Appendix E: Program Outcomes and Measures Memorandum

Appendix E provides the MCG-approved Program Outcomes and Measures Memorandum which outlines the MokeWISE Program Objectives and Consequences to be Avoided.

MokeWISE Program Memorandum:
Program Outcomes & Measures

Revision Date: 22 November 2013

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Introduction

The Mokelumne Watershed Inter-regional Sustainability Evaluation (MokeWISE) program has emerged following years of dialogue between a diverse set of stakeholders in the Upper and Lower Mokelumne River watersheds. MokeWISE, when concluded, is expected to yield a scientifically-based and broadly-supported water resources program that includes sustainable approaches to water resources management in the Mokelumne River watershed.

This effort includes establishing program outcomes and measures through a stakeholder-driven process. The program outcomes and measures will ultimately serve as the basis for developing and evaluating program options. As a first step in developing program outcomes and measures, members of the Mokelumne Collaborative Group (MCG) were asked to provide initial thoughts related to desired program outcomes and consequences to be avoided. This memorandum documents the process implemented to solicit initial thoughts, feedback received from MCG members, and the process for using this feedback moving forward.

The MCG was asked to complete an interest statement template designed to capture initial thoughts on desired program outcomes and consequences to be avoided. In completing the template, MCG members were asked to draft a one to two paragraph interest statement narrative summarizing their organizations' interest in the MokeWISE program, including key areas of interest and concern in the watershed and desired potential project outcomes. They were then asked to complete a table summarizing initial ideas related to desired potential benefits to be achieved and potential consequences to be avoided by the program, and potential ways of measuring these outcomes. Finally, members were asked to indicate the relative importance of each potential outcome to their organizations on a scale

of 1 to 3, with 1 as highest priority. The interest statement template provided to the MCG can be found in Appendix A. The narrative interest statements provided by MCG members can be found in Appendix B.

Information provided through this exercise was compiled by the project team with the goal of identifying areas of common interest, which were used to develop joint program objectives and measures. In addition, the interest statement narratives were shared with the MCG to aid in increasing each member's awareness of the specific interests of the other participating organizations.

Program Objectives and Consequences to be Avoided

The project team reviewed, categorized and in some cases revised potential outcomes identified by MCG members in order to develop a consolidated list of potential desired outcomes and consequences to be avoided. As such, this consolidated list represents the project team's synthesis of all input received. Not all interests expressed by MCG members are included in the consolidated list. The preliminary list was reviewed and revised by MCG members so that each stated interest accurately reflects the interest of the MCG member organizations to which it is attributed. The inclusion of a stated interest does not indicate general support of all stakeholders. On the other hand, attribution of an interest to specific stakeholders does not mean that other stakeholders do not support that interest.

Table 2 provides the consolidated list of potential program outcomes suggested by MCG members. Potential outcomes are summarized by category, and the MCG member organizations that identified each outcome are identified.

Table 3 summarizes consequences to be avoided that were identified by MCG members through the interest statement exercise. Each consequence to be avoided is summarized, along with the general category in which it falls and the attributing stakeholders.

Program Constraints

The MokeWISE program is funded by a Proposition 84 Integrated Regional Water Management (IRWM) planning grant, administered by the California Department of Water Resources (DWR). The program is envisioned to be a stakeholder-driven process, with the MCG determining the program objectives, project alternatives to be considered, assessment criteria, etc. The scope of work was written to explicitly indicate this intent.

However, as a grant-funded program with a defined scope of work, schedule, and budget, there are some limitations in terms of what can be achieved as part of the planning process. For example, the deliverables identified in the DWR agreement must be achieved in order for expenses to be reimbursed, and any expenses above and beyond the grant funds available will not be reimbursed. Further, as an IRWM-funded program, the MokeWISE program must adhere to the guidelines established for the IRWM program.

Next Steps

This document reflects the Planning Team's initial interpretation and summarization of the interest statements that were provided by MCG members. This document will be provided to and reviewed with the MCG to ensure that all interests and concerns have been accurately and adequately captured. Based on written comments received, the MokeWISE program objectives will be revised and resubmitted for acceptance by the MCG at the November meeting.

Table 2: Program Objectives and Desired Outcomes

Category	*Objective*	*Summary*	*Potential Measurement*	*Attributing Stakeholders*
Water Supply	Promote demand-side management strategies	The program should promote projects and policies that support demand-side management strategies including conservation, water use efficiency, peak period rationing and leak detection.	Cost/benefit of conservation vs. new supply; amount of water saved per project implemented	AWA, Calaveras Planning Coalition, Foothill Conservancy, Calaveras County, JVID, Sierra Club
	Increase supply reliability	The program should result in increased water supply reliability for water purveyors.	Water accounting system for surface and groundwater; Acre-feet (AF) of supply in various hydrologic year types	EBMUD, AWA, Lodi, NSJWCD, GBA/SJ County, CCWD, CPUD, JVID
	Increase amount of stored water	The program should result in an increase in the amount of water stored within the watershed and consider both ground and surface options.	Acre-feet per year (AFY) of supply diverted for recharge; groundwater level monitoring; AF of surface storage available	CCWD, Stockton East, JVID, GBA/SJ County, Stockton Municipal Utilities, Calaveras County, AWA, Calaveras PUD, JVID
	Promote smart, responsible development	The program should promote projects and policies that ensure that the water needs of new development are met while limiting negative externalities and end use harm.	Inclusion of land use coordination component(s) in recommended program	Calaveras County, MyValleySprings.com, Foothill Conservancy
	Reduce reliance on groundwater for irrigation	The program should result in a reduced reliance on groundwater for irrigation and explore surface water alternatives.	AFY of groundwater used for irrigation	SJRCD
	Promote a long-term groundwater balance	The program should promote projects and policies that seek to contribute to a positive long-term groundwater balance.	Groundwater level monitoring; flow diversion measurements	CA Sport Fishing, MyValleySprings.com, Stockton East, Stockton Municipal Utilities
	Maximize water resource availability for all beneficial uses	The program should promote projects and policies that allocate water to the full spectrum of beneficial uses based on full analysis of all potential sources of supply.	Number of different types of uses supported by the recommended program; number of different supply sources studied	Calaveras County, CCWD, Calaveras Planning Coalition, Foothill Conservancy
	Decrease the need	The program should seek to implement	The amount of water	Calaveras Planning

Category	*Objective*	*Summary*	*Potential Measurement*	*Attributing Stakeholders*
	to import water	state legislative goals to improve self-sufficiency and reduce the need to import water	imported	Coalition
Water Demands	Review and understand existing agency demand estimates	The MCG should review and come to a common understanding of water demand estimates described in existing planning documents	Number of MCG stakeholders who understand existing demand numbers.	Foothill Conservancy, Calaveras Planning Coalition, MyValleySprings.com, Trout Unlimited
	To identify water demand issues for timely consideration by the water agencies during their next UWMP update.	The program should identify issues and analyses for water agencies to consider as they prepare demand and population estimates.	Number of demand issues and analyses identified for water agency consideration as they prepare demand and population estimates for their UWMP Updates.	Calaveras Planning Coalition, Foothill Conservancy
Water Quality	Protect and improve surface and groundwater quality	The program should result in improved water quality within the watershed for both surface water and groundwater.	Groundwater and surface water quality monitoring .	Lodi, NSJWCD, EBMUD, SJRCD, CCWD, JVID, Sierra Club
	Match delivered water quality to use	The program should try to avoid wasting high quality water on uses that do not need it.	The amount of high quality water saved by substitution with lower quality water; he amount of high quality water that is put to uses that do not need it.	Calaveras Planning Coalition
	Use water purification technology as a tool to maximize beneficial uses	The program should seek to implement the state's legislative goals to use water purification technology as a tool to increase the beneficial uses of water.	The amount of water that was put to additional beneficial uses through purification technology.	Calaveras Planning Coalition
Recreation	Increase access for water-based recreation	The program should result in increased access to the Mokelumne River from Highway 12 to the headwaters.	Number of new public access points	Delta Fly Fishers
	Increase angling	The program should result in increased	Number of fish observed	Delta Fly Fishers

Category	*Objective*	*Summary*	*Potential Measurement*	*Attributing Stakeholders*
	and other recreational opportunities	spawning habitat, designating sections of the river for hatchery and wild species, and designating appropriate environmental flows.	during annual fish counts; amount of spawning habitat created or enhanced; length of river designated for wild species; amount and timing of environmental flows	
	Increase angling and other recreational opportunities	The program should result in the stocking of hatchery-raised trout in designated areas on the Upper Mokelumne and designating and managing wild trout sections.	Number of hatchery-raised trout observed during angling surveys	Delta Fly Fishers
	Increase angling and other recreational opportunities	The program should result in the reintroduction of salmon in the Upper Mokelumne river.	Number of salmon observed during fish counts	Delta Fly Fishers, MyValleySprings.com
	Increase angling and other recreational opportunities	The program should result in increased angling, harvesting, and other recreational opportunities.	Estimated monetized, or otherwise quantified, benefit of recreational enhancements included in recommended program(s)	EBMUD, JVID, Trout Unlimited
Water Rights	Resolve existing water rights conflicts in the watershed	The program should seek to resolve existing water rights protests and to achieve a common understanding of the application of relevant water rights law in the watershed.	Number of water rights protests resolved	GBA/SJ County, EBMUD, JVID, Foothill Conservancy, CA Sport Fishing, Woodbridge Irrigation District, Sierra Club
Flood Management	Enhance flood protection and management	The program should result in multi-benefit projects which provide flood protection for residents and businesses within the watershed and enhance ecosystem function.	Cost of flood-related damages in the watershed	NSJWCD
Data	Use sound, agreed-upon data to evaluate program alternatives	The program should produce an agreed-upon hydrology dataset and Water Availability Analysis	MCG approval of data used during program	CA Sport Fishing, Foothill Conservancy, Trout Unlimited, US Forest Service, Sierra Club

Category	*Objective*	*Summary*	*Potential Measurement*	*Attributing Stakeholders*
	Use sound, agreed-upon data to evaluate program alternatives	Program components should be described with sufficient detail to allow for evaluation.	Ability of program component to be evaluated	CA Sport Fishing, Calaveras Planning Coalition
	Promote the contribution of sound scientific data to current body of knowledge	The program should generate and promote projects with monitoring and reporting requirements to increase water resources data	Number of recommended project(s) including a data collection and reporting component	Calaveras County, Calaveras Planning Coalition
Environment	Protect and enhance natural environment	The program should result in the protection and enhancement of the natural environment of the Mokelumne watershed.	Number and extent of protection and enhancement measures; monetization or other quantification of environmental benefits / enhancements	EBMUD, CA Sport Fishing, Foothill Conservancy, JVID, Trout Unlimited, Sierra Club
	Protect and enhance natural environment	The program should include support for wild and scenic designation of the Mokelumne River down to the Pardee High Pool.	Degree of support for Wild and Scenic designation	Calaveras Public Utility District, Calaveras Planning Coalition, Sierra Club
	Protect and restore fisheries	The program should protect, restore, and enhance fisheries in the Mokelumne River downstream of Woodbridge Dam.	Number of fish counted during annual fish counts and surveys	Delta Fly Fishers, Trout Unlimited
Collaboration	Foster long-term regional relationships and avoid unnecessary conflict and litigation	The program should foster long-term regional relationships which will promote continued collaboration on water management issues and reduce unnecessary litigation.	Percentage of MCG stakeholders continuing commitment throughout project duration and number of issues resolved in the process Number of issues resolved through the MokeWISE program	USFS, Foothill Conservancy, Calaveras County, Calaveras Planning Coalition, EBMUD, NSJWCD, JVID
	Promote broadly-supported outcomes that	The program should promote projects and policies that support outcomes benefiting a wide range of interests within the	Percentage of MCG member organizations that receive a tangible benefit from	SJRCD, GBA/SJ County, MyValleySprings.com, Foothill Conservancy

Category	*Objective*	*Summary*	*Potential Measurement*	*Attributing Stakeholders*
	benefit a wide range of interests	watershed.	implementation of the preferred program	
	Promote broadly-supported outcomes that benefit a wide range of interests	The program should promote the least controversial projects and policies.	Degree of consensus among MCG members on selected alternative	NSJWCD, Foothill Conservancy
	Promote broadly-supported outcomes that benefit a wide range of interests	The program should result in agreements that reduce conflict.	Number of agreements that reduce conflict	Foothill Conservancy
	Develop a program consistent with all existing licenses, permits, and agreements affecting the River	The program should facilitate a common understanding of the requirements contained in all existing licenses, permits, and agreements affecting the Mokelumne River and ensure that MCG proposals will not interfere with their implementation.	Number of existing licenses, permits, and agreements violated by the recommended program(s) and severity of violation	Trout Unlimited, Foothill Conservancy
	Develop a program consistent with all existing licenses, permits, and agreements affecting the River	The program should adhere to all CEQA/NEPA regulations.	Completion of CEQA/NEPA documentation	Calaveras Planning Coalition
Other Human Values	Increase investment in forest management	The program should promote forest management that reduces the economic impact of wildfires and other natural disasters, particularly on water supply.	Flux of sediment discharged post-fire compared to historic events (e.g., Power Fire); monetization of costs avoided by pre-emptive management	Sierra Nevada Conservancy
	Maximize socio-economic, cultural, recreational, public health, and public safety benefits with a	The program should seek to design projects and policies to improve socio-economic, cultural, recreational, public health, and public safety benefits with a particular emphasis on DACs.	Acres of cultural resource areas preserved; acres of recreational area maintained; miles of stream enhanced for fisheries	Calaveras Planning Coalition

Category	*Objective*	*Summary*	*Potential Measurement*	*Attributing Stakeholders*
	particular emphasis on disadvantaged communities (DACs)			
	Achieve equity	The program should be designed to achieve equity across regions, cultures, incomes, and time,	Amount of perceived equity across regions, cultures, incomes, and time.	Calaveras Planning Coalition, MyValleySprings.com

Table 3: Consequences to be avoided during the MokeWise Program

Category	*Consequence to be Avoided*	*Summary*	*Potential Measurement*	*Attributing Stakeholders*
Data	Avoid basing decisions on incomplete or inaccurate information	The program should avoid decision-making based on incomplete or inaccurate information.	MCG approval of data used for program decision-making	Calaveras Planning Coalition
Environment	Avoid demand for new or larger on-stream dams	The program should avoid demand for new or larger on-stream dams.	Number of new on-stream dams or dam expansions recommended	Foothill Conservancy
	Avoid harmful impacts to fisheries and other wildlife	The program should avoid harming fisheries and other aquatic and terrestrial wildlife.	Number of species harmed by the program and degree of harm; miles of fishery habitat degraded	Foothill Conservancy
	Avoid conversion of agricultural lands to developed uses	The program should avoid urbanization of agricultural lands.	Number of agricultural acres urbanized	Foothill Conservancy
	Avoid shifting environmental impacts from one	The program should avoid shifting environmental impacts from one sensitive area to another.	Number and extent of adverse environmental impacts shifted from one	Foothill Conservancy

	area to another		location to another	
	No diminishment of the benefits of existing in-stream flow	The program should protect against any decrease in benefits to public trust resources of existing in-stream flows.	Quantification of the benefits of existing flows in the River; quantification of impacts resulting from potential reduction of these flows	CA Sport Fishing
Collaboration	Avoid closing the process to the public	The program should avoid closing the process to the public.	Percentage of MokeWISE planning meetings open to the public; percentage of MokeWISE implementation meetings open to the public	Calaveras Planning Coalition
Other Human Values	Avoid dependency on potentially unreliable supply	The program should support projects and policies that will prevent downstream users from becoming dependent on unreliable supplies	Percent of time recommended supplies will be unavailable due to reliability issues	CCWD
	Minimize adverse socio-economic and public health and safety impacts	The program should promote projects and policies that limit or appropriately mitigate adverse socio-economic and public health and safety impacts.	Cost benefit analysis of recommended program considering social, environmental, and cultural impacts required of projects; comparison of projected cost to published "willingness to pay" benchmarks	EBMUD, Foothill Conservancy, MyValleySprings.com, Calaveras Planning Coalition, Calaveras PUD, JVID
	Avoid end use harm	The program should seek to allocate water in ways that do the least end use harm.	Amount of end use harm	Calaveras Planning Coalition, MyValleySprings.com
	Avoid violating procedural or substantive laws.	The program should commit to completing CEQA/NEPA analysis prior to the agencies adopting and implementing the program.	Number of lawsuits filed for failing to comply with CEQA/NEPA	Calaveras Planning Coalition
	Avoid interregional inequity	The program should provide parity or equity among the regions.	Degree to which program alternatives serve inter-regional equity	MyValleySprings.com

Appendix A

MokeWISE Interest Statement

Please return to Katie Cole (kcole@rmcwater.com) no later than Thursday, September 12.

Organization Name:

Representative Name:

Interest Statement Narrative

[Please provide one or two paragraphs summarizing your organization's interest in the MokeWISE program, including key areas of interest and concern in the watershed, and desired potential project outcomes.]

Potential Program Objectives

[Please complete the table on the following page summarizing initial thoughts related to desired potential benefits to be achieved and potential consequences to be avoided by the program, as well as ways of measuring those outcomes, to the extent possible. Please also indicate how critical each potential benefit / consequence is to your organization by providing a priority of 1, 2, or 3, where priority 1=highest priority / of critical importance, 2= medium priority / important but not critical, 3= lower priority / desired outcome but not critical. Please feel free to add rows as needed.]

Table 1: Initial Thoughts Related to Potential Benefits to be Achieved and Potential Consequences to be Avoided

Potential Benefit / Consequence	**Summary Description**	**Potential Measurement Approach(es)**	**Priority (1, 2, or 3)**
EXAMPLE: Increased groundwater recharge	*EXAMPLE: The project should result in a net increase in water recharged to the Eastern San Joaquin Groundwater Basin.*	*EXAMPLE: Flow meters to measure new / additional supply diverted for recharge.*	*EXAMPLE: 2*

Appendix B

MokeWISE Program:

Mokelumne Collaborative Group Interest Statements

Amador Water Agency

The Amador Water Agency is the largest purveyor of treated water in Amador County and strives to meet the needs for water and wastewater service throughout the County consistent with land use agency plans and approvals. The Amador Water Agency projects a shortfall in available water for Amador County and seeks to secure water for those future needs. Amador Water Agency plans to utilize water reclamation, conservation, and new water supply projects to meet future demands. Amador Water Agency also recognizes natural, recreational, and cultural resources within the Mokelumne Watershed, as well as the needs and rights of others who all rely on water that originates in the Mokelumne Watershed.

The MokeWISE program offers an avenue to develop and evaluate solutions to balance water needs with the finite water resource within the watershed and the Amador Water Agency desires to be a part of this program in seeking to meet current and future water needs throughout Amador County.

Calaveras County

Calaveras County is interested in the MokeWISE program for a few reasons. Development, specifically residential, in the lower part of the County will continue to struggle without water. In preparing for future development, the County would like to have a better understanding of what water from the Mokelumne River would be available for land use planning purposes.

The County would like to improve the linkage between land use planning decisions and water planning. We need to have a better understanding of water issues and needs. As the Lead Agency, projects cannot be approved without proof of services such as water and has struggled to obtain this type of data in the past.

Within the boundaries of the County there are various agricultural opportunities, especially in the lower part of the County. Having the knowledge and ability to provide land owners with the necessary resources to have an agricultural operation is important to the County. This process may present opportunities to work with agencies to come up with a way to supply agriculture with raw surface water and/or recycled water.

Calaveras County Water District

To enhance the use of Mokelumne River water in Calaveras County, providing water to underserved and water distress communities in Western Calaveras County, enhancing

agriculture and economic development in Calaveras reducing or eliminating the balance of water flowing west without offsetting compensation.

To gain relief from unreasonable and restrictive conditions imposed upon the use of Calaveras County Water by downstream interests. To provide an education to downstream users of the historical abuses and perpetual disadvantages to area of origin, which all similar in impacts whether perpetrated by Los Angeles, Oakland or Stockton.

Calaveras Planning Coalition

The CPC is a group of community organizations and individuals who want a healthy and sustainable future for Calaveras County. We believe that public participation is critical to a successful planning process. United behind eleven land use and development principles, we seek to balance the conservation of local agricultural, natural and historic resources, with the need to provide jobs, housing, safety, and services.

Consistent with the public interests provisions of the water code, our overarching interest is to see Moke water allocated in a way that does the most good and/or the least harm. This interest can be broken down into at least five parts.

First, our interest is to see Moke water used for a broad spectrum of beneficial uses: development uses, agricultural uses, salmon fishery restoration, recreational whitewater boating, and Delta habitat maintenance.

Second, our interest is to make the most out of Moke water conservation, re-use, and rationing.

Third, with regard to the allocation of Moke water for developed uses, we want to see the water used for development that promotes economic, social, and environmental benefits.

Fourth, our interest is to see Moke water allocated for development in those communities that are most committed to mitigating the adverse economic, social and environmental impacts associated with that development.

Fifth, from a process standpoint, we want Moke water, wastewater, and rate-setting activities carried out in forums with more effective, more valued, and more heeded public participation activities.

Calaveras PUD

The Calaveras Public Utility District interest in the MokeWISE project is to collaborative work with the stakeholders in the watershed. Using the knowledge to evaluate the resource and develop the strategies to support the interregional success. Collectively set goals that represent the comprehensive evaluations, development and future implementation of the needs of the stakeholders group in planning for a "MokeWISEr" future.

California Sport Fishing Protection Alliance

CSPA's primary goal in the MokeWISE process is to develop a defensible, sustainable and replicable water availability analysis for the Mokelumne watershed and for other potentially connected watersheds from which Mokelumne watershed water uses may seek to draw.

CSPA's second goal in the MokeWISE process is to evaluate water availability for potential projects in the Mokelumne watershed in the context of alternative Delta export operations, including operation of the Cross Channel Gates.

CSPA's third goal in the MokeWISE process is to agree on a hydrology dataset and water balance model that will allow the technical analysis necessary to achieve the first two goals. Ideally, this technical information and tool would be publicly available.

CSPA's fourth goal in the MokeWISE process is to create a positive long-term groundwater water balance in Eastern San Joaquin County, in order to enable responsible water management, and so that present and future management actions do not exacerbate the current unsustainable condition in which more groundwater is pumped than is recharged.

CSPA's fifth goal in the MokeWISE process is to build on achievement of the first three goals to resolve CSPA's existing water rights protests with San Joaquin County entities.

CSPA's sixth goal in the MokeWISE process is to assure reasonable protection for Amador and Calaveras County state filings and for Amador and Calaveras counties' area of origin water rights interest in general.

CSPA's seventh goal is to protect and maintain the benefits to the Mokelumne River that derive from the Mokelumne Settlement Agreement for Project 137.

City of Lodi, Public Works

1. Water Quality Protection for the Watershed:

The Mokelumne River is the water supply for Lodi Lake which serves as a significant cultural, economic, and recreational resource to the residents of Lodi. The City of Lodi allocates significant resources to protect the river and lake through control of storm water and other sources of runoff within the City.

2. Protection of the Drinking Water Supply:

The Mokelumne River is the water supply for the new City of Lodi Surface Water Treatment Plant (SWTP) that currently provides 6,000 acre feet of drinking water annually to the residents of Lodi. The SWTP significantly reduces groundwater pumping and depletion in the Lodi area. It is essential that the water supply be available to provide high quality

drinking water and reduce groundwater depletion. The SWTP is capable of treating 11,000 acre feet annually, and can be expanded to treat 22,000 acre feet annually.

Delta Fly Fishers, Inc.

In dealing with issues on the Mokelumne, I view the river as three segments;

Segment One -confluence with the San Joaquin to the base of Woodbridge Dam

Segment Two - Woodbridge dam to Electra Road including Lodi Lake, Camanche and Pardee Reservoirs.

Segment Three - The river above Electra Road.

Areas of Interest and Concern:

Segment One - Restoration of smallmouth, largemouth, American Shad and Striped Bass fishing in this portion of the river. Adequate water volumes for passage for anadromous fishes (chinook salmon and steelhead). Increased public recreational access.

Fisheries restoration could include improvements to the river bed due to possible silting and other negligence and restoration of adequate flows. Public access through what is now almost 100 percent private property to be able to fish for the above mentioned species.

Segment Two - Further restoration of the salmon and steelhead fisheries and adequate monitoring, insuring that the fisheries do not deteriorate due to neglect. Increased public access for both fishing and other recreational purposes including access to the river portions between Camanche and Pardee and above Pardee to Highway 49.

Segment Three - Proper management of the Mokelumne as a sustainable trout fishery, including the possibility of establishing a wild trout section with special regulations and the public access to allow for the development of public access to those portions of the river.

The possibility also exists for the expansion of the chinook salmon fishery above Pardee through a trucking and trapping program or improved fish ladder access through Camanche and Pardee dams.

Note: All of the above are public trust issues. The river, before being over developed and over drafted provided all of these fisheries and recreational opportunities to the citizens of the state. Commercial interests and developments have severely impacted these public trust assets with little in the way of mitigation, causing a great loss to the citizens of the state.

EBMUD

EBMUD obtains 90% of its water supplies from the Mokelumne River. Our interest as a participant in the UMRWA-GBA MokeWISE program is directly related to our desire to

maintain the reliability of that resource. Participation also affords EBMUD an opportunity to strengthen our relationship(s) with other water agencies and interest groups that share our desire to protect the River and its' associated environment benefits (recreational, fisheries, biologic, water supply, etc.).

As part of the District's recently completed Water Supply Management Program 2040 (WSMP 2040) effort, EBMUD identified objectives used to guide how we would go about planning to meet our water supply needs over the coming 30 years. Those objectives fell under four main categories. WSMP 2040 objectives align with how we'd approach our MokeWISE participation, in that we'd want to see MokeWISE project outcomes that address one or more of those objectives:

1. Operations, Engineering, Legal & Institutional Objectives:
   - Provide water supply reliability
   - Utilize current water right entitlements.
   - Promote District involvement in regional solutions
2. Economic Objectives:
   - Minimize cost to District customers.
   - Minimize drought impact to District customers.
   - Maximize positive impact to local economy
3. Public Health, Safety & Community Objectives:
   - Ensure the high quality of the District's water supply.
   - Minimize adverse sociocultural impacts (including environmental justice).
   - Minimize risks to public health and safety.
   - Maximize security of infrastructure and water supply.
4. Environmental Objectives:
   - Preserve and protect the environment for future generations.
   - Preserve and protect biological resources.
   - Minimize carbon footprint.
   - Promote recreational opportunities.

Foothill Conservancy

The Foothill Conservancy, a community-based nonprofit organization based in Amador and Calaveras counties, has a 24-year history of working to protect and restore the upper Mokelumne River and its watershed. Consequently, we have a deep interest in the MokeWISE program and its outcomes. The Foothill Conservancy's mission is to protect, restore, and sustain the natural and human environment of our counties for the benefit of current and future generations. We are committed to finding positive solutions that will work for all interests, focusing on fact, science, and law, while supporting community-based solutions. We are dedicated to helping develop lasting, long-term water solutions that will assure the future health of the Mokelumne while addressing future water needs.

Our priorities for MokeWISE include protecting the ecological values of the river and avoiding actions that could preclude future restoration of its anadromous fisheries; ensuring the protection of the river's historical, recreational, and cultural resources and uses; protecting terrestrial and aquatic wildlife; and ensuring that Amador and Calaveras counties are assured a reasonable future water supply while addressing the water needs of downstream users. We hope the MokeWISE project will resolve interregional water disputes, address the question of water availability in a definitive way that looks at all potential water sources, include meaningful demand-side approaches to water supply, and establish productive, watershed-wide working relationships that can address future issues regarding water supply and watershed health.

GBA/San Joaquin County

The Mission of the GBA is to employ a consensus-based approach to collaboratively develop stakeholder-supported projects and programs that mitigate and prevent the impacts of long-term groundwater overdraft. Managing the underlying groundwater basin is critical in providing reliable water supplies, which are essential for the economic, social, and environmental viability of the San Joaquin County Region. Yet, the problem of significant groundwater overdraft and the resulting decline of groundwater levels in Eastern San Joaquin County has created a "silver-lining" with an estimated 1 to 2 million acre-feet of potential operable groundwater storage capacity, a volume equivalent to Folsom Reservoir.

Member agencies in the GBA have long looked to the Mokelumne River as a major source of water for conjunctive use projects. The GBA's desire to develop a project with broad based support is reflected in the GBA's commitment to the Mokelumne WISE effort. The vision for a conjunctive use program utilizing Mokelumne River water hopes to accomplish increased dry-year water supplies, improved groundwater management, maintained or enhanced agricultural viability, and protection of water rights in a manner that sustains the environmental, social and economic viability of the Mokelumne Watershed, project partners and San Joaquin County as a whole.

Jackson Valley ID

The Jackson Valley Irrigation District serves Irrigation, Raw Domestic and soon Treated water to members of our district located just north of Lake Pardee and Camanche near Ione, California. The Districts primary source of water is from the Jackson Creek Watershed but we do receive 3,850 Acre Feet of water annually from the Mokelumne River Watershed through Lake Pardee. The district encompasses roughly 12,000 acres of land and roughly 8,500 acres of land used for irrigation and serves a population of about 1,000 people. The District faces many hurdles being that we are a somewhat small district and work with a small staff of three running and operating the system which include 2 large distribution laterals stretching miles through the district, maintaining a dam and headwork's, a 500 kw

hydro-electric plant, pumping stations and soon a newly installed 175gpm water treatment plant.

In the last several years the district has seen an increase in demand for water primarily for irrigation purposes. The new addition of several vineyards and the development of more irrigated pasture lands have been on the rise. As California's population grows and regulations from the Federal and State Environmental agency's clamp down on how and where to grow crops and raise cattle, it makes JVID unique and will create more demand from farmers and ranchers looking to comply with the new regulatory standards. JVID is reaching a tipping point where the amount of water we currently serve yearly does not leave an adequate water supply in our reservoir to prepare for drought events once the season is concluded. As more and more people put a finical stake into the system JVID plays a very important role to insure the water is available and the system is capable of serving the water. The lack of adequate storage is one of JVID's biggest concerns but not just for JVID but we believe for the whole State of California. JVID's primary interests of being MokeWISE member is to insure a clean, plentiful and guaranteed source of water for farming, livestock, raw domestic, industrial, recreation, and treated water to the members of our District for now and years into the future.

MyValleySprings.com

It is the mission of MyValleySprings.com (MVS) to promote responsible growth and development through public participation in community planning in order to preserve the quality of rural life in the greater Valley Springs area. Community land use planning impacts every aspect of our lives, and so the interests of MVS are far-reaching and include, of course, water quantity and quality. Responsible, sustainable growth and development cannot occur without an adequate clean water supply.

Consequently, some of our interests and concerns are: retaining a reliable water supply for area residents, agriculture, and wildlife; groundwater quality, quantity, and recharge; protection of surface water and the watershed; identifying (and to the extent practical, quantifying) current and future water supply relative to land use planning; and water conservation and recycling.

Of particular concern to MVS are the falling groundwater levels in that portion of western Calaveras County which overlies the Eastern San Joaquin Sub-basin. Without intervention, dwindling groundwater supplies will necessitate land use restrictions and intensify the need for surface water, but we wonder if groundwater recharge and groundwater banking (if feasible) are practical solutions without groundwater regulation.

MVS is also interested in promoting an increased awareness among downstream users of the historical, cultural, and economic significance of the Mokelumne River to Calaveras and Amador Counties.

As potential outcomes, MVS would like to see: 1) existing water (surface, groundwater, precipitation) supplies quantified; 2) existing water needs (residential, municipal, agricultural, and aquatic and terrestrial habitat) quantified; 3) a determination of the amount (if any) of "excess" water available from the Mokelumne; 4) a realistic needs assessment for future water demand; 5) increased commercial recreation and fishing on the upper Mokelumne; 6) a greater emphasis on water conservation as a routine strategy; 7) more cooperation across political boundaries and philosophical divides; and 8) more public outreach, education, and participation.

MyValleySprings.com supports, in principle, the "envisioned program benefits" as outlined in the MokeWISE program description (page 4). However, we have concerns about the process and implementation measures that will be used to produce those benefits. For example, how and where will wet weather flows be stored? If storage means an off-stream reservoir, we have reservations about the cost and location of such a reservoir. If storage means groundwater banking, we have concerns about how such stored groundwater will be regulated.

In the table below we have tried to focus on a few benefits and consequences more specific to the greater Valley Springs area.

North SJC Water Conservation District

Desire to work with other interested parties to provide a dependable water supply to our customers, enhance the groundwater basin, capture flood flows, maintain good water quality and establish a network of parties interested in the long term interests of the Mokelumne River.

Pacific Gas & Electric

Pacific Gas and Electric is a major stakeholder on the Mokelumne River. PG&E has a license with the Federal Energy Regulatory Commission (FERC) which allows the company to operate a major power generation project on the river consisting of 5 power generating facilities and 13 reservoirs which are used as storage facilities to keep the power generating facilities supplied. PG&E's primary interest regarding the Mokelumne River will always be to remain in compliance with that FERC license. Doing so requires numerous different activities, including providing access for recreation at many of the facilities along the river. PG&E is interested in maintaining the ability to operate all generating facilities as close to full capacity as possible, so that we may provide our customers with this clean, renewal, and affordable energy supply. PG&E is also interested in having the flexibility to consider increasing power generation on the river as future opportunities may allow.

Sierra Club

Sierra Club California would like the MokeWISE process to result in the following:

- Protect and restore the Mokelumne River as aquatic and riparian habitat, including traditional floodplain areas, especially in view of sensitive fish species.
- Increased flows on the Mokelumne as needed to accomplish the above and to help restore Delta inflows.
- Increased access for anadramous species to upper river reaches.
- Develop clear data on historic and current flows ("available" supply), current diversions, and intended future diversions by all diverters.
- Clarify water rights and contractual agreements, including where there are conflicts. We would very much like to see some resolution of such conflicts to help avoid diverters overstating of future demand.
- Stabilize and reduce urban and agricultural demand for Mokelumne water by maximizing water use efficiency and conservation, urban and agricultural pricing incentives, and adoption of alternative supply strategies (reuse/recycling, conjunctive use, graywater use, rainwater harvesting, etc)
- Promote sustainable management of groundwater basins and resources throughout the watershed; no 'water mining'.
- Protect Mokelumne River water quality.
- It is an explicit goal of Sierra Club California for the Mokelumne River to be designated as a Wild and Scenic River for approximately 37 miles of the North Fork and Main Stem.

Sierra Nevada Conservancy

The Sierra Nevada Conservancy has invested heavily over the last five years in the Mokelumne Watershed. Those investments have advanced collaborative forest management. SNC also maintains its involvement in the Mokelumne Avoided Cost Analysis, which will quantify the economic impacts of wildfire on water resources and serve as a guide to foster investment in the watershed. SNC has also provided grants to Amador Water Agency, the Amador FireSafe Council, and US Forest Service among others.

The establishment of an appropriately scaled Bioenergy facility in the upcountry, increasing the pace and scale of sustainable forest management, protection and enhancement water resources, and building consensus where it has been elusive or non-existent generally encompasses the SNC's priorities in the watershed.

Stockton East WD

My District does not have any particular project in mind for the group. The Mokelumne River is not part of SEWD's primary water shed but does impact the water basin that encompasses our service area. SEWD is participating in this process as it is a groundbreaking opportunity

to learn how this type of forum could potentially apply in other areas of the State (specifically the San Joaquin River).

My District is interested in any type of ground water recharge project that would benefit the basin lying beneath the majority of San Joaquin County.

Stockton Municipal Utility

As a supplier of potable water for municipal and industrial uses to over half of the Stockton Metropolitan Area, the City of Stockton has a vested interest in water supply availability from the Mokelumne River watershed. Under a long-term contract for 6,500 acre-feet per year of Mokelumne River water with the Woodbridge Irrigation District (WID), with an option for an additional 6,500 acre-feet, Mokelumne supplies aid the City's effort to provide surface water in-lieu of groundwater pumping to help recharge the critically over-drafted Eastern San Joaquin Groundwater Basin. The WID supply, along with supply from the Stanislaus, Calaveras and San Joaquin Rivers has allowed the City to greatly enhance its ability to provide a high-quality source of supply to its customers while protecting and preserving groundwater supplies for periods of drought.

The City's interest in the MokeWISE program is to support efforts in the Mokelumne watershed to protect all beneficial uses and increase local use of available surface supplies now and in the future. This effort brings together, in a collaborative manner, those parties that are positioned to support or oppose future Mokelumne River uses. The City's desired project outcome is one in which available Mokelumne River supplies are put to greater beneficial use, in full disclosure to the interested parties engaged in the MokeWISE process, in an environmentally protective manner.

Trout Unlimited

Trout Unlimited (TU) is a non-profit organization with a mission to protect, restore and enhance cold-water fish species and their habitats. TU's mission is furthered by its 10,000 California members as well as statewide staff. TU members fish the waters in the Mokelumne River watershed and many actively participate in relevant processes and activities ranging from local watershed clean-up efforts to the MAC plan update. TU views this process as an opportunity to provide input regarding potential multi-benefit solutions that would achieve many outcomes including protecting and enhancing the condition of the watershed for cold-water fish. TU has a long history of engaging in collaborative stakeholder discussions that aim to find efficient and creative solutions to issues of water allocation that ensure the health of the watershed while meeting other objectives.

In this process, TU's main priority is ensuring that proposed actions adequately protect the cold-water fish species that currently exist in the watershed. This includes advocating for the completion of a robust and defensible water availability analysis for the Mokelumne

River watershed that does not assume that water needed for fisheries or other environmental needs is available. In addition, it includes ensuring that flow regimes established in permits/settlements etc. are not compromised. TU also has an interest in the program producing scientifically supported proposals and utilizing models or other tools that are transparent, vetted within the group and publicly available.