from the Sacramento River. Any Sacramento River diversion would avoid direct impacts on the American River.

The chart in Section Three, I entitled, "*1995 and Proposed Year 2030 Surface Water Diversions*" summarizes the proposed drier and driest year diversions for each purveyor. Specific information for each purveyor is found in Section Five, I, Purveyor Specific Agreements.

### **C. Specific Agreement on Actions to Meet Customers' Need While Reducing Diversion Impacts in Drier Years**

Purveyors will implement actions in drier and driest years to meet their customers' water needs while at the same time reducing diversion impacts. Specific diversion amounts for each purveyor are found in Section Five, I, Purveyor Specific Agreements and are summarized in the chart in Section Three, I entitled, "*1995 and Proposed Year 2030 Surface Water Diversions*."

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<sup>1</sup> For the initial *Water Forum Agreement*, this dry year action applies to the City of Roseville and the Placer County Water Agency. A mutually agreed upon assurance related to this dry year action for the City of Roseville is contained in its Purveyor Specific Agreement. The assurance for this dry year action as it applies to Placer County Water Agency is a remaining issue.

### **III. SUPPORT FOR IMPROVED PATTERN OF FISHERY FLOW RELEASES FROM FOLSOM RESERVOIR**

#### **A. Intent**

This element supports needed assurances for continued implementation of a pattern of water releases from Folsom Reservoir that more closely matches the needs of anadromous fish, in particular fall-run chinook salmon.

Since construction of Folsom Dam and Reservoir, the U. S. Bureau of Reclamation (Bureau) has made releases legally constrained only by the outdated fish flow requirements of State Water Resources Control Board Decision 893. It allows flows in the river during dry years to be as low as 250 cubic feet per second, although the Bureau releases greater amounts. Since the standard was adopted and Folsom and Nimbus dams were constructed, the fishery has significantly declined.

Until recently the Bureau made relatively higher releases in the summer and reduced releases in the fall. This does not match the life cycle needs of fall-run chinook salmon which need more cool water in the fall and are not present in the summer.

An extensive hydrological and biological analysis found that with the historic pattern of releases from Folsom Reservoir, increased diversions envisioned by the Water Forum would have unacceptable impacts on the Lower American River fishery.

Beginning in December 1994, the Water Forum convened a Fish Biologists' Working Session of fish experts with special knowledge of the Lower American River. Their charge was to develop recommendations on an improved pattern of releases. Participants included representatives from the U.S. Fish and Wildlife Service, California Department of Fish and Game, State Water Resources Control Board, U.S. Bureau of Reclamation, and representatives from the Water Forum.

After several months, participants in the Fish Biologists' Working Session came to general agreement regarding which fish species should be given priority when there are constraints in water availability. They also developed an Improved Pattern by which available water can be released from Folsom Reservoir in a "fish friendly" manner consistent with the reservoir's flood control objectives.

This Improved Pattern of Fishery Flow Releases from Folsom Reservoir will somewhat reduce summer flows to conserve water to allow increased releases in the fall. Their conclusion is that this Improved Pattern will maximize instream flows and temperature conditions for fall-run chinook salmon in the Lower American River.

In 1998, steelhead were listed under the Endangered Species Act as threatened. Therefore the Bureau is required to operate Folsom Dam in a way that does not jeopardize the continued existence of these fish.

It is recognized that as additional information becomes available in the future it could be beneficial to further refine this Improved Pattern. In addition there needs to be flexibility in implementing an Improved Pattern to reflect real time ecological considerations. This is sometimes referred to as "adaptive management."

It is the intent of the signatories to the *Water Forum Agreement* that an Improved Pattern of Fishery Flow Releases from Folsom Reservoir be permanently implemented recognizing that over time this Improved Pattern may be refined to reflect updated understanding of the fishery. One way this will be implemented will be an updated State Water Resources Control Board flow standard for the Lower American River. It is also the intent that there be flexibility ("adaptive management") in the implementation of an Improved Pattern to reflect real time ecological considerations.

In the future there will also be transfers of water among signatories to the *Water Forum Agreement* and conceivably to other organizations that are not signatories. It is the intent that any transfers of American River water be delivered in a manner consistent with an Improved Pattern of Fish Flow Releases. The Water Forum Successor Effort will develop guidelines for determining consistency.

## **B. Improved Pattern of Fishery Flow Releases From Folsom Reservoir**

The Central Valley Project Improvement Act was passed in 1992. This law authorized fish and wildlife restoration as an additional purpose of the Central Valley Project. It also required the federal government to develop an Anadromous Fish Restoration Program (AFRP) plan including implementation of an improved pattern of fishery flow releases from Folsom Reservoir to benefit anadromous fish.

Since 1996 the Bureau, in consultation with the U.S. Fish and Wildlife Service and the California Department of Fish and Game, has attempted to release water from Folsom Reservoir in a manner consistent with the flow objectives for the Lower American River to the extent Reclamation's available water supply has permitted it to do so. Their AFRP flow objectives for the Lower American River are set forth in the November 20, 1997 "Department of the Interior Final Administrative Proposal on the Management of Section 3406 (b) (2) Water." They are essentially the same as the Improved Pattern of Fishery Flow Releases developed by the Fish Biologists' Working Session which was convened by the Water Forum. It is recognized that in the process of updating the Lower American River standard it will be necessary to make some corrections to the AFRP flow objectives for the Lower American River. These corrections include some typographic corrections as well as inclusion of target carryover storage amounts for Folsom Reservoir.

For purposes of the *Water Forum Agreement*, the Improved Pattern of Fishery Flow Releases is defined as a release pattern consistent with the corrected version of the AFRP flow objective for the Lower American River as set forth in the November 20, 1997 "Department of the Interior Final Administrative Proposal on the Management of Section 3406 (b) (2) Water" (see Appendix I of this *Water Forum Agreement*).

The Bureau is working to formalize this improved pattern of fishery flow releases through both the Operational Criteria and Plan for the Central Valley Project (OCAP) and the AFRP of the Central Valley Project Improvement Act. OCAP and AFRP are the federal government's rules for how the Central Valley Project will be operated.

The increased diversions in the *Water Forum Agreement* would be permanent. Therefore it is essential that an Improved Pattern also be implemented by the Bureau on a permanent basis. Therefore one of the essential requirements of the *Water Forum Agreement* is that the State Water Resources Control Board update the Lower American River flow standard.

### **C. Specific Agreement on Support for Improved Pattern of Fishery Flow Releases from Folsom Reservoir**

As part of the *Water Forum Agreement* all stakeholders will actively endorse permanent implementation of an Improved Pattern of Fishery Flow Releases from Folsom Reservoir while recognizing that over time this Improved Pattern may be refined to reflect updated understandings of the fishery. It is also agreed that there will be flexibility ("adaptive management") in the implementation of an Improved Pattern to reflect real time ecological considerations.

The *Water Forum Agreement* is based on the expectation that the Improved Pattern of Fishery Flow Releases would be implemented consistent with the AFRP Lower American River flow objectives in the November 20, 1997 Final Administrative Proposal with some corrections. Therefore, if the Department of the Interior substantially changes the AFRP flow objectives for the Lower American River, it would be considered a changed circumstance that would have to be considered by the Water Forum Successor Effort.

The signatories' support for the increased diversions is dependent on adequate assurances of the Bureau's permanent implementation of an Improved Pattern as described above. One form of assurance will be an updated State Water Resources Control Board flow standard for the Lower American River. Other assurances will be in the form of participation in the Operational Criteria and Plan (OCAP) process; and participation in the Central Valley Project Improvement Act Environmental Impact Statement (PEIS). Adequate forms of assurance are more fully described in the Assurances and Caveats Section of the *Water Forum Agreement* (Section Four, I).

It is further agreed that any transfers of American River water by signatories be delivered in a manner consistent with an Improved Pattern of Fishery Flow Releases as described above.

One of the functions of the Water Forum Successor Effort will be to ensure that an Improved Pattern as described above is permanently implemented recognizing that over time that this Improved Pattern may be refined to reflect updated understanding of the fishery.

#### **IV. LOWER AMERICAN RIVER HABITAT MANAGEMENT ELEMENT**

##### **A. Intent**

The Habitat Management Element (HME) for the Lower American River, combined with other elements of the *Water Forum Agreement*, is intended to fulfill one of the Water Forum's two coequal objectives:

***Preserve the fishery, wildlife, recreational, and aesthetic values of the Lower American River.***

The HME is necessary to comply with the California Environmental Quality Act's (CEQA) requirement to avoid or lessen, to the extent reasonable and feasible, all significant impacts to the Lower American River resulting from future increased surface water diversions identified in the *Water Forum Agreement*. The HME has been incorporated into the Water Forum Environmental Impact Report.

The HME is also an important issue for another reason. In 1998, steelhead on many rivers, including the American, were listed as threatened under the federal Endangered Species Act. As purveyors proceed with their diversion projects, they will have to consult with resource agencies. Under the Endangered Species Act, projects can move forward only if the resources agencies find that they will not jeopardize the continued existence of the species.

The Habitat Management Element will be implemented for the term of the *Water Forum Agreement* - to the year 2030.

##### **B. Lower American River Habitat Management Element**

The Lower American River HME will contain five programmatic components that together will address flow, temperature, physical habitat, and recreation issues for the Lower American River: Habitat Management Plan; Habitat Projects that Benefit the Lower American River Ecosystem; Monitoring and Evaluation; Project-Specific Mitigation; and Lower American River Recreation.

1. The Lower American River Habitat Management Plan will include detailed descriptions of all reasonable and feasible projects that could be implemented to avoid and/or offset potential impacts to Lower American River fishery and riparian resources due to the increased surface water diversions defined under the *Water Forum Agreement*.

The Plan will also identify and define:

- a. Performance standards to be used as indicators of the health of the Lower American River (e.g. flows, temperatures, etc.)
- b. The conceptual (e.g., mitigation banking or other) and technical framework for the Habitat Management Program;

- c. Schedule and technical assistance required for development, implementation, and monitoring of the Habitat Management Program;
- d. How the Habitat Management Program will be coordinated with other programs, plans, initiatives, and/or mandates that affect the Lower American River ecosystem;
- e. Logistics and responsibilities associated with administering the Habitat Management Program;
- f. Implementation priorities, strategies, and schedules for the proposed projects;
- g. Lead organizations for implementation of each project;
- h. How the Habitat Management Program could serve as the framework for addressing any Endangered Species Act requirements; and
- i. Cost-sharing obligations and specific funding commitments.

Moreover, the Habitat Management Plan will outline protocols for Plan updating, and will clearly identify the type, amount, and costs for all technical assistance that will be required to develop/update, administer, implement, and monitor the Habitat Management Program.

Consultant services and other technical assistance will be acquired to: 1) effectively develop, implement, administer, and monitor the success of the Habitat Management Program; and 2) provide input to federal and state agencies for actions that will contribute to the preservation of the values of the Lower American River. This will ensure that there is effective advocacy to achieve a “fair share” of CVPIA Restoration Funds allocated to Lower American River improvements, real-time implementation of the Improved Fishery Flow Pattern Releases (focusing on the volume, temperature, and timing of flows), and preservation of riparian habitat.

Within the first 12 months after the *Water Forum Agreement* is signed, the Habitat Management Plan will be completed and adopted.

2. Projects that Benefit the Lower American River Ecosystem have been identified by the CALFED American River Technical Team. Currently, 22 potential projects/studies have been identified for the Lower American River. Those that could be appropriately supported through the Water Forum Successor Effort are identified in Table 1. Additional projects that could be supported by other agencies are identified in Table 2. The projects/studies identified in Table 1 are strictly potential candidates for inclusion, and should not be considered as a final array of management elements to be adopted by the Water Forum.

3. Monitoring and Evaluation will: 1) establish baseline conditions for future reference and assess the health of the Lower American River as diversions increase; and

2) assess the response of fish, wildlife, and riparian communities to the management/restoration projects implemented under the Habitat Management Plan as well as the increased diversions. Monitoring and Evaluation will also meet the CEQA requirement to have a mitigation monitoring plan.

Real time monitoring and regular evaluation are also necessary components of the adaptive management approach for the ongoing implementation of the *Water Forum Agreement*. Real time monitoring will be particularly useful to the Folsom Reservoir Operations Group as it makes monthly flow and temperature decisions.

Every five years the Water Forum Successor Effort will review the comprehensive evaluation of the health of the Lower American River ecosystem.

Regular evaluations conducted every five years will allow the Water Forum Successor Effort to comprehensively review the overall impacts of the *Agreement* on the health of Lower American River.

Specifics on the monitoring and evaluation program will be included in the Water Forum EIR.

4. Project-Specific Mitigation will be required of each purveyor to mitigate any site-specific impacts associated with their diversion. An example of such site-specific mitigation would be installing fish screens for new diversions or, potentially, improving existing diversion screens.

5. Lower American River Recreation: This component is intended to address effects on recreation along the Lower American River. Two components of the *Water Forum Agreement* have an effect on the recreational flows for the Lower American River. First, the Improved Pattern of Fishery Flow Releases results in lower summer time releases so that cold water can be conserved in Folsom Reservoir to benefit the fall-run chinook salmon. Second, the increased surface water diversions result in less water being available to flow down the entire length of the Lower American River.

In order to reduce the impacts of reduced recreational flows on the Lower American River an initial list of projects has been developed. These are summarized in Table 3 below. This list of projects will be refined over time.

Consideration will be given to locating projects in the service areas of purveyors contributing to the Lower American River Habitat Management Element. Preference will be given to those projects having the greatest nexus to the recreational impacts on the Lower American River resulting from implementation of the *Water Forum Agreement*.

Funding for recreation projects is included in the Habitat Management Element Cost Allocation Principles. Contributions to the HME would be for both Habitat and

Recreational projects, with the Water Forum Successor Effort deciding on annual expenditures.

**TABLE 1. Water Forum Cost-Sharing for Lower American River Habitat Projects.**

Proposed projects and studies for which the Water Forum could be a cost-share partner. Table 1 contains preliminary, rough cost estimates for years 2-4 and annual costs thereafter for the life of the *Water Forum Agreement*. Estimated costs can be expected to change and are provided here for discussion purposes only. In the first year up to \$340,000 of Water Forum funding will be used to: prepare the Habitat Management Plan; provide technical assistance; and develop and begin implementing the monitoring program. Amounts shown for contributions by other agencies represent the Water Forum's preliminary estimate of the funding that will be requested from those agencies. No commitments have yet been made by those external agencies.

PROJECT/STUDY	AGENCY	ANNUAL COST	
		Years 2-4	Ongoing
Wetland/Slough Complex	SAFCA	Unknown	To be determined
	CALFED	Unknown	
	Water Forum	\$25,000	
Shaded Riverine Aquatic Habitat	SAFCA	Unknown	To be determined
	CALFED	Unknown	
	Water Forum	\$25,000	
Tailrace Habitat Utilization Study	CALFED	\$15,000	Study complete
	Water Forum	\$15,000	
Thermal Refugia Utilization Study	CALFED	\$25,000	Study complete
	Water Forum	\$25,000	
Off-site Mitigation (if required)	Water Forum	Unknown	Unknown
Monitoring and Evaluation	SAFCA	\$100,000	\$100,000
	Water Forum	\$100,000	\$100,000
	CVPIA	\$100,000	\$100,000
Plan Development, Updating & Technical Assistance	SAFCA	\$150,000	\$70,000
	Water Forum	\$150,000	\$70,000
	CVPIA	\$150,000	\$70,000

**TABLE 2. Additional Lower American River Habitat Projects.** These are additional projects and studies that would be carried out by other organizations.

<b>Habitat Projects that Benefit the Lower American River Ecosystem</b>				
<b>Priority</b>	<b>Actions</b>	<b>Study or Project</b>	<b>Possible Funding Source(s)</b>	<b>Lead Organization</b>
High	New Flow Standards	Project	City of Sacramento	City of Sacramento
High	Flow Fluctuation Criteria	Project	CVPIA	USBR
High	Dry Year Flow Augmentation	Project	CVPIA	PCWA USBR/USFWS
High	Folsom Temperature Control Device (TCD)	Project	USBR	USBR
High	Folsom Reservoir Cold Water Pool Management	Project	SCWA Folsom SJWD USBR	USBR
High	Instream Cover (Woody Debris)	Project	ACOE SAFCA	ACOE SAFCA
High	Flood Control Channel Improvement	Project	SAFCA ACOE	SAFCA
High	Spawning Habitat Management/Maintenance	Study, Project	CVPIA CALFED	CDFG USFWS
High	Hatchery Temperature Control	Project	USBR	USBR
High	Hatchery Management Practices	Project	USBR CDFG	CDFG
Moderate	Fire Management	Project	Sacramento County	Sacramento County
Low	Increase Artificial Production of Salmonids	Project	USBR CDFG	CDFG
Low	Angling Regulations	Project	CDFG	CDFG

Table 2. - continued

<b>Project-specific Mitigation</b>				
<b>Priority</b>	<b>Actions</b>	<b>Study or Project</b>	<b>Possible Funding Source(s)</b>	<b>Lead Organization</b>
	Fish Screen Improvement	Project	Water Forum purveyors with fish screens CVPIA	Water Forum purveyors

It is also recognized that the State Steelhead Restoration Plan includes a study of the feasibility of reintroduction of steelhead above Folsom Dam. Water Forum water purveyors are concerned that reintroduction not impose Endangered Species Act requirements on diversions upstream of Folsom Dam.

After the technical team prepared this list, an additional potential project was identified by the Department of Fish and Game. It would be beneficial to tag steelhead to determine the extent of natural spawning in the Lower American River.

LEGEND:

- ACOE - Army Corps of Engineers
- CVPIA - Central Valley Project Improvement Act
- Folsom - City of Folsom
- PCWA - Placer County Water Agency
- SAFCA - Sacramento Area Flood Control Agency
- SCWA - Sacramento County Water Agency
- SJWD - San Juan Water District
- USBR - United States Bureau of Reclamation
- USFWS - United States Fish and Wildlife Service

**TABLE 3. Initial Listing of Potential Projects to Address Effects on Lower American River Recreation**

<b>Project</b>	<b>Potential Funding Source(s)</b>	<b>Lead Organization(s)</b>
Update Recreation Element of the Lower American River Parkway Plan	Water Forum HME and Sacramento County	Water Forum Successor Effort, Sacramento County
Increase access to American River	Water Forum HME, Sacramento County, City of Sacramento	Water Forum Successor Effort, Sacramento County
Trails adjacent to waterways	Water Forum HME, Sacramento County, City of Sacramento	Water Forum Successor Effort, Sacramento County
Purchase and develop Uruttia property for recreational and environmental values	Sacramento County, Sacramento City, and Water Forum HME	Sacramento County and Sacramento City

**C. Relationship to a Coordinated Multi-Agency Lower American River Ecosystem Habitat Management Program (HMP)**

The Lower American River ecosystem is also affected by agencies outside the Water Forum. Many agencies have some type of jurisdiction over decisions that affect the ecosystem. Several outside agencies have responsibility and financial resources to benefit the Lower American River.

It is also recognized that the Water Forum Successor Effort will not by itself have sufficient funding to implement all the actions necessary to fully preserve the Lower American River ecosystem. Therefore it is intended that the Water Forum Habitat Management Element (HME) be undertaken as part of a coordinated Multi-Agency Lower American River Habitat Management Program (HMP) through the currently established Lower American River Task Force. It is proposed that this partnership be formalized by a Letter of Intent among:

- 7 The Water Forum Successor Effort (administered by the Sacramento City-County Office of Metropolitan Water Planning);
- 7 Sacramento Area Flood Control Agency (SAFCA);
- 7 CALFED (or its successor);
- 7 U.S. Bureau of Reclamation (CVP and CVPIA);

- 7 U.S. Fish and Wildlife Service;
- 7 National Marine Fisheries Service
- 7 California Department of Fish and Game;
- 7 Sacramento County Parks Department.

The Lower American River Task force will provide a forum through which the partnering agencies can pursue key objectives from other ongoing or planned state and federal initiatives involving the agencies identified above, including:

- 7 The Water Forum Habitat Management Element
- 7 the American River component of CALFED's Ecological Restoration Program Plan (ERPP);
- 7 SAFCA's emerging floodway management plan (FMP);
- 7 Sacramento County's American River Parkway Plan (ARPP); and
- 7 The federal Anadromous Fish Restoration Program (AFRP) of the Central Valley Project Improvement Act (CVPIA).

The Lower American River Task Force will also draw upon the expertise of groups such as the Folsom Reservoir Operations Work Group.

Membership on the Lower American River Task Force will be expanded to include a Water Forum environmental representative and a representative from the Sacramento County Water Agency representing purveyors who contribute to the Water Forum HME.

The Lower American River Task Force will oversee development of the detailed Lower American River Habitat Management Plan which will identify priorities for environmental restoration and enhancement.

Although each agency/organization represented on the Lower American River Task Force will retain autonomy over its own budget, the Lower American River Task Force will coordinate opportunities for costs sharing. Through the integration of ongoing and planned management/restoration efforts, the most effective program for the Lower American River will be developed, thereby providing maximum benefits to the river ecosystem. Moreover, through cooperation and cost-sharing, the costs to each organization for developing, implementing, and monitoring the Program will be minimized.

The Water Forum Successor Effort will informally evaluate this arrangement in six months with a formal evaluation at the end of one year to determine if the Water Forum should continue using the Lower American River Task Force as the vehicle to develop and implement the Lower American River Habitat Management Program.

## D. Water Forum Cost Allocation Principles

1. Proposed Lower American River habitat projects and studies that could be supported by the Water Forum Habitat Management Element are shown in Table 1. The initial listing of potential projects to address effects on Lower American River recreation that could be supported by the Water Forum Habitat Management Element is shown in Table 3.

### 2. Cost-Sharing among Water Forum Purveyors

a. The City of Sacramento and the Sacramento County Water Agency (through Zone 13) will commit to a combined total of \$375,000 annually to the Habitat Management Element (including an estimated, but not earmarked, \$35,000 annually for recreational projects.).

The City of Sacramento and Sacramento County Water Agency (SCWA) will commit to funding their share of the Habitat Element starting when they sign the *Water Forum Agreement*. Their contributions will fund the majority of the Water Forum's share of the core program, especially real time monitoring, evaluation, and planning. The City of Sacramento will contribute \$125,000 annually and SCWA will contribute \$250,000 annually using Zone 13 funds.

b. Sacramento County Water Agency Zone 13 funds will be used to meet the HME obligations for the purveyors serving the unincorporated areas of Sacramento County and in the City of Citrus Heights.

Property owners in the unincorporated areas of Sacramento county and in the City of Citrus Heights are assessed in their property taxes for county-wide water management expenses that could include many of the real time monitoring, evaluation and planning activities in the Habitat Management Program.

Therefore SCWA's Zone 13 contribution to the Habitat Management Element will cover the financial obligations of these water users serving the unincorporated area of Sacramento County and the City of Citrus Heights: 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.

c. Contributions from Other Purveyors.

Other purveyors signatory to the *Water Forum Agreement* that divert from the American River are the City of Folsom, Placer County Water Agency<sup>2</sup>, City of Roseville, and San Juan Water District in Placer County.

(1) Central Valley Project water. A portion of their increased diversions will be Central Valley Project water for which these purveyors contribute into the Central Valley Project Restoration Fund. The Water Forum Successor Effort will work to ensure that a fair share of those Restoration Funds will be spent on improvements to the Lower American River.

Therefore, these purveyors will not be contributing to the Water Forum Habitat Element for increased diversions of CVP water. If for any reason, the purveyors do not contribute to the CVP Restoration fund for increased diversions of CVP water over their baseline amounts (i.e. historic maximum amount of water diverted in any one year through the year 1995 or, in certain appropriate instances, other amounts identified in a purveyor's specific agreement), they would contribute to the Habitat Management Element as set forth below.

(2) Non-Central Valley Project water. Some purveyors will also be increasing their diversions of non-CVP water. For increased diversions of non-CVP water from the American River, purveyors would pay \$3 per acre foot when they divert the water. Increases are defined as amounts above their baseline (i.e. historic maximum amount of water diverted in any one year through the year 1995 or, in certain appropriate instances, other amounts identified in a purveyor's specific agreement). If a purveyor exchanges current CVP water deliveries with non-CVP water they will pay \$3 per acre foot for the water they exchange.

It is specifically recognized that Placer County Water Agency would only contribute to the HME for increased American River diversions of non-CVP water used by PCWA. Contributions to the HME for PCWA water used by San Juan Water District, City of Roseville, Northridge Water District and any other purveyors are not the responsibility of PCWA.

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<sup>2</sup> Placer County Water Agency's contribution to the Habitat Management Element is subject to resolution of the remaining issues identified in its Purveyor Specific Agreement.

### 3. Cost Cap

The City of Sacramento, Sacramento County Water Agency and other Water Forum signatories' commitments to financially contribute to the HME are capped at the dollar amounts shown in sections a, b, and c above, adjusted only for inflation as set by the January issue of the "*Engineering News Record*" published Construction Cost Indexes for U.S. - 20 Cities Average and for the San Francisco Bay Area. The annual adjustment index would be calculated using the average of the cost indexes for these two areas.

If the Water Forum balance in the Habitat Management Element fund exceeds \$1 million of unearmarked funds, annual contributions would be reduced or deferred until the unearmarked balance went below \$1 million.

Every five years the Water Forum Successor Effort will review the evaluation of the health of the Lower American River ecosystem. At those times, any signatory to the *Water Forum Agreement* can request that the Water Forum Successor Effort renegotiate the Cost Cap to increase or decrease the amount based on the needs at that time. Any increase or decrease would have to be approved by the signatories to the *Water Forum Agreement*.

4. Through the Multi-Agency Effort, agencies in addition to the Water Forum Successor Effort and its signatory agencies will be requested to contribute to the Lower American River Habitat Management Program budget. Total costs shared by all partners, (including Water Forum and requested cost-sharing from SAFCA, U.S. Bureau of Reclamation and CALFED) for each of the two years after development of the Habitat Management Program are estimated to be approximately \$915,000. Annual costs thereafter for monitoring, evaluation, plan updating and technical assistance are estimated to be approximately \$510,000. Additional funding will be needed for projects identified in the Habitat Management Plan and recreational projects.

This program assumes significant financial contributions from other members of the Multi-Agency Lower American River Habitat Management Program. If that does not occur, it would be considered a changed circumstance requiring renegotiation.

### 5. Project Specific Mitigation.

Any project-specific habitat mitigation, (e.g. fish screens at diversion facilities) or recreation mitigation is the responsibility of individual purveyors. Costs for project specific mitigation are not eligible for funding under the Habitat Management Element.

## **E. Adaptive Management**

The Habitat Management Program is based on the principal of "adaptive management," which allows for flexibility in making future resource-management decisions as additional data become

available. Information collected under the on-going Monitoring and Evaluation will be fed back into the management decision making process on a real-time basis.

It is recognized that monitoring and evaluation may identify adverse impacts not currently anticipated. If the unanticipated impacts are significant, this would be considered a changed condition. The Water Forum Successor Effort would meet and confer on options for mitigating these unanticipated impacts.

Options include additional habitat measures to reduce or eliminate the adverse impacts. Funding could come from the purveyors signatory to the *Water Forum Agreement* or other partners in the Multi-Agency Lower American River Habitat Management Program. If unanticipated significant adverse impacts cannot be mitigated, this would be considered a changed circumstance requiring renegotiation of the relevant portions of the *Water Forum Agreement*.

If the Lower American River is designated as critical habitat for an endangered or threatened species, the Endangered Species Act may require a higher level of mitigation than that anticipated to be paid from the Habitat Management Element. Thus, if the Lower American River is designated as critical habitat, it may be considered a changed condition to be addressed by the Water Forum Successor Effort.

**F. Specific Agreement for the Lower American River Habitat Management Element.**

All signatories will support and where appropriate, participate in the Lower American River Habitat Management Element as set forth above.

## V. WATER CONSERVATION ELEMENT

### Introduction

This Water Conservation Element is essential to meeting both of the coequal goals of the Water Forum. First, conserved water will be available to help supply increased demand. Secondly, conservation will minimize the need for increased groundwater pumping and increased use of surface water, including water diverted from the American River.

Continued commitment to water conservation will benefit water purveyors, customers, and the environment because it:

Reflects growing public support for the conservation of limited natural resources and adequate water supplies.

Allows water districts to optimize the use of existing facilities.

Delays or reduces the capital investments required for capacity expansion of water and wastewater treatment facilities even though the service area may grow.

Is essential for the state and federal agency approvals which will be required for specific projects.

### MUNICIPAL AND INDUSTRIAL WATER CONSERVATION

#### A. Intent

Water purveyors in the region have been working hard to conserve water through implementation of a number of water conservation Best Management Practices (BMP's). The Water Conservation Element of the *Water Forum Agreement* is intended to set forth the water purveyors' programs for implementing all of the BMP's. They were adapted from the Statewide Memorandum of Understanding (MOU) Regarding Urban Water Conservation Best Management Practices and have been customized for use by the Water Forum.

This Water Conservation Element contains the basic components of Water Conservation Plans that will be implemented by the purveyors. Conservation Plans for each purveyor are incorporated as Appendix J to this *Water Forum Agreement* (separately bound and on file at the Water Forum office).

#### B. Purveyors Receiving Central Valley Project Water Supplies

**San Juan Water District, Citrus Heights Water District, Fair Oaks Water District, Orange Vale Water District, Sacramento County, City of Roseville, City of Folsom, El Dorado Irrigation District, Georgetown Divide Public Utility District, and Placer County Water Agency** are, or will become, users of Central Valley Project water supplies. As such they are

subject to the water conservation provisions of the Central Valley Project Improvement Act (CVPIA). CVPIA conservation requirements and related costs are independent of the *Water Forum Agreement*.

### C. Basic Elements of Water Conservation Plan for Municipal and Industrial Uses

1. RESIDENTIAL<sup>3</sup> METER RETROFIT (BMP # 4) and CONSERVATION PRICING (BMP #11) Volumetric measurement and conservation pricing are essential elements of a water conservation program. Water users need to be able to know how much they are using in order to be efficient. Users need accurate economic signals -- which require volumetric measurement and conservation pricing -- in order to encourage the use of water in the most efficient manner possible.

a. **El Dorado Irrigation District, Georgetown Divide Public Utility District, Placer County Water Agency, Rancho Murietta Community Services District, and Rio Linda/Elverta Community Water District.** These five purveyors are already fully metered and use volumetric billing.

b. **San Juan Water District, Citrus Heights Water District, Fair Oaks Water District, Orange Vale Water District, Sacramento County, City of Roseville, and City of Folsom.** It is recognized that CVPIA meter retrofit provisions are outside the scope of the *Water Forum Agreement* and that they require faster implementation than what is included in the *Water Forum Agreement*. Purveyors signing the *Water Forum Agreement* who receive CVP water agree that if for any reason any or all of their service area is not immediately or in the future subject to the CVPIA meter retrofit requirement, beginning no later than the start of the fourth year after the *Water Forum Agreement* is signed they would annually retrofit at least 3.3% - 5% of the total number of unmetered residential connections as of the date of the *Water Forum Agreement*.

c. In the first two years after the *Water Forum Agreement* is signed, the **Northridge Water District, the Carmichael Water District, and Citizens Utilities** would plan for, budget, and prepare the public for a residential meter retrofit program. Beginning no later than the start of the fourth year after the *Water Forum Agreement* is signed these purveyors would retrofit at least 3.3% - 5% of the total number of unmetered residential connections as of the date of the *Water Forum Agreement*.

d. **City of Galt, Florin County Water District, Del Paso Manor County Water District.** It is recognized that residential water meter retrofit along with quantity based pricing are important tools for improving the efficiency of water use. This helps extend the supply while also reducing the need for increased groundwater pumping or diversions from the American River.

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<sup>3</sup> "Residential" for purposes of defining the scope of this BMP is defined as single family or duplex customers.

It is also recognized that these three relatively smaller water purveyors currently rely totally on groundwater and will not realize immediate water supply benefits from participating in the *Water Forum Agreement*. Therefore until such time as these three purveyors need discretionary approvals for new or expanded surface water supplies, an active voluntary meter retrofit with incentives is acceptable. Nothing in the *Water Forum Agreement* prevents purveyors from deciding to undertake a more rapid meter retrofit program.

At such time as any of these purveyors needs discretionary approvals for new or expanded surface water supplies they agree to annually retrofit at least 3.3% - 5% of the total number of unmetered residential connections and read and bill as set forth below.

If in the future any of these purveyors receives benefits from another agency's conjunctive use program, it agrees to discuss its meter retrofit program with the Water Forum Successor Effort.

e. **City of Sacramento:** 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.

f. Water Forum signatories would not implement local retrofit on resale, or any other requirements that would impose escrow or disclosure responsibilities on realtors. This provision would not apply to the City of Sacramento since their Charter prohibits mandatory residential metering. All purveyors would retain the ability to implement incentives for a voluntary meter retrofit at time of resale that would not impose escrow or disclosure requirements.

g. In administrative proceedings related to statewide matters such as the Bay-Delta water rights proceeding, signatories to this *Agreement* may need to advocate statewide meter retrofit schedules different than what is included in this *Agreement*.

h. All signatories to the *Water Forum Agreement* will actively support the California Public Utilities Commission (CPUC) allowing investor-owned utilities to recover all costs of meter retrofit through rates.

i. As soon as practical, purveyors signatory to the *Water Forum Agreement* will begin reading all meters and including the usage on the customers' bills. This includes meters required in new construction since 1992 and meters retrofit onto existing connections. It is recognized that circumstances vary purveyor by purveyor. However the general guideline used for negotiating each purveyor's water conservation plan was that purveyors would read the meters and provide usage information within three years of signing of the

*Water Forum Agreement*. Each purveyor's schedule for implementing this provision is included as part of its Water Conservation Plan.

j. As soon as practical, purveyors will implement conservation pricing which bases customer charges on the quantity of water used. With conservation pricing, the unit rate is constant regardless of quantity used (uniform rate) or the rate increases as the quantity of water used increases (increasing block rate). It is recognized that circumstances vary purveyor by purveyor. However the general guideline used for negotiating each purveyor's water conservation plan was that purveyors would base customer charges on the quantity of water used within six years of signing of the *Water Forum Agreement*. Each purveyor's schedule for implementing this provision is included as part of its Water Conservation Plan.

2. NON- RESIDENTIAL METER RETROFIT (BMP #4) Purveyors will retrofit at least 85% - 90% of non-residential customers within ten years. Complete non-residential retrofit is not a requirement. This is in recognition of the fact that there could be some smaller non-residential customers whose service locations could be very difficult and expensive to retrofit.

3. RESIDENTIAL ULTRA-LOW FLUSH TOILET REPLACEMENT PROGRAM (BMP #16) California Plumbing Codes require the installation of Ultra-low Flush (ULF) (1.6 gallon) toilets in new construction which saves approximately 3.5 gallons per flush over older models. ULF toilet retrofitting programs have shown that the water savings average 44 gallons per day for toilets replaced in a multiple family complex and 28 gallons per day saved in single family retrofits.

Purveyors are encouraged, but not required, to establish residential toilet replacement programs. This could be done in conjunction with any toilet replacement programs implemented by sanitation districts. It could also be implemented in cooperative programs with community organizations.

4. NON-RESIDENTIAL TOILET PROGRAM (BMP #16) Purveyors will provide incentives for replacement of non-residential toilets with ULF toilets. This could also be done in conjunction with any toilet replacement program implemented by sanitation districts.

5. BEST MANAGEMENT PRACTICES OTHER THAN METERS, CONSERVATION PRICING, AND TOILETS If they have not already done so, purveyors will start implementing the remaining Best Management Practices (BMP's) within three years of signing the *Water Forum Agreement* in a manner consistent with the Water Forum BMP Implementation Criteria (see Appendix D). These criteria were adopted on July 28, 1997 by the Water Forum. They were adapted from the Statewide Memorandum of Understanding (MOU) Regarding Urban Water Conservation Best Management Practices (BMPs) developed by the California Urban Water Conservation Council (CUWCC) and have been customized for use by the Water Forum. These criteria include a Functional Equivalency Provision which in some cases allowed purveyors to negotiate alternative implementation methods that will be as effective as the standard criteria.

The Water Forum Successor Effort will facilitate “changed conditions” negotiations to determine how BMP’s adopted or amended by CUWCC after July, 1997 will be incorporated into the Water Forum purveyors’ Water Conservation Plans.

If Water Forum signatories are unable to agree on how BMP’s adopted or amended by CUWCC after July, 1997 will be incorporated into the Water Forum purveyors’ Water Conservation Plans, individual signatory organizations can advocate how they believe those new BMP’s should be implemented. This can be done as part of the review of environmental documentation or in legislative, administrative, regulatory and other venues.

6. CITIZEN INVOLVEMENT PROGRAM In the implementation of BMP's (especially meter retrofit and pricing programs) the water purveyors will establish a citizen involvement program, such as citizen advisory committees, to help design, implement and market water conservation programs. Each purveyor will establish this program within three years of signing the *Water Forum Agreement*, if they do not already have a program established. Each purveyor's citizen involvement program is described in its Water Conservation Plan.

7. WATER CONSERVATION PLANS INCLUDED AS AN APPENDIX TO THE WATER FORUM AGREEMENT The Water Conservation Plans provide the way for water purveyors to identify and then report their progress toward the implementation of the BMP's and for all parties to confirm that the Conservation Element of the *Agreement* is being implemented. Water Forum's stakeholder representatives negotiated with each purveyor the specifics of that purveyor's Water Conservation Plan.

Components of the Water Conservation Plans are:

- a. Description of how the purveyor will implement each BMP;
- b. Annual targets, staffing, and budgets for each of the initial four years;
- c. Description of how the purveyor will implement its citizen involvement program;
- d. Past (at least from 1975 on) and projected total water use to the year 2030 - demonstrating consistency with assumptions used in *Water Forum Agreement* (see Appendix D for format); and
- e. Past (at least from 1975 on) and projected per capita water use to the year 2030 (see Appendix D for format.).

8. IMPLEMENTATION OF WATER FORUM BMP’S FOR NEW OR EXPANDED SERVICE AREA A purveyor’s agreed upon Water Forum Water Conservation Plan shall be implemented for its entire service area including future changed boundaries.<sup>4</sup>

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<sup>4</sup> See City of Folsom Purveyor Specific Agreement (Section D) for further information on this item.

9. ANNUAL REPORTS Water purveyors will prepare annual reports on the implementation of water conservation activities as outlined in their Water Conservation Plans. These reports will be shared with the Water Forum Successor Effort.

a. Purveyors will annually report their conservation activities for prior year and compare total and per capita water use with their original projections. (i.e., updating the charts originally prepared for item 7 d and e above.)

b. If there were any significant differences from what water conservation activities or results were planned, an explanation of the differences will be included. If water conservation results were significantly less than anticipated, an indication of how the results will be achieved in the future will be described.

c. Each purveyor's progress toward BMP implementation will be annually reviewed and reported by the Water Forum Successor Effort.

10. UPDATING WATER CONSERVATION PLANS Purveyors will update their Water Conservation Plans every five years.

**D. Specific Agreement on the Water Conservation Element for Municipal and Industrial Uses**

All signatories will support, and where appropriate, participate in the Water Conservation Element as set forth above and as described in their Water Conservation Plans negotiated for the *Water Forum Agreement*. Purveyors' Water Conservation Plans are incorporated as Appendix J to this *Water Forum Agreement* and are on file at the Water Forum office.

## AGRICULTURAL WATER CONSERVATION

In 1990, agriculture in Sacramento County contributed to nearly 48% of the water demand for the area. It is projected that the future water demand for agriculture will drop to approximately 29% by 2030. This is due to a number of reasons including the conversion of agricultural land to urban uses as anticipated by the adopted General Plans. Another reason for water use reduction is that agriculture in Sacramento County is projected to become more water efficient. By the year 2030 irrigation efficiencies are expected to increase by 5%.

The amount of water used by agriculture is determined by the crops grown, the type of irrigation system, and the incentives or regulations in place to increase irrigation efficiencies.

In the northwest section of Sacramento County the principal crop is rice. Water is supplied by the Natomas Central Mutual Water Company (NCMWC) which is a Central Valley Project (CVP) contractor. NCMWC has been conserving water since 1986 through the installation of recirculation systems which reduce water diversions while growing the same amount of crops. These systems have reduced water use in rice fields by 26%. In the future, NCMWC will continue to conserve surface water by conjunctive use. By pursuing this additional method, it is expected that another 5% could be saved. Other efforts, such as lined canals in sandy soil, tiered pricing, and other controls are expected to gain additional efficiencies.

In the southern section of Sacramento County, water is supplied principally through the pumping of groundwater. One incentive to reduce agricultural water use in this area has been the cost of electricity to pump groundwater. Since the early 1950's the south County agricultural irrigation districts (Galt, Clay, Omochumne-Hartnell) have been practicing water conservation by installing recirculating systems so water would not be lost at the end of the fields and drip irrigation systems for certain row crops. It is estimated that these methods have reduced water use by up to 50% compared to field irrigation. By implementing additional conservation measures it is expected that another 5% could be saved by 2030.

Much of the surface water currently used by agriculture in the Sacramento region is from the Central Valley Project (CVP). In addition, as provided for in the Purveyor Specific Agreement for South Sacramento County Agriculture, the agricultural irrigation districts (Galt, Clay, Omochumne-Hartnell) in the southern section of Sacramento County plan to divert and use up to 35,000 acre feet from Folsom-South Canal in years when the projected March to November unimpaired inflow to Folsom Reservoir is greater than 1,600,000 acre feet. This will augment their groundwater supplies. This surface water most likely will come from the CVP. Surface water from the CVP for agricultural use is subject to the conservation requirements of the CVP Improvement Act of 1992 including criteria for Best Management Practices (BMPs) for Agricultural Contractors.

Support for this diversion is linked to successful negotiation of an agricultural water conservation program. Specifics on the Water Forum's agricultural water conservation program will be negotiated by the Water Forum Successor Effort.

## **VI. GROUNDWATER MANAGEMENT ELEMENT**

Developed jointly by the Sacramento Metropolitan Water Authority Groundwater Committee and the Sacramento Water Forum Groundwater Negotiation Team.

### **A. Intent**

Our vital groundwater resource supplies over half the water used in the region. The purpose of a groundwater management plan is to protect the viability of that resource for both current and future users. To do so requires monitoring the amount of water withdrawn from the groundwater basin and promoting the use of groundwater in conjunction with surface water supplies to maximize the availability of both. This must be accomplished by creating publicly accountable governance structures which respect the rights of all groundwater users. Ideally, these structures should be established using existing authority and institutions.

This document contains recommendations by which to monitor the amount of groundwater which can be pumped from the basin over a long period without damaging the aquifer (sustainable yield). The Sacramento North Area Groundwater Management Authority was established in August 1998 using the existing authority of the City of Sacramento, the City of Folsom, City of Citrus Heights, and County of Sacramento through adoption of a Joint Powers Agreement. In the South Area and the Galt Areas of the County, negotiations for specific groundwater management arrangements will continue employing the principles of interest-based negotiation to provide all community interests the opportunity to participate in tailoring a groundwater management plan to fit each area's unique needs.

### **B. Recommendations Concerning Sustainable Yield**

#### **1. BACKGROUND ON SUSTAINABLE YIELD AND CONJUNCTIVE USE**

Our vital groundwater resource must be protected. In addition, if managed in conjunction with the surface water available during wet years, the groundwater basin can provide storage capacity to bank water which can be used to meet demand in dry years. To achieve these objectives, recommendations must address two important factors, sustainable yield and conjunctive use.

Within the context of these recommendations, sustainable yield is defined as the amount of groundwater which can be safely pumped from the groundwater basin over a long period of time while maintaining acceptable groundwater elevations and avoiding undesirable effects which might include increased pumping costs, accelerated movement of underground pollutants, etc. Sustainable yield requires a balance between pumping and basin recharge and is expressed as the number of acre feet of water per year which can be pumped from the basin on a long-term average annual basis.

Conjunctive use is the planned management and use of both groundwater and surface water in order to improve the overall reliability of a region's total water supply. For example, in wet years when surface water is plentiful, groundwater pumping may be reduced or eliminated and only

surface water is used. The groundwater basin would be replenished in these wet years. In dry years when surface water is in short supply, the water that has been accumulating in the basin would be pumped for use and surface water diversions reduced or eliminated. Additional surface water diversions will be required to implement a conjunctive use program. Conjunctive use is expressed in acre feet per year.

The following purveyors utilize the groundwater basin for some or all of their water supply. There are also residents, businesses and agriculturalists who pump groundwater from the basin.

**NORTH AREA:** Arcade Water District, Arden Cordova Water Service (Arden area), Carmichael Water District, Citizens Utilities Company of California (portion), Citrus Heights Water District, City of Sacramento, Del Paso Manor Water District, Fair Oaks Water District, McClellan Air Force Base, Sacramento International Airport, Northridge Water District, Orange Vale Water Company, Rio Linda/Elverta Community Water District, Sacramento County WMD (portion).

**SOUTH AREA:** Arden Cordova Water Service (Cordova area), Citizens Utilities Company of California (portion), City of Sacramento, Elk Grove Water Works, Florin County Water District, Fruitridge Vista Water Company, Mather Air Force Base, Omochumne-Hartnell Water District (portion), Sacramento County WMD (portion), Tokay Park Water Company, Sacramento County Water Agency, Zone 40.

**GALT AREA:** City of Galt, Clay Water District, Galt Irrigation District, Omochumne-Hartnell Water District (portion).

## 2. RECOMMENDATION ON SUSTAINABLE YIELD: NORTH AREA

The recommended estimated average annual sustainable yield is 131,000 acre feet. This represents the year 1990 pumping amount. To help meet year 2030 demands, a program would be implemented to use the groundwater basin conjunctively with surface water supplies.

## 3. RECOMMENDATION ON SUSTAINABLE YIELD: SOUTH AREA

The recommended estimated average annual sustainable yield is 273,000 acre feet. This represents the year 2005 projected pumping amount and is 23,000 acre feet more than the 1990 pumping amount. The projected 2005 pumping amount for the South Area took into consideration the cost of delivery of surface water and the impacts which occur due to the lower stabilized groundwater levels. To meet year 2030 demands, a program would be implemented to use the groundwater basin conjunctively with surface water diversions.

#### 4. RECOMMENDATION ON SUSTAINABLE YIELD: GALT AREA

The recommended estimated average annual sustainable yield is 115,000 acre feet.<sup>5</sup> This represents the year 1990 pumping amount. Conjunctive use would be implemented, dependent upon the availability of surface water, to enhance groundwater levels.

#### C. Recommendations Concerning a Groundwater Management Governance Structure

##### 1. BACKGROUND ON GROUNDWATER RIGHTS

There are fundamental differences between surface water rights and groundwater rights that require any groundwater management plan to be tailored to reflect those differences. For example, most appropriative surface water rights are governed by a complex, statewide statutory system. Since 1914, surface water appropriators have been required to obtain a permit from the State Water Resources Control Board and abide by the permit conditions to use water. Surface water rights may be forfeited by disuse, i.e., the failure to exercise those rights. Surface water users must also be able to demonstrate reasonable and beneficial use of water, as these terms are defined in California water law, or run the risk of losing some or all of their water rights.

In contrast, there is no statewide statutory scheme for groundwater and no permit system. While groundwater must also be put to beneficial use, groundwater rights are not per se lost by disuse. The regulation of groundwater use is primarily a local government responsibility. In Southern California, statutory and judicially mandated or authorized groundwater management is, in fact, the rule rather than the exception. In recent years, encouraged by state legislation and recent judicial decisions, areas of Northern California have increasingly viewed groundwater management as an appropriate means by which local areas can protect their groundwater resources. Under current legislation, the County of Sacramento as well as the cities of Sacramento, Folsom and Citrus Heights have groundwater management authority.

Groundwater rights fall into one of three general categories. The first category of groundwater rights are “overlying rights.” An overlying right is the right of a land owner to take water from the basin underneath the land for reasonable, beneficial purposes on the land, thus the term overlying rights. Overlying rights exist by virtue of land ownership and are correlative to the overlying rights of other land owners. “Unexercised overlying rights” are those overlying water rights that are not currently being utilized. Because both exercised and unexercised overlying rights are held as part of the ownership of land, they are “vested” rights in the sense that they pass from owner to owner with the sale of the land; however, such rights are subject to reduction by prescription when no surplus water is available, as discussed below.

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<sup>5</sup> In the Galt Area, the development of surface water for conjunctive use and reduction in groundwater pumping due to conservation and modified agricultural practices may take several years to accomplish. During this interim period, the average annual usage may exceed the recommended sustainable yield. It should be recognized that this recommendation for the Galt Area is a *long-term* goal.

The second type of right to groundwater is an “appropriative right.” This right is gained through the extraction and utilization of water for reasonable, beneficial purposes. Because appropriative rights are not held as part of the ownership of the overlying land, the rights of an appropriator depend on the actual taking of water for reasonable, beneficial use. As between two appropriators, the relative priority system of “first in time, first in right” applies. Because California law favors the greatest number of beneficial uses of water, public entities may gain appropriative rights by pumping groundwater for “municipal” purposes without actually owning a substantial portion of the overlying land. So long as there is a surplus in the groundwater basin, appropriative rights are not adverse to overlying rights.

The third type of right to groundwater, known as a “prescriptive right,” comes into existence only if the groundwater basin has no “surplus” water available. Prescriptive rights in groundwater law are rights gained by appropriating non-surplus water for the statutorily prescribed period. A basin is in a state of “surplus” when the amount of water being extracted from it is less than the maximum amount that could be drawn without adverse effects on the basin’s long-term supply. An appropriative right can ripen into a prescriptive right if the appropriator takes non-surplus water for the statutorily prescribed period. While private individuals and entities may lose their groundwater rights to others who gain a prescriptive right against them, California law states that public entities cannot lose their water rights through prescription.

In determining whether a basin has surplus water, the courts have looked to the basin’s “sustainable yield.” Sustainable yield is the maximum amount of water which can be withdrawn annually from a groundwater supply under a given set of circumstances without causing an undesirable effect. Under the best case scenario, when overlying rights holders are ready to exercise their unexercised rights, or when the city, county, or other entity seeks to appropriate more groundwater for municipal purposes, the pumping in the basin will not exceed the basin’s sustainable yield. As long as surplus water exists and the basin maintains sustainable yield, all groundwater rights are protected: overlying rights are not lost by prescription; appropriative rights may be fully exercised; and no user gains a prescriptive right against another.

Under the “worst case scenario,” when overlying rights holders are ready to exercise their unexercised rights, or when the city, county, or other entity seeks to appropriate more groundwater for municipal purposes, basin-wide pumping will exceed sustainable yield. The lack of surplus water serves as a signal that overlying rights may be lost through prescription and that appropriative rights may begin to ripen into prescriptive rights. In short, the inability to maintain a sustainable yield creates the conditions that have historically given rise to litigation and groundwater basin adjudication. Under this worst case scenario, the “train wreck” that the Water Forum was established to prevent -- divisive, expensive, and protracted litigation and adjudication -- will have occurred.

As discussed in detail below, this Groundwater Element seeks to avoid the train wreck by calling for arrangements to manage the basin so as to prevent basin-wide pumping in excess of sustainable yield. Indeed, the primary purpose of these arrangements is to manage the limited groundwater resources such that the basin is never threatened by the inability to maintain sustainable yield.

Recognizing the unique and varied nature of groundwater rights, the surface water priority system of “first in time, first in right” does not apply to the policies and procedures effecting groundwater management. Instead, in establishing a groundwater management plan, the challenge is to create a framework that: (1) allows current users to continue to exercise their rights; (2) recognizes 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, as discussed above; (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. Ultimately, current groundwater users, future groundwater users, and those who rely on groundwater for conjunctive use must recognize that they all share a common interest -- the protection, preservation, and enhancement of the groundwater basin.

## 2. FUNDAMENTAL ASSUMPTIONS

The recommendations contained in this document are based on the following thirteen assumptions:

- a. The purpose of groundwater management is to maintain access to a safe and reliable supply of water, either through continued use of groundwater, a conjunctive use program or access to an alternative satisfactory source of supply.
- b. For groundwater users in Sacramento County and adjacent areas, alternative satisfactory sources of supply should be developed which are both fully accessible and economically feasible.
- c. In accordance with existing law, a groundwater management program must:
  - \* respect the existing rights of any person, association, corporation, municipality or public district;
  - \* recognize the vested nature of both exercised and unexercised overlying rights (as discussed in the background section of this Element);
  - \* recognize that given the vested nature of all overlying rights, the surface water priority system of “first in right” does not apply to groundwater pumping; and
  - \* ensure that the groundwater basin is managed in such a way as to promote the continued health and stability of that resource for the benefit of all current and future users.
- d. The hydrology of the Sacramento region suggests three groundwater sub-areas within the basin, each with different problems and conditions. The groundwater management governance structure should recognize these differences and provide for local control in each sub-area of the basin so as to address these varying problems and conditions most effectively.

e. At the same time, adequate provisions must be made to insure over-all coordination of policies and activities among the three sub-areas of the basin.

f. It is impossible to foresee the future or to predict each circumstance which might arise in management of the groundwater basin. Therefore, it is the goal of these principles and recommendations to outline a basic framework for groundwater management and to discuss options to insure basin-wide coordination. In the North Area of Sacramento County, the Sacramento North Area Groundwater Management Authority will have to exercise professional competence and good judgement in addressing specific problems and issues. In the South Area and the Galt Area, those entities which assume groundwater management responsibilities will have to do likewise. It is not the purpose of this document to anticipate these specific problems and dictate solutions. To do so would weaken the authority of the various groundwater management entities and undermine the flexibility which they must have in order to discharge their responsibilities.

g. In discharging their planning and management responsibilities, the groundwater management entities must consider the fact that there are unexercised rights holders who may begin to exercise their rights at some future date, either before or after the term of the *Water Forum Agreement* (year 2030). Consistent with the *Water Forum Agreement*, these entities must manage the groundwater basin with such eventualities in mind, taking into account both current and future water needs.

All groundwater rights holders, whether their rights are exercised or unexercised, share the common goal of maintaining the long-term viability of the basin. To insure that all current and future users are treated equitably, including both those currently exercising groundwater rights and those with unexercised rights, the groundwater management plans must neither (a) reward or penalize exercised rights holders for electing to exercise their rights nor (b) reward or penalize unexercised rights holders for electing not to exercise their rights immediately. Accordingly, when previously unexercised rights are exercised in the future, the same conditions and burdens, financial and otherwise, will apply equally to similarly situated groundwater rights holders within the same sub-area who receive the same level of benefit, regardless of the date when their rights were first exercised.

h. Effective groundwater management will require the use of surface water. Therefore, the groundwater management governance structure must address relationships with those agencies which can deliver such surface water and specify how the interests of these agencies will be represented in the governance structure.

i. The groundwater management governance structure should facilitate participation by water agencies with specific and relevant interest in the groundwater governance structure outside of Sacramento County and encourage cooperation and collaboration with such agencies.

j. Groundwater makes up a portion of the total water resource identified to meet projected water demands in 2030. These water demands are based primarily on the

General Plans approved by the respective city councils and the county boards of supervisors as of June, 1996.

k. The authority to make land use decisions is vested in county boards of supervisors and city councils. This document recognizes that fact and assumes that these entities will continue to exercise this authority.

l. This document assumes that, as a part of the Water Forum discussions, a program will be negotiated to insure the on-going monitoring and implementation of the *Water Forum Agreement*. This program is currently referred to as the "Water Forum Successor Effort." The Successor Effort will be based on the principles of collaboration and consensus and will not entail formalized legal authority to mandate or regulate actions by the signatories to the *Water Forum Agreement*. The Successor Effort may or may not include some permanent entity through which monitoring functions are carried out.

### 3. GOVERNANCE OPTIONS

Taking these assumptions into account, the Sacramento Metropolitan Water Authority (SMWA) Groundwater Committee (Committee) and the Water Forum Groundwater Negotiation Team (Team) reviewed options to implement a groundwater management governance structure including:

- \* a voluntary plan under AB 3030
- \* existing options provided for in the Sacramento County Water Agency (SCWA) Act but never implemented;
- \* modification of these existing options which would require no action by the legislature or only a limited amendment of the groundwater provisions of the Act;
- \* options based upon joint powers agreements as provided for in state statutes; and
- \* special legislation in the State Assembly and Senate.

In considering each of these alternatives, the Committee and the Team applied three standards: what is simplest, what is most efficient and, given political realities, what can be implemented most expeditiously. The Committee and the Team also sought the advice of legal counsel to be sure that recommendations concerning a groundwater management governance structure would meet all requirements of law and regulation (as of September, 1996).

After exhaustive review and discussion, the Committee and the Team determined that the Joint Powers Agreement which established the Sacramento North Area Groundwater Management Authority is the option which best meets the three standards previously identified. Recognizing the differences in circumstances and conditions in other areas of the County, the Committee and the Team also determined that the Sacramento North Area arrangements should not serve as a

template for the South and Galt Areas and negotiations concerning groundwater arrangements in the South Area and the Galt Area should continue, as discussed below.

Concerning the Joint Powers Agreement which established the Sacramento North Area Groundwater Management Authority, it is important to note the law requires that all of the participating public agencies must have independent authority to exercise whatever powers are to be jointly exercised. For purposes of groundwater governance, the two essential powers are authority to manage groundwater and authority to establish a regulatory fee. The public agencies in Sacramento County which hold these powers are Sacramento County, the City of Sacramento, the City of Folsom, and City of Citrus Heights.

The Sacramento North Area Groundwater Management Authority was established in August 1998 using the existing authority of the City of Sacramento, the City of Folsom, City of Citrus Heights, and County of Sacramento through adoption of a Joint Powers Agreement.

#### 4. SCHEDULE FOR IMPLEMENTATION

The SMWA Groundwater Committee and the Water Forum's Groundwater Negotiation Team noted the fact that:

a. Current conditions affecting the importation of surface water and use of groundwater in the North Area of the County differ significantly from those in the South Area and the Galt Area: (NOTE: For purposes of this document, these areas are defined as follows: North Area - north of the American River; South Area - between the American and the Cosumnes Rivers; Galt Area - south of the Cosumnes.)

(1) The North Area is closer to build-out.

(2) Delivery systems for surface water are already being expanded and utilized to a greater extent in the North Area.

(3) Almost all of the North Area, including agriculture, is served by organized purveyors. Thus, the institutional infrastructure necessary to implement groundwater management is further developed in the North Area.

(4) The Sacramento Metropolitan Water Authority which includes eight of the 12 water purveyors in the North Area wishes to implement a ground water management plan as soon as possible and has already taken action to do so.

b. Given these and other significant differences in the opportunities and constraints in the North Area compared to the rest of Sacramento County:

(1) The schedule for implementation of groundwater management arrangements in each Area will differ.

(2) The Sacramento North Area Groundwater Management Authority was established in August 1998.

c. It is important to note that discussions, involving all parties interested in the negotiation of groundwater management arrangements in the South Area and the Galt Area will continue. These discussions, employing the principles of interest-based negotiation, are part of a public process designed to provide all community interests the opportunity to participate in tailoring a groundwater management plan to fit each area's unique circumstances. The goal of these discussions is to reach agreement on satisfactory groundwater management arrangements in the South Area and the Galt Area as soon as feasible.

d. Again, it should also be noted that recommendations contained in this document for groundwater management in the North Area are not a "template" to be imposed on the South or Galt Areas. While some North Area recommendations may be useful in other areas of the county, groundwater management plans, including an appropriate governance structure and financial arrangements, must be developed and crafted to meet the unique conditions of the South and the Galt Areas.

e. Assuming that, at a future date, satisfactory joint powers agreements and/or memoranda of understanding are negotiated which provide for the participation in a groundwater management program by purveyors outside of Sacramento County, those purveyors may be represented in the groundwater management program and any related governance structure as specified in those joint powers agreements or memoranda of understanding.

## 5. RECOMMENDATIONS ON THE GROUNDWATER MANAGEMENT GOVERNANCE STRUCTURE: GENERAL

Based upon careful consideration of the fundamental assumptions, review of the available options for a groundwater management governance structure, discussion with engineering and other technical consultants and guidance provided by legal counsel, the Sacramento Metropolitan Water Authority Groundwater Committee and the Sacramento Water Forum Groundwater Negotiation Team make the following recommendations.

a. The Sacramento North Area Groundwater Management Authority ("Authority") and responsible groundwater management entities in the South Area and the Galt Area will exercise the right to manage groundwater for the benefit of current and future users, including overlying users with unexercised rights. In order to do so, the Authority and other responsible entities will use economic measures (incentives and disincentives) to encourage conservation and raise revenues necessary to purchase surface water for implementation of conjunctive use programs. For example, groundwater users may pay a per acre foot fee for water consumptively used. Such a fee encourages water management, rewards water conservation, protects overlying rights, and does not penalize those who have not yet fully exercised their overlying water rights. Of course, a per acre foot fee on

water consumptively used is just one option that the Authority or other groundwater management entity may elect to implement.

It will be up to each Authority or other entity to decide what mechanisms work best in their particular area to raise revenues and encourage conservation.

b. Provisions must be made to insure coordination of management policies and activities among all three areas of the groundwater basin and to facilitate cooperation among the North, South and Galt Areas in all matters of mutual interest. (See Section 8 later in this Groundwater Management Element.)

c. The Sacramento North Area Groundwater Management Authority and other groundwater management entities should be provided with sufficient technical support and/or staff to enable them to discharge their groundwater management responsibilities.

d. All meetings of the Sacramento North Area Groundwater Management Authority and other groundwater management entities shall be open to the public, subject to the provisions of the Brown Act.

e. The purpose of the Sacramento North Area Groundwater Management Authority and other groundwater management entities shall be to:

(1) maintain the long-term sustainable yield of the area of the groundwater basin under its delegated jurisdiction

(2) manage the use of groundwater in the area of the basin under its delegated jurisdiction and facilitate implementation of an appropriate conjunctive use program by the area purveyors

(3) coordinate efforts among all participants in the local groundwater management plan to devise and implement strategies to safeguard groundwater quality

(4) work collaboratively with the responsible groundwater management entities in other Areas to promote coordination of policies and activities throughout the basin.

f. In order to fulfill these purposes within their respective areas, the Sacramento North Area Groundwater Management Authority and groundwater management entities in other areas of the basin should have the authority to:

(1) collect and monitor data on annual pumping amounts

(2) recommend annual extraction goal based on the availability of surface water

- (3) monitor implementation of annual "puts" and "takes"
- (4) monitor the migration of toxic plumes
- (5) facilitate collaboration among purveyors to identify the area's needs and develop a plan to meet those needs
- (6) determine allocation of administrative costs
- (7) determine allocation of water costs on a project by project basis
- (8) based upon determinations of benefit, establish regulatory fees to cover water costs and administrative costs.

g. Each of the three areas of the groundwater basin is served by different water purveyors. The responsible groundwater management entity in each area of the basin must reflect this fact. Therefore, the composition of each entity will vary.

h. Commercial/industrial self-supplied groundwater users (i.e., major industrial users which pump their own groundwater) and agricultural pumpers shall be represented on the responsible groundwater management entity in each of the three areas of the basin.

i. Sec. 10910 of the Water Code, as amended by Senate Bill 901, requires cities and counties to ask a public water purveyor to provide an assessment of whether its total projected water supplies can meet the anticipated increase in water demand which would be created as the result of a proposed development project. (The size of projects subject to this requirement is set forth in the code.)

Nothing in these recommendations is intended to modify or impair the existing authority of county boards of supervisors or city councils to make land use decisions. At the same time, in order to discharge its responsibility to manage the area of the basin under its delegated jurisdiction, the Sacramento North Area Groundwater Management Authority and other groundwater management entities must be informed of proposed development projects which may affect water demand in its area. Therefore, at the same time that a public water purveyor responds to a city's or a county's request for an assessment, it shall send a copy of its assessment report to the Authority or the groundwater management entity in whose jurisdiction the proposed development would take place.

As indicated above, the Sacramento North Area Groundwater Management Authority was established in August 1998. The Joint Powers Agreement creating the Authority was based upon the recommendations set forth in the following two sections of this document. The provisions in these two sections have already been implemented but they are included here for reference.

6. RECOMMENDATIONS ON THE GROUNDWATER MANAGEMENT GOVERNANCE STRUCTURE: NORTH AREA --- GENERAL

- a. The Sacramento North Area Groundwater Management Authority should be created as soon as possible by a Joint Powers Agreement among public agencies which have the authority to manage groundwater and to establish a regulatory fee: i.e., the City of Sacramento, the City of Folsom, the City of Citrus Heights and Sacramento County.
- b. The Joint Powers Agreement shall remain in effect until terminated by one of the signatory agencies. To do so, the signatory agency intending to terminate the agreement must give ninety days written notice to all other signatories. Upon termination, the assets and liabilities of the joint powers authority become the responsibility of the signatory agencies in whatever proportion is set forth in the joint powers agreement.
- c. The Sacramento North Area Groundwater Management Authority shall have the authority, in conformance with existing water rights and consistent with the *Water Forum Agreement*, to exercise the delegated right to manage groundwater in the area of the basin under its jurisdiction so as to protect the future viability of the basin as a water resource.
- d. In order to meet legal requirement, all members serving on the Sacramento North Area Groundwater Management Authority must be appointed by the public agencies which are signatories to the joint powers agreement: i.e., the City of Sacramento, the City of Folsom, the City of Citrus Heights and Sacramento County.
- e. In the North Area, each organized purveyor shall be represented on the Authority. Representatives shall be selected from among the elected members of the purveyor's board of directors. In the case of an investor-owned utility, the representative shall be a member of the board of directors or the designee thereof.
- f. Prior to the appointment of the representative of each purveyor, the purveyor shall submit a recommended appointment for their representative to the appointing agency. The appointing agency shall give consideration to such recommendations but shall retain the absolute discretion to appoint any person satisfying the criteria set forth in Paragraphs h (1), (3) and (4) below.
- g. In order to meet legal requirements, all members serving on the Sacramento North Area Groundwater Management Authority do so at the pleasure of the appointing public agency.
- h. The joint powers agreement creating the Sacramento North Area Groundwater Management Authority shall specify membership on the Authority as follows:
  - (1) One representative from each of the following organized water purveyors (selected from among the elected members of the purveyor's board of directors or,

in the case of an investor owned utility, a member of the board of directors or designee thereof):

- Arcade Water District
- Arden Cordova Water Service
- Carmichael Water District
- Citizens Utilities Company of California
- Citrus Heights Water District
- City of Folsom
- City of Sacramento
- Del Paso Manor Water District
- Fair Oaks Water District
- Natomas Central Mutual Water Company
- Northridge Water District
- Orange Vale Water Company
- Rio Linda/Elverta Community Water District
- Sacramento County Water Maintenance District
- San Juan Water District

(2) In order to meet the legal requirement that all members serving on the Sacramento North Area Groundwater Management Authority be appointed by the public agencies which are signatories to the joint powers agreement:

(a) The City Council of the City of Citrus Heights shall appoint the representative of the Citrus Heights Water District.

(b) The City Council of the City of Folsom shall appoint its own representative.

(c) The City Council of the City of Sacramento shall appoint the representatives of:

- Arcade Water District
- Arden Cordova Water Service
- Citizens Utilities Company of California
- City of Sacramento
- Del Paso Manor Water District
- Natomas Central Mutual Water Company

(d) The Sacramento County Board of Supervisors shall appoint the representatives of :

- Carmichael Water District
- Fair Oaks Water District
- Northridge Water District
- Orange Vale Water Company
- Rio Linda/Elverta Community Water District

- Sacramento County Water Maintenance District
- San Juan Water District

(3) One representative of North Area agriculture to be appointed by the Sacramento County Board of Supervisors.

(4) One representative of commercial/industrial self-supplied groundwater users to be appointed by the City Council of the City of Sacramento.

(5) At such time as satisfactory joint powers agreements and/or memoranda of understanding are negotiated which provide for the participation in the groundwater management program by purveyors outside of Sacramento County, a representative(s) of those purveyors (the City of Roseville, Placer County Water Agency, South Sutter Water District, etc.) may be appointed to the Sacramento North Area Groundwater Management Authority under any arrangement specified in the Joint Powers Agreement(s) or memoranda of understanding.

i. In addition, the Joint Powers Agreement creating the Sacramento North Area Groundwater Management Authority should specify:

(1) voting on the Authority be structured as follows:

(a) Each representative shall have one vote

(b) All items pertaining to finances must be approved by a double majority: i.e., a majority of all of the members of the Authority (voting on the basis of one person/one vote)

And a majority of votes weighted on the basis of total water production.

(NOTE: For purposes of determining regulatory fees or charges to support the administrative costs, total water production means the combined surface water and groundwater delivered by retail providers, together with that water produced by agricultural and self-supplied users for use within the boundaries of the joint powers authority. For purposes of determining regulatory fees or charges to support water costs, total water production means the groundwater portion only of the total amount of water delivered by retail providers, together with that groundwater produced by agricultural and self-supplied users for use within the boundaries of the joint powers authority.)

(NOTE: The weighted vote of the representative for commercial/industrial self-supplied groundwater users shall be weighted on the basis of total water production by all such users combined. The weighted vote for the representative for agriculture shall be weighted on the same basis.)

(NOTE: To the extent that a classification of water producers/pumpers [e.g. agriculture] pays a differential rate [see Section 7, b, (1) and 7, c, later in this Element], the weighted vote of that representative shall be adjusted accordingly. For example, each acre foot pumped equals one vote. Agriculture pumps a total of 100,000 acre feet but pays only 20% of the regulatory fees established for other pumpers. The vote of the representative for agriculture would be calculated at 20,000 votes, one fifth of that of other representatives. It is important to note that in this example the figure of 20% is used for illustrative purposes only. No determination on whether agriculture pays a differential rate or what that rate might be has been made.)

Approval of all other items requires only a majority of all the representatives on the Authority.

- j. The Authority should have the discretion to invoke alternative dispute resolution procedures in any circumstances which it deems appropriate. (See also Item 9, later in this Element.) Such procedures might include review of any dispute or disagreement by an ad hoc subcommittee of the Authority, use of an outside neutral third party, etc.

## 7. RECOMMENDATIONS ON THE GROUNDWATER MANAGEMENT GOVERNANCE STRUCTURE: NORTH AREA - FINANCE

It is probable that in the North Area, the implementation of a groundwater management plan will require the importation of surface water. The importation of surface water will generate attendant costs. In addition, there will be costs related to administering the groundwater management program. Therefore, the following recommendations are made:

- a. The Sacramento North Area Groundwater Management Authority shall establish a rate structure, having determined:
  - (1) The basis on which the rate is calculated (e.g., total water production, number of connections, etc.) and
  - (2) Whether the rate is to be applied under a tiered benefit system to take into account a groundwater user who receives a greater benefit than a user who receives a lesser benefit (e.g., maximum benefit, intermediate benefit, basic benefit.) If the Authority chooses to implement a tiered benefit system, it shall define tier or level of benefit as it deems appropriate, given the circumstances in the area of the basin under its jurisdiction.
- b. The Sacramento North Area Groundwater Management Authority shall be responsible for determining the allocation of and the rate for regulatory fees or charges to cover water costs and administrative costs.

- (1) Administrative costs (e.g., staffing, data collection, monitoring, studies, etc.)

There may be a differential rate applied to groundwater as opposed to surface water use. However, the rate for each type of non-agricultural water shall be applied consistently within that category of water.

- (2) Water costs (e.g., the cost of water, pumping and treatment costs and other costs related to a conjunctive use program)

During the first five years of operation, the Sacramento North Area Groundwater Management Authority shall be prohibited from establishing regulatory fees to fund water cost payments that exceed an annual average of \$5.00 per acre foot (minimum \$0.00 - maximum \$10.00) of groundwater pumped spread against approximately 100,000 acre feet of pumping per year.

c. In the North Area, agricultural pumpers may pay a percentage of the regulatory fee established for non-agricultural pumpers for administrative and water costs. This percentage shall be determined by the Sacramento North Area Groundwater Management Authority. (NOTE: In other areas of the state, agricultural pumpers generally pay a lower rate. This differential rate is based on such factors as: agriculture pays less for contract water; agriculture could use untreated water and thus avoid treatment related costs, etc.)

d. In discharging its planning and management responsibilities, the Authority must consider the fact that there are unexercised rights holders who may begin to exercise their rights at some future date, either before or after the term of the *Water Forum Agreement* (year 2030). Consistent with the *Water Forum Agreement*, the Authority must manage the groundwater basin with such eventualities in mind, taking into account both current and future water needs.

When overlying rights holders with unexercised rights begin to exercise those rights, they will be treated exactly the same as similarly situated users in the North Area who are currently exercising their rights; that is, when previously unexercised rights are exercised in the future, the same conditions and burdens, financial or otherwise, will apply equally to similarly situated groundwater rights holders within the North Area who receive the same level of benefit, regardless of date when their rights were first exercised. For example, those with unexercised rights will pay the then-existing regulatory fees when they elect to exercise their rights as their contribution to the groundwater management program -- just like other similarly situated users in the North Area who receive the same level of benefit.

e. In the North Area, a groundwater extraction facility that is used to provide water for domestic purposes to a single-unit residence or for irrigation of less than 2.5 acres shall be exempt from any regulatory fee for water or administrative costs.

- f. The Authority shall decide whether other exemptions from participation in a groundwater management plan (based on some minimum amount of groundwater pumped for consumptive use) shall be allowed.
- g. Any action (past and/or future) taken by a groundwater purveyor or pumper which provides a benefit to the basin should be reviewed by the Authority on an annual basis and taken into account by the Authority (as appropriate) when determining regulatory fees.
- h. Any pumping of groundwater for remediation of hazardous substances under a regulatory agreement or governmental order is not a consumptive use subject to a regulatory fee or other financing mechanism discussed in this agreement, unless subsequently used for direct consumptive use or returned to the river for sale downstream.
- i. Any individual, business or other entity which has been assessed a regulatory fee and believes the regulatory fee to be unwarranted or unfair, may seek reconsideration by the Authority in accordance with procedures to be developed by the Authority (and similar to those used by other public agencies).

#### 8. RECOMMENDATIONS TO INSURE BASIN-WIDE COORDINATION AMONG THE LOCAL GROUNDWATER MANAGEMENT ENTITIES

The groundwater management entity in each area of the basin (North, South and Galt) will be independent of one another. But, while the hydrology of the Sacramento region suggests that there are three groundwater sub-areas within the basin, each sub-area overlies the **same** basin. Therefore, there must be a mechanism to:

- \* Safeguard the viability of the total basin through coordination of policies and activities across the three sub-areas of the basin
- \* Facilitate cooperation among the three sub-areas on projects or programs of mutual benefit
- \* Promote efficient operation through cost-sharing arrangements, shared staff, equipment, facilities, etc. if possible and appropriate
- \* Facilitate resolution of any inter-area disagreement in conformance with an agreed upon model for dispute resolution. (See Section 9 later in this Element.)

A variety of measures or combinations of measures which might be used to accomplish these four objectives have been considered by the Committee and the Team including but not limited to:

- \* No formal mechanism for coordination: each situation to be addressed on an ad hoc basis by the appropriate groundwater management entities in each sub-area of the basin
- \* A standing inter-area coordinating committee composed of representatives of the appropriate groundwater management entities who meet regularly (or only as necessary)
- \* Mandatory joint meetings of area representatives
- \* Informal or formal coordination as needed through the Water Forum successor effort

Based upon review and discussion of all available options, the following recommendation is made.

- \* Within one year of the initiation of the Sacramento North Area Groundwater Management Authority, representatives of the Authority shall meet with representatives of other entities which have groundwater management responsibilities in the South Area and the Galt Area to develop and adopt appropriate measures to ensure ongoing coordination of policies and activities in the three sub-areas of the basin.

## 9. RECOMMENDATIONS CONCERNING ALTERNATIVE DISPUTE RESOLUTION

The *Water Forum Agreement* is a complex document negotiated by the representatives of the many stakeholder organizations over a five year period. No agreement, however, no matter how complex, can anticipate every possible changing condition which might arise in the future or how these changed conditions may impact the terms of the *Agreement*. Concerns or disagreements among the stakeholders may arise and these must be addressed in a direct and timely manner. At the same time, it is important to safeguard the integrity of the *Agreement* and the delicate balance of interests which it represents. Therefore, the following recommendations on alternative dispute resolution are made concerning:

- \* disputes between parties represented on the Sacramento North Area Groundwater Management Authority
- \* disputes between groundwater management entities in different sub-areas of the basin.

Nothing in these recommendations shall preclude any party from exercising their legal rights by filing an action in a court of competent jurisdiction concerning any item at issue. However, before doing so, all persons, associations, corporations, districts, municipalities or public agencies represented on the various groundwater management entities throughout the basin agree to participate in good faith in these alternative dispute resolution procedures.

### DISPUTES AMONG PARTIES REPRESENTED ON THE SACRAMENTO NORTH AREA GROUNDWATER MANAGEMENT AUTHORITY

- a. Within six months of its inception, the Sacramento North Area Groundwater Management Authority shall discuss, develop and adopt an alternative dispute resolution program and procedures.
- b. Participation in such a program shall be mandatory for all persons, associations, corporations, districts, municipalities or public agencies represented on the North Area Authority.
- c. These alternative dispute resolution procedures shall provide for:
  - (1) If the disagreement pertains to the substance of the *Water Forum Agreement*, timely consultation with the Water Forum successor effort on the cause and current status of the disagreement as well as strategies which may lead to a resolution of the problem;
  - (2) Prompt response by the Authority when any party invokes alternative dispute resolution procedures;
  - (3) If the disagreement cannot be resolved by the Authority itself, use of an outside neutral third party (i.e., a mediator) to assist the parties in working toward a satisfactory resolution;
  - (4) Completion of all procedures within sixty to ninety days, unless the parties to the dispute agree to extend this timeline; and
  - (5) Timely notice to the Water Forum Successor Effort that alternative dispute resolution procedures have been initiated and the reasons therefor.

DISPUTES BETWEEN GROUNDWATER MANAGEMENT  
ENTITIES IN DIFFERENT SUB-AREAS OF THE BASIN

- a. Within six months of initiation of agreed-upon groundwater management plans in the South Area or in the Galt Area, the appropriate groundwater management entities shall meet together and establish a process to discuss, develop and adopt alternative dispute resolution procedures which will be implemented in any dispute or disagreement which might arise between or among these groundwater management entities.
- b. Implementation of these procedures by these entities in any dispute or disagreement shall be mandatory.
- c. These procedures shall provide for:
  - (1) If the disagreement pertains to the substance of the *Water Forum Agreement*, timely consultation with the Water Forum Successor Effort on the

cause and current status of the disagreement as well as strategies which may lead to a resolution of the problem;

(2) If the disagreement cannot be resolved by the groundwater management entities themselves, use of outside neutral third party (i.e., a mediator) to assist the entities in working toward a satisfactory resolution;

(3) Completion of all procedures within sixty to ninety days, unless the entities themselves agree to extend this timeline; and

(4) Timely notice to the Water Forum Successor Effort that alternative dispute resolution procedures have been initiated and the reasons therefor.

d. These procedures shall be adopted by the groundwater management entities not later than one year after the initiation of agree-upon groundwater management plans in the South Area and/or the Galt Area.

#### 10. RECOMMENDATIONS TO INSURE ON-GOING COLLABORATION BETWEEN THE LOCAL GROUNDWATER MANAGEMENT ENTITIES AND THE WATER FORUM SUCCESSOR EFFORT

As noted above, this document assumes that a permanent Successor Effort will be created and charged with the responsibility of overseeing, monitoring and reporting on implementation of the *Water Forum Agreement*. In order to discharge this responsibility, the Successor Effort must work closely with the local groundwater management entities throughout the basin. This will require a full sharing of all information pertaining to the groundwater basin and consultation, as appropriate. Therefore, the following recommendations are made.

a. Representatives of the Sacramento North Area Groundwater Management Authority and the Successor Effort shall meet together to discuss and adopt appropriate measures to insure an on-going exchange of information and collaboration on all matters of mutual interest and concern.

b. When a groundwater management plan becomes operational in the South Area and/or the Galt Area, a similar meeting between the Successor Effort and the appropriate groundwater management entities shall be convened within three months of the inception of the new groundwater management plan.

#### 11. SPECIFIC AGREEMENT ON THE GROUNDWATER ELEMENT

All signatories to the *Water Forum Agreement* will support and, where appropriate, participate in the Groundwater Management Element as set forth above.

## VII. WATER FORUM SUCCESSOR EFFORT ELEMENT

### A. Intent

Given the complexity of the issues, level of detail, number of signatories, the duration of the *Water Forum Agreement* and the changes that will inevitably occur between now and the year 2030, stakeholder representatives have concluded that a mechanism must be created to ensure actual implementation of the *Agreement* over the next three decades.

### B. Purpose

The Water Forum Successor Effort is responsible for overseeing, monitoring and reporting on the implementation of the *Water Forum Agreement*. It will continue the interest-based collaborative process successfully used to develop the *Water Forum Agreement*. Consistent with that process, **the Water Forum Successor Effort will have no independent governing or regulatory authority.**

### C. Modification of the *Water Forum Agreement*

The Water Forum Successor Effort has no independent authority to alter the *Water Forum Agreement*. At the same time, the Successor Effort must be able to respond to the changing conditions or other unforeseen circumstances which will arise over the next thirty years. The *Agreement* may be changed only by the signatories employing the same interest-based collaborative process used to negotiate the original *Agreement*. The Water Forum Successor Effort will facilitate and coordinate such negotiations, should they prove necessary.

It should be noted that Specific Agreements found in Section Five of the *Water Forum Agreement* cannot be changed or modified without the expressed approval and consent of the entity whose interests would be affected by the change.

### D. Membership

Membership in the Successor Effort will be composed of representatives of those entities which are signatories to the *Water Forum Agreement* including business, agricultural and environmental organizations, citizen groups, water purveyors and local governments.

### E. Characteristics and Responsibilities of Representatives

As noted, the Successor Effort will continue the interest-based process used successfully in developing the *Water Forum Agreement*. Therefore, it is important that individuals selected as representatives evidence the following characteristics:

- 7 Commitment to the discipline of interest-based problem solving;
- 7 Willingness to make the necessary time available; and
- 7 Willingness to work collaboratively with others.

Because the effectiveness of the Successor Effort will depend upon cooperation and collaboration among all participants, representatives will observe the following guidelines:

- 7 Listen carefully and openly discuss issues with others who hold different opinions;
- 7 View a disagreement as a problem to be solved, not a battle to be won;
- 7 Avoid stereotyping and personal attacks on any other representative;
- 7 Avoid questioning or impugning the motivations or intentions of any other representative;
- 7 Respect the integrity and values of other representatives; and
- 7 Honor commitments once made.

#### **F. Administrative Structure and Policy Direction**

The Water Forum Successor Effort will be administered under the auspices of the Sacramento City-County Office of Metropolitan Water Planning. As with the Water Forum, Successor Effort staff will be employees or contractors of the City of Sacramento and all administrative responsibilities with respect to such employees or contractors will continue to be handled by the City. This arrangement will:

- 7 Ensure continuity between the Water Forum and the Water Forum Successor Effort;
- 7 Preserve existing technical expertise;
- 7 Avoid the costs, confusion and delays inherent in transferring the Successor Effort to a different organization; and
- 7 Avoid creating another redundant government entity.

The *Water Forum Agreement* will be a Memorandum of Understanding. It will contain provisions creating the Successor Effort organization. All parties which sign the Memorandum of Understanding will become full participants in the Successor Effort. In addition, there will be a supplementary funding agreement which will include the City of Sacramento, the County of Sacramento and the other agencies (including agencies outside of Sacramento County) which, consistent with the funding principles set forth in Section J below, are actually making payments to support the work of the Successor Effort.

It is important to note that:

- 7 All signatories to the *Water Forum Agreement* will have equal standing in the Successor Effort whether they are a public agency, investor-owned utility or citizen interest/advocacy organization;
- 7 Though Water Forum Successor Effort staff will be employees or contractors of the City of Sacramento, the Successor Effort representatives will provide over-all policy direction for work by staff.

## **G. Decision-making Process**

Members of the Successor Effort will continue to use the same collaborative form of decision-making used in the Water Forum negotiations. This collaborative process respects both the diversity and the legitimacy of the interests of all participants. The following principles, based on the interest-based decision-making model used in the Water Forum, will guide the Successor Effort decision-making process.

1. The Successor Effort will strive for consensus (agreement among all participants) in its decision-making.
2. The Successor Effort will not limit itself to strict consensus if a one hundred percent agreement cannot be reached after all interests and options have been thoroughly identified, discussed and considered. Less-than-consensus decision-making will not be undertaken lightly.
3. Less-than-consensus decision-making will use an interest-based approach. This means that all Successor Effort decisions must have a preponderance of support from each of the major “interest groupings” participating in the Successor Effort. Although “interest groupings” have not yet been identified for the Successor Effort, interest groupings used in the Water Forum will likely serve as a reference point.
4. Specific Agreements found in Section Five of the *Water Forum Agreement* cannot be changed or modified without the expressed approval and consent of the signatories whose interests would be affected by the change.

It should be noted, however, that within the principles enumerated above, the Successor Effort itself must take the lead responsibility in working out the details of its own decision-making model. Therefore, by July 1, 2000, signatory representatives shall meet together to determine how the Successor Effort’s collaborative decision-making will work.

## **H. Dispute Resolution**

A major function of a collaborative process is to prevent disagreements from escalating into full fledged disputes. With proper facilitation and communication, most potential disputes can be resolved. However, no matter how sophisticated a collaborative process exists, there will inevitably be disputes. Some may arise out of interpretation of specific provisions of the *Agreement*. Others may result from concerns about non-compliance or differing interpretations of the terms of the *Agreement*.

It is essential that stakeholders not revert to litigation as a first response to every perceived problem or transgression. Lawsuits can quickly destabilize the collaborative process and return all Successor Effort participants to gridlock. Therefore, while not waiving any of their legal rights, all organizations represented in the Successor Effort agree to initiate alternative dispute resolution procedures, including mediation, before pursuing litigation.

**I. Specific Tasks Which must Be Completed by the Successor Effort for the *Water Forum Agreement* to Be Fully Implemented**

See Attachment A: Water Forum Successor Effort - Preliminary Work Plan.

**J. Budget and Allocation of Budget Costs**

The projected budget for the Successor Effort as well as the allocation of costs is based on the following ten principles.

1. In order to estimate the actual cost of the Successor Effort, a Preliminary Work Plan which identifies the tasks for the first four years has been developed and is included in this document as Attachment A. The projected annual cost for the tasks set out in this work plan is \$675,000 for the first year of operation. (A sample budget for the first year of operation is set forth in Attachment B.) All signatories have reviewed this Preliminary Work Plan and agree that \$675,000 for the first year will be provided as set forth below.

2. Prior to completion of the first year following the signing of the *Water Forum Agreement*, the Successor Effort shall undertake a careful review of progress to date and shall revise the Work Plan in light of the then existing circumstances. The annual budget and contributions may be revised at that time.

Any increase or decrease to the first year budget would require a consensus among all interest groups and agreement by those agencies providing Successor Effort funding.

3. On an annual basis, the Successor Effort budget will be approved by the stakeholder representatives to the Water Forum Successor Effort in accordance with the updated Work Plan for that year.

4. Consultants shall be used only as needed and the identification and approval of actual expenditures for specific consultant contracts shall be part of the Successor Effort budget process. If consultant contract funds or funds allocated for consultant contracts in a given fiscal year are not spent prior to the end of that year or earmarked for future expenditure, the Successor Effort shall modify the next year's budget in an appropriate manner.

5. A purveyor's annual contribution to support the estimated cost of the Successor Effort shall be based upon the number of connections served by the purveyor. There are other possible bases for determining contributions; e.g. the number of acre feet per year diverted from the American River. Some purveyors, however, will use only groundwater. Some will divert only from the Sacramento River. Others will use a combination of both surface water and groundwater in amounts which will vary from year to year. Yet all will benefit from implementation of the *Water Forum Agreement* and the work of the Successor Effort. In general, then, purveyor contributions related to number of connections served offers the most equitable and stable basis for sharing Successor Effort costs.

Allocation of first year costs for the Successor Effort on a purveyor-by-purveyor basis is contained in Attachment C. It should be noted that this cost allocation assumes that all the purveyors identified in Attachment C will sign the initial *Water Forum Agreement*. If fewer purveyors sign the initial *Water Forum Agreement*, the first year costs allocated to the purveyors that do sign will increase.

6. Zone 13 was formed by the Sacramento County Water Agency (SCWA) to fund drainage and water supply studies and related costs. As a result, property owners in the unincorporated areas of Sacramento County and the City of Citrus Heights are already assessed through their property taxes for the planning and evaluation activities that will be carried out by the Successor Effort. Therefore, SCWA's Zone 13 contribution to the Successor Effort shall cover the financial obligations of water purveyors serving the unincorporated areas of the County and the City of Citrus Heights. This will include the Carmichael Water District, Citrus Heights Water District (in Sacramento County), Citizens Utilities (in Sacramento County), Clay Water District, Del Paso Manor Water District, Fair Oaks Water District, Florin County Water District, Galt Irrigation District, Natomas Central Mutual Water Company, Northridge Water District, Omochumne-Hartnell Water District, Orange Vale Water Company, Rio Linda/Elverta Community water District, and San Juan Water District (in Sacramento County).

7. The annual contribution of other purveyors in Sacramento County not included in Zone 13 shall be based upon the number of connections served by that purveyor (as set forth in Principle #5 above). This would include the City of Folsom, the City of Galt<sup>6</sup>, and the City of Sacramento.

8. The annual contribution of purveyors outside of Sacramento County shall be based upon the number of connections served by that purveyor (as set forth in Principle #5 above). This will include Citizens Utilities (in Placer County), City of Roseville, El Dorado Irrigation District, Georgetown Divide Public Utility District, the Placer County Water Agency and the San Juan Water District (in Placer County).

9. Each purveyor's share shall be adjusted annually based on the then current number of connections of each purveyor signatory to the *Agreement*.

10. Sacramento Municipal Utility shall make an annual contribution of \$10,000.

11. El Dorado Irrigation District and Georgetown Divide Public Utility District: Mutually agreed upon Water Forum Successor Effort expenses related solely to converting these purveyors' procedural agreement into Specific Agreements will be reimbursed by these purveyors. As soon as the purveyors have negotiated Specific Agreements and they sign the

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<sup>6</sup>The City of Galt City Manager has informed Water Forum staff that when the Water Forum Successor Effort begins, the City of Galt will evaluate whether to financially participate in the Water Forum Successor Effort. The City of Galt's participation in the *Water Forum Agreement* is also subject to agreement with other signatories regarding Galt's financial contribution to the Water Forum Successor Effort.

*Water Forum Agreement*, they will contribute to the Water Forum Successor Effort on the same basis as other purveyors that have Specific Agreements.

**K. Five Year Review**

Every five years the Water Forum Successor Effort will comprehensively review progress made in achieving both of the coequal objectives.

**L. Changed Conditions and Amendments to the *Water Forum Agreement***

Given the complexity of issues, level of detail, number of signatories, duration of the *Water Forum Agreement*, and changed circumstances that will undoubtedly occur between now and the year 2030. Some changes may call for renegotiation of some terms of the *Water Forum Agreement*. However, a request for renegotiation does not necessarily mean the *Water Forum Agreement* will be revised. The *Water Forum Agreement*, including Specific Agreements, can be changed or modified only with the expressed approval and consent of the signatories to the *Water Forum Agreement*.

Any proposal to amend this Memorandum of Understanding or the attached *Water Forum Agreement* would be considered in the context of both of the Water Forum's coequal objectives. Specific procedures for amending the *Water Forum Agreement* consistent with the collaborative decision making process will be developed by the Water Forum Successor Effort within the first year of its operation.

**M. Specific Agreement on the Water Forum Successor Effort.**

All signatories to the *Water Forum Agreement* will participate as members of the Water Forum Successor Effort and, where specified, will financially contribute as indicated above.

**ATTACHMENT A: WATER FORUM SUCCESSOR EFFORT**

**PRELIMINARY WORK PLAN**

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**FULL TIME EQUIVALENT STAFF TIME (INCLUDING SECRETARY) FOR EACH ACTIVITY AREA SHOWN AS “(FTE \_\_\_)” : TOTAL FTE , 4.**

**ESTIMATED TIMELINE FOR IMPLEMENTATION**

CATEGORY 1	---	First year
CATEGORY 2	---	Second year
CATEGORY 3	---	Third year
CATEGORY 4	---	Fourth year and thereafter

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**WATER DIVERSIONS (FT 1.5) :**

- 7 Provide leadership in securing implementation of the Updated Lower American River Flow Standard **(1,2)**
  - 7 Oversee drafting of the Updated Flow Standard **(1,2)**
  - 7 Negotiate with USBR mutually acceptable flexibility in implementation of the Flow Standard **(1,2)**
  - 7 Negotiate recommended amendment to the existing Declaration of Full Appropriation for the American River **(1,2)**
  - 7 Monitor completion of the upstream diversion agreements **(1,2)**
  - 7 Negotiate future updates to the Lower American River flow standard based on future agreements with any purveyor whose diversions may not be in the first phase of the *Water Forum Agreement* **(2,3,4)**
  - 7 Prepare testimony for the SWRCB **(2)**
  - 7 Coordinate with external water users including
    - State Water Project Contractors Association
    - CVP Water Users Association
    - Delta water users **(1,2)**
  - 7 Coordinate with state-wide environmental organizations **(1,2)**
    - Environmental Defense Fund
    - Natural Resources Defense Council
    - Bay Institute
    - Natural Heritage Institute **(1,2)**
  - 7 Coordinate with government agencies including
    - U.S. Bureau of Reclamation
    - Department of Water Resources
    - Environmental Protection Agency
    - U.S. Fish and Wildlife Service
    - National Marine Fisheries Service
-

- Department of Fish and Game
- California Resources Agency
- State Lands Commission
- CALFED (1,2)

- 7 Mediate and complete negotiations with any purveyors not included in the first phase of the *Water Forum Agreement* (1,2)
- 7 Negotiate criteria for transfers among Water Forum participants that would result in Water Forum signatories support for those transfers (2)
- 7 Establish data base, schedule and methodology for determining annual projected water diversions including which water forecasts to use, timely notice to diverters, etc. (2)
- 7 Develop reporting system to insure accurate information on actual diversions (1,2)
- 7 Implement the system including secure the cooperation of all diverters, collect, analyze and disseminate data, monitor results on an on-going basis, etc. (2,3,4)
- 7 Assist implementation of dry year alternatives (as needed) (4)
- 7 Organize stakeholder support for modifications necessary to implement the *Water Forum Agreement* such as changes in points of diversion, places of use, water exchanges, etc. (2,3,4)
- 7 Ensure that necessary assurances concerning future actions are achieved and specific caveats are met. (1,2,3,4)

**CRITICALLY DRY YEAR RESPONSE (FT .1) :**

- 7 Work with water purveyors and the Sacramento Area Water Works Association to develop a coordinated approach to water reductions in drought years (2)
- 7 Develop a detailed response plan for critically dry years including schedule and criteria for determining extent of water shortage, membership on the Dry Year Conference Committee, range of response options, methodology for determining “equitable” water use reductions, decision-making process within the Committee, etc. (1,2)
- 7 Convene the Dry Year Conference Committee (as needed) (4)
- 7 Provide staff support for all aspects of the Committee’s work (4)
- 7 Coordinate implementation of Committee decisions among all water users including purveyors, self-supplied industry and agriculture (4)
- 7 Communicate the work of the Committee to outside agencies, organizations, the media and the public (4)

**COORDINATION WITH HABITAT MANAGEMENT PROGRAM AND FISHERY ASSURANCES (FT .1)**

**FISHERY ASSURANCES --- [FUNDED AS PART OF THE HABITAT MANAGEMENT ELEMENT, NOT THE SUCCESSOR EFFORT]**

- 7 Identify and prioritize actions to insure protection for the fishery, wildlife, recreational and aesthetic values of the Lower American River. These may include:
  - Participating in the development of the Operational Criteria and Plan for releases from the Central Valley Project reservoirs
  - Participating in the development of the CVP Programmatic Environmental Impact Statement to insure conformity with the *Water Forum Agreement* (1,2,3,4)
- 7 Coordinate Water Forum participation in the Lower American River Operation Group which will make real-time flow release decisions based on adaptive management (1,2,3,4)
- 7 Participate in the adoption of the of the Anadromous Fish Restoration Program for the Lower American River (1,2,3)
- 7 Provide technical collaboration and assistance to USBR, F&WS and F&G (1,2,3,4)

**HABITAT MANAGEMENT PROGRAM --- [FUNDED AS PART OF THE HABITAT MANAGEMENT ELEMENT, NOT THE SUCCESSOR EFFORT]**

- 7 Coordinate all activities related to habitat management undertaken by *Water Forum Agreement* signatories (2,3,4)
- 7 Coordinate creation of and participate in the multi-agency Lower American River Habitat Management Program (2,3,4)
- 7 Participate in the Restoration Roundtable to insure that a fair share of CVP restoration funds are spent for improvements on the Lower American River (1,2,3,4)
- 7 Coordinate Water Forum's response to the existing petition for endangered species listing for steelhead (1,2,3,4)
- 7 If desired, coordinate development of a Habitat Conservation Plan that would respond to endangered species listing for steelhead (1,2,3,4)
- 7 Provide technical collaboration and assistance to USBR, F&WS and F&G (1,2,3,4)
- 7 Review effectiveness of partnership with the Lower American River Task Force in implementing the Lower American River Habitat management program (1)

**GROUNDWATER (FT .3) :**

- 7 Monitor on-going implementation of the *Water Forum Agreement* Sustainable Yield Recommendations (1,2,3,4)

- 7 Maintain liaison with the Sacramento North Area Groundwater Management Authority **(1,2,3,4)**
- 7 Convene and facilitate negotiations to establish an acceptable groundwater management program in the South Area of the County. Activities will include:
  - Identifying all key participants
  - Assisting participants to define and present their issues and interests
  - Coordinating logistical arrangements for all meetings
  - Providing “technical support” on interest-based negotiation
  - Staffing all aspects of the negotiation process
  - Maintaining contact with all key constituencies
  - Communicating the work of the negotiators to outside agencies, organizations, the media and the public
  - Coordinating implementation of the groundwater management program as negotiated **(1,2,3)**
- 7 Work with signatories to the existing agricultural district joint powers agreement to establish an acceptable groundwater management program in the Galt Area which includes all interested parties including the City of Galt. **(1,2,3)**
- 7 Insure adequate consistency and coordination among the groundwater management programs/entities across the three sub-areas of the groundwater basins **(2,3,4)**
- 7 Oversee the alternative dispute resolution procedures concerning groundwater set forth in the *Water Forum Agreement* (as needed) **(4)**

**WATER CONSERVATION (FT .2) :**

- 7 Review all water purveyors’ Water Forum annual water conservation reports as outlined in the Water Conservation Element **(2,3,4)**
- 7 Make annual report to the Plenary Session of all stakeholders concerning the status of implementation of Best Management Practices (BMP) **(2,3,4)**
- 7 Advise purveyors whose conservation results are below expectations or sources of assistance **(2,3,4)**
- 7 Facilitate “changed conditions” negotiations to determine how BMP’s adopted or amended by the California Urban Water Conservation Council after July 1997 will be incorporated into the Water Forum purveyors’ Water Conservation Plans. **(1,2,3,4)**
- 7 Monitor all other federal, state and CPUC regulations which effect conservation programs and advise purveyors and other stakeholders of the impact of any changes which may indicate a “changed condition” for the Water Forum **(2,3,4)**
- 7 Facilitate “changed conditions” negotiations among stakeholders to modify conservation elements of the *Water Forum Agreement* if required by new federal or state regulations **(2,3,4)**
- 7 Implement Water Forum Procedural Agreement concerning agricultural water conservation **(2,3)**
- 7 Annually review all water purveyors Citizen Involvement Programs for Water Conservation and advise any purveyors whose efforts are below expectations of sources of assistance **(2,3,4)**

- 7 Monitor and support regional efforts to collaborate on the implementation of BMPs, particularly ways to include energy and wastewater utilities (2,3,4)

#### **COORDINATION OF PARTICIPATION IN OTHER PROCESSES (FT .2) :**

- 7 Coordinate Water Forum signatories participation in other processes including
- CVPIA implementation
  - State Water Resources Control Board Bay-Delta Water Rights Proceedings
  - CALFED process
  - Department of the Interior Anadromous Fish Restoration Program (1,2,3,4)
  - Endangered Species Act consultation (1,2,3,4)
- 7 Provide technical analysis and support to those processes (1,2,3,4)
- 7 Participate in the development of U. S. Bureau of Reclamation's Operational Criteria and Plan for the Central Valley Project (1,2,3,4)
- 7 Negotiate criteria for land use agencies to use in assessing consistency of land use decisions with the diversions from the American River and the estimated average annual sustainable yields of the three sub-basins negotiated as part of the *Water Forum Agreement* (1,2,3)
- 7 Coordinate support for external funding of Folsom Reservoir Recreation Improvements (1,2,3,4)

#### **RESPONDING TO CHANGED CONDITIONS (FT .3) :**

- 7 Monitor legal developments including legislation, rules, regulations, and court decisions which may impact implementation of the *Water Forum Agreement* (e.g., drinking water standard, additions to the Endangered Species List, etc.) (2,3,4)
- 7 Monitor other developments at the local, regional, state and federal levels which may impact implementation of the *Water Forum Agreement* (e.g., land use decisions, changes in the health of the American River fishery, migration of toxic plumes in the groundwater basin, etc.) (2,3,4)
- 7 Analyze the impact of such external factors on the implementation of the *Agreement* and provide timely notice to all stakeholders (2,3,4)
- 7 Identify those external factors which are of such import that they will require re-negotiation of some elements of the *Agreement* (4)
- 7 Work with stakeholders to develop a re-negotiation agenda and schedule (4)
- 7 Provide staff support for all aspects of the re-negotiation process (4)
- 7 Coordinate implementation of re-negotiated elements of the *Agreement* by all stakeholders (4)

#### **ENVIRONMENTAL COMPLIANCE (FT .2) :**

- 7 Assist U.S. Bureau of Reclamation to complete National Environmental Policy Act (NEPA) compliance (1,2)
- 7 Prepare any/all subsequent environmental documentation which may be required to support actions taken in response to changed conditions (4)

- 7 Implement mitigation monitoring and reporting plan **(1,2,3,4)**

**EVALUATION AND REPORTING (FT .1) :**

- 7 Evaluate progress on all aspects of implementation of the *Water Forum Agreement* **(2,3,4)**
- 7 Comply with all reporting requirements of the Environmental Impact Report **(2,3,4)**
- 7 Research, draft and issue to the stakeholders, the media and the public an annual report documenting all important developments pertaining to implementation of the *Agreement* including but not limited to
- actual diversion amounts
  - progress on water conservation / BMP implementation
  - actions to implement the fishery flow pattern
  - health of the Lower American River eco-system
  - progress on integrating the use of surface water and groundwater to achieve sustainable yield **(2,3,4)**
- 7 Research, draft and issue to the stakeholders, the media and the public a comprehensive five-year evaluation on progress toward achieving the two coequal goals of the *Water Forum Agreement*: a safe and reliable water supply and protection of the public trust values of the Lower American River **(4)**
- 7 Prepare for, convene and staff the annual Plenary Session of the Water Forum stakeholders **(2,3,4)**

**MAINTAIN RELATIONSHIPS/ PREVENT-RESOLVE DISPUTES (FT .3) :**

- 7 Facilitate on-going dialogue among stakeholders on all items of mutual interest **(1,2,3,4)**
- 7 Coordinate interpretation of the *Water Forum Agreement* **(2,3,4)**
- 7 Assist *Water Forum Agreement* signatories to resolve misunderstandings and maintain positive inter-personal relationships **(1,2,3,4)**
- 7 Preserve and enhance the good-faith interest-based process which has made the *Agreement* possible **(1,2,3,4)**
- 7 Educate all new stakeholder representatives on the principles of interest-based negotiation, the interests of all other *Water Forum Agreement* signatories, the history of the *Agreement* (especially the essential integration of the seven key elements of the *Agreement*), progress to date and current status **(2,3,4)**
- 7 Provide updates, as necessary, to stakeholder organizations and to individual stakeholder representatives on the principles on interest-based negotiation **(2,3,4)**
- 7 Respond promptly to identified stakeholder concerns **(2,3,4)**
- 7 Identify timely actions which can prevent/lessen problems related to “deal-creep” or non-compliance **(2,3,4)**
- 7 Work with stakeholders to develop mutually acceptable administrative procedures to address and resolve disputes internally before seeking other legal remedies including but not limited to designated responsible individuals, specific timelines, response options, etc. **(2,3)**

- 7 Secure explicit stakeholder approval of these procedures and reaffirmation of commitment to implement them (2,3,)

**PUBLIC OUTREACH (FT .2) :**

- 7 Develop and implement a comprehensive communication strategy concerning the purpose and progress of the *Water Forum Agreement* which reaches
  - stakeholder organizations
  - opinion leaders in the Sacramento region
  - other interested parties in the American River watershed
  - community groups and organizations
  - interested parties outside of the American River watershed
  - the media
  - the public (1,2,3,4)
- 7 Maintain public outreach and education activities designed to promote continued public support for the *Water Forum Agreement* (1,2,3,4)

**INTERNAL ADMINISTRATION (FT .5) :**

- 7 Staff all meetings of the Successor Effort including
  - Plenary Meetings of all stakeholders
  - Steering Committee and all sub-committees
  - Technical teams, ad hoc groups, etc. (1,2,3,4)
- 7 Provide for adequate office space, equipment, supplies, etc. (2,3,4)
- 7 Develop annual budget (1,2,3,4)
- 7 Provide staff and consultants as needed (1,2,3,4)
- 7 Administer contracts (1,2,3,4)
- 7 Maintain all appropriate records (1,2,3,4)
- 7 Etc., etc., etc.

**ATTACHMENT B: WATER FORUM SUCCESSOR EFFORT**

**SAMPLE BUDGET**

**FIRST YEAR OPERATION**

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**7 STAFF: \$326,000 per year**

Assumes three professional full-time equivalent employees or contractors and one secretary. After the first three years, when a significant portion of the initial work of the Water Forum Successor Effort has been completed, professional staff may be reduced from 3 to 2.

**7 RENTAL OF OFFICE SPACE AND EQUIPMENT: \$53,400 per year**

Assumes office space of 2500 sq. ft. @ \$1.50 per square foot. Copier @ \$700 per month. Does not reflect economies of scale resulting from shared facilities.

**7 TELECOMMUNICATIONS: \$5,600 per year**

**7 OFFICE SUPPLIES AND MATERIALS: \$40,000 per year**

Includes postage, printing, publications, meal and travel expenses, temporary clerical service, computer supplies, seminar registrations, etc.

**7 CONSULTANT CONTRACTS: \$250,000 per year**

Contracts needed for hydrology, fishery, engineering, mediation services, etc. Consultants used only as needed.

**7 TOTAL OF ABOVE: \$675,000 per year**

**ATTACHMENT C: POTENTIAL FIRST YEAR COST ALLOCATION ON A PURVEYOR-BY-PURVEYOR BASIS**

Purveyors / Organizations	Total Connections	Successor Effort			
		% connections included	# connections included	Successor Effort Total	monthly rate impact
Zone 13, Sacto Co unincorporated area	173,641	100%	173,641	\$333,359	0.160
City of Folsom	9,942	100%	9,942	\$19,087	0.160
City of Galt <sup>7</sup>	5,170	50%	2,585	\$4,963	0.080
City of Roseville	23,859	100%	23,859	\$45,805	0.160
City of Sacramento	121,300	100%	121,300	\$232,874	0.160
Placer County Water Agency	9,480	See note below	9,480	\$18,200	0.160
Sacramento Municipal Utility District	NA	NA	NA	\$10,000	NA
San Juan Water District (Placer Co.)	5,580	100%	5,580	\$10,713	0.160
<b>Totals</b>	<b>348,972</b>		<b>346,387</b>	<b>\$675,000</b>	

**NOTES:**

An estimate of \$675,000 was used as the first year cost for the Successor Effort.

Zone 13 funds will be used to cover the financial contributions for water purveyors serving the unincorporated areas of Sacramento County and the City of Citrus Heights.

For Placer County Water Agency, it is assumed that 67% of their 28,440 connections are regularly served by the Yuba/Bear Rivers. Therefore, the remaining 9,480 connections are included in this calculation. As PCWA continues to develop the American River and develops the Sacramento River diversion included in the *Water Forum Agreement*, connections served by these supplies will be included in the allocation procedure.

El Dorado Irrigation District and Georgetown Divide Public Utility District: Mutually agreed upon Water Forum Successor Effort expenses related solely to converting these purveyors' procedural agreement into Specific Agreements will be reimbursed by these purveyors. As soon

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<sup>7</sup>The City of Galt City Manager has informed Water Forum staff that when the Water Forum Successor Effort begins, the City of Galt will evaluate whether to financially participate in the Water Forum Successor Effort. The City of Galt's participation in the *Water Forum Agreement* is also subject to agreement with other signatories regarding Galt's financial contribution to the Water Forum Successor Effort.

as the purveyors have negotiated Specific Agreements and they sign the *Water Forum Agreement*, they will contribute to the Water Forum Successor Effort on the same basis as other purveyors that have Specific Agreements.

In the future as Citizens Utilities Company of California serves customers in Placer County, it will contribute to the Water Forum Successor Effort based on the number of those connections.