



Anza Borrego Desert Integrated Regional Water Management

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California Department of Water Resources
Division of Integrated Regional Water Management
Financial Assistance Branch
Post Office Box 942836
Sacramento, CA 94236
Attn: Joe Yun

SUBJECT: COMMENTS ON ROUND 2 PLANNING GRANT EVALUATION AND
REQUEST TO RESCORE AND FUND THE ANZA BORREGO DESERT PLANNING
GRANT PROPOSAL

Dear Mr. Yun,

Thank you for the opportunity to comment on the Anza Borrego Desert (ABD) Proposition 84 Integrated Regional Water Management (IRWM) Planning Grant evaluation and scoring. This letter documents our major concerns and provides responses to the Department of Water Resources (DWR) Proposal Evaluation comments on ABD's Planning Grant Proposal (Proposal).

Comments are provided below on the Proposal Evaluation with specific details clarifying where we believe scoring errors may have occurred or DWR reviewers may have misunderstood the description of the planning activities in the ABD IRWM Region (Region) as discussed in the Proposal.

Overall Context for ABD IRWM Planning Effort

DWR's IRWM Grant Program seeks to address major water-related issues and conflicts within the State, particularly as those relate to disadvantaged communities (DACs). As described in ABD's Proposal, the sole source aquifer under the community of Borrego Springs and the Anza-Borrego Desert State Park is in severe overdraft. The ABD Region is comprised entirely of DAC communities (Work Plan Figure 3-3; also attached) who do not have the resources to develop a regional water management plan on their own that meets DWR requirements. In 2011, DWR commissioned a professional facilitator to work with the region's stakeholders to assess their ability and interest in working together. This report concluded:

"The state of the Borrego Valley groundwater basin is critical to the water supply needs of the Anza Borrego Desert region. It is of utmost importance that the stakeholders within the Borrego region work together to manage their groundwater resources sustainably. The findings of this assessment indicate that the stakeholders are willing to work... to develop an understanding of the scale of the problem and state of the basin and to develop a workplan to address the issues."



Work Plan

Inconsistent Application of Work Plan Scoring Criteria Among Round 2 Proposals:

In our review of the July 2012 Round 2 Planning Grant Draft Funding Recommendations table, we noticed that the Santa Clara River Region scored full points (15 points) for the Work Plan while the ABD Proposal scored only 9 points. To understand what DWR considers as an excellent Work Plan, we obtained a copy of the Santa Clara River IRWM Region's Round 2 Planning Grant Proposal which is publically available online. Upon reviewing the level of detail in the Santa Clara River's Work Plan and the ABD Region's Work Plan, we have substantial concerns that DWR has not scored proposals in a clear and consistent manner. **Appendix A** to this letter includes the Santa Clara River and the ABD Region Work Plans for comparison.

DWR scoring criteria for the Work Plan category states:

"Scoring is based on the completeness and appropriateness of detail and planning that the applicant demonstrated within the application that supports the development of a standards- compliant IRWM Plan or component of a IRWM Plan." (Round 2 Planning Grant PSP, Table 5, page 19) (emphasis added)

Despite DWR's scoring criteria for the Work Plan category, the Santa Clara River's Work Plan states:

"Further, the funds requested from this grant funding opportunity for development of the Recycled Water Master Plan Update and the Updating of the Water Use Efficiency Strategic Plan do not directly fill the gap in terms of a need for a compliant IRWMP. As described in Table 3-1 above, much of the work currently occurring is bringing the Plan into concurrence with the Proposition 84 Standards." (Santa Clara River Work Plan, Pages 15-16) (emphasis added)

How can DWR provide a full score of 15 points to a planning grant proposal that has nothing to do with directly updating an IRWM Plan? As acknowledged in their Work Plan, the Santa Clara Valley Region received funding in Round 1 and work is "currently occurring" to complete their IRWM Plan Update.

Further, the level of detail provided in the Santa Clara River Proposal (Santa Clara River Work Plan, pages 10-16) is simply inferior compared to the ABD Region's Work Plan (ABD Work Plan, pages 24-39), which was criticized by DWR for having "documentation and rationales (that) are incomplete or insufficient." We don't understand how the scoring criteria used to evaluate the Planning Grant work plans led to the draft awards and request that DWR reconsider and rescore the ABD proposal based upon consistent and clear criteria.

DWR Comment 1:

"While the Applicant explains current circumstances and priority issues for the region, the Proposal lacks documentation supporting how the Plan will comply with the following five IRWM Plan standards: a) Integration, b) Project Review Process, c) Impacts and Benefits, d) Finance, and e) Coordination. Although Table 3-2 cites the Work Plan tasks that address each of the standards; the tasks, as described, do not always support the table reference. The use of a catchall phrase in Task 3.6 assumes all unmentioned

standards will be covered in Task 3.6 is insufficient in supporting that a standards compliant plan will result from the planned work.”

Response to Comment 1:

The Work Plan is structured to build upon stakeholder outreach (described in Task 1), regional planning studies (described in Task 2), and specific IRWM planning activities (Task 3) in order to develop a standards-compliant IRWM Plan. Tasks 3-1 through 3-5 are designed to address IRWM Plan Standards that will require an additional amount of work and stakeholder input. Task 3-6 is designed to accumulate all of the work products from Task 1, Task 2, and Task 3-1 through Task 3-5 to create an IRWM Plan that addresses all IRWM Plan standards.

The Work Plan specifically states that some work has been completed in the Region’s Draft IRWM Plan (page 22-23), and that this information will form the basis of the planning grant effort. The Proposal states:

“the RWMG will utilize information for sections such as Resource Management Strategies, Impacts and Benefits, and Integration Opportunities that were included within the Draft IRWM Plan.” (ABD Work Plan, page 38)

Additional budget was not allocated to chapters or topics where the initial draft is relatively complete; as such, Task 3-6 covers the minor improvements that need to be made to these chapters. Further, Table 3-2 outlines the revisions and work needed to ensure that each of the Plan standards is fully incorporated into the IRWM Plan sections. With regard to the standards specifically called out in the evaluation:

1. *Integration* – Section 4 of the Draft IRWM Plan articulates how the integration of the resource management strategies can support Plan objectives and provide additional benefits. The Integration standard will be fully met through expansion of the stakeholder outreach process (Task 1), wherein stakeholders have an opportunity to develop partnerships and integration opportunities. Section 4 of the Draft IRWM Plan will then be expanded to better describe the stakeholder/ institutional and project integration that results. This integration description will then be incorporated into the IRWM Plan during Task 3-6.
2. *Project Review Process* – Section 5 of the Draft IRWM Plan clearly describes the Region’s project review process, including project submittal, screening, and prioritization. The Project Review Process standard will be fully met through refinement of the Region’s goals, objectives, and priorities (Task 3-2), which will help to refine the project review process by serving as the basis for evaluation criteria during project selection. This refined selection process will be described and incorporated into the IRWM Plan during Task 3-6.
3. *Impacts and Benefits* – Section 6 of the Draft IRWM Plan includes an assessment of impacts and benefits of the projects submitted for inclusion in the Plan, including specific assessment of the impacts and benefits to DACs. The Impacts and Benefits standard will be fully met when this discussion is updated during Task 3-6.
4. *Finance* – The Finance standard will be met through development of a financing program for the IRWM program and projects, which is designed as an open and

transparent Stakeholder Committee process (Task 3-1). This financing program will then be incorporated into the IRWM Plan during Task 3-6.

5. *Coordination* – Section 1 of the Draft IRWM Plan describes the state, federal, and local agencies that participate in water management in the Region. The Coordination standard will be fully met through expansion of the stakeholder outreach process (Task 1), wherein the RWMG coordinates with state, federal, and local agencies and organizations during the planning process. The RWMG will also work closely with USGS, USBR, USEPA, USACE, and DWR during development of the regional water resources plans (Task 2) which will form the technical foundation of the IRWM Plan. Section 1 of the draft IRWM Plan will then be expanded to better describe these coordination efforts during Task 3-6.

Task 3-6 in the Proposal Budget (Attachment 4) includes total hours that will be allocated toward completing each of the IRWM chapters described in Table 3-2. The Proposal clearly states that the sections mentioned by DWR will in fact be addressed and completed by the Region, that the Region understands DWR requirements, and is committed to completing a standards-compliant IRWM Plan:

“As part of the IRWM Plan development process, the RWMG will document how the IRWM Plan meets State goals and priorities. The IRWM Plan will contain a clear description outlining the location of all content as required by DWR’s IRWM Plan Guidelines.” (ABD Work Plan, page 38)

The ABD IRWM Region is committed to honoring DWR’s requirements to produce a standards-compliant IRWM Plan, and is also committed to honoring important regional issues and ensuring that those issues are incorporated not only into a standards-compliant IRWM Plan, but also into an IRWM Plan that contains implementable planning that is meaningful to the Region. The Proposal was vetted through multiple stakeholder meetings, and the RWMG is confident that the work items included within the Proposal will allow the Region to complete a standards-compliant plan that is acceptable to DWR and to the Region’s stakeholders.

DWR Comment 2:

“It is not clear how the stakeholders will provide input directly to the RWMG when they appear to have separate meetings (Tasks 1-2.1 and 1-2.2).”

Response to Comment 2:

Comment 3 appears to reflect a failure on DWR’s part to acknowledge best practices for managing regional planning and stakeholder outreach that have been proven in IRWM regions throughout the State.

The Proposal describes the three RWMG agencies within the region: Borrego Water District, County of San Diego, and Resource Conservation District of San Diego County (ABD Work Plan, page 3). All mentions of the RWMG, as an entity that administers the program, include all three agencies. It is important that the RWMG hold separate meetings (ABD Work Plan, Task 1-2.1) to discuss administration and financing of the IRWM program and other issues that may arise. While the ABD Region is somewhat new to the IRWM planning process, the ABD region is familiar with a number of other IRWM regions that hold separate RWMG and stakeholder meetings. This is a common

practice in IRWM planning. We do not believe that the scoring should reflect a bias on DWR's part that the ABD IRWM Region should be penalized for upholding a practice common to other IRWM regions in the State.

The Proposal lists all of the identified stakeholders within the ABD region; those currently participating in the Stakeholders Committee are shown in italics (ABD Work Plan, page 11, Table 3-1). Table 3-1 shows that the RWMG members will be present at Stakeholders Committee meetings, and will therefore be able to receive input from stakeholders as the IRWM Plan is developed. All of the RWMG agencies participated in Stakeholders Committee meetings that were held to develop the Proposal. The Proposal states:

“As such key topics essential to IRWM planning in the Region are developed, the Stakeholders Committee will be asked to provide input and feedback to the RWMG to ensure that these important topics are vetted through the Region's stakeholders.” (ABD Work Plan, Task 1-2.2, page 26)

To ensure that RWMG representatives can be available to engage with stakeholders and hear their input, RWMG and Stakeholders Committee meetings will be held back-to-back, as the schedule shows them all occurring on the same day (refer to Attachment 5).

The bottom-up governance structure chart (ABD Work Plan, page 13) also shows that the Stakeholders Committee provides information and input up to the RWMG. For all of the reasons stated above, it should be clear to DWR reviewers that stakeholders will provide input directly to the RWMG during the planning process.

Conclusion:

In DWR's standard scoring criteria:

“A score of 4 points will be awarded where the criterion is fully addressed but is not supported by thorough documentation or sufficient rationale.” (DWR's 2010 Guidelines, Section V.G, standard Scoring Criteria, page 26)

The ABD IRWM Region respectfully asks DWR to reconsider the entirety of the Proposal and how our Work Plan tasks effectively support the development of a standards compliant IRWM Plan. The ABD IRWM Region requests rescoring of the Work Plan criterion to 4 points (4 points x weighting factor = 12).

DAC Involvement

Inconsistent Application of DAC Scoring Criteria Among Round 2 Proposals:

In our review of the July 2012 Round 2 Planning Grant Draft Funding Recommendations table, we noticed that two IRWM Regions – the Upper Santa Clara River IRWM Region and the Watersheds Coalition of Ventura County IRWM Region – do not contribute to DWR's DAC funding target. In reviewing the evaluations for each of the aforementioned IRWM regions, we also noticed that these regions both received the same score for the DAC Involvement criterion as did the ABD IRWM Region (6 points). Considering the magnitude of DACs within the ABD IRWM Region, and the amount of outreach that would be provided to DACs if the ABD IRWM Region were to receive planning grant funding, we don't understand how these scores were determined.

DWR scoring criteria for the DAC Involvement category states:

“Scoring is based on the specificity and appropriateness of tasks included within the Work Plan to show how the IRWM Region will facilitate and support sustained DAC participation in the IRWM planning process. This can include specific outreach and engagement activities, work on governance, work on project selection, etc.” (PSP Table 5, page 19) (emphasis added)

The scoring evaluation for the Santa Clara River IRWM Region states (see evaluation in **Appendix B**):

“the Work Plan does not include any tasks that facilitate and support the involvement of DACs in the planning effort.” (Santa Clara River Evaluation, page 1)

Similarly, the scoring evaluation for the Watersheds Coalition of Ventura County IRWM Region states (see evaluation in **Appendix B**):

“...the Work Plan presented does not include specific tasks targeted to DACs throughout the region that support sustained involvement by DACs in the regional planning process.” (Watersheds Coalition of Ventura County Evaluation, page 1)

How can DWR provide a score of 6 points to two planning grant proposals that do not meet DWR’s scoring criteria for this category? DWR requires task-specific work for the DAC Involvement criteria, and each of the aforementioned planning grant proposals, by the admission of DWR’s own scoring evaluation, do not include tasks pertaining to DAC involvement.

Considering that the ABD Proposal includes a multitude of specific tasks and activities to support and facilitate DAC participation in the ABD IRWM planning process, this inconsistent application of the scoring criteria must be addressed.

DWR Comment 3:

“While the application states that the region meets the disadvantaged definition, the proposal seems to lack long term engagement of DACs in the planning effort. Subtask 1-1.2 “Increase and Sustain Involvement from DACs and Tribal Entities” explains that targeted outreach by phone and email will notify DACs and Tribes of meetings, and that up to four meetings will be held in DAC or tribal areas to identify major water related issues. Sub-task 1-1.2 notes that “These meetings will result in the development of text that will be incorporated into the IRWM Plan to characterize DAC and tribal communities and their water management needs.” In addition, the consultant will work with those representing DACs (although these representatives were not identified at this early stage) within the region to develop project scopes, budgets, and cost estimates for identified DAC projects to insert into the IRWM Plan. These efforts do not adequately demonstrate how the region will facilitate and support sustained DAC participation in the IRWM planning process.”

Response to Comment 3:

The ABD Proposal includes a clear mapping of the widespread DAC population in the Region (Work Plan Figure 3-3; also attached) and a robust DAC outreach effort in Subtask 1-1.2. The Proposal deserves a higher score for DAC involvement than it received.

The Proposal states that stakeholder engagement and participation are considered imperative to the development of a successful and meaningful IRWM Plan for the Region:

“Establishing a common understanding and support for the IRWM Plan among key stakeholders is critical to the success of the ongoing program. As the program moves forward, it will be important to do what is possible to increase stakeholder engagement through increased attendance and participation in stakeholders meetings. It will be especially important to increase outreach to stakeholders that have been previously contacted, but have not yet officially participated in the IRWM program or the Stakeholders Committee.” (ABD Work Plan, Task 1-1, page 24)

The 2000 Census data demonstrated that almost the entire ABD IRWM Region is considered a DAC. Figure 3-3 in the Proposal (ABD Work Plan page 8; also attached) clearly maps the extent of DACs, defined as those with a median household income less than \$37,994, within the Region. A very small portion of the Region, including the Majestic Pines CSD service area, is not considered a DAC; all of the rest of the ABD Region is a DAC.

Not only will outreach to engage and encourage participation of all stakeholders include DACs within this Region; but specific outreach targeted to DAC representatives (Subtask 1-1.2) will also occur. As the DWR evaluator has noted, the ABD IRWM Region will engage in activities to specifically encourage and solicit engagement among DACs. Subtask 1-1.2 (ABD Work Plan, page 24) includes targeted outreach by phone and email to notify DACs and Tribes of meetings, and up to four meetings held in DAC or tribal areas to identify major water related issues. These meetings will result in a direct contribution (text) to our standards-compliant IRWM Plan.

The Proposal further describes outreach work completed by an independent facilitator that determined stakeholder engagement in IRWM planning is feasible.

“In order to facilitate a robust stakeholder process, the DWR Regional Service Representative requested that DWR, through a separate contract with the Center for Collaborative Policy (CCP), provide facilitation services to the ABD IRWM stakeholders.” (ABD Work Plan, pages 11-12)

These outreach activities and actions have demonstrated that phone and face-to-face interviews are the best methods for engaging stakeholders and encouraging participation in the ABD IRWM process. While the DAC-related engagement efforts described in the Proposal may seem unique to the evaluator, they are considered the best method for DAC engagement within the ABD IRWM Region. DWR has worked with the ABD IRWM Region and should be aware of the unique and dispersed nature of stakeholders within the Region. The approach presented in the Proposal for DAC and stakeholder involvement is consistent with DWR’s proposed approach for engaging stakeholders in groundwater management planning, and therefore is well suited for engaging DACs in the ABD IRWM Region.

The ABD Proposal also notes:

“Those representing DACs within the Region have expressed that they lack the resources or technical capacity to develop project submittals that address those

critical needs. Without support, their participation in the IRWM process may wane over time. As such, the RWMG will work with those project sponsors to develop project scopes, budgets, and cost estimates to help ensure the DAC projects can be included in the IRWM Plan Update and future funding applications. This support includes planning and engineering services to achieve conceptual-level drawings, schematics, and cost estimates for up to 4 projects necessary to meet critical DAC needs.” (ABD Work Plan, Subtask 1-1.2, page 25)

Acknowledging that long-term engagement of DACs is difficult to attain, the Proposal brings DAC participants into this planning process and allows the region to begin a longer-term discussion of regional basin management issues and overdraft solutions. The Proposal then includes additional support for DAC project development, which will ensure that DAC needs are met with appropriate engineering solutions. The trust built among the DAC stakeholders through this planning process is what provides the incentive for longer-term engagement. As explained above, the Proposal includes both widely-used best practices for engaging DACs, as well as methods identified by the DWR’s own independent facilitator: targeted outreach meetings, individual calls/interviews, and planning/engineering support. These efforts will directly contribute to the IRWM Plan sections and will also help the region to establish a long-term relationship with representatives of DACs.

Conclusion:

In DWR’s standard scoring criteria:

“A score of 5 points will be awarded where the criterion is fully addressed and supported by thorough and well-presented documentation and logical rationale.” (DWR’s 2010 Guidelines, Section V.G, standard Scoring Criteria, page 26)

The ABD IRWM Region respectfully asks DWR to reconsider the entirety of the Proposal and how our Work Plan tasks effectively support the long-term engagement of DACs in the IRWM planning process. The ABD IRWM Region requests rescoring of the DAC Involvement criterion to 5 points (5 points x weighting factor = 10 points).

Budget

Inconsistent Application of Budget Scoring Criterion Between Rounds 1 and 2:

In our review of the Round 1 and Round 2 Planning Grant evaluations associated with the Budget, there appears to be inconsistency in the application of DWR’s scoring criteria. We recognize that the Round 1 and Round 2 scoring criteria differed slightly, as presented below.

Round 1: “Scoring is based on the level of completeness and detail provided within the budget, whether or not the budget matches the work plan and Schedule, and on the administrative costs associated with running the project.” (Round 1 Planning Grant PSP, Table 5, page 18)

Round 2: “Scoring is based on completeness and specificity of the Budget items, the degree to which each cost is reasonable and provided with appropriate supporting documentation, the degree to which the Budget is consistent with the Work Plan and Schedule. Is the basis of estimate presented for budget items reasonable and

logical? Is the Budget consistent with the Work Plan and Schedule?” (Round 2 Planning Grant PSP, Table 5, page 19)

Although there are minor differences in scoring criteria between Round 1 and Round 2, the manner in which DWR scored the ABD Proposal’s Budget appears inconsistent. **Appendix C** contains the budgets from the Round 1 Planning Grant process for the ABD Region, the Coachella Valley, and San Diego IRWM Regions which were all made publically available by DWR. **Appendix D** includes the ABD Budget from the Round 2 Planning Grant process for comparison purposes. Based on our understanding that DWR considered all three of the Round 1 attachments as excellent Budgets (all earned the maximum 10 points), the ABD Proposal’s Budget is laid out in a similar manner with similar assumptions, although the ABD Budget has more detail and specificities that describe, in detail, the way in which the budget was calculated.

How can DWR score ABD’s Round 2 Proposal so harshly when only minor changes were made to the scoring criteria and past examples provided by DWR (include ABD’s own Round 1 Budget) are far less detailed? The ABD Proposal was written to reflect the additional considerations added to the scoring criteria in Round 2, but was at the same time based upon highly successful budget formats used in previous grant application rounds. This is a reasonable approach given that DWR’s scoring process has remained relatively consistent since Proposition 50. If DWR would like specific additional information, such requirements should be made clear. This will prevent regions such as the ABD IRWM Region from relying on references that are no longer accurate.

Inconsistent Application of Budget Scoring Criterion Among Round 2 Proposals:

As explained previously, our review of the July 2012 Round 2 Planning Grant Draft Funding Recommendations table led us to review the publically available planning grant proposal for the Upper Santa Clara River IRWM Region. Both the ABD IRWM Region and the Santa Clara River IRWM Region scored 6 points in the Budget category. For comparison purposes, each of the budgets is included in **Appendix D**. In general, we are concerned that the DWR evaluation for the Santa Clara River IRWM Region notes very serious issues with the budget, including the following:

- the requested grant amount exceeds the maximum allowable amount,
- the amount requested for Task 4 is not included in the grand total on the Budget Summary Table,
- the use of staff names rather than classifications in budget estimates prevents reviewer evaluation of estimate reasonableness,
- the basis and justification of the lump sums were not provided, and
- there was no information about how costs associated with several tasks were derived.

In contrast, the ABD Region’s Budget was criticized for minor issues including inflated consultant rates and inadequate justification for various billing categories.

How can DWR give the same score to such vastly different proposals? The difference in level of detail and specificity between the two budgets contained within Appendix D is

apparent and highly discouraging. As discussed below, the ABD Region respectfully requests that DWR reconsider the ABD Budget in light of the established scoring criteria in the Guidelines and PSP.

DWR Comment 4:

“The criterion is less than fully addressed and documentation is incomplete. The Budget states in all categories that the hourly costs are inflated to include all costs for producing deliverables, without supporting documentation to demonstrate the basis for the estimate. The consultant team includes both a Project Manager and a Project Planner, without any explanation as to the duties associated with the roles, making it difficult to ascertain if the costs are reasonable.”

Response to Comment 4:

As the DWR evaluator noted, the ABD Proposal clearly acknowledges that the hourly costs are inflated to include all costs for producing deliverables, rather than including printing costs in the budget directly.

“The costs for producing deliverables are factored into the hourly costs for the consultant team anticipated to complete this work.” (ABD Budget, Task 3-6, page 20)

Consulting firms often produce deliverables using in-house word processing and graphics staff, along with in-house printing equipment, under overhead rather than trying to estimate per-page costs for client billing. The Proposal estimate, provided to the ABD IRWM Region by a consultant, includes this common practice.

Further, the Planning Grant PSP does not require an explanation of duties for each of the RWMG or technical team proposed to complete each task; rather, it requires:

“supporting information for the budget such as labor categories, hourly rates, labor time estimates, and subcontractor quotes. The subcontractor quotes should also include information supporting the quotes, such as hourly rates and the number of hours required to perform each included task.” (Round 2 Planning Grant PSP, page 17) (emphasis added)

The ABD Proposal’s Budget provides all of these items for DWR’s review and consideration (please refer to **Appendix D**), broken out by task and subtask.

Consulting firms often staff IRWM planning projects using a more senior Project Manager to guide development of deliverables and a supporting Project Planner as the primary author on those deliverables. The ABD IRWM Region is familiar with many other IRWM regions that use the approach of a Project Manager and Project Planner to develop IRWM Plans. This is a reasonable estimation on behalf of the ABD IRWM Region, and we do not believe should constitute a reduction in points to the Proposal.

Conclusion:

In DWR’s standard scoring criteria:

“A score of 5 points will be awarded where the criterion is fully addressed and supported by thorough and well-presented documentation and logical rationale.” (DWR’s 2010 Guidelines, Section V.G, standard Scoring Criteria, page 26)

The ABD IRWM Region respectfully asks DWR to reconsider how our Budget fully documents the basis of estimate for each budget item in clear budget breakdown tables for each task. The ABD IRWM Region requests rescoring of the Budget criterion to 5 points (5 points x weighting factor = 10 points).

Program Preferences

DWR Comment 6:

The Proposal sufficiently demonstrates that 7 of the 15 preferences will be met.

Response to Comment 6:

In Attachment 6, we articulate how the Proposal will contribute to the attainment of 13 Program Preferences. DWR staff has acknowledged that the ABD Proposal does demonstrate that it will meet the following 7 Program Preferences:

- 1) Include regional projects or programs,
- 2) Effectively integrate water management programs and projects within hydrologic region,
- 3) Address critical water supply or water quality needs of disadvantaged communities,
- 4) Effectively integrate water management with land use planning,
- 5) Climate change response actions,
- 6) Expand environmental stewardship, and
- 7) Protect surface water and groundwater quality.

The ABD RWMG would like DWR to further consider that the Proposal also contributes to the following 3 additional Program Preferences:

- 8) *Conflict resolution* – The discussion of the Borrego Valley Groundwater Basin in the ABD Proposal describes the severe overdraft condition of the basin, stakeholder’s concerns about its long-term viability, and the fact that stakeholders are in conflict about how to resolve this critical issue.

“According to recent modeling by the U.S. Geological Survey (USGS), if present overdraft levels continue unabated there may be only 50-years until the Upper Aquifer is dewatered. There is concern groundwater availability and quality may deem the Borrego Valley’s lower groundwater aquifers unusable from an economic standpoint.... Despite the potentially dire situation of the Region’s main water supply source, the Region has not yet reached consensus regarding the status of the Region’s groundwater basins.” (ABD Work Plan, page 16)

The IRWM planning process will help regional stakeholders to better understand groundwater conditions and associated land subsidence (ABD Work Plan, Task 2-1, page 27); develop management alternatives and funding mechanisms (ABD Work Plan, Task 2-2, page 30); and assess groundwater quality impacts of dewatering (ABD Work Plan, Task 2-3, page 32). These studies are necessary to

resolve long-standing conflicts between with various ABD Region stakeholders about the overdraft condition.

- 9) *Drought preparedness* – In DWR’s Guidelines, one of the examples of drought preparedness outcomes is “efficient groundwater basin management” (DWR Guidelines, Table 1, page 13). The ABD Proposal clearly states that the groundwater basin is in overdraft and that sustainable basin management is the most important issue being addressed in the IRWM planning process.

“Since groundwater within the Upper Aquifer is likely the most economically and technically feasible existing water resource for the area, it is imperative that this water resource is appropriately and sustainably managed now, especially given that this resource likely has less than 50 years of availability at current withdrawal rates according to the most recent USGS work (see Task 2.1 below).” (ABD Work Plan, page 16)

The IRWM planning process will help regional stakeholders to better understand groundwater conditions and associated land subsidence (ABD Work Plan, Task 2-1, page 27) and develop management alternatives and funding mechanisms (ABD Work Plan, Task 2-2, page 30). Better management of the groundwater basin will facilitate the future availability of groundwater supplies in the case of a long-term drought.

- 10) *Water quality protection* – Task 2-3 in the ABD Proposal specifically addresses groundwater quality protection for the Region’s population.

“the purpose of Task 2-3 is to develop forecasts that analyze potential water quality impacts and their relative economic and environmental integrity impacts that may arise due to the lowering of the Region’s groundwater tables (dewatering).

The IRWM planning process will provide the Region’s stakeholders with the tools necessary to ensure that groundwater quality is protected and maintained.

Conclusion:

In DWR’s supplemental scoring criteria:

“One half point will be awarded for each of the Program Preferences that will be met in the IRWM Plan, up to a maximum of 5 points.” (Round 2 Planning Grant PSP, Table 5, page 19)

The ABD IRWM Region respectfully asks DWR to reconsider how our Proposal contributes to the three additional Program Preferences described above. The ABD IRWM Region requests rescoring of the Program Preferences criterion to 5 points (0.5 points x 10 Program Preferences = 5 points).

Tie Breaker Points

In our review of the July 2012 Round 2 Planning Grant Draft Funding Recommendations table, we noticed that DWR did not award tie breaker points (up to 5 points available) to any proposal. The DWR scoring standard for this criterion states:

“These points may be applied in cases where applications have a tied score. Tie breaker points will be added to proposal scores for regional proposals from IRWM planning efforts that have not yet received Proposition 84 IRWM Planning Grant funding or interregional proposals over applicants that already have a Round 1 IRWM Planning Grant award. These points will be assigned by the Selection Panel after consensus technical reviews are complete.” (Round 2 Planning Grant PSP, Table 5, page 21) (emphasis added)

Given that the ABD IRWM Region does not have an adopted IRWM Plan and has never received IRWM Grant Program funding – neither from Proposition 50 nor from Proposition 84 – the Region would clearly be potentially eligible to receive tie breaker points. In addition, the presence of widespread DACs within the ABD IRWM Region and the fact that our Region has critical water supply and water quality issues, provide a clear impetus for including the ABD IRWM Region within the funding awards.

If DWR re-scores any portion of the ABD IRWM Region’s Proposal, resulting in tied points with another application, we request that DWR apply the 5 tie breaker points accordingly in respect of the scoring criteria outlined above.

General Conclusion and Questions Regarding the ABD Round 2 Proposal and Evaluation Comments

In our review of ABD’s Round 2 Proposal Evaluation score and comments compared to ABD’s Round 1 Proposal Evaluation and score, as well as reviewing in depth successful proposals for Round 2, their scores, and evaluations, we are concerned that the scoring and evaluation of ABD’s Round 2 Proposal may have been influenced by considerations external to the merits of the proposal.

Whether such external considerations are related to regional population or the potential challenges of arriving at a viable plan to address the severe overdraft of the Borrego Valley Basin, we wish to encourage DWR that the water management issues faced by this region are important for the economic and environmental well-being of the wider southern California region and should not be treated as a “sacrifice zone” for underinvestment.

For example, the Anza-Borrego Desert State Park (ABDSP), based on the California Department of Parks and Recreation’s own economic research, contributes between \$40 million and \$50 million annually to the region.¹ Over a 30-year period, this amounts to a nominal cash contribution to the economy of southern California of approximately \$1.2 billion.

The gateways for the visitation that generates this annual regional cash flow are the communities in the ABD IRWM Region. For example, a sustainable water supply for Borrego Springs is an important and critical variable determining the economic

¹ Anza-Borrego is the largest State Park in California (and second largest in the United States) and includes 12 designated wilderness areas. Approximately 500,000 to one million people visit the park each year, providing significant economic benefits for the surrounding communities. See “California Outdoor Recreation Economic Study: Statewide Contributions and Benefits” (2011).

contribution of the ABDSP to southern California as Borrego serves as one of the major visitation gateways to the ABDSP.

Our understanding is that DWR's recommendation for no Round 2 Planning Grant funding makes the ABD region one of only two IRWM regions in the State who applied for and did not receive planning grants in both rounds.

As a Region with widespread DACs, this raises serious issues for the ABD Region to pursue a standards-compliant IRWM Plan in the hopes of ever applying for and receiving a Round 2 or 3 Implementation Grant award. How does DWR imagine that effective regional planning could be achieved in resource-limited region? For all of these reasons, we implore DWR to consider revising the scoring of the ABD Proposal on its merits and then let us discuss how DWR believes that it may assist this DAC-designated Region to address its water management problems for the benefit of the entire southern California economy.

Thank you again for the opportunity to provide comments on the ABD IRWM Planning Grant Proposal and DWR's scoring of the Proposal. The IRWM planning process is necessary for the ABD IRWM Region to address key regional issues and ensure stakeholder involvement throughout the Region. We are confident that the issues outlined above can be easily reviewed and that the Proposal can be re-scored by DWR.

Sincerely,

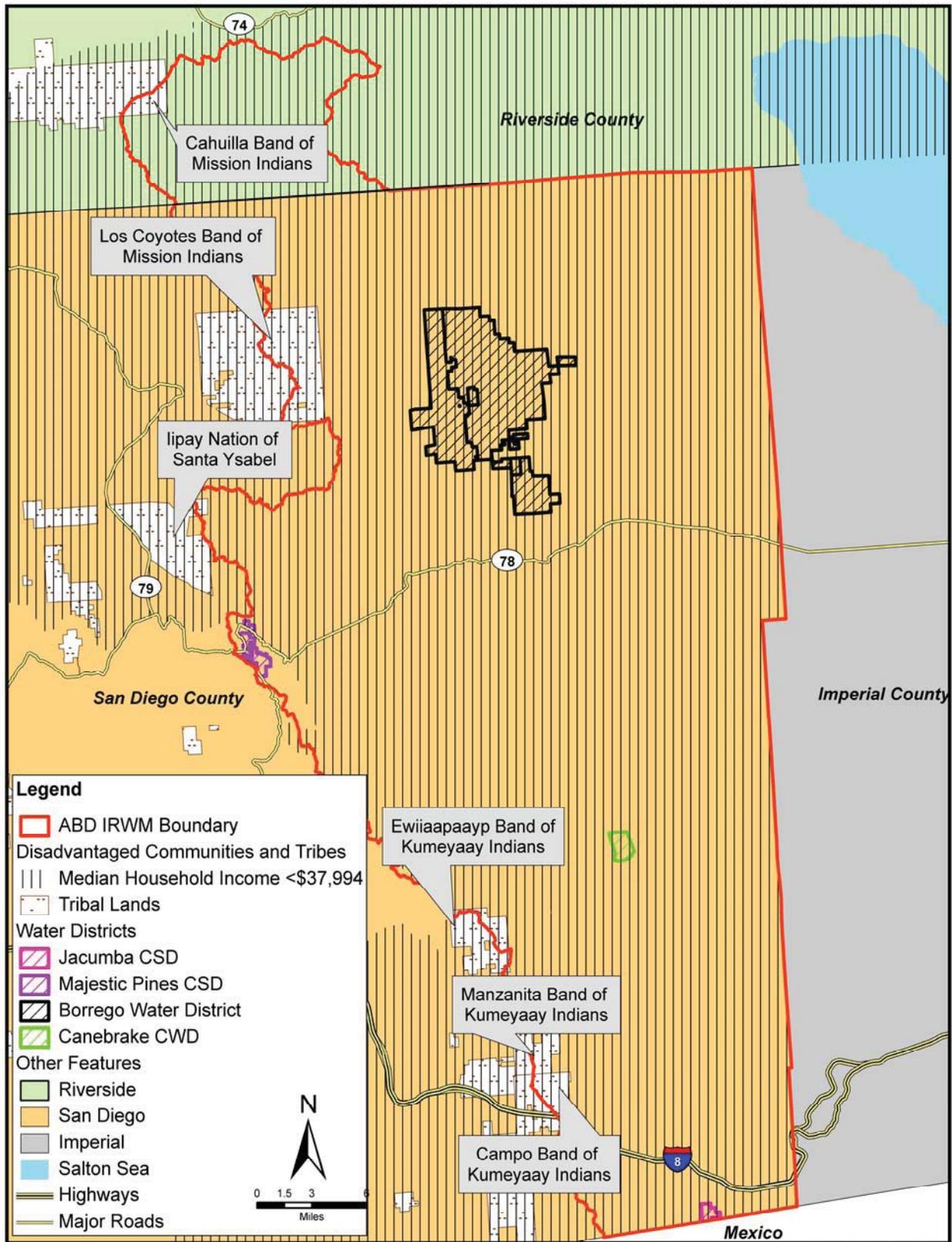


Jerry Rolwing

Chair, Anza-Borrego Desert Regional Water Management Group

Cc: Ms. Tracie Billington, Chief of Financial Assistance Branch
Ms. Anna Aljabiry, IRWM Region Contact
Mr. Brian Moniz, Southern Regional Office
Ms. Marty Leavitt, Resource Conservation District of Greater San Diego County
Mr. Jim Bennett, County of San Diego Department of Planning and land Use

Figure 3-3: Disadvantaged Communities and Tribal Land within the ABD Region



U.S. Census Bureau, 2000 Census, Median Household Income by Census Tract, Available: http://www.sandag.cog.ca.us/resources/maps_and_gis/gis_downloads/admin.asp





UPPER SANTA CLARA RIVER

Integrated Regional Water Management

ATTACHMENT 3 - WORK PLAN

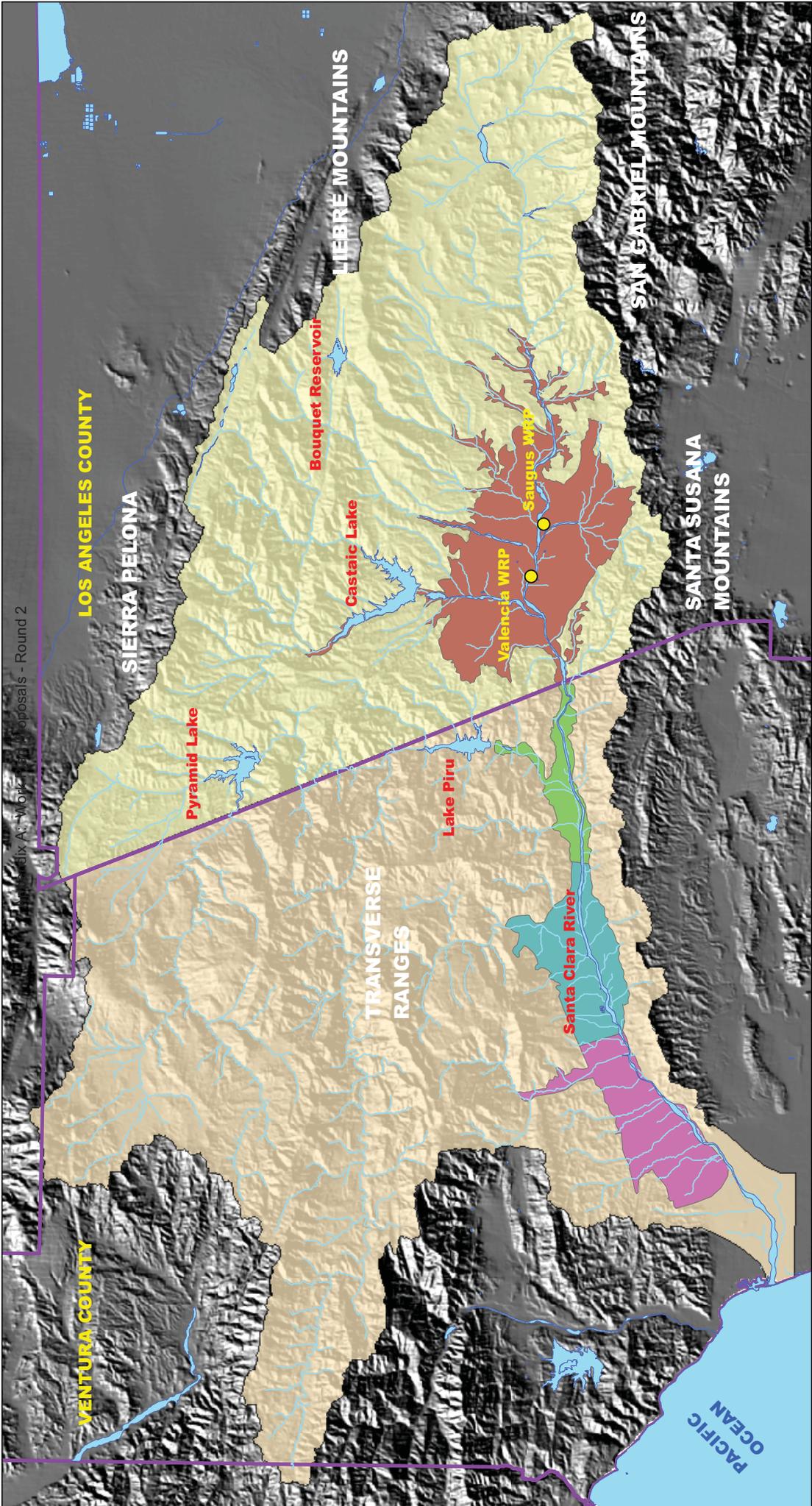
3.1 Current Status in Meeting IRWM Standards

The Upper Santa Clara River IRWMP is a complete plan that has been adopted by each of seven RWMG members, as well as collectively as the Regional Water Management Group (RWMG). The Upper Santa Clara River IRWMP currently meets all of the former Proposition 50 IRWM Guidelines, as well as meeting many of the new Proposition 84 Guidelines. The region is currently updating its Plan and conducting two technical studies, a climate change technical study and a Salt and Nutrient Management Plan with funds received in the Planning Grant Round 1 for those Proposition 84 Standards that needed further development.

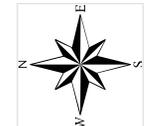
The following discussion identifies, by Proposition 84 Standard, a status update as to where the Plan stands in terms of compliance with each of the sixteen separate standards and indicates where more work is necessary or where modification of the Plan is desired. Special note is made to highlight where the grant work plan content will highlight or contribute to compliance with these standards. This is also summarized in Table 3-1.

Work plan tasks that will be performed as part of the grant proposal are discussed in section 3.2 and include the update of the Agency's Recycled Water Master Plan and associated California Environmental Quality Act documentation, the update of the Santa Clarita Valley Water Use Efficiency Strategic Plan, and overall Grant Administration.

Figures 3-1 and 3-2 provide the IRWMP Region boundary and the hydrological features within the Region.



Appendix A: Work Plan Proposals - Round 2



Legend

- Water Reclamation Plants
 - Lower Santa Clara River
 - Upper Santa Clara River
- Groundwater Basin**
 - EASTERN
 - PIRU
 - FILLMORE
 - SANTA PAULA
- Watershed**
 - Lower Santa Clara River
 - Upper Santa Clara River

Figure 3-1
Upper Santa Clara River Watershed
Hydrologic Features

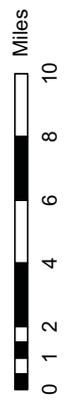
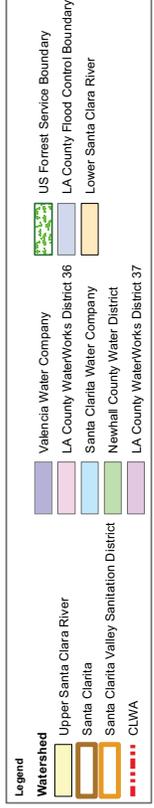
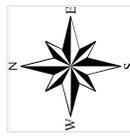
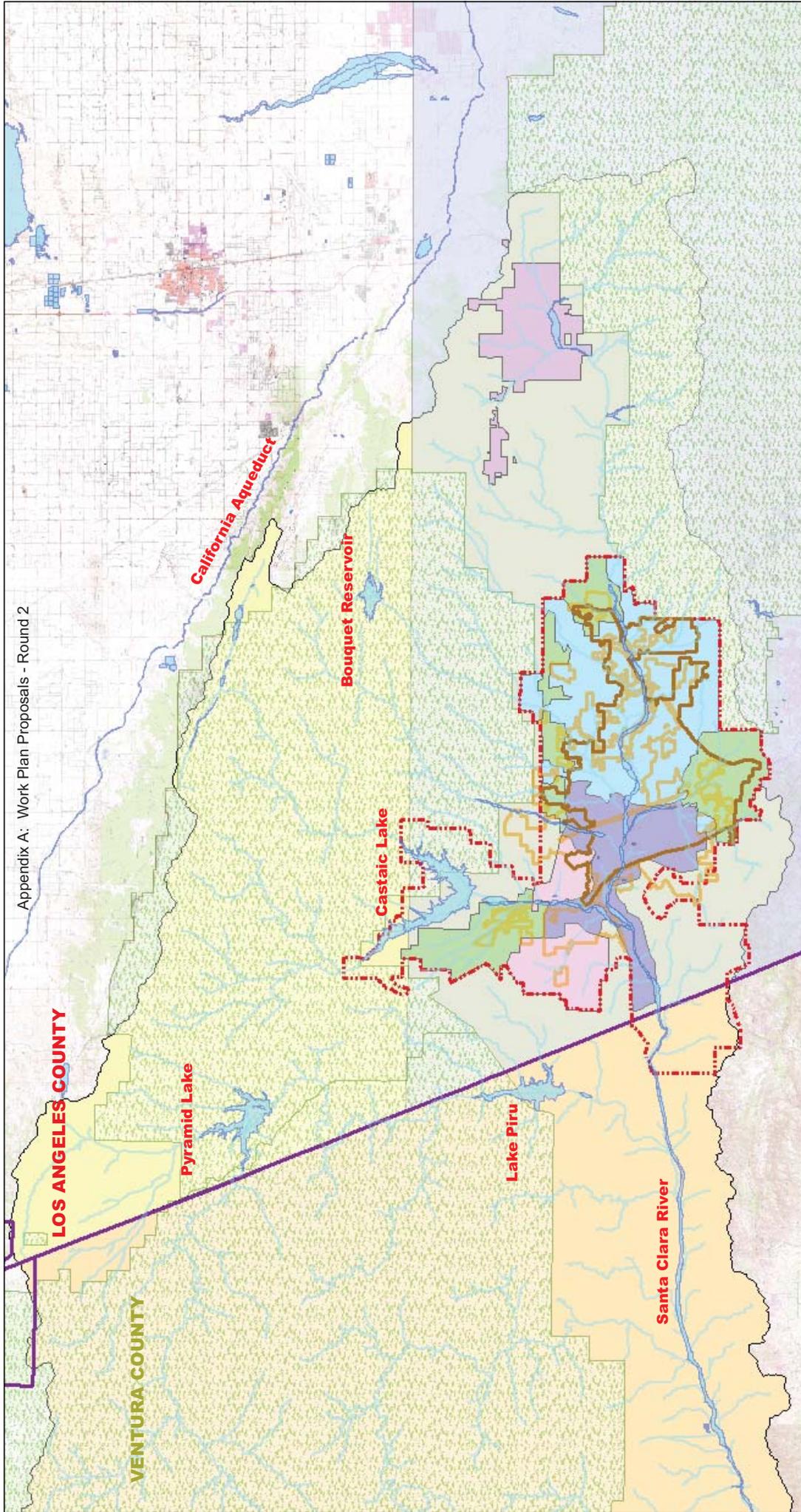


Figure 3-2
Upper Santa Clara River
Watershed/IRWMP Region



TABLE 3-1
CURRENT STATUS IN MEETING THE IRWM PLAN STANDARDS

PROPOSITION 84 STANDARD	STATUS	SPECIFIC STANDARD STATUS
Governance	Standard will be met with plan language being revised or amended with Planning Grant Round 1 funds. Revised plan anticipated (March 2013).	The RWMG governance structure is based on an intention to ensure balanced representation across the IRWMP's three main regional objectives (i.e., water supply, water quality, and resources stewardship), as well as geographic diversity across the Region. The RWMG has the participation of at least three public agencies, two of which have statutory authority over water management. The members of the RWMG are Castaic Lake Water Agency, City of Santa Clarita, Los Angeles County Flood Control District, Newhall County Water District, Santa Clarita Water Division of Castaic Lake Water Agency, Santa Clarita Valley Sanitation District of Los Angeles County, Valencia Water Company, and the San Gabriel and Lower Los Angeles San Gabriel Rivers and Mountains Conservancy. The RWMG's governance structure involves cooperation from the public, stakeholders, project proponents, and RWMG members. In general, the RWMG monitors IRWMP requirements/developments, and makes administrative decisions (including managing the grant application/administration process, paying for consultant(s), and preparing stakeholder agendas/meeting materials). Broader decisions that are needed (such as nominating RWMG members, making any required changes to the Plan necessary to meet funding guidelines, and updating the IRWMP) are brought to the stakeholders, and a decision is sought through a collaborative process, with stakeholders voting on the decision if needed. Through the IRWMP process, entities have built working relationships that guide ongoing IRWMP planning and implementation. Additionally, the governance structure for the Upper Santa Clara River IRWMP is designed to encourage regional participation and to accept project proposals on an ongoing basis.
Region Description	Standard will be met with plan language being revised or amended with Planning Grant Round 1 funds. Revised plan anticipated (March 2013).	The IRWMP discusses the general impacts of climate change in its description of regional water resources and focuses of the potential impacts of climate change on the reliability of supply from the State Water Project. Using Planning Grant funds received from Round 1, the region description is currently being updated to further identify the potential vulnerabilities to water resources in the IRWMP Region to projected climate change. Climate change scenarios are being defined consistent with the 2011 Draft DWR State Water Project Reliability Report. Vulnerable watershed characteristics are being defined and include hydrology, watershed landscape, water supply and demand, groundwater recharge, ecosystem, and other characteristics such as weather, changes in the amount, intensity, timing, quality, and variability of runoff and recharge; and effects of sea level rise (on imported water



PROPOSITION 84 STANDARD	STATUS	SPECIFIC STANDARD STATUS
<p>Objectives</p> <p>Standard will be met with plan language being revised or amended with Planning Grant Round 1 funds. Revised plan anticipated (March 2013).</p> <p><i>**The Recycled Water Master Plan Update and Update of the Santa Clara Valley Water Use Efficiency Strategic Plan will assist in developing technologically feasible and quantifiable objectives relating to water demand and water supply. The two Updates may also result in updating of regional priorities.</i></p>		<p>supply by DWR). The region description is also being updated to include an assessment and ranking of these vulnerabilities.</p> <p>The objectives in the IRWMP are being assessed as part of the IRWMP current update process. The IRWMP objectives will be discussed in the context of climate change with regard to potential for changes in the amount, intensity, timing, quality and variability of runoff and recharge in addition to the need to consider the effects of sea level rise on water supply conditions and to identify suitable adaptation measures. One of the current IRWMP objectives is an improvement in water quality. The increase in water supply by means of recycled water use is an IRWMP objective. Updating of the Recycled Water Master Plan will identify the current and future recycled water demands within the Valley. Based on this, the quantifiable objective will be modified. Likewise, the Santa Clara Valley Water Use Efficiency Strategic Plan will identify how much conservation will be needed in the future, which will assist in modifying the 'reduce water demand' objective target.</p> <p>The objectives in the IRWMP are the following. One quantifiable target is provided for each (however in the IRWMP there may be additional quantifiable targets identified for any particular target):</p> <p>Reduce Water Demand</p> <p>Implement technological, legislative and behavioral changes that will reduce user demands for water. <i>Ten (10) percent overall reduction in projected urban water demand throughout the Region by 2030 through implementation of water conservation measures.</i></p> <p>Increase Water Supply</p> <p>Understand future regional demands and obtain necessary water supply sources. <i>Increase use of recycled water by up to 17,400 acre-feet per year (AFY) by 2030, consistent with health and environmental requirements.</i></p> <p>Improve Water Quality</p> <p>Supply drinking water with appropriate quality; improve groundwater quality; and attain water quality standards. <i>Comply with existing and future Total Maximum Daily Load (TMDLs).</i></p> <p>Improve Operational Efficiency</p> <p>Maximize water system operational flexibility and efficiency, including energy efficiency. <i>With assistance of local energy utility, perform electrical audit on all wholesale and purveyor water facilities once</i></p>



**PROPOSITION 84
STANDARD**

STATUS

SPECIFIC STANDARD STATUS

every five years.

Resource Management Strategies Standard will be met with plan language being revised or amended with Planning Grant Round 1 funds. Revised plan anticipated (March 2013).

*** The Recycled Water Master Plan Update and Update of the Santa Clarita Valley Water Use Efficiency Strategic Plan may result in updating of the resource management strategies.*

The IRWMP currently evaluates the 24 water management strategies contained within the California Water Plan. Since the release of the 2009 Update of the California Water Plan, the following strategies have been added, which will be considered in the IRWMP Update: Forest Management, Land Use Planning and Management (formerly Urban Land Use Management), and Improve Flood Management. The stakeholders considered these additional strategies at an IRWMP Stakeholder meeting in January (2012) and evaluated them for applicability to the Region.

Additionally, the IRWMP must identify and implement “No-Regrets” Adaptation Strategies to the general effects of climate change, such as meadow and forest restoration, flood plain protection, and water use efficiency. The Climate Change Technical Study will help to identify the “No-Regrets” Adaptation Strategies that will be most effective and appropriate for this Region. These will be discussed with the Stakeholders again in the context of climate change at a future Stakeholder meeting.

Integration Standard is met with existing plan language.

The IRWMP has a successful framework to ensure collaboration between entities and integration of projects so as to achieve multiple benefits. The IRWMP meets the new standard and the update that is currently underway will continue to use this successful format for integration.

Project Review Process Standard will be met with plan language being revised or amended with Planning Grant Round 1 funds. Revised plan anticipated (March 2013).

Using Planning Grant funds received from Round 1, the project review process will be refined over the next 9 months to meet the new standard. As part of that process, projects included in the IRWMP, and additional projects deemed necessary, will be assessed for their ability to adapt to potential climate change impacts and for the benefits the project will provide. The project review process will include as assessment of the contribution of the project reducing greenhouse gas (GHG) emissions as compared to project alternatives, and California Environmental Quality Act (CEQA) project-level analysis with respect to GHG emissions. The IRWMP will not yet provide a calculation of GHG emissions on a project-by-project basis, but it will use the results of the Climate Change Technical Study to discuss this on an analytical level.

*** The Recycled Water Master Plan Update and Update of the Santa Clarita Valley Water Use Efficiency Strategic Plan will help to identify new candidate projects for submittal to the IRWMP.*



PROPOSITION 84 STANDARD	STATUS	SPECIFIC STANDARD STATUS
Impacts And Benefits	Standard will be met with plan language being revised or amended with Planning Grant Round 1 funds. Revised plan anticipated (March 2013).	The IRWMP meets the majority of the new standard. However, the discussion is currently being updated to include the discussion of impacts and benefits between regions, as well as those directly affecting disadvantaged communities (DAC), Environmental Justice related concerns, and Native American tribal communities, and including the benefits of environmental stewardship in order to meet the standard completely.
Plan Performance And Monitoring	Standard will be met with plan language being revised or amended with Planning Grant Round 1 funds. Revised plan anticipated (March 2013).	The plan performance and monitoring discussion contained within the IRWMP meets the majority of the standard but is currently being updated to provide a discussion of policies and procedures that promote adaptive management with respect to the effects of climate change. The Stakeholders and RWMG have devoted monthly meetings to the discussion of updating existing data, IRWMP objectives, regional priorities, and statewide priorities for relevance and these are being modified as needed to ensure the overall IRWMP reflects regional changing needs. Additionally, Candidate Projects will be reviewed and they will be evaluated as part of the Update schedule to ensure that the current plan objectives will be met and the resulting Plan Projects offer the greatest benefit possible. This ongoing review and update allow the plan to undergo "adaptive management", e.g., allows the IRWMP to evolve to changing conditions, and incorporate new data (e.g., climate change vulnerabilities).
Data Management	Standard will be met with plan language being revised or amended with Planning Grant Round 1 funds. Revised plan anticipated (March 2013).	Using Planning Grant funds received from Round 1, the IRWMP is currently being updated with a Data Management System that will help track and document the progress of IRWMP implementation and for storing and disseminating data from monitoring efforts. A discussion of how findings or "lessons learned" from project-specific monitoring efforts will be included to improve the RWMG's ability to implement future projects in the IRWMP Plan.

*** Data obtained for the Recycled Water Master Plan Update and Update of the Santa Clara Valley Water Use Efficiency Strategic Plan will be used to update the technical analysis portions and data management chapters. Both studies will also be filling in data deficiencies identified in the Plan.*



PROPOSITION 84 STANDARD	STATUS	SPECIFIC STANDARD STATUS
Finance	Standard will be met with plan language being revised or amended with Planning Grant Round 1 funds. Revised plan anticipated (March 2013).	The IRWMP meets most of the new finance standard. However, the discussion is currently being updated to add an explanation of how operation and maintenance (O&M) costs for projects that implement the IRWMP would be covered and the certainty of O&M funding in order to meet the standard completely.
Technical Analysis	Standard will be met with plan language being revised or amended with Planning Grant Round 1 funds. Revised plan anticipated (March 2013). <i>** The Recycled Water Master Plan Update and Update of the Santa Clara Valley Water Use Efficiency Strategic Plan will assist in developing technologically feasible and quantifiable objectives relating to water demand and water supply.</i>	The IRWMP meets most of the technical analysis standard. The IRWMP includes a detailed listing and categorization of the documents used to develop the baseline information and technical analyzes for the development of the IRWMP. Updating of the IRWMP includes a review of these documents and updating if necessary as well as identifying new relevant technical documents that should be reviewed to support the IRWMP. Given the new standards, the expanded scope of the technical analysis, and review of current planning documents, an updated report on deficiencies, priority for filling the gaps, and plan to address them are part of the current update process.
Relation To Local Water Planning	Standard is met with existing plan language. <i>** The Recycled Water Master Plan Update and Update of the Santa Clara Valley Water Use Efficiency Strategic Plan will require close coordination among the wholesale and retail water agencies, potential recycled water customers, and land use developers.</i>	The IRWMP currently meets this standard. However, in order for the Plan to meet the requirements of the climate change standard, the IRWMP is being updated to consider and incorporate the water management issues and climate change adaptation and mitigation strategies from local planning document.



PROPOSITION 84 STANDARD	STATUS	SPECIFIC STANDARD STATUS
Relation To Local Land Use Planning	Standard is met with existing plan language.	The IRWMP currently meets this standard. However, in order for the Plan to meet the requirements of the climate change standard, the IRWMP is being updated to include a discussion of the region’s demonstrated information sharing and collaboration with regional land planning efforts being undertaken in order to manage multiple water demands throughout the state, to adapt to water management systems to climate change, and potentially offset climate change impacts to water supply in California.
	<p><i>** The Recycled Water Master Plan Update and Update of the Santa Clarita Valley Water Use Efficiency Strategic Plan will both tie in to the next update of the Urban Water Management Plan (2015), and require coordination with local planning agencies and with the Los Angeles County and City of Santa Clarita’s One Valley One Vision document General Plan Updates.</i></p>	
Stakeholder Involvement	Standard is met with existing plan language.	The IRWMP currently meets this standard. The IRWMP was developed and continues to operate via a broad public process focused on outreach through meetings, community events, direct emails, mailings, and face to face interaction to maintain Stakeholder involvement. Stakeholders, including DACs, were and continue to be able to directly interact with the IRWMP by adding projects to the list of Candidate Projects for implementation of the IRWMP, assisting in development and updating of the resource management strategies and objectives through consensus based interactive stakeholder meetings.
Coordination	Standard will be met with plan language being revised or amended with Planning Grant Round 1 funds. Revised plan anticipated (March 2013).	The IRWMP is currently being updated to include mention of California Natural Resource Agency’s California Adaptation Strategy process and the RWMG’s consideration of membership in the California Climate Action Registry which is a future Stakeholder meeting agenda topic. The Plan will also be updated with the Region’s coordination ongoing efforts with other adjacent planning regions including: the joint Climate Change Workshop that is being sponsored between the Watershed Coalition of Ventura County (WCVC), USCR, and Santa Barbara County IRWMP Regions, the Watershed Awareness Month of May activities in which a number of IRWMP projects are being highlighted within the watershed also co-sponsored by the USCR and WCVC IRWMP Regions, and the participation by both the WCVC and USCR IRWMP members in each other’s regular Stakeholder meetings to ensure that the entire watershed is protected and managed appropriately.



PROPOSITION 84 STANDARD	STATUS	SPECIFIC STANDARD STATUS
Climate Change	Standard will be met with plan language being revised or amended with Planning Grant Round 1 funds. Revised plan anticipated (March 2013).	Using Planning Grant funds received from Round 1, the RWMG has commissioned a Climate Change Technical Study that will identify vulnerability of the Region to climate change, evaluate potential climate change impacts, identify and evaluate potential adaptation strategies, and will make recommendations as to how to collect and utilize greenhouse gas emissions data within the IRWMP framework. The study will then be used to update the IRWMP so that it will meet the requirements of the climate change standard.



3.1.1 Disadvantaged Community Outreach Process

During development of the IRWMP, no communities that met the definition as defined in the Water Code of a Disadvantaged Community (DAC) were identified, but there are pockets of lower income areas that may have issues similar to DACs, such as inability to access to information, for example. In the spirit of providing “a safe, clean, affordable, and sufficient water supply to meet the needs of California residents, farms, and businesses”, a DAC Outreach Subcommittee was formed along with the development of a DAC outreach strategy to reach these communities, which will include parts of Newhall and Canyon Country.

As part of this strategy, the RWMG contacted other groups known to deal with DAC issues, such as the City of Santa Clarita Housing Department and the Newhall Community Center. Individuals working on the IRWMP visited the Newhall Community Center and spoke with their staff. Center staff suggested the RWMG work with their teacher of the English as a Second Language (ESL) class. A professional outreach consultant was utilized to prepare materials in both English and Spanish and the Newhall Community Center teacher used those materials as part of the course work. This was a very effective way to communicate these issues rather than simply placing an article in a publication with an overly broad target audience. This was face to face interaction being delivered by someone this group of people had an existing relationship with and trusted. It also afforded the opportunity to expand the number of people who received the information. The Newhall Community Center is extensively used and the community who use it take great pride in the programs that are offered there. When the Center was being planned, the community was an integral part of the design and location of the building and it functions as an extended family for many that use it. Similar resources exist in Canyon Country including a public library.

In addition to providing this IRWMP information in the ESL classes, Stakeholders presented IRWMP information at the Emergency Expo and Arbor Day events. Both are City of Santa Clarita events, attended by thousands of people, and were very successful in engaging the community on IRWMP issues. Open channels of communication and good working relationships have also been established between agencies/companies of the Santa Clarita Valley and the Tataviam Band of Mission Indians due to several development projects involving their lands.

These specific efforts of direct emails, mailings, face to face interaction, event participation, classroom instruction, flyers, notices, surveys, and presentations were performed to get environmental groups, conservancy groups, well owner groups, DACs, water suppliers, municipalities, sanitation districts, flood control districts, American Indian Tribes, developers, landowners, adjacent IRWM areas, State agencies, elected representatives, and the like to take part in the IRWMP. With the involvement of the Stakeholders, the facilitation meetings, the tracking of Stakeholder comments, and the efforts to incorporate those comments into the IRWMP the group has been able to incorporate a broad range of input and ideas.



With the recent completion of the County of Los Angeles’s One Valley One Vision (OVOV) land use planning document, the OVOV update of the City of Santa Clarita General Plan, and the 2010 Census data, there is a wealth of new information available to assist in identifying existing and potential new stakeholders, including DAC’s, tribal communities, and environmental justice communities. These types of outreach efforts are continual efforts as part of the USCR IRWMP and will be throughout the IRWMP Update.

3.2 Grant Work Plan Content (Work Plan Tasks)

Funding is being requested from the Round 2 Planning Grant solicitation for the following work plan tasks. These technical studies directly support the technical feasibility of the objectives in the IRWMP.

Task 1 RECYCLED WATER MASTER PLAN UPDATE

The CLWA requires an update of its 2002 Recycled Water Master Plan in order to compile the latest information with regard to potential recycled users, design of infrastructure and the availability of recycled water to serve them. The project would require an investigation to identify all large landscape irrigators and other non-potable water users and their proximity to an updated list of potential sources of recycled water. This data will then be used to prepare various recycled water system designs and cost evaluations to determine a suite of options for recycled water delivery that reflect current regulatory requirements. The recycled water system options will then be matched with potential water conservation program portfolios to arrive at a cost-effective and realistic strategy to meet the State’s requirements of 20 percent per capita water conservation by 2020 (SBx7-7).

Subtask 1.1: Recycled Water User Map and Hydraulic Model Update

- 1.1.1 Collect updated potential recycled water users from water purveyors.
- 1.1.2 Map the potential recycled water users in a Geographic Information System (GIS) program.
- 1.1.3 Collect the purveyor’s potable pressure zone information and incorporate the information in GIS.
- 1.1.4 Establish recycled water pressure zones.
- 1.1.5 Create a hydraulic model to incorporate the potential recycled water user demands and pressure zones.



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Subtask 1.2: Draft Recycled Water System Analysis

- 1.2.1 Evaluate the potential recycled water users, and their demands per pressure zone.
- 1.2.2 Determine the recycled water system seasonal storage requirements and identify potential seasonal storage locations.
- 1.2.3 Evaluate the recycled water system and determine a cost effective layout.

Subtask 1.3: Draft Recycled Water Master Plan

- 1.3.1 Review previous recycled water documents to include but not limited to the Recycled Water Master Plan dated May 2002, Recycled Water Program EIR for the May 2002 Recycled Water Master Plan, Recycled Water Phase 2A Preliminary Design Report, Recycled Water Program Phase 2A Environmental Documents, Honby Pump Station Technical Memorandum, Seasonal Storage Evaluation, System Optimization Technical Memorandum, and the Amended Engineer's Report for the existing Recycled Water System.
- 1.3.2 Review the draft recycled water rules and regulations and Sanitation District Agreement and incorporate related information into the master plan.
- 1.3.3 Finalize the draft recycled water system analysis and coordinate with the water purveyors and Sanitation District of Los Angeles County.
- 1.3.4 Identify and evaluate the recycled water system implementation phases including but not limited to the phase limits, phase demands, costs, and schedule.
- 1.3.5 Revise the recycled water hydraulic model to incorporate the latest system analysis and implementation phases.
- 1.3.6 Prepare the Draft Recycled Water Master Plan.
- 1.3.7 Present and coordinate the Draft Recycled Water Master Plan with the purveyors and the Sanitation District of Los Angeles County.

Subtask 1.4: Final Recycled Water Master Plan

- 1.4.1 Review comments from the various reviewers and revise the master plan accordingly.
- 1.4.2 Finalize the recycled water hydraulic model accordingly.
- 1.4.3 Prepare the Final Recycled Water Master Plan.



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- 1.4.4 Present the Final Recycled Water Master Plan with the local water purveyors and the SCV Sanitation District of Los Angeles County.

Task 1 Deliverables:

- Recycled Water User Map
- Hydraulic Model
- Draft and Final Recycled Water Master Plan

Task 2 RECYCLED WATER MASTER PLAN ENVIRONMENTAL IMPACT REPORT

Update of the Recycled Water Master Plan will require the preparation of a new subsequent Programmatic Environmental Impact Report pursuant to the California Environmental Quality Act.

Subtask 2.1: Project Kick-off

Meet with Agency staff in a project kick-off meeting to review program tasks, schedule, existing documents and data, and address questions and data needs, and visit the project sites.

Subtask 2.2: Notice of Preparation

Prepare Notice of Preparation and mail to list of appropriate agencies supplied by CLWA.

Subtask 2.3: Conduct Regular Meetings

- 2.4.1 Prepare for and conduct regular scheduled meetings with Agency staff and General Counsel to review progress and address issues.
- 2.4.2 Provide all necessary exhibits and documents required for presentation on environmental topics for public meetings and hearings.
- 2.4.3 Prepare and provide minutes to Agency for review and for the files for all project-related meetings with Agency staff and outside entities. Assume an average one to two-hour meeting every 4 weeks over a 12-month period.



Subtask 2.4: Draft Environmental Impact Report (EIR)

- 2.4.1 Prepare draft EIR for the Recycled Water Master Plan Update, necessary to satisfy the latest requirements of CEQA.
- 2.4.2 Prepare Notice of Availability and file Notice of Completion of the draft EIR with the State Office of Planning and Research.
- 2.4.3 Distribute draft EIR, either as a PDF or as a hardcopy, as specified by CLWA according to list of appropriate agencies supplied by CLWA.

Subtask 2.5: Review Comments on DEIR

- 2.5.1 Prepare drafts of the EIR at appropriate times for review by Agency staff. Provide five (5) copies of each draft for Agency review and comments.
- 2.5.2 Prepare responses to comments on the final draft EIR, including consultation with federal and state agencies if endangered species or habitat are identified.
- 2.5.3 Prepare Notice of Determination within five working days of deciding to carry out the project and file with the State Office of Planning and Research. Also file the Notice with the county clerk of the county or counties in which the project is located.

Subtask 2.6: Prepare Final EIR

- 2.6.1 Prepare and provide copies of Final EIR documents as necessary for review by local, state, federal agencies and others.
- 2.6.2 Prepare Notice of Determination
- 2.6.3 Prepare the administrative record as part of the Final EIR.

Subtask 2.7: Project Management

The primary objectives of the project management task are to: 1) ensure that project schedule and budget are met; 2) document project activities (progress reports and meetings); and 3) ensure that project work and deliverables meet quality objectives.

Task 2 Deliverables:

- Notice of Preparation



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- Draft and Final EIR
- Administrative Record

Task 3 STRATEGIC WATER USE EFFICIENCY PLAN UPDATE

The Santa Clarita Valley Family of Water Suppliers (the Suppliers) joined together in 2007 to develop a plan to ensure the efficient use of water in the Santa Clarita Valley (Valley). The Santa Clarita Valley Water Use Efficiency Strategic Plan (SCV WUE SP) was finalized in 2008 and included programs and projects that were targeted to effectively reduce the per capita water use in the Valley by at least 10% by 2030. In 2010/2011, the Suppliers were awarding funding from the Proposition 84 Round 1 Implementation Grant Program to fund 4 conservation programs identified within the SCV WUE SP.



With current law (SBX7-7) mandating a 20% reduction in water demand by 2020, it becomes necessary to update the SCV WUE SP. At a minimum, an update of the SCV WUE SP shall analyze current data on water consumption in the Valley, assess current conservation efforts that have followed the SCV WUE SP, those that have deviated from the SCV WUE SP by necessity and those that are independent of the SCV WUE SP, identify additional water conservation programs, analyze cost benefits, and recommend a plan of action.

It is important the SCV WUE SP update also include an interactive model (i.e., spreadsheet) that is able to be modified by the Suppliers as conditions change in years to come.

Subtask 3.1: Analysis of Data

Use data from the 2010 Urban Water Management Plan (UWMP), data being developed to update the Agency's Recycled Water Master Plan and the original Santa Clarita Valley Water Use Efficiency Strategic Plan (2008) as well as more recent data from the Suppliers (e.g., survey results from O'Rorke and the Family of Water Suppliers, etc.) to describe historical consumption patterns, saturation of the market with water-efficient fixtures, willingness of the community to adopt various measures, compliance with the CUWCC MOU, and other issues or trends as they emerge.

Subtask 3.2: Assess Conservation Efforts

Review current conservation programs at the Suppliers (retailers and wholesaler) terms of scope and effectiveness of water savings.



Subtask 3.3: Identify and Develop Water Conservation Measures

- 3.3.1 Describe potential water conservation programs for residential (single and multi-family), commercial, industrial, institutional and landscape water use to
 - a. achieve 10% reduction in GPCD by 2015 (in conjunction with recycled water programs that will be identified in the Recycled Water Master Plan Update)
 - b. achieve 20% reduction in GPCD by 2020 (in conjunction with recycled water programs that will be identified in the Recycled Water Master Plan Update)
 - c. achieve “on track” status with the CUWCC’s Best Management Practice (BMP) requirements for members of the Suppliers
- 3.3.2 Develop in detail both water conservation measures that are quantifiable and those that are non-quantifiable (e.g., social marketing).
- 3.3.3 Document the underlying assumptions used for calculating water savings.

Subtask 3.4: Assess Cost-Effectiveness

Taking into consideration alternative levels of recycled water use identified in the Draft Update of the Recycled Water Master Plan, analyze prospective water conservation programs in terms of cost-effectiveness and rank programs by their appropriateness to the Santa Clarita Valley. Programs should be divided between the efforts of the wholesaler and the retailers as well as potentially cooperative efforts. Ideally, the wholesale agency would provide some baseline programs (e.g., High Efficiency Toilet [HET] rebates) and the retail agencies would provide programs that are specific to their service area (e.g., commercial and industrial audits in service areas with CII customers).

At this point, the Suppliers would like to review work efforts to date prior to development of the plan.

Subtask 3.5: Create a Conservation Plan

- 3.5.1 Create a customized plan for multiple conservation programs that includes costs, benefits, social acceptance and partnership opportunities for achieving 10% reduction in gallons per capita per day (GPCD) by 2015, 20% reduction in GPCD by 2020 and “on track” status with the CUWCC’s BMP requirements.
- 3.5.2 Identify a methodology for an evaluation of the conservation plan post-implementation.
- 3.5.3 Assess conservation staffing levels at wholesale and retail agencies.
- 3.5.4 Identify and describe potential funding opportunities.



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3.5.5 Evaluate the conservation requirements needed in concert with projected recycled water use to meet SBx7-7 requirements. Text will be provided, either separately or as an appendix that can facilitate the completion of the Recycled Water Master Plan Update towards this effort.

Subtask 3.6: Project Management

The primary objectives of the project management task are to: 1) provide close coordination among the retailers, the project team, and other involved parties; 2) ensure that project schedule and budget are met; 3) document project activities (progress reports and meetings); and 4) ensure that project work and deliverables meet quality objectives.

Task 3 Deliverables:

- Draft and Final Strategic Water Use Efficiency Plan Update
- Text/Chapter to support the Recycled Water Master Plan Update

Task 4 GRANT ADMINISTRATION

This task is to administer and manage project activities and the overall project schedule and budget to ensure that the project is completed efficiently and successfully. Project management activities will include budget and schedule control and quality assurance and quality control (QA/QC) for the duration of the project. This task also includes the development and submittal of quarterly reports to DWR. Quarterly reports will include project progress reports, upcoming work, schedule, budget, and other pertinent information.

Task 4 Deliverables:

- Proposal Quarterly Reports and Invoices
- Grant Agreement Completion Final Report

3.3 Additional IRWM Plan Work

No additional work has been identified as needed to produce standards compliant IRWM Plan. As mentioned previously funds were received and work is currently being conducted to prepare a Salt and Nutrient Management Plan as part of the IRWMP. The CEQA document for that SNMP will still have to be prepared. However, it is not necessary for the IRWMP to be considered a compliant plan.

Further, the funds requested from this grant funding opportunity for development of the Recycled Water Master Plan Update and the Updating of the Water Use Efficiency Strategic Plan do not directly fill the gap in terms of a need for a compliant IRWMP. As described in Table 3-1 above, much of the work currently occurring is bringing the Plan into concurrence with the Proposition 84



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Integrated Regional Water Management

Standards. These two technical studies have substantial value to the technical validity and feasibility of the IRWMP and the existing and potential future projects that will become part of the IRWMP as they determine the amount of overall recycled water demand that will be available within the Region, and the amount of anticipated conservation that we can expect given the current legislative requirements, recent economic conditions, and hydrologic conditions and how those have created a trend that assumptions have to be planned upon. The results of these studies will be important documents to discuss with the Stakeholders, will become foundational to the upcoming 2015 Update of the Urban Water Management Plan, and will be additional resource documents to the IRWMP.

Attachment 3	Anza Borrego Desert Integrated Regional Water Management Planning Grant Proposal Work Plan
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Attachment 3 consists of the following items:

- ✓ **Introduction**
- ✓ **Current Status in Meeting IRWM Plan Standards (page 22)**
- ✓ **Grant Work Plan (page 24)**
 1. Stakeholder Outreach & Program Administration
 2. Regional Water Resources Plans
 3. Updating the ABD-IRWM Plan
 4. Grant Administration
- ✓ **Additional IRWM Plan Work (page 40)**

1. Introduction

The Anza Borrego Desert (ABD) Integrated Regional Water Management (IRWM) Region (Region), which was formally approved through the California Department of Water Resources' (DWR's) Region Acceptance Process (RAP) in 2009, is unique compared to other IRWM regions for several reasons.

The ABD Region is largely comprised (over 70%) of State land that falls within the jurisdiction of the Anza-Borrego Desert State Park (State Park). For this reason, the Region possesses unique natural and cultural resources that are irreplaceable and of Statewide and National importance. Designated as a National Natural Landmark in 1974 and a Biosphere Reserve by the United Nations, the State Park contains the largest area of open wilderness within the State of California, including approximately 61 sensitive plant species, 86 sensitive animal species, nine (9) California Historic Landmarks, and innumerable cultural resource sites (Anza-Borrego Desert State Park 2005). Major drainages within the State Park include Rockhouse Canyon, Coyote Creek, Borrego Palm Canyon, Tubb Canyon, Grapevine Canyon, Fan Felipe Creek, Fish Creek, Rodriguez and Oriflamme Canyons, Vallecito Creek, Canebrake and Bow Willow Canyons, and Carrizo Creek. Alluvial valleys within the State Park are important for water resources as they provide the conduit through which runoff can infiltrate to regional groundwater basins. However, groundwater overdraft conditions could potentially adversely impact the State Park's mission to preserve and to conserve the natural capital of the desert ecosystems within the Park.

Unique Attributes of the Region:

- Over 70% is comprised of important State resources (Anza-Borrego Desert State Park).
- Almost 100% of the Region qualifies as a DAC.
- Faces critical water supply issues relating to sole reliance on dwindling groundwater resources.

Second, the Region is unique because almost 100% of the Region qualifies as a disadvantaged community (DAC). Stakeholders have expressed concerns about the affordability (pumping and treatment costs) and quality of groundwater supplies within the Region for these DAC residents. Therefore, it is

critical to ensure that the integrated planning process supports maintenance of a sustainable and safe water supply in accordance with Statewide Priorities.

Given its particular value regarding natural resources and DACs, the Region faces critical water supply issues that must be addressed through collaborative planning and management. The Region relies on groundwater resources for its sole source of water supply; yet existing groundwater resources of the Borrego Valley are in a state of overdraft and potentially face substantial water quality issues which could adversely impact the State Park's mission to preserve and to conserve the natural capital of the desert ecosystems. Due to the Region's unique nature, it is imperative that the ABD IRWM Plan be completed to meet DWR's IRWM Plan Standards so as to comprehensively address the Region's water resource issues, while positioning the Region for necessary funding to implement critical water supply and water quality projects.

Regional Background

The following information, adapted from the 2009 RAP submittal, the Draft IRWM Plan, and the Planning Grant-Round 1 Application, provides general background information regarding the Region.

Establishment of the ABD Region

In 2006, the Borrego Water District (BWD) began working to secure a position within an IRWM Region in the San Diego or Colorado River Funding Areas. However, these attempts were unsuccessful due to political boundary considerations. In 2009, BWD partnered with the County of San Diego (County) and Resource Conservation District of Greater San Diego County (RCD) to form the ABD IRWM Region, which would better reflect the geologic and hydrologic conditions of the Borrego Valley area. In 2009, the Region officially became an IRWM region through DWR's RAP approval.

The original RAP submittal for the Borrego Valley area was limited to the Borrego Valley Watershed within San Diego County, but was later expanded to include the portion of San Diego County that lies in the Colorado River Hydrologic Basin, the entire Borrego Valley Watershed that extends into Riverside County, and the area of San Diego County east of the Tecate Divide (refer to **Figure 3-1** and **Figure 3-2**). The expanded Region includes the entire Anza-Borrego Desert State Park, four public water purveyors, and six separate tribal lands.

Details regarding the history of the ABD Region, including letters that demonstrate the history described above are included as **Exhibit A**.

Figure 3-1: Jurisdictions within the ABD IRWM Region

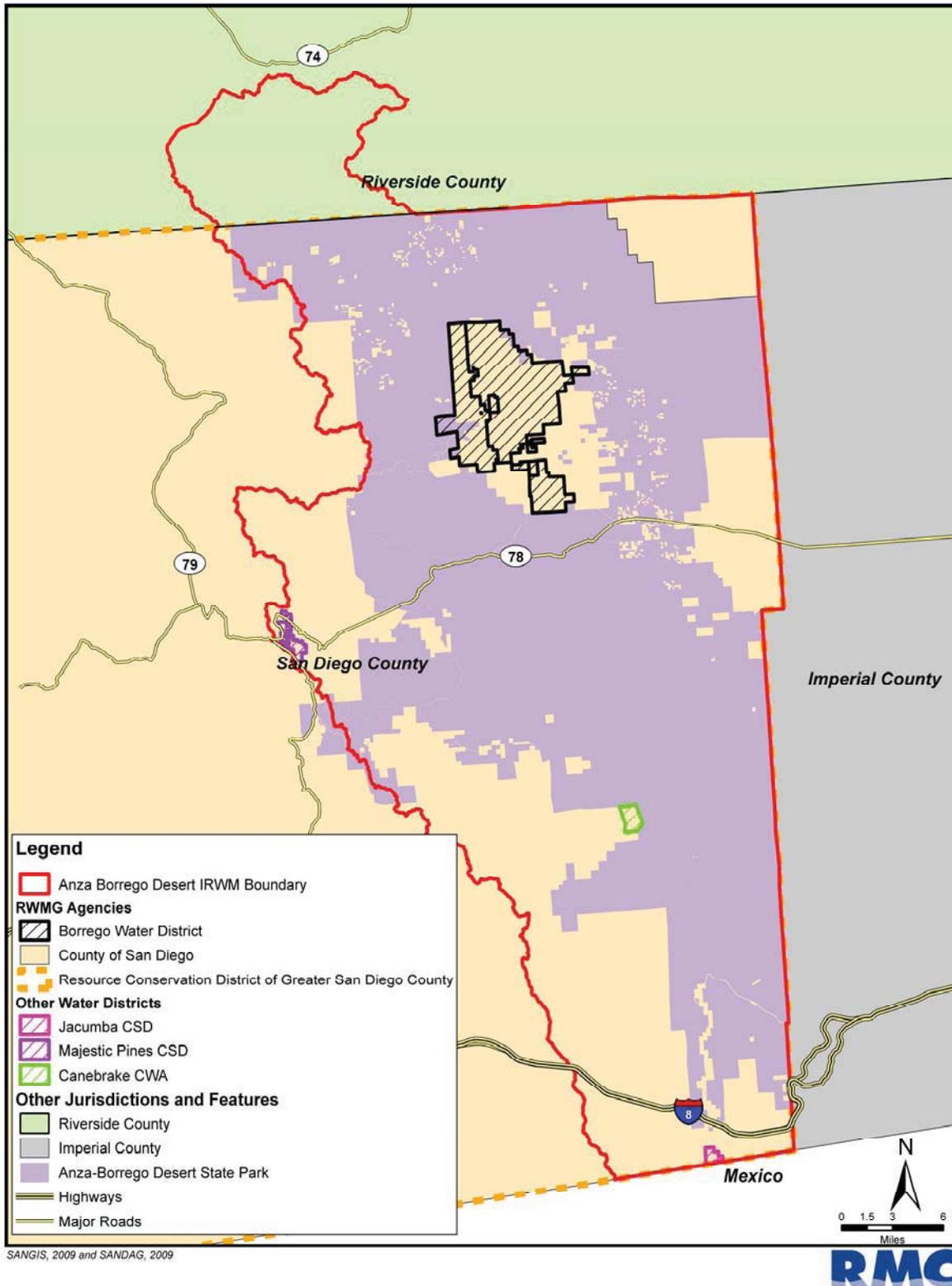
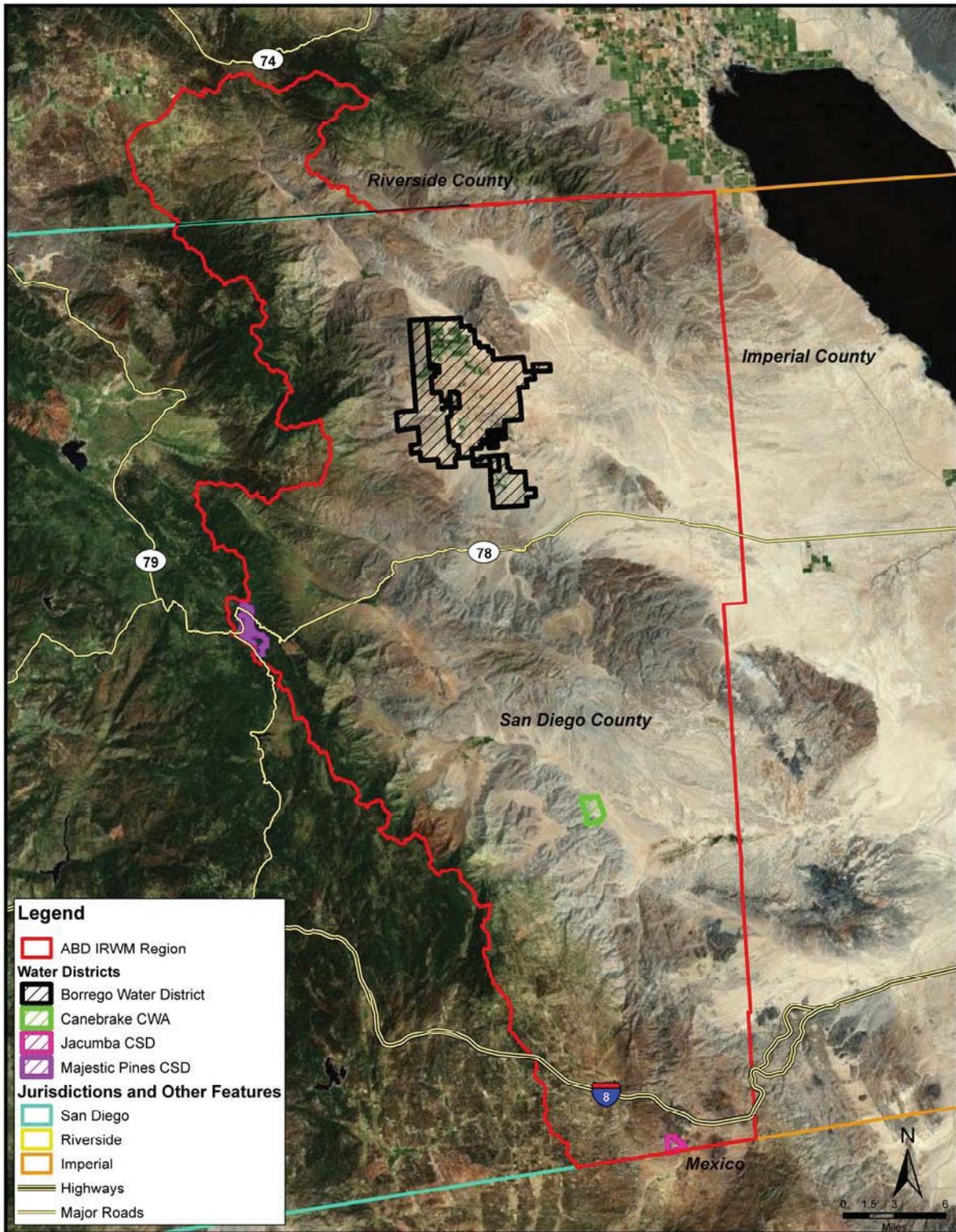


Figure 3-2: Aerial Map of the Anza Borrego Desert IRWM Region



Regional Water Management Group

To comply with the IRWM requirements, a Regional Water Management Group (RWMG) was formed in 2009 to implement the ABD IRWM Program. Three local agencies comprise the RWMG:

- Borrego Water District (BWD),
- County of San Diego (County), and
- Resource Conservation District of Greater San Diego County (RCD).

The BWD service area overlays the northern portion of the Region, while both the County and RCD operate within the entire Region with the exception of lands in the Coyote Creek Watershed that lie within Riverside County (refer to Figure 3-1).

BWD, which was established in 1962, is a water supply and groundwater management agency with the authority to manage the Region's largest water supply source (groundwater). BWD provides water, sewer, flood control, and gnat abatement services for areas in the unincorporated community of Borrego Springs. In 2002, BWD adopted a Groundwater Management Plan in accordance with the Groundwater Management Act (Assembly Bill 3030; Water Code §§ 10750 et seq.) and obtained the authority of a groundwater replenishment district. As a designated groundwater replenishment district, BWD has the authority to conduct planning for groundwater management, to buy and sell water, to exchange water, to distribute water in exchange for ceasing or reducing groundwater extraction, to conduct groundwater recharge activities, and to build necessary works to achieve groundwater replenishment. This designation also provides the authority to levy a replenishment assessment.

The County is involved in water management within the Region through collection of annual groundwater level data and development of land use restrictions that may prevent an increase in aquifer overdraft and reduce flood-related threats to property. In addition, the County has responsibilities regarding flood control within the portions of the Region that lie within the County, and has land use authority within San Diego County lands.

The RCD is involved in water-related management through soil and water conservation and watershed management and restoration activities. The RCD has the authority to promote and provide conservation education, to conduct research, and to advise and assist other public agencies and private individuals in the areas of land use planning, soil and water conservation, wildlife habitat enhancement and restoration, agricultural sustainability, control of exotic plant species, and watershed restoration.

Other Water Managers

In addition to BWD, there are three additional entities within the Region that have water supply authority:

- Canebrake County Water District (CWD),
- Jacumba Community Services District (CSD), and
- Majestic Pines CSD.

Each of these water supply entities supplies water to small unincorporated communities located within the County (refer to Figure 3-1). Canebrake CWD was formed in 1966, and provides potable water (groundwater) to the community of Canebrake, which is located fifteen (15) miles south of Borrego Springs. Jacumba CSD was formed in 1985, and provides potable water supply and park and recreation services to the unincorporated community of Jacumba, which is a federally-designated colonia located adjacent to the United States-Mexico border. Majestic Pines CSD was formed in 1993, and provides potable water to two residential developments located near the community of Julian.

Geographic and Hydrogeographic Setting

The ABD Region is located in the Colorado River Funding Area, which coincides with the Lower Colorado River hydrologic unit. This 850,000-acre Region is almost entirely located in the County of

San Diego, with a small area in southern Riverside County. The Region is bounded on the east by Imperial County; on the south by Mexico; on the west by the Peninsular Range and on the north by Riverside County, except for a portion of the Coyote Creek watershed that extends into Riverside County (refer to Figure 3-1).

The topography of the Region is highly variable and has a major effect on meteorology, hydrology, soils, vegetative communities, wildlife habitat use, and human land use patterns (refer to Figure 3-2). Elevations range from a few feet above mean sea level (AMSL) to over 6,000 feet AMSL in the Peninsular Range. Topography in the Peninsular Range area creates unique habitat niches such as deep canyons on the eastern slopes that support native vegetation, and alluvial fans that extend from the canyon mouths. In addition, topographically enclosed drainage basins containing interior valleys and no outlets are common. The eastern portion of the Region is made up of ancient sea bottom, shoreline, marsh, and inland lake deposits. Mountain masses are scattered throughout the Region and are thought to be related to the Peninsular Range, and made of the same parent rock. The oldest rocks in the Region dating from about 540 million years ago are in the Santa Rosa, San Ysidro, and Coyote Mountains. These metamorphic rocks were originally part of an ancient inland sea bottom and contain fossils of marine life forms that are more than 450 million years old. Most Anza-Borrego fossils range from 6 million to half a million years old and may be the longest continuous record for life during this period in North America (Jefferson and Lindsey 2006).

The Region lies just to the west of the San Andres fault zone and is bisected by two active fault zones, the San Jacinto and the Elsinore faults. The San Jacinto fault runs from the Hemet area through Borrego Valley with branches to the Salton Trough. The Elsinore fault runs from Temecula south along County Road S-2. On April 9, 1968, the largest earthquake in the Region in modern times occurred on the Coyote Canyon fault, a branch of the San Jacinto fault. The epicenter was near Borrego Mountain and the magnitude was 6.4 on the Richter Scale (Remika 1992; Jee 1988).

Annual precipitation is sparse and variable throughout the Region, ranging from 2 to 6 inches at stations on the desert floor. However, occasional torrential rainfall can bring destructive flash flooding. Flash flooding is generally attributed to monsoon-like conditions, which generally occur in the summer and fall months as a result of local thunderstorms and tropical cyclones that develop in the Gulf of Mexico. Flash flooding poses a substantial issue in that it has resulted in severe development restrictions throughout the Region.

The Region experiences mild temperatures in the winter months and hot temperatures in the summer. Measurements taken at the Borrego Desert Park Weather Station show that in a typical year monthly extreme high temperatures reach over 85° F (29° C) as early as March, and are routinely over 100° F (38° C) by May. From June through September, the monthly extreme high temperatures will routinely exceed 110° F (43° C). Not until November will monthly maximum temperatures stay consistently below 100° F.

Water supply to the Region is composed of groundwater that is recharged by runoff from the surrounding mountain watersheds. These flows, primarily from the north (Coyote Creek), recharge the upper aquifer of the Region's groundwater basins along permeable water courses. Groundwater is extracted and utilized throughout the Region from numerous wells. Agencies with water control authority, including BWD, measure their own groundwater extractions; however the majority of groundwater extractions are not measured, and are therefore estimated by indirect methods.

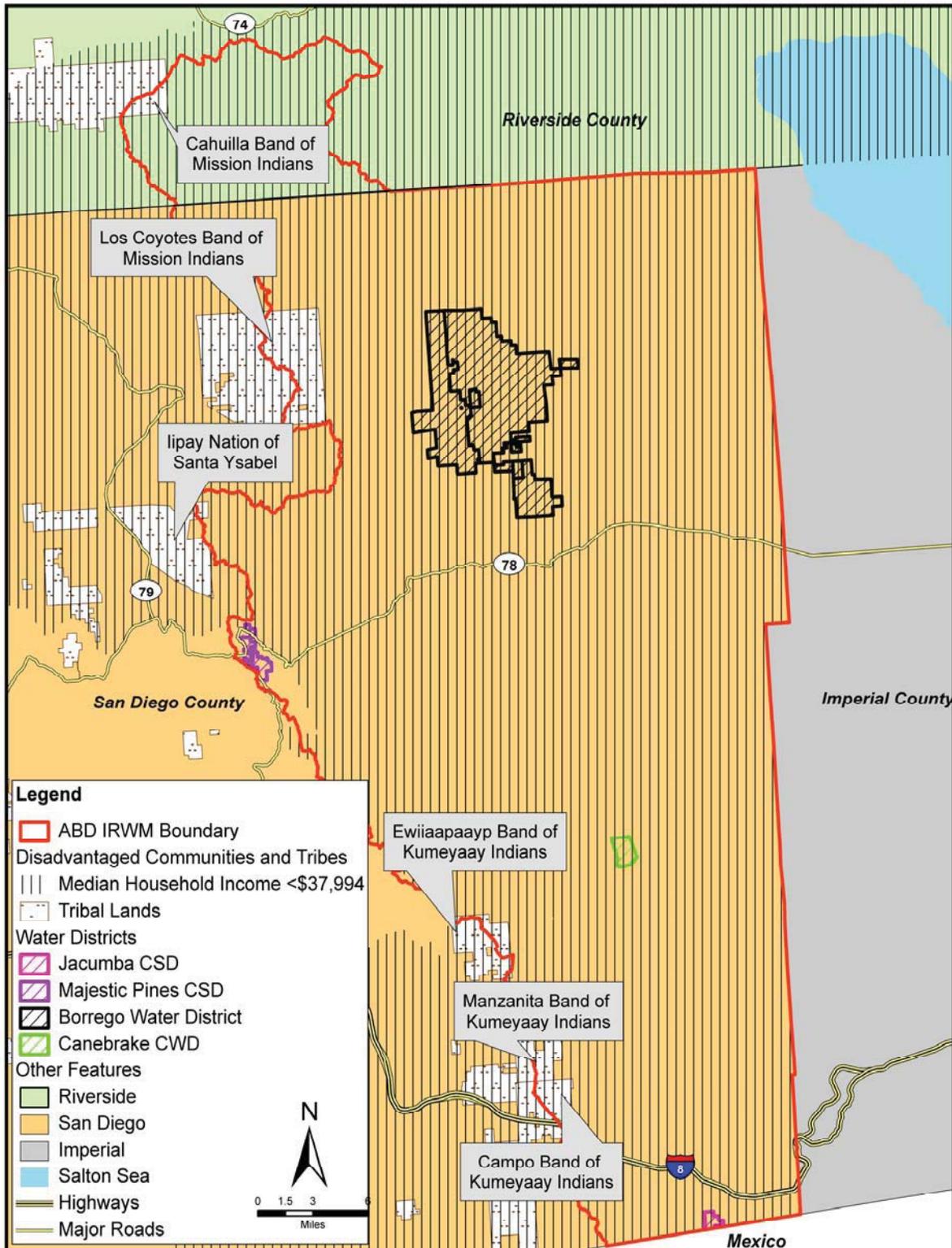
On rare occasions, storm flows in the Borrego Valley are of such a magnitude that they cannot entirely percolate to groundwater basins before reaching an area known as the Borrego Sink, located at the lowest elevation in the Borrego Valley. This depression is typically a dry lake bed, however during very rare events, the Borrego Sink may overflow with water. Such storm flows are often associated with tropical monsoons originating in the Gulf of Mexico.

Regional Demographics

The Region is home to a small number of permanent residents (approximately 3,000); however the Region supports a large amount of tourism, particularly through the use of recreational features of the Anza-Borrego Desert State Park and the Ocotillo Wells State Vehicular Recreation area (SVRA). According to the State Park's General Plan, 600,000 people visit the State Park each year on average, and the annual number of visitors has ranged from 424,000 to 900,000 (Anza-Borrego Desert State Park 2005).

As demonstrated within **Figure 3-3**, almost the entire Region is classified as a DAC according to DWR standards. According to the 2010 DWR Guidelines, a DAC is classified as, "a community with an annual median household income (MHI) that is less than 80 percent of the Statewide annual median household income." Based on the most recent geographic data available for the Region (2000 Census data), the MHI for California is \$47,493. As such, those communities with incomes less than 80% of this value, or \$37,994, qualify as DACs.

Figure 3-3: Disadvantaged Communities and Tribal Land within the ABD Region



U.S. Census Bureau, 2000 Census, Median Household Income by Census Tract, Available: http://www.sandag.cog.ca.us/resources/maps_and_gis/gis_downloads/admin.asp



In addition, **Figure 3-3** demonstrates that the Region also contains small amounts of tribal land from six separate tribal entities, including the following tribes:

- Cahuilla Band of Mission Indians,
- Los Coyotes Band of Mission Indians,
- Iipay Nation of Santa Ysabel,
- Ewiiapaayp Band of Kumeyaay Indians,
- Manzanita Band of Kumeyaay Indians, and
- Campo Band of Kumeyaay Indians.

History of Water Management Efforts in the Region

The Region's primary groundwater basin (the Borrego Valley Groundwater Basin), which supplies water to the majority of the Region's residents, has been known to be in a state of overdraft for many years, most likely since 1945. In the past few decades, the Borrego Valley's water demands have increased, therefore increasing the magnitude of the area's overdraft condition.

Over the last few decades, local residents and other interests within the Borrego Valley have expressed growing concern regarding the lowering of the area's groundwater table and the fact that the Region did not have a plan or regulatory agency with the authority to adequately address regional groundwater overdraft. As a result, in 2000, BWD initiated the process of becoming a Groundwater Management Agency in accordance with the Groundwater Management Act.

BWD's 2002 Groundwater Management Plan (GWMP) successfully established BWD as the designated AB3030 groundwater management agency for the Borrego Valley Groundwater Basin. However, as of today this groundwater basin remains an unmanaged basin, as the statutory provisions of the Act do not appear to provide adequate authority for establishing a managed basin in this situation nor a cost-effective means to collect water extraction fees. For these reasons, BWD has previously attempted to address the overdraft through voluntary measures paid for primarily by BWD's ratepayers, although these ratepayers account for only approximately 10% of annual withdrawals from the basin. Thus, since 2002, although there has been concerted effort by Borrego Valley stakeholders to comprehensively address and manage the area's groundwater resources, the authority and funding mechanism has not been in place to establish managed groundwater basins, presently considered a necessary criteria for water banking, importing replenishment water, and obtaining the financing for building water transport pipelines to accomplish these purposes.

The impetus for beginning IRWM planning in the Region was to gather a comprehensive group of agencies, stakeholders, and citizens that could work toward developing an IRWM Plan that would assist the Region in resolving regional issues such as groundwater overdraft, groundwater quality, flood control, and environmental integrity.

Summary of IRWM Planning Efforts

The following sections provide information regarding previous IRWM planning efforts that have occurred in the Region from the Public Kickoff in early 2010 to present.

Meeting Summary

A Public Kickoff meeting was held in January 2010 to initiate the Region's IRWM planning process. Following this meeting, the RWMG and IRWM stakeholders (Stakeholders Committee) worked through September 2010 to begin development of a Draft IRWM Plan and prepare and submit a Planning Grant-Round 1 Application to DWR. During this timeframe, the RWMG and the Stakeholders Committee met on a regular basis, with meetings occurring approximately once per month.

Upon receipt of information that the Region was not recommended for Planning Grant-Round 1 funding, the RWMG reconvened to begin development of a Planning Grant-Round 2 Application. The RWMG decided to increase stakeholder involvement and transparency in development of Planning Grant Application materials by inviting all regional stakeholders to meetings and working collaboratively to establish the overall goals and focus of the IRWM planning process. Through this process, the RWMG convened seven (7) meetings (open to all stakeholders) from July 2011 to March 2012 to develop Planning Grant-Round 2 Application materials. In addition, a Work Plan Workgroup comprised of interested stakeholders was convened through three (3) conference calls and multiple e-mail correspondences to develop a draft Work Plan for the Planning Grant-Round 2 Application. The draft Work Plan, all completed attachments, and other materials included within the final Planning Grant Proposal were vetted through the Stakeholders Committee. **Figure 3-4** provides a graphical representation of the past timeline of the IRWM Program.

Figure 3-4: IRWM Timeline

Milestones	2009	2010				2011				2012
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Region Approved through RAP	★									
Public Kick-off Meeting		★								
Develop Draft IRWM Plan Chapters		★ ★	★ ★	★ ★						
Develop Planning Grant-Round 1 Application			★ ★	★						
Reconvene for Planning Grant-Round 2 Application							★			
Planning Grant-Round 2 Stakeholder Meetings								★	★ ★ ★	★ ★
Planning Grant-Round 2 Workgroup Meetings									★ ★	★

Past and Current Outreach Efforts

In 2010 and 2011, the RWMG led by BWD initiated a stakeholder outreach process to help support development and adoption of an IRWM Plan. As part of the stakeholder outreach process, the Stakeholders Committee met on October 11, 2011 and completed an exercise to identify all potential stakeholders within the Region. **Table 3-1** below provides a list of identified stakeholders.

Table 3-1: Identified ABD Stakeholders¹

<i>Agricultural Interests (Agricultural Alliance for Water and Resource Education)</i>	Jacumba Community Services District
<i>Anza-Borrego Desert State Park</i>	Lodging Interests*
<i>Anza-Borrego Foundation</i>	Ocotillo Wells State Vehicular Recreation Area
<i>Borrego Water District</i>	Outlying Community: Boulevard
<i>Borrego Chamber of Commerce</i>	Outlying Community: Canebrake
Borrego Community Sponsor Group	Outlying Community: Jacumba
Borrego Springs Unified School District	Outlying Community: Ocotillo Wells
Cahuilla Band of Mission Indians	Outlying Community: Shelter Valley
Campo Band of Kumeyaay Indians	Homeowners Associations
Canebrake County Water District	Los Coyotes Band of Mission Indians
Commercial Development*	Majestic Pines Community Services District
<i>County of San Diego</i>	Manzanita Band of Kumeyaay Indians
<i>Elsinore-Murrieta-Anza Resource Conservation District</i>	Residential Development*
Ewiiapaayp Band of Mission Indians	<i>Resource Conservation District of Greater San Diego County</i>
<i>Golf Course Interests*</i>	RV Park Interests*
lipay Nation of Santa Ysabel	<i>Salton Community Service District</i>

¹ Those stakeholders identified in italics currently participate on the Stakeholders Committee.

*It was noted that these groups do not have a cohesive group of aligned interests at this time.

In order to facilitate a robust stakeholder process, the DWR Regional Service Representative requested that DWR, through a separate contract with the Center for Collaborative Policy (CCP), provide facilitation services to the ABD IRWM stakeholders. Please note that because this work is being completed through DWR, this work is not included within the overall Budget (refer to Attachment 4). Additionally, this effort captured a limited number of preliminary meetings and stakeholder contacts; as such, ongoing outreach is needed and included in Task 1 of this Work Plan.

The request, granted by DWR Southern Region Office, included a scope of work with two phases. During Phase 1, CCP conducted interviews of potential stakeholders in the Region to determine the feasibility of providing facilitation services in support of an ABD IRWM Plan. Questions included:

1. Will stakeholders from the key organizations in the Region participate in IRWM planning in order to make it a legitimate process?
2. What are the main water issues and challenges that need to be addressed in the IRWM Plan?
3. Will the region be successful in addressing those issues in spite of obstacles that might derail development of the IRWM Plan?

In addition, RMC-WRIME, through a separate contract with DWR, would take part in the relevant interviews and conduct additional research to ascertain the status of technical information, determine technical needs, and determine the feasibility of providing technical support to assist in the drafting of the ABD IRWM Plan.

The summary report produced by CCP following the stakeholder interviews determined that a robust stakeholder process that supports IRWM planning is feasible. The summary report resulted in four (4) major recommendations for the ABD Region. The questions (*presented in italics*) and their relative recommendations and/or results (**presented in bold**) are summarized below:

- *Is it possible for the ABD IRWM Region to convene a group of stakeholders representing appropriate agencies, interest groups, and businesses to draft an IRWM Plan for the region?*

Stakeholder interviews confirmed that stakeholders are potentially committed to participating in the preparation of the ABD IRWM Plan, including ABD State Park, agriculture interests, golf interests, business interests, and non-governmental organizations. **An effort should be made to identify other possible stakeholders and include them in the IRWM planning process as they may have timely issues that also need to be addressed.**

- *Is it reasonable to assume that the stakeholders will work together toward the goal of producing a viable IRWM Plan?*

While some interviewees noted that it may be challenging to get stakeholders to communicate with each other and work together toward a common goal, most interviewees expressed optimism that in spite of the differences of opinion, stakeholders can work together and compile a successful IRWM Plan. **This process will likely require education of the public about regional water issues, and some facilitation during solution-seeking processes.**

- *Is it economically feasible for DWR to provide facilitation from CCP for the Borrego IRWM Plan development effort?*

Yes, however due to distance and travel time associated with attending meetings in the Borrego IRWM Region, it is recommended that contracts include cost-saving provisions.

- *Is it feasible for a consultant team to conduct additional research to ascertain the status of technical information, determine technical needs, and provide technical support to assist in developing the ABD IRWM Plan?*

Yes, it is feasible to conduct additional research; however there are recommended steps to expedite this process:

- Collect available technical data and information about the Borrego Valley Groundwater Basin and other regional groundwater basins.
- Review existing literature and information.
- Develop an impartial understanding of the state of the region's groundwater basins from a scientific perspective.
- Identify and describe gaps in the data, information, and analysis.
- Work with stakeholder representatives to develop a consensus on the scale of Region's groundwater issues and the state of the Region's basins.
- Develop a work plan that identifies potential options to address identified issues.

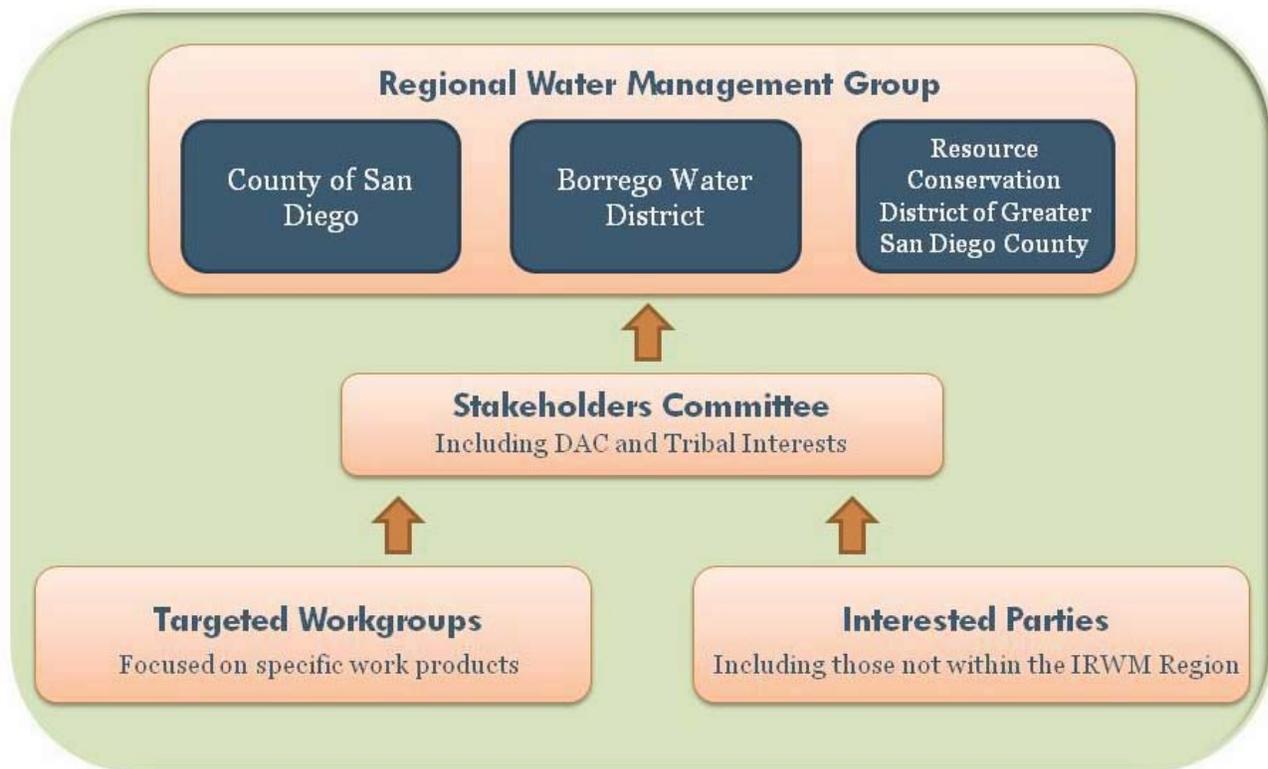
Based on the recommendations presented above, DWR is pursuing Phase 2, also through a separate contract with CCP, to continue to facilitate stakeholder meetings and help engage stakeholders during the

development of the ABD IRWM Plan. *Additional IRWM Plan Work*, below, provides further discussion of the planned scope of work for Phase 2.

Governance Structure

The ABD Region strives to maintain transparency in all IRWM-related activities, and therefore has an organizational (governance) structure that functions as a “bottom-up” process where stakeholders feed information and input up through the RWMG, who is responsible for considering stakeholder input when making informed decisions for the Region. **Figure 3-5** below provides a graphical representation of the Region’s existing bottom-up governance structure.

Figure 3-5: Existing Bottom-Up Governance Structure



Regional Water Management Issues

In October 2011, stakeholders participated in an exercise with a professional facilitator from CCP through which they identified “big” (key) issues within the Region. During this process, stakeholders unanimously identified four key issues:

1. water supply,
2. water quality,
3. flood control, and
4. environmental integrity.

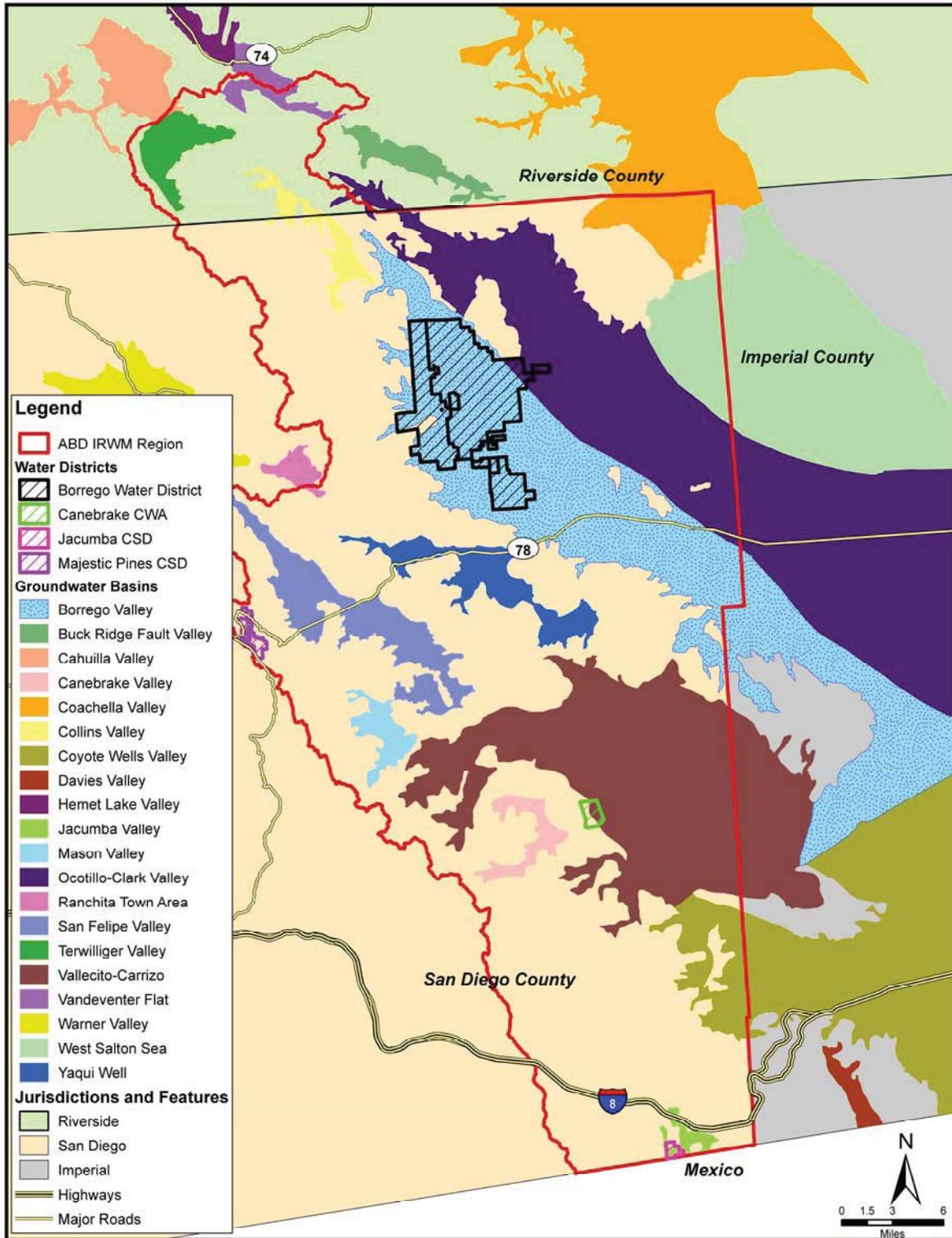
Stakeholders unanimously identified water supply as the Region’s most important issue among the four identified key issues. While the issue of environmental integrity was not formally defined within this process, stakeholders agreed that due to the importance of the State Park to the Region, water-related issues potentially affecting the natural environment (particularly within the State Park) should be considered.

The following includes an overview of each of the four regional issues identified by stakeholders. Background information is also provided regarding climate change, which is an emerging issue not previously addressed within the region and included in the scope of this Work Plan.

Water Supply

Usable water supply within the Region is solely sourced from groundwater basins. Within the Region, runoff from surrounding mountain watersheds recharges local groundwater basins, which are then accessed from multiple locations via pumping. There are many groundwater aquifers within the Region; however the Borrego Valley Groundwater Basin (Basin 7-24 per DWR Bulletin 118) supplies water to the majority of the Region's residents (refer to **Figure 3-6**). The Borrego Valley Groundwater Basin is composed of three distinct aquifers: the Upper, Middle, and Lower aquifers.

Figure 3-6: Groundwater Basins within the ABD IRWM Region



DWR Bulletin 118, 2004



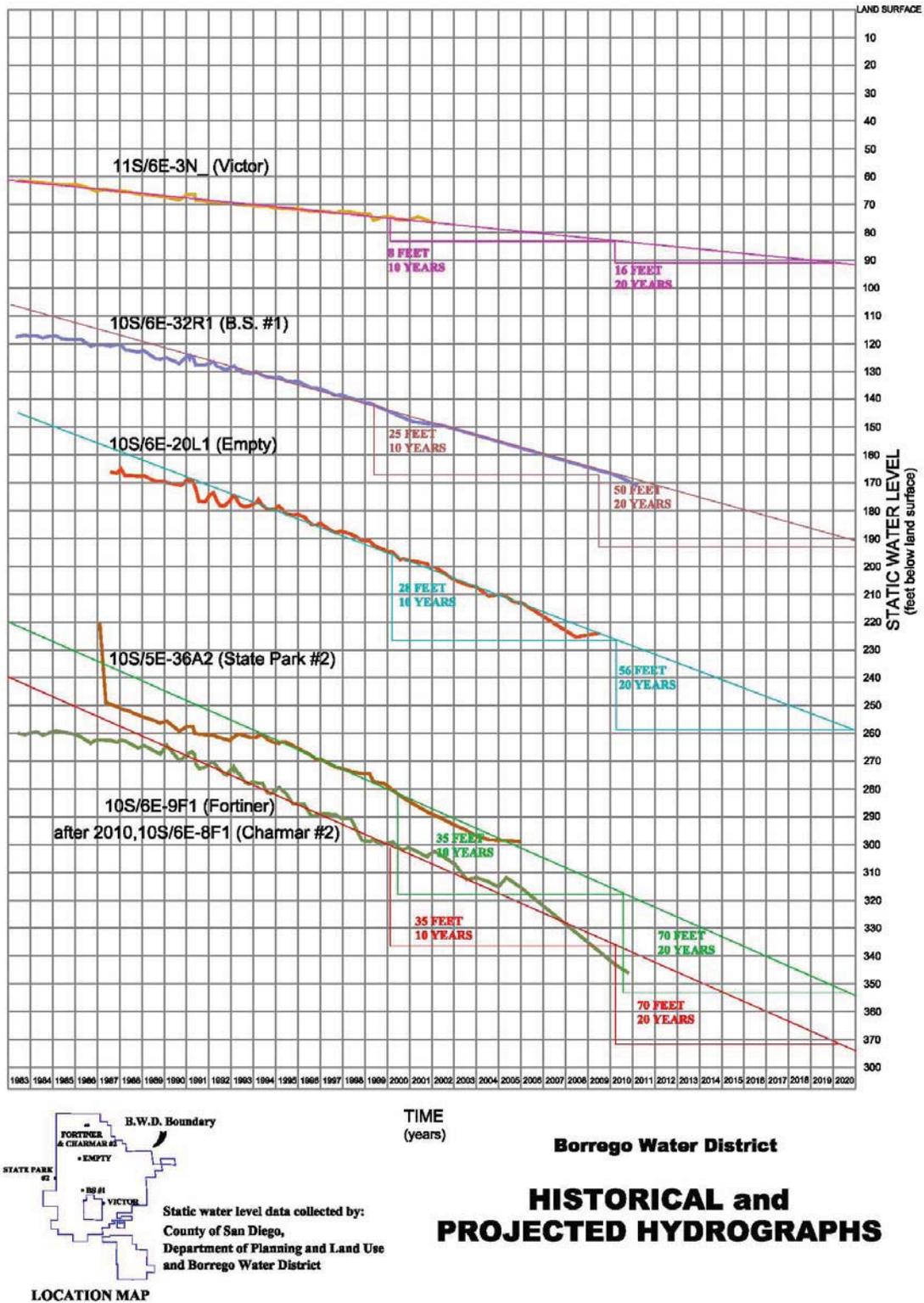
The Region's groundwater basins, particularly the Borrego Valley Groundwater Basin, are in a state of overdraft. According to the County of San Diego General Plan Update, the estimated usable life of the Upper Aquifer of the Borrego Valley Groundwater Basin under existing conditions is approximately 50 to 100 years (County of San Diego 2011). Stakeholders within the region have concerns about this useful life of the aquifer. According to recent modeling by the U.S. Geological Survey (USGS), if present overdraft levels continue unabated there may be only 50-years until the Upper Aquifer is dewatered. There is concern groundwater availability and quality may deem the Borrego Valley's lower groundwater aquifers unusable from an economic standpoint.

Despite the potentially dire situation of the Region's main water supply source, the Region has not yet reached consensus regarding the status of the Region's groundwater basins.

Available groundwater within the Borrego Valley Groundwater Basin is currently sourced mainly from the Upper Aquifer (County of San Diego 2010). Hydrogeological information regarding the Borrego Valley Groundwater Basin suggests that it is not known at this time whether it is economically viable to pump groundwater from the Middle and Lower aquifers due to their depth and the quality of groundwater that can be obtained on a continuous basis. For example, if groundwater from this depth contains large amounts of fluorides or other contaminants, expensive tertiary treatment may be required for all purposes, including irrigation and municipal uses (County of San Diego 2010). Due to the fact that groundwater does not currently require this level of treatment, the Borrego Valley would be required to install costly treatment facilities that would substantially increase the cost of local water supply. In addition, pumping from lower depths would likely increase pumping costs by a substantial amount. Given that almost the entire Region qualifies as a DAC, it is unlikely that it would be economically viable for Borrego Valley pumpers to rely on groundwater that requires high levels of treatment or requires a substantial increase in pumping costs. Therefore, although groundwater exists within the Middle and Lower Aquifers of the Borrego Valley's groundwater basins, there is substantial and justified concern throughout the Region that this water may not be viable from a technical or economic perspective. Since groundwater within the Upper Aquifer is likely the most economically and technically feasible existing water resource for the area, it is imperative that this water resource is appropriately and sustainably managed now, especially given that this resource likely has less than 50 years of availability at current withdrawal rates according to the most recent USGS work (see Task 2.1 below).

Figure 3-7 provides historical and projected hydrographs of the Borrego Valley Groundwater Basin from 1983 to 2020. This graphic demonstrates past and potential future declines in local groundwater levels within various sampling points throughout the basin.

Figure 3-7: Historical and Projected Hydrographs of the Borrego Valley Groundwater Basin



Despite the importance of groundwater supplies and the potentially dire situation of the Region's main water supply source (the Borrego Valley Groundwater Basin), the Region has not yet reached consensus regarding the current and future status of the groundwater basins.

DWR has also recently initiated, through its Southern Region Office and a separate contract with RMC-WRIME, development of the *ABD Region Summary*. This effort will analyze existing information about the Region's groundwater basins to document the past, present, and range of foreseeable future conditions within the local groundwater basins (Borrego Valley Groundwater Basin and outlying basins). Through a stakeholder-driven process, the *ABD Region Summary* will help achieve consensus among the Region's stakeholders regarding current and future projected land use assumptions, water demands, and groundwater basin characteristics. As the *ABD Region Summary* will rely on existing information, it will compile known data regarding the existing groundwater supply and demand, given that information regarding these parameters is available and agreed upon by stakeholders. As such, this effort will produce a common understanding of the existing status of the Region's groundwater basins, and will not produce future modeling of groundwater levels or groundwater quality. *Additional IRWM Plan Work*, below, provides further discussion of the planned scope of work for the *ABD Region Summary*.

While the *ABD Region Summary* and other ongoing groundwater planning efforts will provide useful groundwater management data, they do not include development of alternatives that could be implemented to ensure groundwater is sustainably managed within the Borrego Valley. As such, work included within this Work Plan (refer to **Task 2-1 and Task 2-2 of this Work Plan**) aims to fill this gap and move the area towards developing alternatives that can be implemented to achieve sustainable groundwater management.

Water Quality

As described above, the Region's groundwater basins, in particular the Borrego Valley Groundwater Basin, are in a state of overdraft. As the Region's groundwater basins are dewatered (under existing conditions), it is possible that water quality issues will arise. According to Bulletin 118 from DWR, the Borrego Valley Groundwater Basin is currently impacted by total dissolved solids (TDS) and also potentially by nitrates (DWR 2004). Nitrate is regulated as a primary contaminant by both federal and state agencies, and can have significant human health effects. Nitrate contamination of the groundwater has been noted in some wells within the ABD region. The sources of these nitrates are most likely anthropogenic as high nitrate concentrations are not "naturally occurring" in the groundwater of the Region's basins. (Mueller & Helsel, 1996; USGS, 2000).

Information from local stakeholders suggests that nitrates, inorganic compounds, and other byproducts may exist at high concentrations within certain portions of the groundwater basins. This information is supported by multiple instances of groundwater wells being taken offline, particularly due to issues involving high nitrate concentrations. Therefore, there is concern that as the Region's groundwater basins become dewatered, water quality conditions will change, and a greater amount of the Region's groundwater supply will be impacted by water quality issues. Given that the Borrego Valley's existing groundwater from municipal water wells used to supply potable water does not exceed maximum contaminant levels set by regulators, if water quality issues were to arise, they would potentially require that BWD and/or other pumpers implement costly water treatment systems that are not currently in place. As such, water quality impacts could have a substantial economic impact within the area, by potentially rendering groundwater prohibitively expensive depending on the level of water treatment required. This concern is especially serious given the economic demographics of the Region and the fact that the majority of the Region qualifies as a DAC.

Therefore, this Work Plan contains activities that will lead the Region towards a better understanding of groundwater quality by assessing how water quality may change as the Region's groundwater basins are dewatered (refer to **Task 2-3 of this Work Plan**).

Flooding

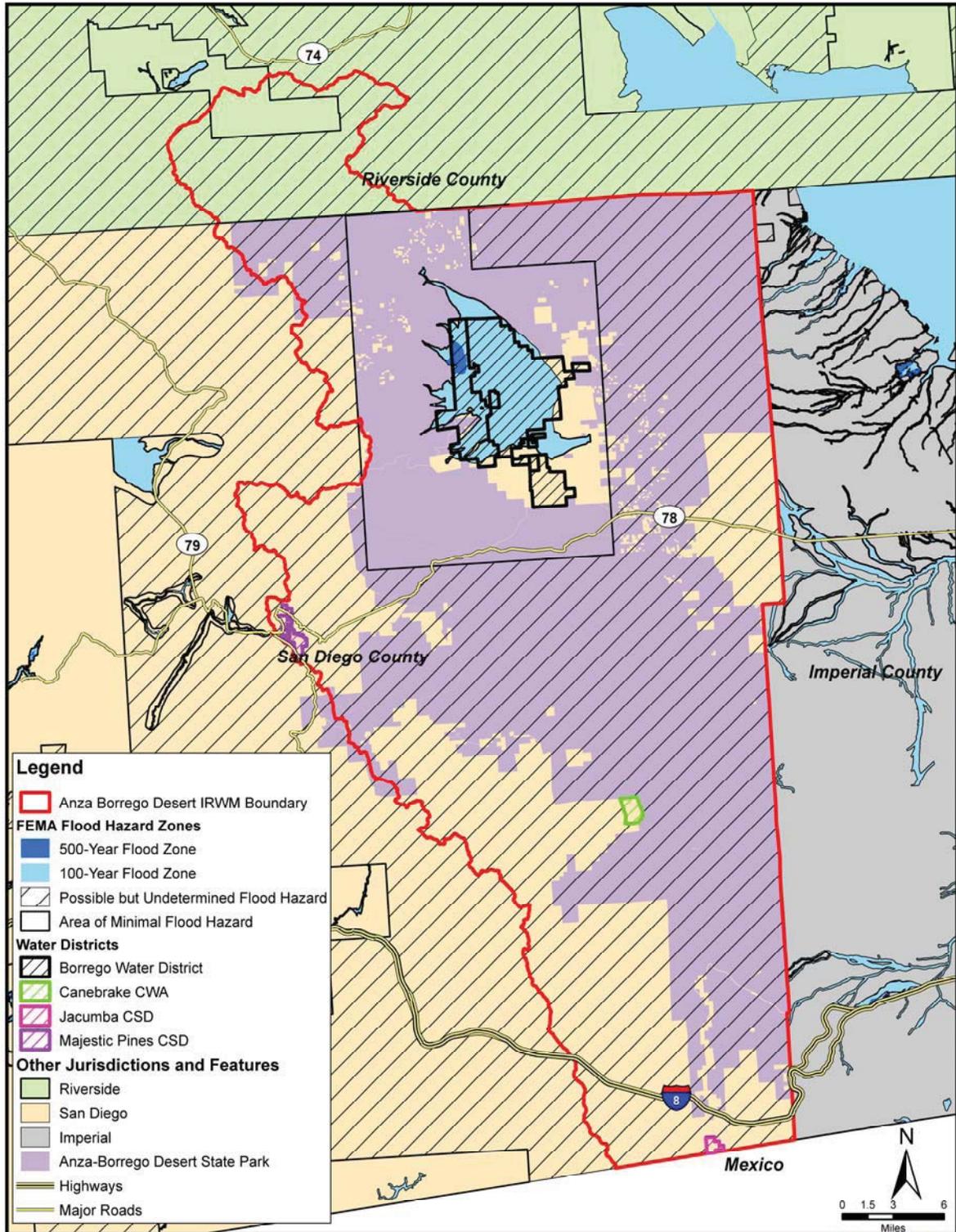
In October 2011, stakeholders identified flood control as a key issue throughout the Region. The Borrego Valley in particular contains seven major alluvial fans and has experienced repetitive flooding over the years. An alluvial fan is a geologic feature where a fan-shaped mass of mud and debris is deposited from the sudden slowing of flood waters from a steep valley onto a flat plain. The flooding associated with alluvial fans can be very hazardous and has historically been associated with significant property damage and loss of life. According to the National Weather Service, during a September storm in 2004, a wall of mud 8 -10 feet high and 150 yards wide travelled through Borrego Palm Canyon. Over the years, there have been major flooding events on the alluvial fans within Borrego Valley causing millions of dollars of damages.

The County of San Diego is constantly striving to increase public safety in the area and reduce the potential for future losses from flood events which will occur. Stakeholders, however, have noted that flood-based development restrictions have harmed the Region's economy, because the County of San Diego currently restricts development in certain portions of the Region that have mapped flood risks according to the Federal Emergency Management Agency (FEMA). As such, there is an economic impetus for implementing flood control measures, because such measures may alleviate development restrictions and provide benefits to the Region's economy (refer to **Figure 3-8** for an overview of the current flood areas mapped by FEMA). The purpose of flood-related development restrictions is to avoid damages to structures and property during flood events, which has been a substantial issue in the Region. For example, a 2010 study conducted by the United States Army Corps of Engineers (USACE) indicates that the total damage incurred to the Borrego Springs area alone due to a 100-year flood event is over \$29 million (USACE 2010).

Within the Borrego Valley, the County of San Diego is initiating a delineation process to alleviate some of the development restrictions. Once complete, it will begin drafting guidance to help explain the applicable requirements. This process will need to be coordinated with the flood management aspects of the IRWM Plan as a part of **Task 2-4.1 of this Work Plan**.

Meanwhile, the rest of the Region has not undertaken either a Region-wide survey of flooding issues or conducted an analysis of potential alternatives that could be developed to alleviate flood issues. Therefore, **Task 2-4.2 of this Work Plan** includes analysis that will assess adaptation strategies that will manage flood risks, both under current conditions and specifically as it relates to climate change.

Figure 3-8: Currently Mapped Flood Areas according to FEMA



SANGIS, 2009 and SANDAG, 2009
FEMA, 2009



Environmental Integrity

“Environmental integrity” embraces the concept that the Region and its vast array of environmental resources must be protected by ensuring their sustainability. Sustainable water use does not harm ecosystems, degrade water quality, or compromise the ability of future generations to meet their own needs.

Information from the County indicates that groundwater overdraft, flooding, and other water management issues have resulted in environmental integrity issues in the Region. Specifically, overdraft of the Borrego Valley Groundwater Basin, in conjunction with recent droughts, has caused substantial loss to important biological resources such as sensitive plant and animal species within the State Park (County of San Diego 2011). Specifically, information from the Anza-Borrego Desert State Park demonstrates that the decline of Mesquite Bosque Habitat is positively correlated to the reduction of groundwater levels (Anza-Borrego Desert State Park 2005). If the Region’s groundwater basins continue to be dewatered and lose viability, it is possible that biological resources, such as those within the State Park will continue to be impacted. Furthermore, if groundwater overdraft were to impact groundwater quality, biological resources and other environmental resources within the Region could be further impacted. In addition, stakeholders have indicated that flooding has the potential to damage the environmental integrity of the Region through erosion and siltation that impact the Region’s ecosystems. Such environmental integrity issues could result in potentially large adverse economic impacts to the considerable annual revenues generated for the Region from tourists visiting the State Park and frequenting the resorts and winter homes in the region.

Due to the importance of environmental integrity and the nexus between this issue and the other key issues (water supply, water quality, and flooding), **Tasks 2-2, 2-3, and 2-4 in this Work Plan** have components (specific subtasks) that address this issue.

Climate Change

DWR’s IRWM Grant Program Guidelines, which will guide development of the ABD IRWM Plan, contain specific and substantial requirements regarding climate change. Specifically, DWR requires that IRWM plans address both adaptation to the effects of climate change and mitigation of greenhouse gas emissions. While many generalized climate change studies have been completed throughout the State of California, no climate change vulnerability analyses or other specific climate change analyses have been completed for the Region.

Due to the Region’s reliance on groundwater supplies, climate change analyses will need to assess potential climate change-related impacts to this critical regional resource. A 2010 paper written by scientists from the Massachusetts Institute of Technology indicates that climate change is anticipated to impact annual recharge rates, which would therefore impact the Region’s water balance and potentially reduce the usable lifetime of the Borrego Valley Groundwater Basin (Gene-Hua et al 2010).

In addition, an existing report from DWR entitled *Water and Border Area Climate Change – An Introduction* provides an overview of potential impacts that may arise within the United States-Mexico Border Region (within which the ABD Region lies) as a result of climate change (DWR 2008). This report indicates that monsoons originating in the Gulf of Mexico, which currently cause flash flooding within the Region, could intensify with climate change (DWR 2008).

Also, climate models are in general agreement that the air temperature will continue to increase by as much as 3 °C by 2100 in the southwestern United States in response to increases in greenhouse gasses (Earman and Dettinger, 2007) and they typically predict overall drying trends in the desert areas of the southwestern United States (Seager et. al, 2007). Increased air temperature will increase rates of evaporation resulting in decreased stream flows by lowering contributions from runoff and groundwater

sources. In addition, increased air temperature will increase the potential evapotranspiration, which likely will increase water demands, further stressing the limited water resources in this region.

Due to the potential impact that climate change may have on issues already identified as important within the Region (water supply and flooding), **Task 3-4 in this Work Plan** includes a climate change analysis which will assess Region-specific climate change vulnerabilities and consider adaptation strategies that may be adopted to address such vulnerabilities.

2. Current Status in Meeting IRWM Plan Standards

As described previously, the ABD IRWM planning process was initiated by the RWMG in January 2010 via a Public Kickoff meeting. Subsequent to that, all interested participants were organized into a Stakeholders Committee. Monthly meetings of both the RWMG and the Stakeholders Committee were immediately initiated and work began on developing an IRWM Plan. As of August 2011, portions of the IRWM Plan have been completed in draft form.

While the Draft IRWM Plan provides a substantial starting point, it was not completed, finalized, or adopted by the RWMG agencies or the Stakeholders Committee. These groups have determined that additional work, in addition to increased stakeholder and public outreach, and revisions to the Draft IRWM Plan are needed prior to adoption. In addition, the IRWM Plan must be updated in compliance with DWR's IRWM Grant Program Guidelines in order to be eligible for future rounds of Proposition 84 or Proposition 1E grant funding. As such, this Work Plan includes the tasks necessary to complete an IRWM Plan that is compliant with current DWR standards, and approved by the RWMG and the Stakeholders Committee.

The IRWM Grant Program Guidelines include sixteen (16) specific standards that must be met by the IRWM Plan. **Table 3-2** provides a summary of revisions that need to be made to the existing Draft IRWM Plan to meet standards set within the Guidelines. In addition, Table 3-2 provides information regarding whether or not given revisions or work will be covered by funds requested as part of this Planning Grant Proposal. Any necessary work not contained within the *Grant Work Plan* is described in within *Additional IRWM Plan Work*.

Appendix A: Work Plan Proposals - Round 2

Anza Borrego Desert Planning Grant Proposal

Attachment 3: Work Plan

FINAL

Table 3-2: Revisions Needed for the IRWM Plan

IRWM Plan Sections (DWR 2010)	Draft IRWM Plan Section (2010)	Revisions and Work Needed	Work Plan Task Addressing IRWM Plan Section	Covered by DWR Planning Grant?
Governance	Section 1, Governance	Expand discussion of governance structure, public noticing, Plan adoption, decision-making, and collaborative process	Task 1, Task 3-1	Partially
Region Description	Section 2, Description of Region	Refine description of regional description based on new/updated information about the Region	Task 1, Task 2, Task 3-6	Partially
Objectives	Section 3, Goals, Objectives, and Targets	Expand discussion of process used to determine objectives	Task 3-2	Yes
Resource Management Strategies	Section 4, Resource Management Strategies Identification and Integration	Expand discussion of process used to identify resource management strategies for IRWM Plan	Task 3-6	Yes
Integration	Section 4, Resource Management Strategies Identification and Integration	Expand discussion of stakeholder/institutional and project integration	Task 1, Task 3-6	Yes
Project Review Process	Section 5, Project Review Process	Expand discussion of project submittal, funding application prioritization, and modification	Task 3-2	Yes
Impact and Benefit	Section 6, Impact and Benefits	Expand discussion of the impacts and benefits of program implementation	Task 3-6	Yes
Plan Performance and Monitoring	Not completed	Determine discussion of methods to evaluate Plan performance	Task 3-4	Yes
Data Management	Not completed	Determine the IRWM data management system	Task 3-3	Yes
Finance	Not completed	Evaluate potential sources and certainty of funding	Task 3-1	Yes
Technical Analysis	Not completed	New discussion of technical information, analysis, and methods	Task 3-3	Yes
Relation to Local Water Planning	Not completed	New discussion of relation to local water and flood management planning	Task 3-5	Yes
Relation to Local Land Use Planning	N/A	New discussion of relation to local land use planning, relationships between water managers and planners, and proactive efforts to improve relationships	Task 3-5	Yes
Stakeholder Involvement	Section 2, Description of Region	Expand discussion of process used to engage stakeholders and DACs, decision-making process, and information access	Task 1, Task 2, Task 3 (all subtasks)	Partially
Coordination	Section 2, Description of Region	Expand discussion of coordination with State and federal agencies, as well as interregional IRWM partners	Task 1, Task 2, Task 3 (all subtasks)	Yes
Climate Change	N/A	New discussion of climate change, anticipated implications and effects, and mitigation opportunities	Task 2-3, Task 3-6	Yes

3. Grant Work Plan

Task 1: Stakeholder Outreach & Program Administration

Task 1-1: Stakeholder Outreach (Including DACs and Tribes)

Establishing a common understanding and support for the IRWM Plan among key stakeholders is critical to the success of the ongoing program. As the program moves forward, it will be important to do what is possible to increase stakeholder engagement through increased attendance and participation in stakeholder meetings. It will be especially important to increase outreach to stakeholders that have been previously contacted, but have not yet officially participated in the IRWM program or the Stakeholders Committee.

The following are specific subtasks that will be completed as part of Task 1-1:

Subtask 1-1.1: Increase and Sustain Stakeholder Involvement

Stakeholder outreach will continue to involve announcing and posting agendas, minutes, and other items of the stakeholder meetings on the BWD website. Additionally, all meetings and materials will continue to be sent to the IRWM stakeholder email distribution list. Following are specific ongoing outreach activities that will take place in support of the IRWM program process and IRWM Plan implementation.

The RWMG will conduct follow-up activities to the stakeholder outreach that has been completed to date. Specifically, the RWMG will hold up to six (6) public workshops throughout development and completion of the IRWM Plan. These meetings will coincide with IRWM Plan milestones, and will be held at various locations throughout the Region. The workshops are intended to reach out to and solicit input from stakeholders and organizations that are not able to participate in regular Stakeholders Committee meetings. The workshops will be held throughout the Region as appropriate, and will be held at times best suited to obtain maximum stakeholder involvement. Emphasis will be placed on receiving input from stakeholders rather than solely educating participants about the IRWM program. Two (2) of these workshops will be specifically directed toward receiving input on the Public Draft IRWM Plan.

In addition, this task will include activities such as contacting stakeholders by phone and by email to notify them about upcoming IRWM activities and solicit participation in public workshops. In addition, existing stakeholder outreach being conducted by CCP will produce directed outreach strategies that the Region can employ to increase stakeholder involvement. While these specific outreach strategies have not yet been identified, it is anticipated that they will include refining the existing stakeholder list and presenting IRWM-related materials at community organization meetings. In addition, directed outreach will include producing up to six (6) newsletters that can be distributed electronically and in-person at meetings, and development of periodic press releases that will be sent to local news publications such as the Borrego Sun, Anza-Borrego State Park Magazine, Julian News, High Country Journal, and other local news sources to notify community members about upcoming public workshops on IRWM planning topics. The purpose of these stakeholder outreach efforts is to support sustained stakeholder participation throughout development of the Public Draft IRWM Plan.

Subtask 1-1.2: Increase and Sustain Involvement from DAC and Tribal Entities

Specific targeted outreach efforts will also be conducted to groups and individuals representing DAC and tribal interests. Outreach efforts will include contacting identified DAC and tribal stakeholders by phone and by email to notify such stakeholders about upcoming IRWM activities and solicit participation in public workshops. Outreach efforts will also include refining the existing list of DAC and tribal contacts to ensure that all interested DAC and tribal communities and their representatives are included. Outreach will also include up to four (4) meetings to be held in DAC or tribal areas; these meetings will be structured to facilitate direct coordination with DAC and tribal entities to identify their major water-related issues and priorities. These meetings will result in the development of text that will be

incorporated into the IRWM Plan to characterize DAC and tribal communities and their water management needs.

Those representing DACs within the Region have expressed that they lack the resources or technical capacity to develop project submittals that address those critical needs. Without support, their participation in the IRWM process may wane over time. As such, the RWMG will work with those project sponsors to develop project scopes, budgets, and cost estimates to help ensure the DAC projects can be included in the IRWM Plan Update and future funding applications. This support includes planning and engineering services to achieve conceptual-level drawings, schematics, and cost estimates for up to 4 projects necessary to meet critical DAC needs. This effort will provide complete project information, but will not include CEQA or permitting efforts.

Lastly, development of the IRWM Plan and other ABD IRWM-related activities involve a Stakeholders Committee that is discussed in detail in Task 1-2. Due to the importance of DAC and tribal communities within the Region, directed outreach via telephone calls and e-mails, will be conducted prior to Stakeholders Committee meetings to encourage participation among DAC and tribal representatives.

Other Studies or Work Products to be Utilized

- Work completed by CCP under DWR’s Facilitation and Technical Support Contract (see *Additional IRWM Plan Work*).

Deliverables

- Refined electronic distribution list, specifically updated with DAC and tribal entities, with contact phone numbers to provide for follow-up communication;
- Up to six (6) public workshops on IRWM planning topics, including agendas, presentations, handouts, and notes. Two (2) of these public workshops will be directed toward receiving input on the Public Draft IRWM Plan document.
- Periodic updates of the IRWM website (hosted on BWD’s website);
- Up to six (6) newsletters that will be provided to stakeholders to update them on the IRWM Planning Process;
- Periodic press releases submitted to the Borrego Sun and other local news sources as appropriate;
- Identification and implementation of directed outreach strategies such as presentations and outreach at community organization meetings;
- Up to four (4) conceptual planning documents for projects addressing critical DAC needs.
- Up to four (4) DAC and tribal outreach meetings, including agendas, presentations, handouts, and notes; and
- Draft and final IRWM Plan section articulating DAC and Tribal water-related issues and their respective water management needs.

Task 1-2: RWMG / Stakeholders Committee Meetings (Including DACs and Tribes)

As stated above, the RWMG for the ABD Region is comprised of BWD, the County, and the RCD. These entities will continue meeting on a regular basis throughout development of the IRWM Plan. In addition, the Stakeholders Committee, which is currently open to all interested stakeholders, is an important component of the IRWM planning effort as they provide input directly to the RWMG (refer to Figure 3-5). The Stakeholders Committee will continue to meet on a regular basis throughout development of the IRWM Plan, and will discuss specific IRWM-related topics such as deliverables associated with the Regional Water Resources Plans (refer to Task 2) and the ABD IRWM Plan (refer to Task 3). The purpose of this task is to maintain agency and stakeholder involvement to uphold the Region’s current and anticipated future governance structure.

The following are specific subtasks that will be completed as part of Task 1-2:

Subtask 1-2.1: RWMG Meetings

The RWMG is responsible for ongoing management of the IRWM program. The RWMG will meet on an approximately monthly basis. These meetings will generally occur via conference calls. These meetings are critical to maintaining ongoing communication among RWMG members throughout the implementation of Stakeholder Outreach (Task 1-1), and development of the Regional Water Resources Plans (Task 2), and of the IRWM Plan Update (Task 3). A majority of the RWMG meetings will involve IRWM Plan development and outreach activities. These meetings will be the primary opportunity for the RWMG agencies to provide in-kind contributions and assistance to the development of the IRWM Plan and related efforts. This task will involve continued support of the RWMG meetings, including preparation for, facilitation of, and participation in monthly RWMG meetings.

Subtask 1-2.2: Stakeholders Committee Meetings including DACs and Tribes

Due to the importance of continuing participation and information sharing with regional stakeholders, Stakeholders Committee meetings will be held on a monthly or bi-monthly (every other month) basis throughout the time frame of IRWM Plan development (from 2012 - 2014). Despite the presence of DACs and tribal groups within the Region, the Stakeholders Committee does not currently contain members that represent specific DAC or tribal interests. Therefore, as described under Task 1-1, work will be conducted to increase DAC and tribal participation in Stakeholders Committee meetings. As part of these efforts, the RWMG will work with DAC and tribal entities to schedule Stakeholders Committee meetings, and will hold meetings in locations preferable to these groups as practical.

Half of the Stakeholders Committee meetings will take place in person, and half will be held via conference call and/or webinar. The in-person meetings will be held at the BWD headquarters in Borrego Springs or at alternate locations throughout the Region to accommodate other stakeholders, particularly DAC and tribal representatives. Agendas for these meetings will be prepared and distributed in advance to each person listed on the stakeholders list and on the BWD (IRWM) website. A conference line will be provided so that stakeholders that cannot attend in-person can participate via conference call. As necessary, webinars will be utilized to allow for presentations to occur during conference calls.

Stakeholders Committee meetings will be scheduled to coincide with the development of important IRWM Plan topics including governance and financing, goals, objectives, and priorities, metrics, targets, and reporting process, and the nexus between land use and water planning. As such key topics essential to IRWM planning in the Region are developed, the Stakeholders Committee will be asked to provide input and feedback to the RWMG to ensure that these important topics are vetted through the Region's stakeholders. In addition, the Stakeholders Committee will be asked to review and provide feedback on the Public Review Draft IRWM Plan.

Other Studies or Work Products to be Utilized

- Work completed by CCP under DWR's Facilitation and Technical Support Contract (see *Additional IRWM Plan Work*).
- Refined electronic distribution list with contact phone numbers to provide for follow-up communication. Please note that the electronic distribution list will be created as part of Task 1-1, and will include specifics regarding DAC and tribal stakeholders.

Deliverables

- Agendas, materials, handouts, and meeting notes for RWMG meetings (up to 24 meetings).
- Agendas, materials, handouts, webinars, and meeting notes for Stakeholders Committee meetings (up to 24 meetings).

Task 1-3: Coordination with other IRWM Regions

This task includes outreach to and coordination with neighboring IRWM regions within the Colorado River Funding Area, as well as neighboring IRWM regions within other funding areas. The goal of this outreach is to establish a coordination meeting that occurs up to three times per year between the four existing regions within the Colorado River Funding Area (Imperial, Coachella Valley, Mojave, and Anza Borrego Desert) to discuss common planning issues, results of regional planning studies, and possibly distribution of the available remaining Proposition 84 funding. In addition, this task will serve to provide a forum for discussing any joint project opportunities and/or project conflicts with neighboring IRWM regions, particularly those within adjacent or overlapping watersheds.

Other Studies or Work Products to be Utilized

- IRWM Plans for neighboring regions, as appropriate.

Deliverables

- Targeted outreach (emails, telephone calls) to neighboring IRWM regions;
- Agendas, materials, and handouts, and meeting notes for Inter-Regional Coordination meetings (up to 6 meetings).

Task 2: Regional Water Resources Plans

Due to the importance of the four key issues within the Region (refer to *Introduction*), it is essential that they are properly addressed and included within the IRWM Plan. Therefore, the following tasks outline regional water resources plans that aim to address each of the four key issues. Water supply (groundwater) is addressed in Task 2-1 and Task 2-2, and water quality (groundwater quality) as it relates to changes in groundwater levels is addressed in Task 2-3. Task 2-4 addresses climate change, which is a substantial component of DWR's Guidelines for IRWM Plans. In addition, because climate change is anticipated to substantially impact flood control and environmental integrity, Task 2-4 also includes specific components that analyze how climate change will impact these key issues. Tasks 2-2 and 2-3 also include components that address environmental integrity as it relates to groundwater supply and groundwater quality.

Key Regional Issues Identified by Stakeholders:

- Water supply;
- Water quality;
- Flood control; and
- Environmental integrity.

Task 2-1: Characterization of Current Regional Water Supply

The USGS and BWD will work together on a planning study that aims to provide an improved understanding of hydrogeology and water availability of the Borrego Valley. Many studies have been completed on groundwater in the Borrego Valley, which have documented long-term groundwater level reductions due to groundwater pumping. The USGS has produced several studies and models on groundwater in the Borrego Valley, the eldest of which is from 1945, and the newest of which is from 1988. Due to the age of the existing USGS studies and models, the fact that conditions have changed in recent decades, and the potentially dire state of groundwater in the Borrego Valley, there is a pressing need to increase understanding of the existing and future projected conditions of this important water supply source.

The *Evaluation of Ground-Water Conditions and Land Subsidence in the Borrego Valley, California*, includes a total of five (5) tasks, which will ultimately result in development of a groundwater flow and land subsidence model. Recent efforts (in 2009-2011) have focused on gathering groundwater and subsidence data that will enhance the ABD IRWM Plan. Further work to be completed as part of this Study (in 2012) will complete model development and preparation of the final report.

The objective of Task 2-1 is to improve the understanding of groundwater conditions and land subsidence in the Borrego Valley and to incorporate that information into the ABD IRWM Plan. This task represents an important first step in managing groundwater within the Borrego Valley, and will lay the foundation for development of a groundwater flow model that will provide a tool to help evaluate and manage the Region's groundwater resources.

In order to facilitate stakeholder input for the model run scenarios developed by USGS as part of the planning study, a Community Advisory Committee was established in October 2011. This committee met over the course of four months to determine a list of possible model run scenarios to submit to the USGS. These scenarios would take into account various possible future water usages based on several components developed by the committee. During this period, the committee interviewed representatives from the Borrego Springs Community Sponsor Group and the Golf Course Association. In addition, the committee received input from members of the agricultural community through a questionnaire that was prepared and distributed to individuals representing agricultural interests. The scenarios picked by the committee are as follows:

- Scenario #1 - No change in water use;
- Scenario #2 - Low population growth with 25% less recreational and 50% less agricultural usage;
- Scenario #3 - Medium population growth with 50% less recreational and 75% less agricultural usage;
- Scenario #4 - High population growth, based on San Diego County predictions with 50% less recreational and 100% less agricultural usage; and
- Scenario #5 - Reduction of all water usage to natural replenishment value of 4,800 acre feet per year.

The following are specific subtasks that will be completed as part of Task 2-1:

Subtask 2-1.1: Compilation of Available Hydrogeologic Data

This subtask will involve compiling and assembling data, including: climate, streamflow, water-level, landuse, crop-use, well logs, geophysical logs, geologic maps, hydrologic boundaries and watersheds, waste-water discharge, geodetic, and natural discharge data. Said data will be assembled into a Geographic Information System (GIS) database for manipulation and analysis on a geographic level.

Data will be sourced from previous studies by Moyle (1982), Mitten et al (1988), Netto (2001), and Henderson (2001), as these studies include recent information regarding the hydrogeologic units, recharge, discharge, groundwater levels, and groundwater flow of the Borrego Valley.

The GIS database will be preliminary in that it is compiled from existing data, and will be updated and revised throughout the study as new information is collected. The GIS database will be the basis for a three-dimensional, hydrogeologic framework and flow model of the aquifer system that will be completed in subsequent phases of the study (described in *Additional IRWM Plan Work*).

Subtask 2-1.2: Collection and Analysis of New Data

This subtask will involve refining the hydrogeologic framework of the Borrego Valley, as well as developing new geologic and hydrologic models. As such, this subtask will involve the compilation of new data regarding natural runoff and recharge, land elevation data, and well-bore flow and depth-dependent water-quality data.

Geodetic data for runoff and recharge and land elevation will be collected to provide precise and accurate well altitudes and to determine if subsidence is occurring in the Borrego Valley. Well-bore flow and depth-dependent water-quality data will be used to determine if there is a difference in well production and water quality with depth in the alluvium and older formations.

The following describes how such new data will be compiled.

Natural Runoff and Recharge

Precipitation and potential evapotranspiration will be used to estimate the natural runoff and recharge in the basin through implementation of a Basin Characteristic Model (BCM). The BCM will be used with available GIS data such as a digital elevation model, geology, soils, vegetation, precipitation, and air temperature maps compiled in the preliminary GIS database described under Subtask 2-1.1. The BCM may also be used to identify locations and climatic conditions that allow for excess water, therefore quantifying the amount of water available either as runoff or as in-place recharge on a monthly basis, and allowing for inter-basin comparisons of recharge mechanisms.

Land Elevation Data

Two methods of measuring land elevation data, Global Positioning System (GPS) and Interferometric Synthetic Aperture Radar (InSAR), are proposed to determine the location, extent, and magnitude of vertical land-surface changes. GPS surveying will result in measurements of elevation at selected locations (bench marks) that can then be compared to documented historical elevations of those bench marks to calculate vertical changes between the times of elevation measurements. InSAR will produce measurements of vertical land-surface change for various time periods between 1992 and 2008. While GPS measurements will provide actual elevations which will then be compared to previously measured elevations generally over longer time periods, InSAR measurements will provide relative elevation changes generally over shorter time periods.

Well-Bore Flow and Depth-Dependent Water-Quality Data

Well-bore flow and depth dependent water quality data may be collected from several production wells following the USGS methods and procedures for water supply wells. These data will help determine if there is a difference in well production and water quality with depth in the alluvium and older formations. If possible, existing water quality data will be supplemented with water chemistry data collected from monitoring wells and selected existing production wells.

Subtask 2-1.3: Conversion of Fine-Element Model into MODFLOW

The existing USGS model is a three-dimensional finite-element groundwater flow model of three aquifers in the Borrego Valley calibrated at steady-state (1945) and transient (1946-1979) conditions. The first step of Subtask 2-1.3 will be to update the finite-element model to MODFLOW-2005. Like the finite-element model, the updated model will consist of a steady-state stress period and seventeen two-year transient stress periods. The results of the MODFLOW-2005 model will be compared to the existing finite-element model and any differences will be summarized.

Subtask 2.1-4: Update the Model with Current Information

Once the model is converted to MODFLOW-2005, new hydrologic and hydrogeologic information can be incorporated into the simulation. Hydrogeologic framework and groundwater flow models will be developed as part of this study. The hydrogeologic model will include the refined and updated hydrogeologic framework and related hydrogeologic layering needed to build the groundwater flow model. This model will incorporate all of the information compiled in Tasks 2.1-1 through 2.1-3 and in previous studies, as well as any additional drillers and geophysical logs, cross sections, and geologic maps available. Measured groundwater levels collected from 1945 through 2005 will be used to calibrate the groundwater flow model.

Subtask 2.1-5: Prepare Reports

Status reports will be provided as needed to keep BWD informed of the status of work and any findings. Town Hall meetings in Borrego presentation of progress will be done in March of 2009 and March of 2010 (or at other mutually agreed upon appropriate times). A final report will be prepared describing size

and depth of the Borrego Valley groundwater flow system. The interpretive report will summarize the hydrogeologic framework, hydrologic budget, and results from the groundwater flow model.

The results of Subtasks 2-1.1 through 2-1.5 will be summarized for inclusion in the ABD IRWM Plan (refer to Task 3).

Deliverables

- Preliminary GIS database that includes a compilation of existing hydrogeologic and hydrologic data for the Borrego Valley.
- Updated data regarding natural runoff and recharge, land elevation data, and well-bore flow and depth-dependent water-quality data for the Borrego Valley.
- Summary of results of the MODFLOW-2005 model, including a summary of any differences between the MODFLOW-2005 model and the existing three-dimensional finite-element model.
- Updated hydrogeologic framework and groundwater flow model.
- Draft and final report summarizing the results of Subtasks 2-1.1 through 2-1.5, for incorporation into the IRWM Plan.
- Agendas for two (2) Town Hall meetings to present progress of groundwater modeling effort.
- Community Advisory Committee meetings to determine potential model run scenarios.

Task 2-2: Managing the Region’s Groundwater Basins

Given the Region’s reliance on groundwater supplies, it is imperative that the Region manages its groundwater basins in a scientific and economic manner. The purpose of Task 2-2 is to use existing data, including information prepared within the *ABD Region Summary* prepared by DWR and RMC-WRIME (refer to *Additional IRWM Plan Work*) and the *Characterization of Current Regional Water Supply* prepared by USGS and BWD (refer to Task 2-1), and work through an open and transparent stakeholder process to develop a ranked list of alternative strategies and associated funding mechanisms that would provide the Region with implementable strategies for adequately managing its groundwater resources. In addition, due to the intrinsic link between groundwater supplies and environmental integrity within the Region, Task 2-2 will also assess how environmental integrity issues have arisen and may continue to arise if the Region’s groundwater basins are not adequately managed.

The following are specific subtasks that will be completed as part of Task 2-2:

Subtask 2-2.1: Alternative Strategies for Establishing Managed Basins

Following the description of baseline conditions and trends established in the *ABD Region Summary* and Task 2-1, potential alternative strategies that could be implemented to adequately manage the Region’s groundwater basins will be developed. Please note that alternative strategies may include a compilation of various options, and are not limited to a single strategy. Potential options could include technical, legal, and legislative options such as groundwater recharge (technical), legally stipulated agreements negotiated among pumpers (legal), and special act legislation that grants groundwater management authority (legislative).

Work conducted under this subtask will include coordinating with the Stakeholders Committee to determine an agreed upon definition for adequately managing the Region’s groundwater basins. Some of the questions that will be addressed in agreeing upon this definition will be:

1. What is necessary to develop a plan that actually addresses groundwater overdraft by bringing withdrawals into balance with annual recharge?
2. Who currently has or how can the Region establish the authority to enforce the plan?
3. What is a mechanism to pay for implementing the plan?

It is assumed that the *ABD Region Summary* and Task 2-1 will produce information regarding the baseline (existing) groundwater balance (supplies and demands), which does not constitute adequate management due to existing groundwater overdraft conditions. It is likely that the stakeholder group utilized for this subtask will be synonymous with the stakeholder group established to review and provide input for the *ABD Region Summary*; however attendance and participation will be open to all interested stakeholders, particularly DAC and tribal representatives.

This subtask will also involve developing a sound scientific and economic evaluation (a formal prioritization process) that will be used to rank each potential alternative. The prioritization process shall take into consideration the hydrologic feasibility that implementation of each alternative would lead the Region towards adequately managing its basins according to the definition of “adequately managing” as agreed upon by stakeholders. In addition, the prioritization process will assess the relative economic cost associated with implementing and operating each alternative over its reasonable lifetime.

The results of this prioritization process will include a prioritized list that ranks alternative strategies among each other and places alternative strategies into relative tiers. Up to eight (8) of the top-scoring alternative strategies will be placed within the “top-tier” of alternatives. The results of this process will be integrated into the IRWM Plan (refer to Task 3).

Subtask 2-2.2: Mechanisms for Funding Groundwater Management Alternatives

In conjunction with work completed under Subtask 2-2.1, potential mechanisms will be developed to analyze how alternative strategies included within the top-tier list of ranked alternatives could be funded on an ongoing basis. Any alternatives that are identified as financially infeasible will be removed from the top-tier list and replaced with subsequently ranked alternatives. This subtask will include development of financing proposals that describe how to finance implementation, operation, and maintenance of each financially feasible top-tier alternative through its reasonable life. The results of this process will be integrated into the IRWM Plan (refer to Task 3).

Subtask 2-2.3: Addressing Environmental Integrity Issues

This subtask will involve development of a summary of existing and future potential environmental integrity issues and their associated costs assuming continuation of existing conditions (i.e. not adequately managing the Region’s groundwater basins). The purpose of this subtask is to provide information regarding environmental integrity-related issues that have arisen and will potentially arise in the future if the Region’s groundwater basins are not adequately managed. Specifically, this subtask will address potential impacts that have occurred and may impact ecosystem services if the Region’s groundwater basins are not adequately managed. The results of this process are not anticipated for incorporation into the alternative strategy ranking process (Subtask 2-2.1), but rather will be integrated into the IRWM Plan to describe the Region’s important environmental resources as they relate to groundwater overdraft (refer to Task 3).

Other Studies or Work Products to be Utilized

- Work completed by DWR and RMC-WRIME under the *ABD Region Summary*.
- 2002 Groundwater Management Plan, Borrego Water District
- 2009 Integrated Water Resources Management Plan, Borrego Water District
- 2004 California’s Groundwater Bulletin 118 for the Borrego Valley Groundwater Basin, DWR
- 2011 San Diego County General Plan Update, County of San Diego
- *Pending*: 2011 Evaluation of Groundwater Conditions and Land Subsidence in the Borrego Valley, United States Geological Survey
- *Pending*: Southeast California Regional Basin Study, United States Bureau of Reclamation and the Borrego Water District

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- *Pending:* State and Tribal Assistance Grant (STAG) Borrego Springs Pipeline Feasibility Study, United States Environmental Protection Agency and the Borrego Water District

Deliverables

- Up to five (5) Stakeholders Committee meetings to discuss the alternative basin management strategies, the prioritization process, the potential funding mechanisms, and the existing and future potential environmental integrity issues. This deliverable will include agendas, presentations, handouts, and notes.
- Draft and final Groundwater Management Technical Memorandum including a summary of the Stakeholders Committee meetings, alternative strategies, prioritization process, potential funding mechanisms, and associated environmental integrity issues.
- Integration of conclusions and results of the Groundwater Management Technical Memorandum into the ABD IRWM Plan.

Task 2-3: Forecasting Changes in Water Quality as the Groundwater Basins are Dewatered

Although groundwater quality issues could have a potentially substantial impact with regards to the usability and affordability of groundwater and the Region's environmental integrity (refer to *Introduction*), groundwater quality has not been comprehensively analyzed within the Region. Therefore, the purpose of Task 2-3 is to develop forecasts that analyze potential water quality impacts and their relative economic and environmental integrity impacts that may arise due to the lowering of the Region's groundwater tables (dewatering).

The following are specific subtasks that will be completed as part of Task 2-3:

Subtask 2-3.1: Methodologies for Developing Water Quality Forecasts

This subtask involves development of methodologies (including assumptions) that will be utilized to develop water quality forecasts that demonstrate the potential water quality impacts that could occur and the timeframes over which they would occur as the Region's groundwater basins are dewatered. The forecasts will be required to demonstrate the magnitude and extent of water quality impacts under various groundwater management scenarios, including a baseline, "status quo," scenario. The baseline scenario would be established from information presented within the *ABD Region Summary* and Task 2-1, which will determine the current water balance of groundwater within the Region. If further water quality data is needed (e.g. to assess the conditions of the deeper aquifer), a work plan will be developed to accumulate and/or collect the necessary information. The results of Subtask 2-3.1 will be integrated into the IRWM Plan (refer to Task 3 below).

Subtask 2-3.2: Analyze Potential Economic Impacts and Impact Timeframes

This subtask involves implementation of the methodologies developed within Subtask 2-3.1 in order to complete forecasts that demonstrate the potential water quality impacts and the attendant economic costs of these impacts that may occur and the timeframes over which they would occur as the Region's groundwater basins are dewatered. The probabilistic economic cost estimates from this analysis will demonstrate the magnitude and extent of water quality impacts under various groundwater management scenarios, including a baseline scenario. This economic analysis is intended to address: "what are the economic consequences of continuing the overdraft at its present rate?" The results of this subtask will be integrated into the IRWM Plan (refer to Task 3).

Subtask 2-3.3: Addressing Environmental Integrity Issues

This subtask will involve development of a summary of existing and future potential environmental integrity issues that would be anticipated based on water quality forecasts determined within Subtask 2-3.2. The purpose of this subtask is to provide an estimate of both first and second order economic and qualitative information regarding environmental impacts that may potentially arise in the future due to a

probabilistically forecasted decline in water quality resulting from dewatering of the Region's groundwater basins. The results of this analysis will be integrated into the IRWM Plan to describe the Region's salient and projected environmental resources and the associated water quality needed to support these economically important environmental resources (refer to Task 3).

Deliverables

- Up to five (5) Stakeholders Committee meetings to discuss the water quality forecasts, the water quality forecast results, and the potential environmental integrity issues. This deliverable will include agendas, presentations, handouts, and notes.
- Draft and final Water Quality Technical Memorandum including methodologies, forecast results (economic impacts and timeframes), and associated environmental integrity issues.
- Integration of conclusions and results of the Water Quality Technical Memorandum into the IRWM Plan.

Task 2-4: Anticipating the Impacts of Climate Change on Regional Water Resources

The purpose of Task 2-4 is two-fold. First, this task will be utilized to conduct climate change analyses and efforts as specified by DWR within the Guidelines. Second, three key Regional issues (flood control, water supply, and environmental integrity) are anticipated to be affected by climate change. Therefore, Task 2-4 will provide information regarding climate change impacts, vulnerabilities, and possible solutions as they relate to the specific issues identified in the Region.

The following are specific subtasks that will be completed as part of Task 2-4:

Subtask 2-4.1: Climate Change Vulnerability Analysis, Flood Analysis and Prioritization

This task involves development of the climate change analysis required to address DWR's IRWM Grant Program Guidelines relating to climate change. As such, the analysis will assess the vulnerability of the Region to Region-specific climate change impacts, such as groundwater recharge rates and flooding. The vulnerability analysis will include an evaluation of the adaptability of water management systems in the Region to climate change, including water supply, wastewater, and flood control systems. To better understand the Region's flooding issues, the evaluation will include documenting flooding issues in the different communities in the Region (i.e. those in areas of "possible but undetermined risk as shown in Figure 3-8) through outreach to local community members, staff at the County of San Diego, and reviews of any available research and documentation. The Stakeholder Committee will establish priorities by which to rank climate change vulnerabilities, and then complete a prioritization exercise that ranks vulnerabilities in terms of risk and severity. The results of this process will be integrated into the IRWM Plan (refer to Task 3 below).

Subtask 2-4.2: Flood Control and Other Adaptation Strategies

Upon assessing the Region's vulnerability to climate change, work will be completed to identify specific adaptation strategies that can be completed to allow the Region to better adapt to anticipated climate change vulnerabilities. Considering that the Region already faces substantial impacts related to flooding and flood-based development restrictions, it is imperative that the Region have a comprehensive understanding of existing and potential future flood impacts and strategies for addressing such impacts. As such, this subtask will include an assessment of current and alternative flood control strategies that can be utilized to address existing and anticipated future (climate change-related) flood impacts. Part of the alternatives analysis will include an assessment of the relative costs of various flood control strategies in order to determine relative costs to address existing and future flood control techniques.

Further, this subtask will provide climate change adaptation strategies for all other top-ranking climate change vulnerabilities identified within Subtask 2-4.1. Due to the known nexus between climate change and groundwater recharge, it is anticipated that water supply (groundwater) will be one of the top-ranking

climate change vulnerabilities. This exercise will include an assessment of the relative costs of various climate change adaptation strategies. The results of this process will be integrated into the IRWM Plan (refer to Task 3).

Subtask 2-4.3: Addressing Environmental Integrity Issues

This subtask will involve development of a summary of future potential environmental integrity issues that would be anticipated throughout the Region based on the climate change vulnerability analysis completed within Subtask 2-4.1. The purpose of this subtask is to provide information regarding environmental issues anticipated to arise in the future due to anticipated climate change impacts. The results of this process will be integrated into the IRWM Plan (refer to Task 3).

Other Studies or Work Products to be Utilized

- 2010 *Probabilistic Analysis of the Effects of Climate Change on Groundwater Recharge*, Gene-Hua et al.
- 2010 White Paper – Borrego Springs Flood Risk Management Study, United States Army Corps of Engineers
- 2008 Water and Border Area Climate Change, DWR
- 2008 Managing an Uncertain Future – Climate Change Adaptation Strategies for California’s Water – DWR
- 2010 Storm Stories Depict Vulnerability of Valley to Flooding/Heavy Rain, Borrego Sun
- 1989 Borrego Valley Flood Management Report, Boyle Engineering for the County of San Diego
- 1985 Rain and Streamflow History in Eastern San Diego County, County of San Diego
- 1976 Storm Report – Tropical Storm Kathleen, County of San Diego Department of Sanitation and Flood Control
- 1977 Storm Report – Tropical Storm Doreen, County of San Diego Department of Sanitation and Flood Control
- Guidelines for Flood Protection of Structures in Borrego Springs, County of San Diego
- 2011 Climate Change Handbook for Regional Water Management, USEPA Region 9 and DWR

Deliverables

- Up to five (5) Stakeholders Committee meetings to discuss and rank the climate change vulnerability analysis, the climate change adaptation strategies and costs, the flood control strategies and costs, and the potential environmental integrity issues. This deliverable will include agendas, presentations, handouts, and notes.
- Draft and final Climate Change Technical Memorandum including climate change vulnerabilities, climate change adaptation strategies and relative costs, flood control strategies and relative costs, and associated environmental integrity issues.
- Integration of conclusions and results of the Climate Change Technical Memorandum into the IRWM Plan.

Task 3: Prepare and Adopt the ABD IRWM Plan

Task 3 includes all activities required to prepare and adopt the IRWM Plan to meet DWR's Guidelines, and incorporate other work products such as stakeholder outreach and Regional Water Resources Plans described within Task 1 and Task 2 of this Work Plan. Please note that several of the tasks below include work completed by the Stakeholders Committee established in Task 1.

Task 3-1: Updates to Governance and Financing Plan

This task involves convening the Stakeholders to examine long-term governance alternatives available to the Region, including defining both decision-making and financing structures. This effort is intended to help the Region establish a long-term governance structure that will continue regional coordination and collaboration efforts throughout and beyond development of the IRWM Plan. These discussions will build upon the stakeholder outreach and interviews completed by CCP to date and will address any necessary changes to the existing governance structure established thus far (refer to Figure 3-5).

The Stakeholders Committee will develop a set of recommendations for long-term governance to present to the RWMG for consideration. These recommendations will include governance and financing proposals (i.e., how to finance annual program administration), as well as an implementation or transition plan for moving from the existing governance structure to the long-term governance structure. The RWMG will then present the long-term governance recommendations to their governing bodies for discussion and approval.

Other Studies or Work Products to be Utilized

- 2010 Draft IRWM Plan deliverables
- Work completed by CCP under DWR's Facilitation and Technical Support Contract (see *Additional IRWM Plan Work*).

Deliverables

- Stakeholders Committee meetings as needed to discuss long-term governance and financing alternatives. These meetings are budgeted under Task 1-2.
- Draft and final Long-Term Governance recommendations addressing recommended decision-making structure, financing program, and implementation or transition plan.
- Draft and final formal governance agreements (MOU, etc.).

Task 3-2: Refine IRWM Plan Goals, Objectives, and Priorities

As the IRWM Plan is developed, a detailed refinement of the Region's goals and objectives will be necessary. As the Regional Water Resources Plans identified in Task 2 move forward, the RWMG will incorporate any new information learned about the Region's water management systems into the IRWM Plan. This may include clarification of critical water supply or water quality issues and/or incorporation of the new planning strategies into the IRWM Plan framework.

Based on this work, the Stakeholders Committee will work to refine the IRWM Plan goals and objectives to guide the Region during the next planning horizon. As all Stakeholders Committee meetings, these meetings will be advertised to all regional stakeholders and agendas will clearly identify that the IRWM Plan Goals, Objectives, and Priorities topics will be discussed. Additionally, the Stakeholders Committee shall revisit the short- and long-term priorities laid out in the Draft IRWM Plan to determine if the new information and/or changing regional conditions or regulatory requirements results in different priorities. At the conclusion of the Stakeholders Committee's discussion of the aforementioned topics, a recommendation shall be formalized and provided to the RWMG.

Due to the extensive nature of environmental integrity issues addressed within the Regional Water Resources Plans described within Task 2, the RWMG and Stakeholders Committee will be sure to incorporate information relating to environmental integrity into the IRWM Plan.

Other Studies or Work Products to be Utilized

- 2010 Draft ABD IRWM Plan deliverables

Deliverables

- Stakeholders Committee meetings as needed to address IRWM Plan goals, objectives, and priorities. These meetings are budgeted under Task 1-2.
- Draft and final IRWM Plan goals, objectives and priorities.

Task 3-3: Develop Data Management Plan

Data collected to date has included prior reports, memos, letters, and meeting minutes. These items along with raw data such as groundwater levels, water quality, pumping test results, and other information are routinely stored in BWD files, and incorporated into the BWD Geographic Information System (GIS) database. The BWD GIS database was developed in conjunction with the development of numeric modeling being formulated by USGS (refer to Task 2-1), and generally only covers portions of the Region.

Currently, the RWMG, with assistance from the Southern Region Office of DWR, is working to integrate the ABD State Park's extensive GIS data, which covers a large portion of the Region, into the BWD GIS database. In addition to this work, there is a need to incorporate portions of the County's GIS data into the BWD GIS database to create a robust GIS database with information for the entire Region.

This task will involve development of a regional data management system (DMS), which will be developed with common protocols for gathering data in a consistent manner, and making data accessible to the Stakeholders Committee and other stakeholders as appropriate. The DMS will be structured to ensure efficient use of available data, increase stakeholder access to data, and ensure that data gathered as part of IRWM-related activities can be integrated into existing State and local databases.

Other Studies or Work Products to be Utilized

- BWD GIS database
- San Diego County GIS database
- State Park GIS database
- GIS database established by BWD and USGS under Task 2-1
- 2010 Draft IRWM Plan

Deliverables

- Regional DMS with GIS data layers.
- Draft and final description of the ABD Data Management Plan describing the data available to stakeholders through the regional DMS.

Task 3-4: Develop Performance and Monitoring Methods

This task will involve incorporating information from the stakeholder outreach process (refer to Task 1) to determine appropriate targets by which to measure IRWM Plan performance. These metrics and targets will be aligned with the IRWM Plan goals and objectives (refer to Task 3-1) so that the Region can track how integrated projects are helping to achieve the Region's goals.

In addition, this task will involve determination of a reporting process that will be used to assess and report plan performance. An annual reporting process will be used to evaluate the Region's progress on

fulfilling the short-term priorities (i.e., program implementation), as well the Region's progress on implementing the identified water management projects (i.e., project implementation). The annual reporting will contain criteria used to evaluate the progress of implementation projects in meeting the IRWM Plan objectives. This will ensure that the Region is efficiently making progress towards meeting the objectives in the IRWM Plan, the Region is implementing projects listed in the IRWM Plan, and each project in the IRWM Plan is monitored to comply with all applicable rules, laws and permit requirements.

The annual reports will be short and concise summaries that can be used to communicate Plan performance to stakeholders, the public, and the RWMG governing bodies. The annual reports will be delivered in both print and electronic copy to reach as many stakeholders as possible. Due to the importance of stakeholder outreach and transparency within the Region, the annual report will be designed such that it may be presented at the Borrego Springs Annual Town Hall Meeting held in April of each year.

Stakeholders Committee meetings will include a discussion of metrics, targets, and the proposed reporting process. At the conclusion of the Stakeholders Committee's discussion of the aforementioned topics, a recommendation shall be formalized and provided to the RWMG. The RWMG will utilize meetings with the public, stakeholders, and the Stakeholders Committee under Task 1 to discuss and present the Stakeholder Committee's recommendation.

Other Studies or Work Products to be Utilized

- 2010 Draft ABD IRWM Plan

Deliverables

- Stakeholders Committee meetings as needed to address IRWM Plan metrics, targets, and the proposed reporting process. These meetings are budgeted under Task 1-2.
- Draft and final IRWM Plan metrics.
- Draft and final IRWM Plan performance and monitoring methods.
- Design draft and final template for Annual Report.

Task 3-5: Describe IRWM Process Relating to Local Land Use and Water Planning

The RWMG will work with local land use planning efforts, including State and Federal agencies with land use authority such as the State Park, the Bureau of Land Management (BLM), local Resource Conservation Districts, and others to define land use issues as they relate to water management. The RWMG will also invite other water managers such as local community service districts to participate in this task. This task will involve continued dialogue between the RWMG agencies, the State Park, and other agencies with land use and water authority to ensure continued cooperation in implementing IRWM-related projects and meeting regional goals and objectives established under Task 3-2. It is assumed that these parties will meet up to four (4) times during development of the IRWM Plan to ensure that there is an exchange of knowledge and expertise between land use and water managers and identify how to improve planning efforts between these entities. These meetings will occur concurrently with Stakeholders Committee meetings described within Task 1, and will be specially advertised to local land use and water management authorities.

Other Studies or Work Products to be Utilized

- 2011 San Diego County General Plan Update, County of San Diego
- 2010 Draft IRWM Plan Deliverables
- 2005 Anza-Borrego Desert State Park Final General Plan and Environmental Impact Report
- All planning documents for local water authorities including BWD, the RCD, and other participating water agencies.

Deliverables

- Stakeholders Committee meetings as needed, specifically advertised to land use and water managers, that address land use and water planning. These meetings are budgeted under Task 1-2.
- Draft and final IRWM Plan text describing coordination between water management and land use planning.

Task 3-6: Prepare IRWM Plan per State Guidelines

Based on all of the work completed in Tasks 3-1 through 3-5 above, the RWMG will prepare an Administrative Draft IRWM Plan for internal review. In addition, the RWMG will utilize information for sections such as Resource Management Strategies, Impacts and Benefits, and Integration Opportunities that were included within the Draft IRWM Plan. It is assumed that any sections or work for the IRWM Plan not specifically called out in the sections above will be completed as part of Task 3-6.

The Administrative Draft IRWM Plan will contain the following sections:

1. Introduction
2. Region Description, Issues, and Needs
3. Governance and Stakeholder Involvement
4. Vision, Mission, Goals and Objectives
5. Resource Management Strategies
6. Integration Opportunities
7. Project Evaluation and Prioritization
8. Data Management and Technical Analysis
9. Framework for Implementation
10. References

As part of the IRWM Plan development process, the RWMG will document how the IRWM Plan meets State goals and priorities. The IRWM Plan will contain a clear description outlining the location of all content as required by DWRs' IRWM Plan Guidelines. The IRWM Plan will also clearly articulate steps for evaluation and measurement of Plan success.

The RWMG will then prepare a Public Review Draft IRWM Plan for review and consideration by the Stakeholders Committee, at Public Workshops, and by any other interested parties. Two (2) Public Workshops will be conducted to present and discuss the Draft IRWM Plan (see Task 1). The RWMG will facilitate review and discussion of the draft IRWM Plan with stakeholders, including collecting and compiling their comments into a comments matrix.

Following public review of the draft IRWM Plan, the RWMG will review comments, present IRWM Plan changes in response to comments, and solicit agreement from the Stakeholders Committee on the proposed changes. Based on the comments reviewed from the Stakeholders Committee and general public, the RWMG will prepare an Administrative Final IRWM Plan. Following one round of revisions based on final comments, the RWMG will prepare a Final IRWM Plan for presentation to the Stakeholders Committee and other interested parties.

Following completion of the IRWM Plan, the RWMG will prepare an IRWM Plan Executive Summary that will provide a short, visually appealing overview of the IRWM Plan and related activities. The Executive Summary will showcase and communicate IRWM Plan benefits and milestones to the general public, stakeholders, and governing bodies. The Executive Summary will serve as an educational document for the IRWM program that describes the program and explains the value that IRWM planning provides to the Region.

Lastly, the RWMG will facilitate adoption of the IRWM Plan Update by their respective governing boards.

Other Studies or Work Products to be Utilized

- All plans listed in Task 1, Task 2, and previous subtasks of Task 3.

Deliverables:

- Administrative Draft IRWM Plan, in accordance with State Guidelines;
- Public Review Draft IRWM Plan;
- Compiled response to comments matrix;
- Administrative Final IRWM Plan;
- Final IRWM Plan;
- IRWM Plan Executive Summary; and
- Presentation summarizing IRWM Plan for use at Board/Council hearings.
- IRWM Plan Update adoption resolutions

A. Task 4: Grant Administration

This task addresses administration of the Planning Grant Contract between BWD and DWR. Preparation of the contract materials, invoices, progress reports, and project performance documentation is included within this task. Project oversight and grant administration will be provided by BWD staff.

Deliverables

- Planning Grant contract, invoices, progress reports, and project performance documentation.

4. Additional IRWM Plan Work

There are multiple existing efforts within the Region that will be performed in addition to Grant Work Plan that will be utilized in developing a standards-compliant IRWM Plan. The following sections provide details regarding each of these efforts as they relate to development of the ABD IRWM Plan.

DWR Facilitation and Technical Support – Phase 2

CCP will continue work completed under Phase 1 of the DWR Facilitation and Technical Support contract (see *Introduction*), and will therefore provide facilitation services for at least six (6) monthly stakeholder meetings with stakeholders in the ABD IRWM Region. CCP will also conduct limited stakeholder outreach to those unable or unwilling to attend Stakeholder Committee meetings. One goal of Phase 2 is to develop and adopt a Memorandum of Understanding or another formal governance agreement, such as a charter and ground rules, that will enable the Region to work together towards IRWM planning. A second goal of this stakeholder outreach effort will be to support the planning and analysis completed in the *DWR ABD Region Summary* effort below, such that the Region's stakeholders achieve consensus on the scale of Region's groundwater issues and the state of the Region's basins. All work under this effort will be completed by December 2012.

This work will be solely sourced from DWR through Task Order No. 7-11 Borrego IRWMP under DWR Contract No. 4600007671.

DWR ABD Region Summary

DWR and RMC-WRIME will work to complete the *ABD Region Summary*, which also includes two phases. Phase 1, which is anticipated for completion by March 2012, will include an assessment of existing information regarding water supply conditions of the Borrego Valley Groundwater Basin. The ultimate goal of this assessment is to provide a set of facts regarding the basin that can be used for outreach purposes and to garner regional acceptance of the current state of the Borrego Valley Groundwater Basin from a water balance perspective. Phase 2, which is anticipated for completion by September 2012, will include an assessment of groundwater basins throughout the entire ABD IRWM Region. This effort will include stakeholder outreach (partnered with the *DWR Facilitation and Technical Support – Phase 2* effort above) to receive input on the groundwater analysis within the report.

Data from the two aforementioned phases will be compiled into one larger *ABD Region Summary* report that assesses groundwater supply conditions throughout the ABD IRWM Region with particular emphasis on the Borrego Valley Groundwater Basin, which supplies water to the majority of the Region's residents.

This work will be solely sourced through DWR's Southern Region Office.

United States Bureau of Reclamation Southeast California Regional Basin Study

The *Southeast California Basin Study* is a current effort between the United States Bureau of Reclamation (USBR), BWD, the Imperial Irrigation District, the Coachella Valley Water District, and the San Diego County Water Authority. As indicated within Task 2 of this Work Plan, the *Southeast California Basin Study* will be utilized as a reference and supporting document to complete Task 2-2. This study aims at assessing existing water resources, water management practices, and system components to optimize water resources across southeastern California. The study has five major goals, including:

- Characterizing current regional water supply and demand;
- Assessing risks to regional water supplies, including those due to climate change;
- Identifying potential strategies and options to resolve water supply and demand imbalances;
- Identifying potential legal and regulatory constraints and potential impacts to water users; and
- Prioritizing identified strategies and options for potential future actions.

The *Southeast California Basin Study* began in January 2011, and is anticipated for completion by January 2013. The study will be paid for by the USBR and BWD through a 50/50 cost share.

USEPA State and Tribal Assistance Grant Study, Borrego Springs Pipeline Feasibility Study

In 2009, BWD was awarded a State and Tribal Assistance Grant from the U.S. Environmental Protection Agency (USEPA) to perform a feasibility study of an imported water pipeline. The grant amount totaled \$267,000 and the final report is due in February 2012.

The scope for this feasibility study includes several routes that could be utilized for delivering imported water supplies to the Borrego Valley and includes the aspect of water banking sites along the route. Detailed analyses were performed on right-of-way mapping, existing easements, physical barriers along the proposed pipeline routes, potential cultural issues, suspected paleontology sites and habitat for endangered or threatened local flora and fauna. Results from this feasibility study will be incorporated into USBR's *Southeast California Basin Study* and the ABD IRWM Plan. The tasks for this feasibility study include:

- Study Element A – Pipeline Routing from Borrego to Ocotillo Wells
- Study Element B – Pipeline Routing from Ocotillo Wells to Carter Reservoir
- Study Element C – Pipeline Routing Investigation along Power Line from Ocotillo Wells to IID's Westside Canal
- Study Element D – Pipeline from Borrego Springs to Clark Lake Aquifer
- Study Element E – Pipeline Routing Environmental and Permitting Issues
- Study Element F – Allegretti Sub-basin as a Source Water Study

Deliverables from this feasibility study will include detailed maps with pipeline location information, reports on interviews with jurisdictional agencies along the proposed routes, geologic evaluations of potential groundwater banking areas, and a final report combining all of the information into a resource document.

5. References

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Exhibit A
Appendix A: Work Plan Proposals - Round 2
**Anza Borrego Desert
Integrated Regional Water
Management**

P.O. BOX 1870
806 PALM CANYON DRIVE,
BORREGO SPRINGS, CA 92004
(760) 767-5806
FAX (760) 767-5994
www.borregowd.org

DATE: December 29, 2011
TO: Brian Moniz, California Dept. of Water Resources
FROM: Jerry Rolwing
RE: IRWM Regional Acceptance Process for Anza Borrego Desert IRWMG

The Borrego Water District began working to secure a position in the San Diego County IRWMG in 2006. After attending several of the stakeholder meetings, the District was politely asked to leave the group for geographical reasons (attachment A). When confronted, the County IRWM representative, offered to assist Borrego in forming a second County group which would better meet our geological area requirements. Several attempts were made to join in the early programs with Coachella Valley and Imperial County but were unsuccessful, this time due to political boundary considerations. With the assistance of our consultant Bill Mills, the District was able to locate and secure support from the Resource Conservation District of Greater San Diego County and the County of San Diego, through the Department of Planning and Land Use who had direct control over land use and associated water regulations (attachment B).

Our original submittal to the DWR featured the Borrego Valley Watershed area only (attachment C). After meeting with the DWR through an RAP interview, it was agreed for the area boundary to be expanded to better suit the "regional" requirement of the process. The area was expanded to include the portion of San Diego County that lies in the Colorado River Hydrologic Basin Region. The new area combined the Borrego Valley watershed which extends into Riverside County and the area of San Diego County east of the Tecate Divide. The expanded area included the entire Anza-Borrego Desert State Park, Ocotillo Wells State Vehicular Recreation Area, four public water purveyors and five Indian Reservations. The updated boundary and location of the public water systems are featured on the regional map (attachment D). All of these groups have been approached by the Borrego Water District to be included in the program. The IRWMG continues to outreach to these groups and has had some success in recruiting these regional stakeholders but due to various reasons, some groups have declined to participate. The ABD_IRWMG will continue to pursue this level of outreach and the plan work continues.





County of San Diego

DEPARTMENT OF PUBLIC WORKS

JOHN L. SNYDER
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November 22, 2006

Russ Fogarty
General Manager
Borrego Water District
P.O Box 1870
Borrego Springs, CA 92004

Dear Mr. Fogarty:

I am responding to your letter of September 7, 2006, requesting inclusion of the Borrego Valley in the planning area of the San Diego Integrated Regional Water Management (IRWM) Plan. As you are aware, the development of this Plan, currently scheduled for adoption in mid-2007, has been in progress since late 2004. Responsibility for its completion currently resides with a Regional Water Management Group (RWMG) which is a partnership of the San Diego County Water Authority, the City of San Diego, and the County of San Diego (County). Although we find merit in your request to be included in an IRWM Plan process, please understand that including Borrego Valley in the San Diego IRWM Plan requires the concurrence of all three RWMG member agencies.

An issue of critical importance in initiating the San Diego IRWM effort was to define the geographic area to be addressed in the Plan. After careful consideration, the RWMG determined that this should include the area of intersection of San Diego County and California Regional Water Quality Control Board (RWQCB) Region Nine. County staff presented your letter and issue of whether the IRWM Plan boundary should be modified to include the Borrego Valley at a meeting of the RWMG on September 25, 2006. At that meeting, it was decided that the boundaries of the San Diego IRWM Plan should not be adjusted at this time. The primary reasons for this decision are as follows:

The hydrology and physical geography of the Borrego Valley are distinctly different from the IRWM Plan area. A defining characteristic of the IRWM Plan region is the inclusion of all westward draining watersheds. The Borrego Valley is located in a separate hydrologic region with vastly different climates, runoff characteristics, and hydrology.

Attachment A

Mr. Fogarty
November 21, 2006
Page 2

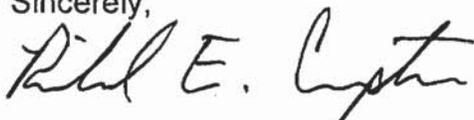
Water supply and wastewater patterns and practices are very different between these two areas. Imported water is the predominant source of supply within the San Diego IRWM Region, and the imported water is supplied by a single wholesale imported water agency – The San Diego County Water Authority. This commonality of water supply and wastewater patterns requires that the Region work together to manage water resources efficiently and to develop a diverse reliable water supply for the Region.

Modifying the IRWM Region at this late date would sidetrack efforts to complete and adopt the Plan on its current schedule. The Plan must be adopted in mid-2007 to enable the Region to apply and compete for State funding under Propositions 50 and 84.

The Borrego Valley presents water supply, water quality, and ecological issues and challenges that are generally quite distinct from those of the San Diego IRWM Region. During the RWMG meeting, it was suggested that the Borrego Water District approach the Imperial Irrigation District (IID) to coordinate an Integrated Regional Water Management Plan within the Colorado River Basin.

Again, please understand the County does not have the authority to determine whether or not Borrego Valley is included within the San Diego IRWM Plan Region. If you have any questions, or if you would like to further discuss the details of this issue with representatives of the RWMG, please contact Jon Van Rhyn at (858) 495-5133.

Sincerely,



RICHARD E. CROMPTON, Assistant Director
Department of Public Works

REC/sm

cc: Ken Weinberg, Director of Water Resources, San Diego County Water Authority
4677 Overland Avenue
San Diego, CA 92123

Marsi Steirer, Deputy Water Department Director, City of San Diego
City of San Diego Water Department
600 B Street, Suite 600, MS 906
San Diego, CA 92101

Jon Van Rhyn, Program Manager, Department of Public Works MS 0384

EG



County of San Diego

ERIC GIBSON
DIRECTOR

DEPARTMENT OF PLANNING AND LAND USE

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INFORMATION (858) 694-2960
TOLL FREE (800) 411-0017
www.sdcounty.ca.gov/dplu

April 22, 2009

Mr. Richard S. Williamson, P.E.
General Manager
Borrego Water District
P.O. Box 1870
806 Palm Canyon Drive
Borrego Springs, CA 92004

RE: Borrego Water District (BWD) Regional Water Management Group

Dear Mr. Williamson:

This letter is to provide notification that the County of San Diego Department of Planning and Land Use (DPLU) gladly accepts your invitation to be a member of the Borrego Water District Regional Water Management Group (RWMG). The County appreciates this great opportunity to work together on the challenges of planning future growth and managing the groundwater resources of Borrego Valley.

Our main point of contact and representative for the RWMG will be Jim Bennett, County Groundwater Geologist, who can be reached at 858-694-3820 or jim.bennett@sdcounty.ca.gov.

Sincerely,

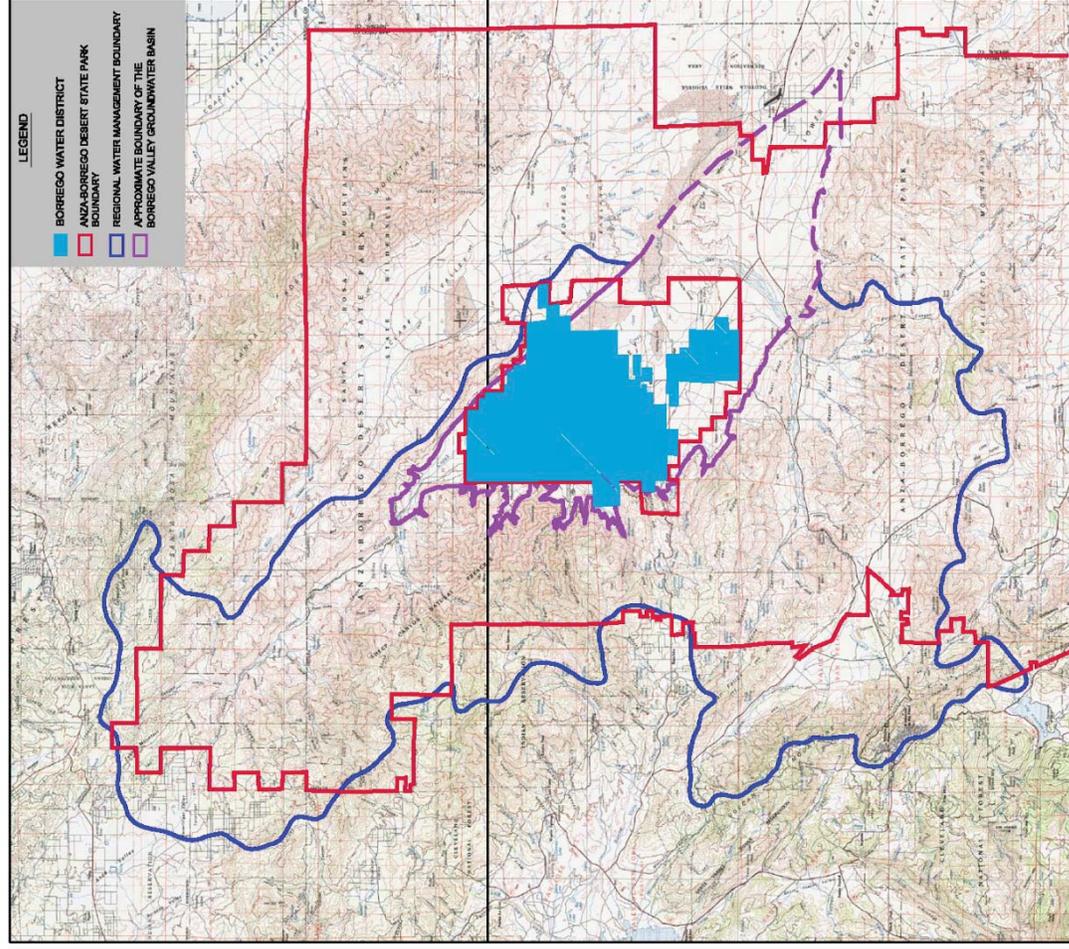
ERIC GIBSON, Director
Department of Planning and Land Use

EG:jb

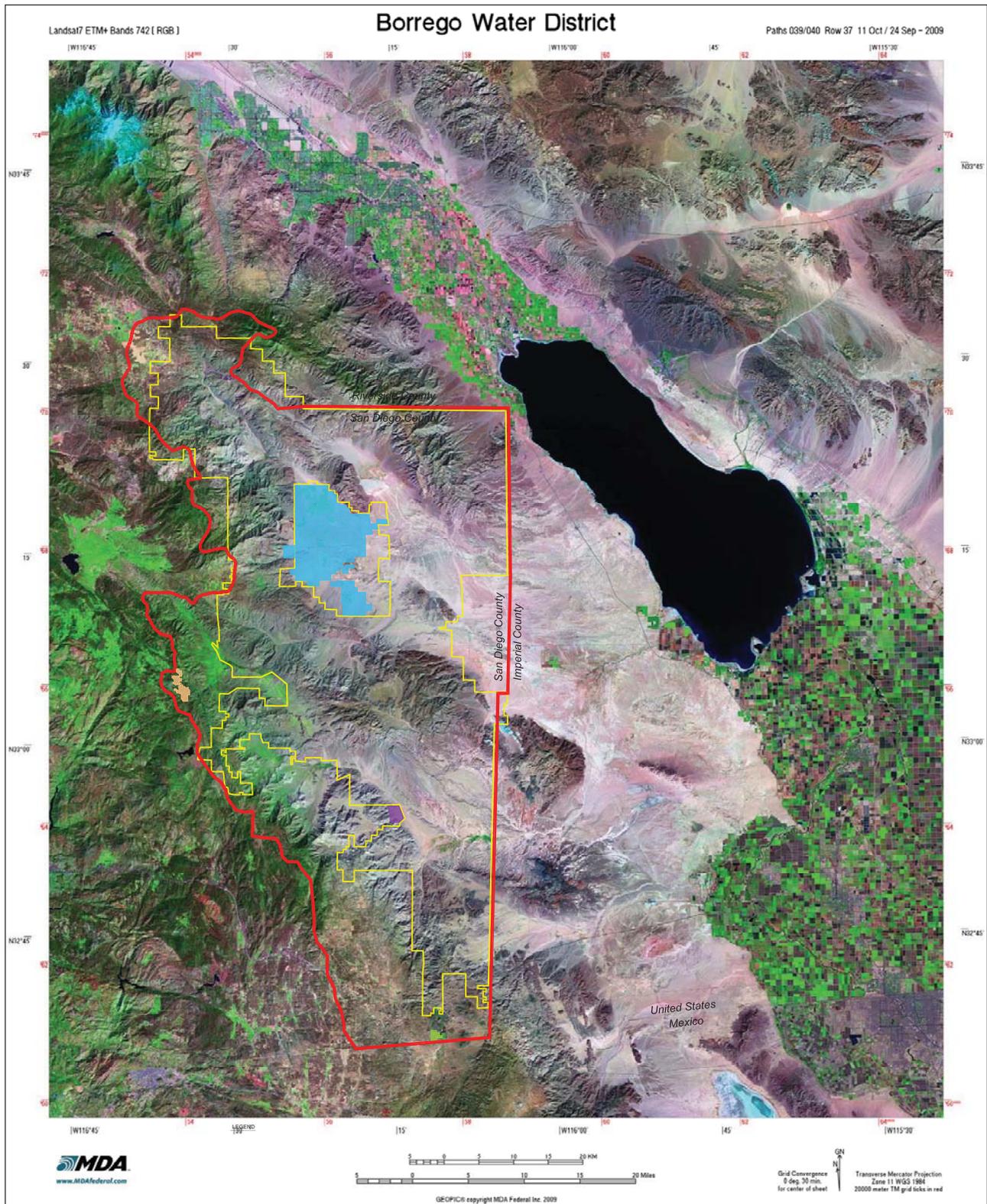
cc: Jim Bennett, County of San Diego, Department of Planning and Land Use

Exhibit A

Appendix A: Work Plan Proposals - Round 2



Borrego Water District
Integrated Water Resources Management Plan
BORREGO VALLEY
San Diego County, California
Figure: 2



Borrego Water District
ANZA BORREGO DESERT
INTEGRATED WATER MANAGEMENT REGION
Imperial, San Diego and Riverside Counties, California

Appendix B: DAC Involvement Comparison - Proposal Evaluations for Other IRWM Regions

Applicant	Castaic Lake Water Agency	County	Los Angeles
Project Title	Upper Santa Clara River Integrated Regional Water Management Plan Round 2 Proposition 84 Planning Grant	Grant Request	\$735,000
		Total Project Cost	\$980,000

Project Description The Proposal requests funding to (1) update the Agency’s 2002 Recycled Water Master Plan (RWMP) and prepare the associated California Environmental Quality Act documentation and (2) update the 2008 Santa Clarita Valley Water Use Efficiency Strategic Plan (WUE Plan). Both of these documents will provide information vital to developing a cost-effective water supply portfolio for the Agency’s service area and compliance with SBx7-7 regulations. In addition, the studies will help identify current and future recycled water demands, project future water conservation requirements, and identify new conservation management programs, meet new Standards, fill identified data gaps identified within the RWMP and WUE Plan, and meet the specific water quality objectives for the IRWMP.

Evaluation Summary

Scoring Criterion	Score
Work Plan	15
DAC Involvement	6
Schedule	5
Budget	6
Program Preferences	5
Tie Breaker	0
Total Score	37

- **Work Plan** The criterion is fully addressed and supported by thorough well-presented documentation and logical rationale. Table 3.1 summarizes the status of the existing Plan and how it will meet the current IRWM Plan standards. It also describes how the proposed work will add substantial value to the technical validity and feasibility of the IRWMP, thereby improving the Plan and future projects. Additionally, the Work Plan is consistent with the Budget and Schedule, and is sufficiently detailed to be inserted as the scope of work in a grant agreement.
- **DAC Involvement** The Work Plan does not include any tasks that facilitate and support the involvement of DACs in the planning effort. The applicant does note that no DACs have been identified within the region to date and goes on to present a discussion on current outreach efforts to “pockets of low income areas.” The Work Plan provides a discussion on the various strategies used to reach out to DACs, noting what these types of outreach are, and will continue as part of the planning process.
- **Schedule** The criterion is fully addressed and supported by thorough and well-presented documentation and logical rationale. The Schedule is reasonable, specific and consistent with the Work Plan and Budget, with the proposed work scheduled for completion approximately two years after the assumed effective date.
- **Budget** The criterion is less than fully addressed and the documentation is insufficient. The requested grant amount exceeds the total amount eligible. The amount requested for task 4 (\$27,563) is not

Appendix B: DAC Involvement Comparison - Proposal Evaluations for Other IRWM Regions

included in the grand total on the Budget Summary Table. The use of staff names rather than classifications in budget estimates prevents reviewer evaluation of estimate reasonableness. The basis and justification of the consultants' lump sum fee estimates for tasks 1, 2, and 3 is not provided, nor is there any information about how the costs associated with tasks 1.1 and 1.2 were derived. Nine quarterly reports were included in task 4.1, where only eight are noted in the Schedule.

- **Program Preference** The applicant clearly shows that 11 of 15 Program and Statewide Preferences are either currently being met or will be met through this proposal.

- **Tie Breaker** Not Applicable.

Appendix B: DAC Involvement Comparison - Proposal Evaluations for Other IRWM Regions

Applicant	County of Ventura	County	Ventura
Project Title	IRWMP Special Studies	Grant Request	\$ 514,000
		Total Project Cost	\$ 732,035

Project Description The objective of this Proposal is to enhance the WVCV IRWM Plan, which was adopted in 2006. The two special studies proposed as part of this grant application are intended to improve the ongoing IRWMP Update, further plan objectives, fill data gaps, and improve outreach to disadvantaged communities. This effort will be a stakeholder driven process.

Evaluation Summary

Scoring Criterion	Score
Work Plan	15
DAC Involvement	6
Schedule	5
Budget	10
Program Preferences	5
Tie Breaker	0
Total Score	41

- **Work Plan** This criterion is fully addressed and supported by thorough and well-presented documentation. The applicant presents a good discussion on current status and states that with the ongoing IRWM Plan Update activities under Round 1 Planning Grant funding, the region's IRWMP will be compliant with current Plan Standards. The two special studies that are proposed in the application will further enhance and improve many aspects of the Plan. The work plan tasks are clear, sufficiently detailed, and support the budget and schedule.
- **DAC Involvement** The criterion is less than fully addressed. Discussion of DAC involvement is presented in a general context of outreach and engagement activities to the region's stakeholders. Although DAC outreach activities are included in the scope of the Round 1 planning grant, the Work Plan presented does not include specific tasks targeted to DACs throughout the region that support sustained involvement by DACs in the regional planning process. Specifically, the applicant includes outreach and solicitation of DAC participation in the planning for one of the special studies included in the proposal, and while this study will ultimately benefit DACs located in the study area, these outreach efforts will end when the study is completed.
- **Schedule** The criterion is fully addressed and is supported by thorough and well-presented documentation and logical rationale. The schedule is reasonable and consistent with proposed actions in the work plan and budget. The schedule shows that results of the special studies will be incorporated into the IRWM plan update funded with Round 1 planning funds.
- **Budget** The criterion is fully addressed and supported by thorough and well-presented documentation. The basis of the estimates presented and the rates are generally reasonable. Additionally, the budget is consistent with the work plan and schedule.
- **Program Preference** The proposal sufficiently demonstrates that 11 of 15 Program Preferences will be met.
- **Tie Breaker** Not Applicable.

Appendix C: Budget Proposals - Round 1 vs. Round 2

Attachment 4 – Project Budget

Proposal Title: Anza Borrego Desert Region Planning Grant Application

Project Title: Anza Borrego Desert Planning Grant Budget

Task Number	Budget Category	Non-State Share* (Funding Match) (1)	In-Kind Share* (Funding Match) (1)	Requested Grant Funding (DWR Grant Amount)	Total	% Funding Match
1	Conduct Monthly Stakeholder and Policy Cmt. Mtgs.	925	2,100	9,075	12,100	25
2	Complete (revise, edit and fill gaps) of Sections 1- 6 of the IRWM Plan	0	875	2,625	3,500	25
3	Conduct Performance and Monitoring	2,675	3,000	17,025	22,700	25
4	Prepare a Data Management Plan	11,000	2,500	40,500	54,000	25
5	Identify Financing Opportunities for Implementation Projects	125	2,000	6,375	8,500	25
6	Technical Analysis	45,175	10,000	165,525	220,700	25
7	Describe IRWM Process and it Relation to Local Planning	1,250	1,000	6,750	9,000	25
8	Identify Region and Local Planning Relationships	0	1,250	3,750	5,000	25
9	Describe Stakeholder Involvement	0		0	0	0
10	Coordination	4,300	500	14,400	19,200	25
11	Describe Climate Change Impacts and Responses	125	1,500	4,875	6,500	25
12	Prepare Final Plan	1,625	5,000	19,875	26,500	25
13	Reimbursement of IRWM costs from September 2008 to Present	58,834	14,374	219,624	292,832	25
	Grand Total	126,034	44,099	510,399	680,532	25

Notes to Table

1 - Funding Match are not State funds, but are in-kind services, federal grant dollars or local agency funds.

IRWM Grant Program – Planning Grant, Round 1, FY 2010-2011

Applicant	Borrego Water District	County	San Diego, Riverside
Project Title	Anza Borrego Desert IRWM Planning Grant	Grant Request	\$510,399
		Total Project Cost	\$680,532

Project Description The proposed IRWM Plan will reduce water demand, construct upgrades to failing infrastructures, address problems with invasive species, study flood control with possible aquifer recharge, water quality evaluation/education and conjunctive use options including the storage of water in the depleted areas of the Borrego Valley Aquifer.

Evaluation Summary

Scoring Criterion	Score
Work Plan	9
DAC Involvement	8
Schedule	6
Budget	10
Program Preferences	3
Geographic Balance	0
Total Score	36

- **Work Plan** The work plan does not fully address the criteria and lacked sufficient supporting documentation. Tasks are defined and support the proposal (plan development); however, deliverables are not always clear or explicitly cited in each task. The work plan in general is missing details and referencing. More specifics in the work plan would have yielded a higher score.
- **DAC Involvement** The applicant provides full description of the DAC areas within the region, which consisted of the entire region. Historical information and future collaboration is discussed. DACs are notified of meetings through a local newspaper and the Borrego Water District website. The RWMG did attempt to involve local tribes in the process, but they declined to participate. The applicant is planning to have projects implemented within the DACs; however, the application did not provide enough detail about how the DACs will continue to be involved in the process in the future.
- **Schedule** Schedule is consistent with work plan and budget, but does not reflect a reasonable time line. For instance, the final plan is scheduled to be prepared by the end of June 2011; however, the technical analysis is not scheduled to be complete until October 2011. In addition, several tasks scheduled to be performed simultaneously are scheduled to be completed by June 2011, coinciding with the completion date of the final Plan. While this may be possible, it doesn't provide adequate time for stakeholder comments and integration of any changes into the final plan.
- **Budget** The budget is presented as a summary of the overall project. Detailed information is provided with each project task. Labor rates and hours associated with specific task are provided. Summary of budget shows proposed funding match and requested grant fund by percentage. Budget items correspond to tasks in the work plan and correlate directly with items in the schedule. Overall budget for project seems reasonable for the quantity of work proposed.
- **Program Preference** The proposal demonstrates a high degree of certainty that three program preferences will be implemented through the plan. Those program preferences are: include regional projects or programs, address critical water supply or water quality needs of DACs, and effectively integrate water management with land use planning.
- **Geographic Balance** Not Applicable

Attachment

4

San Diego Integrated Regional Water Management Planning Grant Proposal Budget

Attachment 4 consists of the following items:

✓ **Proposal Budget(s)**

The proposal budget provides a budget estimate for each Work Plan task, as well as a breakdown of the proposed funding match and requested grant funds.

The proposal budget provides a budget estimate for each Work Plan task, as well as a breakdown of the proposed funding match and requested grant funds. Table 1 provides the overall budget summary for this San Diego IRWM Planning Grant Proposal. Table 2 provides a detailed budget estimate of the labor and direct costs comprising the grant request. Table 3 provides a detailed budget estimate of the consultant and in-kind staff labor included in the funding match. Supporting information provided in the tables includes labor categories, hourly billing rates, and time estimates for each work task.

Funding Match

The total funding match provided in the proposal is 32%. This funding match is comprised of the following non-State funds:

1. Funding for consultant fees as committed by the *Memorandum of Understanding for the Integrated Regional Water Management Grant Program for FYs 2009-2013*;
2. In-kind staff labor from the Water Authority, City of San Diego, and County of San Diego; and
3. Southern California Salinity Coalition and Water Authority member agency funds for salinity and nutrient management planning activities.

Costs for RWMG and consultant labor for the proposed funding match were prepared based on actual reported monthly spending from October 2008 through July 2010, prorated to include only those portions of meetings where topics for the IRWM Plan Update were discussed. Approximately 22% of RWMG meetings and 60% of RAC meetings from October 2008 to present explored topics to be included in the IRWM Plan Update. For example, two July 2009 RWMG meetings involved discussion of the role of watershed coordination groups in the IRWM program (per "Coordination with Local Water Planning" Plan Standard) and preparation for an August 2009 RAC meeting addressing San Diego's tribes and water resources (per "Improve Tribal Water and Natural Resources" Statewide Priority).

Tracking RWMG in-kind staff labor over the last two years has resulted in average monthly spending of \$7,410 for the Water Authority, \$3,244 for the City of San Diego, and \$2,074 for the County of San Diego. Future funding match projections are based on this average monthly spending for the proposed two-year contract timeframe for the IRWM Plan Update. However, this proposal budget assumes that only 75% of RWMG meetings and 85% of RAC meetings during the contract timeframe will involve IRWM Plan Update activities. The remaining 25% of RWMG meetings and 15% of RAC meetings will involve funding applications or administration and are not included in the proposal budget.

Table 1 – Proposal Budget					
Proposal Title: San Diego IRWM Planning Grant Proposal					
Budget Category	Non-State Share* (Funding Match)	Requested Grant Funding	Total	% Funding Match	
Task 1: Outreach and Communication	\$340,880	\$320,440	\$661,320	52%	
(a) 1-1: RWMG Meetings and Coordination	\$140,091	\$57,600	\$197,691	71%	
(b) 1-2: RAC Meetings and Coordination	\$109,148	\$66,000	\$175,148	62%	
(c) 1-3: Public Involvement	\$45,821	\$68,500	\$114,321	40%	
(d) 1-4: Coordination with Disadvantaged Communities	\$11,455	\$48,710	\$60,165	19%	
(e) 1-5: Coordination with Tribes	\$11,455	\$44,270	\$55,725	21%	
(f) 1-6: Coordination with Tri-County FACC	\$22,910	\$20,480	\$43,390	53%	
(g) 1-7: IRWM Website Updates	\$0	\$14,880	\$14,880	0%	
Task 2: Planning Studies	\$125,000	\$306,770	\$431,770	29%	
(i) 2-1: Collaboration with Regional Board	\$0	\$49,110	\$49,110	0%	
(j) 2-2: Salinity and Nutrient Management Planning	\$125,000	\$200,280	\$325,280	38%	
(k) 2-3: Water Management and Land Use Planning	\$0	\$28,690	\$28,690	0%	
(l) 2-4: Integrated Flood Management	\$0	\$28,690	\$28,690	0%	
Task 3: IRWM Plan Update	\$0	\$322,790	\$322,790	0%	
(m) 3-1: Plan Preparation, Review, and Approval Process	\$0	\$7,720	\$7,720	0%	
(n) 3-2: Long-Term Governance and Financing	\$0	\$58,680	\$58,680	0%	
(o) 3-3: Climate Change Analysis	\$0	\$63,840	\$63,840	0%	
(p) 3-4: Establish IRWM Program Priorities	\$0	\$17,900	\$17,900	0%	
(q) 3-5: Refine IRWM Plan Metrics	\$0	\$15,660	\$15,660	0%	
(r) 3-6: Update IRWM Plan per State Guidelines	\$0	\$102,220	\$102,220	0%	
(s) 3-7: Prepare Final IRWM Plan	\$0	\$40,050	\$40,050	0%	
(t) 3-8: Prepare Highlights Document	\$0	\$16,720	\$16,720	0%	
Task 4: Proposal Administration	\$0	\$50,000	\$50,000	0%	
GRAND TOTAL:	\$465,880	\$1,000,000	\$1,465,880	32%	

* Sources of Funding Match:

- In-kind staff labor from the Water Authority, City of San Diego, and County of San Diego; and
- Southern California Salinity Coalition and Water Authority member agency funds for salinity and nutrient management planning activities.

Table 2 – Proposal Budget: Requested Grant Funding												
Proposal Title: San Diego IRWM Planning Grant Proposal												
Budget Category	No. Meetings	Consultant Labor (Hours)						Total Labor Costs	Water Authority Costs	Other Direct Costs	Total Requested Grant Funding	
		Principal	Project Manager	Project Engineer	Graphics	Admin	Total Hours					
(a) Task 1: Outreach and Communication		\$235	\$185	\$175	\$125	\$125						\$320,440
(b) 1-1: RWMG Meetings and Coordination	36	48	216	0	0	48	312	\$57,240	\$0	\$360	\$57,600	
(c) 1-2: RAC Meetings and Coordination	10	60	140	40	8	140	388	\$65,500	\$0	\$500	\$66,000	
(d) 1-3: Public Involvement	10	60	140	140	8	8	356	\$66,500	\$0	\$2,000	\$68,500	
(e) 1-4: Coordination with Disadvantaged Communities	6	24	72	150	4	8	258	\$46,710	\$0	\$2,000	\$48,710	
(f) 1-5: Coordination with Tribes	6	24	48	150	4	8	234	\$42,270	\$0	\$2,000	\$44,270	
(g) 1-6: Coordination with Tri-County FACC	10	8	60	20	20	8	116	\$19,980	\$0	\$500	\$20,480	
(h) 1-7: IRWM Website Updates	24	0	48	0	48	0	96	\$14,880	\$0	\$0	\$14,880	
(i) Task 2: Planning Studies											\$306,770	
(j) 2-1: Collaboration with Regional Board		28	100	120	16	4	268	\$48,580	\$0	\$530	\$49,110	
(k) 2-2: Salinity and Nutrient Management Planning		48	400	600	60	20	1,128	\$200,280	\$0	\$0	\$200,280	
		0	0	0	0	0	0	\$0	\$0	\$0	\$0	
		48	400	600	62	20	1,130	\$200,530	\$0	\$0	\$200,530	
(l) 2-3: Water Management and Land Use Planning		28	40	78	0	8	154	\$28,630	\$0	\$60	\$28,690	
(m) 2-4: Integrated Flood Management		28	40	78	0	8	154	\$28,630	\$0	\$60	\$28,690	
(n) Task 3: IRWM Plan Update											\$322,790	
(o) 3-1: Plan Preparation, Review, and Approval Process		8	24	8	0	0	40	\$7,720	\$0	\$0	\$7,720	
(p) 3-2: Long-Term Governance and Financing	4	40	128	128	16	8	320	\$58,480	\$0	\$200	\$58,680	
(q) 3-3: Climate Change Analysis		16	48	280	8	8	360	\$63,640	\$0	\$200	\$63,840	
(r) 3-4: Establish IRWM Program Priorities	5	8	60	24	0	4	96	\$17,680	\$0	\$220	\$17,900	
(s) 3-5: Refine IRWM Plan Metrics	4	8	48	24	0	4	84	\$15,460	\$0	\$200	\$15,660	
(t) 3-6: Update IRWM Plan per State Guidelines		46	216	236	30	40	568	\$100,820	\$0	\$1,400	\$102,220	
		4	8	8	0	0	20	\$3,820	\$0	\$1,401	\$5,221	
		4	16	16	14	0	50	\$8,450	\$0	\$1,402	\$9,852	
		4	16	16	0	0	36	\$6,700	\$0	\$1,403	\$8,103	

Table 2 – Proposal Budget: Requested Grant Funding												
Proposal Title: San Diego IRWM Planning Grant Proposal												
Budget Category	No. Meetings	Consultant Labor (Hours)						Total Labor Costs	Water Authority Costs	Other Direct Costs	Total Requested Grant Funding	
		Principal	Project Manager	Project Engineer	Graphics	Admin	Total Hours					
		\$235	\$185	\$175	\$125	\$125						
		4	16	12	0	0	32	\$6,000	\$0	\$1,404	\$7,404	
4. Vision, Mission, Goals, and Objectives												
5. Resource Management Strategies		4	8	20	0	0	32	\$5,920	\$0	\$1,405	\$7,325	
6. Integration Opportunities		4	8	16	0	0	28	\$5,220	\$0	\$1,406	\$6,626	
7. Project Evaluation and Prioritization		4	40	16	0	0	60	\$11,140	\$0	\$1,407	\$12,547	
8. Data Management and Technical Analysis		4	14	40	0	0	58	\$10,530	\$0	\$1,408	\$11,938	
9. Framework for Implementation		4	40	32	0	0	76	\$13,940	\$0	\$1,409	\$15,349	
Production of Administrative Draft IRWM Plan Update		6	30	40	16	20	112	\$18,460	\$0	\$1,410	\$19,870	
Production of Public Draft IRWM Plan Update		4	20	20	0	20	64	\$10,640	\$0	\$1,411	\$12,051	
(u) 3-7: Prepare Final IRWM Plan		10	80	80	20	40	230	\$38,650	\$0	\$1,400	\$40,050	
(v) 3-8: Prepare Highlights Document		8	24	16	40	16	104	\$16,120	\$0	\$600	\$16,720	
(w) Task 4: Proposal Administration		0	0	0	0	0	0	\$0	\$50,000	\$0	\$50,000	
(x) GRAND TOTAL:		500	1932	2172	282	380	5266	\$937,770	\$50,000	\$12,230	\$1,000,000	

Appendix C: Budget Proposals - Round 1 vs. Round 2



Table 3 – Proposal Budget: Funding Match														
Proposal Title: San Diego IRWM Planning Grant Proposal														
Budget Category	No. Meetings	Funding Match Oct 08–Dec 10					Funding Match Jan 11–Dec 12					Total Funding Match		
		Consultant	Water Authority	County of San Diego	City of San Diego	Subtotal	Consultant	Water Authority	County of San Diego	City of San Diego	Subtotal			
(a) Task 1: Outreach and Communication														\$340,880
(b) 1-1: RWMG Meetings and Coordination	36	\$11,823	\$22,411	\$9,351	\$4,864	\$48,449	\$0	\$53,352	\$23,357	\$14,933	\$91,642	\$0	\$140,091	\$140,091
(c) 1-2: RAC Meetings and Coordination	10	\$47,630	\$9,605	\$4,007	\$2,085	\$63,327	\$0	\$26,676	\$11,678	\$7,466	\$45,821	\$0	\$109,148	\$109,148
(d) 1-3: Public Involvement	10	\$0	\$0	\$0	\$0	\$0	\$0	\$26,676	\$11,678	\$7,466	\$45,821	\$0	\$45,821	\$45,821
(e) 1-4: Coordination with Disadvantaged Communities	6	\$0	\$0	\$0	\$0	\$0	\$0	\$6,669	\$2,920	\$1,867	\$11,455	\$0	\$11,455	\$11,455
(f) 1-5: Coordination with Tribes	6	\$0	\$0	\$0	\$0	\$0	\$0	\$6,669	\$2,920	\$1,867	\$11,455	\$0	\$11,455	\$11,455
(g) 1-6: Coordination with Tri-County FACC	10	\$0	\$0	\$0	\$0	\$0	\$0	\$13,338	\$5,839	\$3,733	\$22,910	\$0	\$22,910	\$22,910
(h) 1-7: IRWM Website Updates	24	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(i) Task 2: Planning Studies														\$125,000
(j) 2-1: Collaboration with Regional Board		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(k) 2-2: Salinity and Nutrient Management Planning		\$0	\$25,000	\$0	\$0	\$25,000	\$0	\$100,000	\$0	\$0	\$100,000	\$0	\$125,000	\$125,000
Salinity and Nutrient Management Guidelines		\$0	\$25,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25,000	\$25,000
Salinity and Nutrient Management Plans		\$0	\$0	\$0	\$0	\$0	\$0	\$100,000	\$0	\$0	\$100,000	\$0	\$100,000	\$100,000
(l) 2-3: Water Management and Land Use Planning		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(m) 2-4: Integrated Flood Management		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(n) Task 3: IRWM Plan Update														\$0
(o) 3-1: Plan Preparation, Review, and Approval Process		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(p) 3-2: Long-Term Governance and Financing	4	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(q) 3-3: Climate Change Analysis		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(r) 3-4: Establish IRWM Program Priorities	5	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(s) 3-5: Refine IRWM Plan Metrics	4	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(t) 3-6: Update IRWM Plan per State Guidelines		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1. Introduction		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2. Region Description, Issues and Needs		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3. Governance and Stakeholder Involvement		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Table 3 – Proposal Budget: Funding Match

Proposal Title: San Diego IRWM Planning Grant Proposal

Budget Category	No. Meetings	Funding Match Oct 08–Dec 10								Funding Match Jan 11–Dec 12				Total Funding Match			
		Water Authority		County of San Diego		City of San Diego		Subtotal	Consultant	Water Authority		County of San Diego			City of San Diego		Subtotal
4. Vision, Mission, Goals, and Objectives		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5. Resource Management Strategies		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6. Integration Opportunities		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7. Project Evaluation and Prioritization		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8. Data Management and Technical Analysis		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9. Framework for Implementation		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Production of Administrative Draft IRWM Plan Update		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Production of Public Draft IRWM Plan Update		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(u) 3-7: Prepare Final IRWM Plan		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(v) 3-8: Prepare Highlights Document		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(w) Task 4: Proposal Administration		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(x) GRAND TOTAL:		\$59,453	\$57,016	\$13,358	\$6,949	\$136,776	\$0	\$233,380	\$58,392	\$37,332	\$329,104	\$465,880					

Notes:

Costs for past consultant labor based on consultant invoices for Sept 08- July 10, prorated to include only those meetings which addressed IRWM Plan Update topics.
 Costs for past RWMG labor based on actual reported monthly spending Sept 08-July 10 (prorated) and scope/cost for Salinity/Nutrient Management Planning Guidelines.
 Costs for future RWMG labor based on average monthly spending Sept 08-July 10: \$7,410 for the Water Authority, \$3,244 for the County, and \$2,074 for the City. Assumes time distribution: 40% RWMG, 20% RAC, 20% public outreach, 5% DAC outreach, 5% tribal outreach, and 10% Tri-County FACC.

IRWM Grant Program – Planning Grant, Round 1, FY 2010-2011

Applicant	San Diego County Water Authority	County	San Diego
Project Title	San Diego IRWM Planning Grant Proposal	Grant Request	\$1,000,000
		Total Project Cost	\$1,465,880

Project Description The proposed updates to the existing IRWM Plan will address the activities needed to bring the Plan in line with the State’s IRWM Plan Standards. Planning studies will address water quality improvement, implementation of Salinity and Nutrient Management Guidelines, improved connections between water management and land use planning, and clarification of integrated flood management for the arid San Diego Region. The Plan will define a long-term governance and financing structure and compile a climate change analysis.

Evaluation Summary

Scoring Criterion	Score
Work Plan	15
DAC Involvement	10
Schedule	10
Budget	10
Program Preferences	6
Geographic Balance	0
Total Score	51

- **Work Plan** The work plan is detailed and complete. The work plan specifies the appropriate deliverables (agenda, meetings, updates, draft and final reports, etc.) for the four tasks outlined in the proposal. The applicant has a clear screening method to call for projects and screen those projects to prioritize and select the best projects that address multi-benefits and others that benefit the region.
- **DAC Involvement** The applicant demonstrates collaboration with DACs. In addition, the proposal provides information and supporting documentation about the level of DAC involvement in the group. The applicant plans to further incorporate and support DACs through tasks listed in the work plan.
- **Schedule** The schedule corresponds accurately to the work items described in the work plan. Based on the item descriptions in the work plan the schedule is reasonable.
- **Budget** The budget consists of a summary and details for each task item in the work plan. The items shown in the budget correlates with the work plan and schedule. The detailed costs for grant funding and funding match are within reason and thoroughly supported.
- **Program Preference** Six program preferences (include regional projects or programs, effectively integrate water mgt. & land use planning, climate change actions, integrated flood management, protect surface and groundwater quality, and ensure equitable distribution of benefits).
- **Geographic Balance** Not Applicable

Coachella Valley Integrated Regional Water Management Planning Grant Proposal

Budget

Attachment 4 consists of the following items:

✓ **Proposal Budget(s)**

The proposal budget provides a budget estimate for each Work Plan task, as well as a breakdown of the proposed funding match and requested grant funds.

The proposal budget provides a budget estimate for each Work Plan task, as well as a breakdown of the proposed funding match and requested grant funds. Table 1 provides the overall budget summary for this Coachella Valley IRWM Planning Grant Proposal. Table 2 provides a detailed budget estimate of the labor and direct costs comprising the grant request. Table 3 provides a detailed budget estimate of the CVRWMG staff labor included in the funding match. Supporting information provided in the tables includes labor categories, hourly billing rates, and time estimates for each work task.

The total funding match provided in the proposal is 28%. This funding match is comprised of the following non-State funds:

1. In-kind staff labor from Coachella Water Authority (CWA), Coachella Valley Water District (CVWD), Desert Water Agency (DWA), Indio Water Authority (IWA), and Mission Springs Water District (MSWD)

The projected funding match for each CVRWMG agency was based on combined hourly billing rates for two CVWD staff, two MSWD staff, three DWA staff, one IWA staff, and one CWA staff, based on average attendance at April –September 2010 IRWM meetings to discuss IRWM planning topics. The funding match projections are based on this average attendance for the proposed 2-year contract timeframe for the IRWM Plan Update.

Appendix C: Budget Proposals - Round 1 vs. Round 2



Coachella Valley Planning Grant Proposal
Attachment 4: Budget

Table 1 – Proposal Budget					
Proposal Title: Coachella Valley IRWM Planning Grant Proposal					
Budget Category	Non-State Share* (Funding Match)	Requested Grant Funding	Total	% Funding Match	
(a) Task 1: Ongoing Outreach	\$290,700	\$383,079	\$673,779	43%	
(b) 1-1: CVRWGM Program Management	\$182,400	\$122,460	\$304,860	60%	
(c) 1-2: Planning Partners Coordination	\$34,200	\$39,900	\$74,100	46%	
(d) 1-3: DAC Outreach and Technical Support	\$17,100	\$101,000	\$118,100	14%	
(e) 1-4: Tribal Outreach and Coordination	\$34,200	\$29,925	\$64,125	53%	
(f) 1-5: Public Involvement	\$22,800	\$89,794	\$112,594	20%	
(g) Task 2: Technical Evaluations	\$95,680	\$434,025	\$529,705	18%	
(h) 2-1: DAC Water Quality Evaluation	\$23,920	\$155,140	\$179,060	13%	
(i) 2-2: Salt and Nutrient Management Planning Strategy	\$23,920	\$83,705	\$107,625	22%	
(j) 2-3: Integrated Flood Management Planning	\$23,920	\$111,475	\$135,395	18%	
(k) 2-4: Groundwater Elevation Monitoring Strategy	\$23,920	\$83,705	\$107,625	22%	
(l) Task 3: IRWM Plan Update	\$0	\$182,896	\$182,896	0%	
(m) 3-1: Refine Plan Goals, Objectives, and Priorities	\$0	\$20,233	\$20,233	0%	
(n) 3-2: Evaluate and Report Plan Performance	\$0	\$16,520	\$16,520	0%	
(o) 3-3: Climate Change Analysis	\$0	\$56,503	\$56,503	0%	
(p) 3-4: Update Implementation Framework	\$0	\$34,320	\$34,320	0%	
(q) 3-5: Prepare IRWM Plan Update	\$0	\$55,320	\$55,320	0%	
(r) GRAND TOTAL	\$386,380	\$1,000,000	\$1,386,380	28%	

* Sources of Funding Match:

- In-kind staff labor from Coachella Water Authority, Coachella Valley Water District, Desert Water Agency, Indio Water Authority, and Mission Springs Water District



Coachella Valley Planning Grant Proposal
Attachment 4: Budget

Table 2 – Proposal Budget: Requested Grant Funds																						
Proposal Title: Coachella Valley IRWMP Planning Grant Proposal																						
Budget Category	No. Meetings	Consultant Labor (Hours)								Total Labor Costs	Other Direct Costs	Total Requested Grant Funding										
		Principal	Project Manager	Sr Project Manager	Project Engineer	Graphics/Admin	Facilitator	Developer	Total Hours													
(l) Task 3: IRWMP Plan Update		\$235	\$195	\$220	\$185	\$115	\$195	\$170														
(m) 3-1: Refine Plan Goals, Objectives, and Priorities		12	48	0	16	12	17	0	105	\$20,233	\$0	\$20,233										
(n) 3-2: Evaluate and Report Plan Performance		12	48	0	16	12	0	0	88	\$16,520	\$0	\$16,520										
(o) 3-3: Climate Change Analysis		36	90	0	100	72	17	0	315	\$56,503	\$0	\$56,503										
(p) 3-4: Update Implementation Framework		12	48	0	48	12	55	0	175	\$34,320	\$0	\$34,320										
(q) 3-5: Prepare Final IRWMP Plan Update		36	120	0	100	24	0	0	280	\$53,120	\$2,200	\$55,320										
(r) GRAND TOTAL		696	1388	648	1350	372	463	88	5005	\$985,141	\$14,859	\$1,000,000										



Coachella Valley Planning Grant Proposal
Attachment 4: Budget

Table 3 – Proposal Budget: Funding Match Proposal Title: Coachella Valley IRWMP Planning Grant Proposal												
Budget Category	# Meetings	CVRWIMG (Hours)*						Total Labor Costs	Total Funding Match			
		CWSD	MSWD	DWA	IWA	CWA	Total Hours					
		\$220	\$207	\$180	\$100	\$100						
(a) Task 1: Ongoing Outreach												
(b) 1-1: CVRWIMG Program Management	24	192	192	192	192	192	192	\$182,400	\$290,700			
(c) 1-2: Planning Partners Coordination	12	36	36	36	36	36	36	\$34,200				
(d) 1-3: DAC Outreach and Technical Support	6	18	18	18	18	18	18	\$17,100				
(e) 1-4: Tribal Outreach and Coordination	12	36	36	36	36	36	36	\$34,200				
(f) 1-5: Public Involvement	6	24	24	24	24	24	24	\$22,800				
(g) Task 2: Technical Evaluations												
(h) 2-1: DAC Water Quality Evaluation		16	16	16	16	16	16	\$23,920				
2-1-1: DAC Issues Characterization	4	16	16	16	16	16	16	\$23,920				
2-1-2: Compile and Review Water Quality Data for DAC Areas		0	0	0	0	0	0	\$0				
2-1-3: Prepare DAC Water Quality Evaluation		0	0	0	0	0	0	\$0				
(i) 2-2: Salt and Nutrient Management Planning Strategy	4	16	16	16	16	16	16	\$23,920				
(j) 2-3: Integrated Flood Management Planning		16	16	16	16	16	16	\$23,920				
2-3-1: Catalog Existing Plans and Needs	4	16	16	16	16	16	16	\$23,920				
2-3-2: Develop a Regional Vision for Multi-Benefit Flood Protection		0	0	0	0	0	0	\$0				
2-3-3: Facilitate Regional Participation in Flood Management		0	0	0	0	0	0	\$0				
2-3-4: Compile Integrated Flood Management Plan		0	0	0	0	0	0	\$0				
(k) 2-4: Groundwater Elevation Monitoring Strategy	4	16	16	16	16	16	16	\$23,920				
(l) Task 3: IRWMP Plan Update												
(m) 3-1: Refine Plan Goals, Objectives, and Priorities		0	0	0	0	0	0	\$0				
(n) 3-2: Evaluate and Report Plan Performance		0	0	0	0	0	0	\$0				



Table 3 – Proposal Budget: Funding Match Proposal Title: Coachella Valley IRWM Planning Grant Proposal										
Budget Category	# Meetings	CVRWMG (Hours)*						Total Labor Costs	Total Funding Match	
		CVWD	MSWD	DWA	IWA	CWA	Total Hours			
		\$220	\$207	\$180	\$100	\$100				
(o) 3-3: Climate Change Analysis		0	0	0	0	0	\$0	\$0		
(p) 3-4: Update Implementation Framework		0	0	0	0	0	\$0	\$0		
(q) 3-5: Prepare Final IRWM Plan Update		0	0	0	0	0	\$0	\$0		
(r) GRAND TOTAL		370	370	370	370	370	\$386,380	\$386,380		

* Costs for future CVRWMG labor based on combined billing rates for two CVWD staff, two MSWD staff, three DWA staff, one IWA staff, and one CWA staff, based on average attendance at April –September 2010 IRWM activities.

IRWM Grant Program – Planning Grant, Round 1, FY 2010-2011

Applicant	Coachella Valley Water District	County	San Diego, Imperial,
Project Title	Coachella Valley IRWM Planning Grant Proposal	Grant Request	Riverside, San Bernardino \$1,000,000
		Total Project Cost	\$1,386,380

Project Description The proposal updates the Coachella Valley IRWM Plan and will incorporate the information learned from the technical evaluations, as well as refinement of the objectives, priorities, and implementation framework with stakeholders. The IRWM update includes development and incorporation of an integrated flood management plan, salt and nutrient management plan, and a climate change response component.

Evaluation Summary

Scoring Criterion	Score
Work Plan	15
DAC Involvement	10
Schedule	10
Budget	10
Program Preferences	6
Geographic Balance	0
Total Score	51

- **Work Plan** The background section provides a comprehensive description of the RWMG and stakeholders. Plan objectives address major water-related issues and conflicts of the region, especially DAC issues. The IRWM Plan contains a process to select projects for inclusion in the IRWM Plan. Each task was presented with adequate detail and completeness. When implemented, the work plan will address the regional objectives and result in a standards compliant IRWM Plan
- **DAC Involvement** The work plan demonstrates strong involvement and collaboration with DACs. The work plan includes outreach activities that are conducted to solicit DAC and EJ members to participate in the IRWMP process, and help resolve their water related issues. Major water-related issues have been identified through outreach efforts. DACs are currently very active in the planning stage either through DAC meetings and/or being active as part of the Planning Partners group. DAC projects are planned to be implemented within the DAC communities.
- **Schedule** The schedule correlates with the work plan and budget. The schedule is reasonable given the time already spent performing public outreach, identifying issues in the region, soliciting projects, and prioritizing those projects based on urgency, need, and regional planning.
- **Budget** Budget for proposal is broken down into a summary of the overall project and two detailed estimates of the project cost and staff labor. Costs are further broken down to proposed funding match and requested grant fund by percentage. Budget items correspond to tasks in the work plan and correlate directly with items in the schedule.
- **Program Preference** Six program preferences (effectively integrate water management programs, address critical water supply or water quality needs of DACs, climate change response, integrated flood management, protect surface and groundwater quality, improve tribal water and natural resources) have been adequately addressed.
- **Geographic Balance** Not Applicable



UPPER SANTA CLARA RIVER

Integrated Regional Water Management

ATTACHMENT 4 – BUDGET

BUDGETS PROVIDED: SUMMARY AND DETAILED

A summary budget for the Proposal and each of the IRWMP Update planning components is provided as Table 4-1. Work Plan Tasks in this Proposal are numbered as follows:

1. Recycled Water Master Plan Update
2. Recycled Water Master Plan Update Environmental Impact Report
3. Santa Clarita Valley Water Use Efficiency Strategic Plan Update
4. Grant Administration

Tables 4-2 through 4-5 provide detailed budgets for each of the individual work plan tasks consistent with the categories provided in the Guidelines. Also provided are the detailed fee estimates for each task, provided at the end of this Attachment.

CONSISTENCY WITH WORK PLAN AND SCHEDULE

Both the Work Plan and Schedule provide discussions of the work items under the general categories outlined in the budget and are thus consistent with the budget items provided in this attachment.

REASONABLENESS OF DETAILED COSTS AND SUPPORTING DOCUMENTATION

All detailed costs shown for each planning component are reasonable and, where applicable, supporting information has been provided to justify the cost estimates. Supporting information includes labor rates, labor categories, and labor hours; percentage of total used to approximate costs; and/or engineer's estimate or submitted low bid from contractor.

FUNDING MATCH

The proposal includes a funding match at the required 25% match. Additionally some of the individual planning work items has a funding match well above the required 25% match. The proposal funding match is 25% of the total cost of the Proposal. The matching funds will come from property taxes, connection fees and revenue from rates.

Appendix D: Budget Proposals - Round 2



UPPER SANTA CLARA RIVER

Integrated Regional Water Management

TABLE 4-1 Summary Budget						
Proposal Title: Upper Santa Clara River IRWMP Round 2, Proposition 84 Planning Grant						
Individual Planning Item Title		Non-State Share (Funding Match)	Requested Grant Funding (DWR Grant Amount)	Other State Funds Being Used	Total	% Funding Match
Task 1	RECYCLED WATER MASTER PLAN UPDATE	\$120,000	\$360,000	\$0	\$480,000	25%
Task 2	RECYCLED WATER MASTER PLAN ENVIRONMENTAL IMPACT REPORT	\$62,500	\$187,500	\$0	\$250,000	25%
Task 3	SANTA CLARITA VALLEY WATER USE EFFICIENCY PLAN UPDATE	\$62,500	\$187,500	\$0	\$250,000	25%
Task 4	GRANT ADMINISTRATION	\$9,188	\$27,563	\$0	\$36,750	25%
	Grand Total	\$245,000	\$735,000	\$0	\$980,000	25%



UPPER SANTA CLARA RIVER

Integrated Regional Water Management

TABLE 4-2 Project Budget

Proposal Title: Upper Santa Clara River IRWMP Round 2, Prop 84 Planning Grant

Project Title: TASK 1 Recycled Water Master Plan Update

		(a)	(b)	(c)	(d)	(e)	
Budget Category		Non-State Share* (Funding Match)	Requested Grant Funding	Other State Funds Being Used	Total	% Funding Match	Schedule
Task 1	Recycled Water Master Plan Update						
Subtask 1.1	Recycled Water User Map and Hydraulic Model Update	\$50,000	\$0	\$0	\$50,000	100%	Sept 2010 - July 2011
Subtask 1.2	Draft Recycled Water System Analysis	\$70,000	\$0	\$0	\$70,000	100%	Sept 2011 - Aug 2012
Subtask 1.3	Draft Recycled Water Master Plan	\$0	\$324,000	\$0	\$324,000	0%	Aug 2012 - Dec 2013
Subtask 1.4	Final Recycled Water Master Plan	\$0	\$36,000	\$0	\$36,000	0%	Jan 2014 - Aug 2014
	Grand Total	\$120,000	\$360,000	\$0	\$480,000	25%	

*List sources of funding: Property taxes, connection fees and revenue from rates.



UPPER SANTA CLARA RIVER

Integrated Regional Water Management

TABLE 4-3 Project Budget

Proposal Title: Upper Santa Clara River IRWMP Round 2, Prop 84 Planning Grant

Project Title: TASK 2 Recycled Water Master Plan Update Environmental Impact Report

		(a)	(b)	(c)	(d)	(e)	
Budget Category		Non-State Share* (Funding Match)	Requested Grant Funding	Other State Funds Being Used	Total	% Funding Match	Schedule
Task 2	RWMP EIR						
Subtask 2.1	Project Kick-Off	\$625	\$1,875	\$0	\$2,500	25%	Jan 2013 - Jan 2013
Subtask 2.2	Notice of Preparation	\$5,000	\$15,000	\$0	\$20,000	25%	Jan 2013 - Feb 2013
Subtask 2.3	Conduct Regular Meetings	\$1,250	\$3,750	\$0	\$5,000	25%	Jan 2013 - May 2014
Subtask 2.4	Prepare Draft Environmental Impact Report (EIR)	\$36,875	\$110,625	\$0	\$147,500	25%	Mar 2013 - Feb 2014
Subtask 2.5	Review Comments on Draft EIR	\$2,500	\$7,500	\$0	\$10,000	25%	Mar 2014 - Apr 2014
Subtask 2.6	Prepare Final EIR	\$11,250	\$33,750	\$0	\$45,000	25%	Mar 2014 - Jun 2014
Subtask 2.7	Direct Project Management	\$5,000	\$15,000	\$0	\$20,000	25%	Jan 2013 - Jun 2014
(i)	Grand Total	\$62,500	\$187,500	\$0	\$250,000	25%	

*List sources of funding: Property taxes, connection fees and revenue from rates.



UPPER SANTA CLARA RIVER

Integrated Regional Water Management

TABLE 4-3 Project Budget

Proposal Title: Upper Santa Clara River IRWMP Round 2, Prop 84 Planning Grant

Project Title: TASK 3 Santa Clarita Valley Water Use Efficiency Plan Update

		(a)	(b)	(c)	(d)	(e)	
Budget Category		Non-State Share* (Funding Match)	Requested Grant Funding	Other State Funds Being Used	Total	% Funding Match	Schedule
Task 3	Santa Clarita Valley Water Use Efficiency Plan Update						
Subtask 3.1	Analysis of Data	\$12,625	\$37,875	\$0	\$50,500	25%	Oct 2012 - Dec 2012
Subtask 3.2	Assess Conservation Efforts	\$7,800	\$23,400	\$0	\$31,200	25%	Jan 2013 - Feb 2013
Subtask 3.3	Identify and Develop Water Conservation Measures	\$7,825	\$23,475	\$0	\$31,300	25%	Mar 2013 - Apr 2013
Subtask 3.4	Assess Cost-Effectiveness	\$7,500	\$22,500	\$0	\$30,000	25%	May 2013 - Jun 2013
Subtask 3.5	Develop Conservation Plan	\$23,250	\$69,750	\$0	\$93,000	25%	Jul 2013 - Oct 2013
Subtask 3.6	Project Management	\$3,500	\$10,500	\$0	\$14,000	25%	Oct 2012 - Oct 2013
	Grand Total	\$62,500	\$187,500	\$0	\$250,000	25%	

***List sources of funding:** Property taxes, connection fees and revenue from rates, both from wholesale and contributions towards match from retailers.



UPPER SANTA CLARA RIVER

Integrated Regional Water Management

TABLE 4-5 Project Budget

Proposal Title: Upper Santa Clara River IRWMP Round 2, Prop 84 Planning Grant

Project Title: TASK 4 Grant Administration

		(a)	(b)	(c)	(d)	(e)	
Budget Category		Non-State Share* (Funding Match)	Requested Grant Funding	Other State Funds Being Used	Total	% Funding Match	Schedule
Task 4	Reports						
Subtask 4.1	Quarterly Report 1	\$375	\$1,125	\$0	\$1,500	25%	Apr 2012
	Quarterly Report 2	\$375	\$1,125	\$0	\$1,500	25%	Jul 2012
	Quarterly Report 3	\$375	\$1,125	\$0	\$1,500	25%	Oct 2012
	Quarterly Report 4	\$375	\$1,125	\$0	\$1,500	25%	Jan 2013
	Quarterly Report 5	\$375	\$1,125	\$0	\$1,500	25%	Apr 2013
	Quarterly Report 6	\$375	\$1,125	\$0	\$1,500	25%	Jul 2013
	Quarterly Report 7	\$375	\$1,125	\$0	\$1,500	25%	Oct 2013
	Quarterly Report 8	\$375	\$1,125	\$0	\$1,500	25%	Jan 2014
	Quarterly Report 9	\$375	\$1,125	\$0	\$1,500	25%	Apr 2014
Subtask 4.2	Grant Agreement Completion Final Report	\$1,775	\$5,325	\$0	\$7,100	25%	Jul 2014
Subtask 4.3	Administration	\$4,038	\$12,113	\$0	\$16,150	25%	Apr 2012-Jul 2014
	Grand Total	\$9,188	\$27,563	\$0	\$36,750	25%	

*List sources of funding: Property taxes, connection fees and revenue from rates.



UPPER SANTA CLARA RIVER

Integrated Regional Water Management

Appendix D: Budget Proposals - Round 2

Recycled Water Master Plan Grant vs Costs										
Start	Consultant	Agreement/WA #	Description	Agreement / WA Amount	Paid	Paid through	Balance	Status		
9/3/2010	IDModeling	E1011-005-40968	Recycled Water User Map Update	\$ 17,900.00	\$ 17,900.00	11/30/2010	\$ -	Completed	Recycled Water User Map and Hydraulic Model Update	
2/18/2011	IDModeling	E1011-012-43624	Recycled Water Master Plan Hydraulic Model & Pressure Zone Creation	\$ 50,908.75	\$ 50,908.75	7/30/2011	\$ -	Completed	Recycled Water User Map and Hydraulic Model Update	
Grant Subtask 1.1 Recycled Water User Map and Hydraulic Model Update Total				\$ 68,808.75	\$ 68,808.75					
For Grant Application Subtask 1.1 Use				\$ 50,000.00						
9/26/2011	Lee & Ro	11-033	Pressure Zone Evaluation	\$ 44,000.00	\$ 21,243.02	12/31/2011	\$ 22,756.98	In-Progress	Recycled Water System Analysis	
10/31/2011	Lee & Ro	11-041	Seasonal Storage Evaluation	\$ 39,100.00	\$ 23,098.38	1/27/2012	\$ 16,001.62	In-Progress	Recycled Water System Analysis	
12/1/2011	Lee & Ro	11-050	System Optimization Evaluation	\$ 19,960.00	\$ 16,799.33	1/27/2012	\$ 3,160.67	In-Progress	Recycled Water System Analysis	
Grant Subtask 1.2 Recycled Water System Analysis Total				\$ 103,060.00	\$ 61,140.73		\$ 41,919.27			
For Grant Application Subtask 1.2 Use				\$ 70,000.00						
			Overall Total	\$ 171,868.75	\$ 129,949.48					
			Total Project Cost	\$ 480,000.00	\$ 480,000.00					
			Grant Amount (75% of Total Project Cost)	\$ 360,000.00	\$ 360,000.00			Reimbursement Period: 8-6-12 to End		
			CLWA Match Amount (25% of Total Project Cost)	\$ 120,000.00	\$ 120,000.00			Match Period (Completed Work): 9-30-08 to 8-6-12. Match Period (under Grant Period: 8-6-12 to End)		
			CLWA Amount Authorized / Paid already	\$ 171,868.75	\$ 129,949.48					
			Amount CLWA budgeted/paid in excess of match amount	\$ 51,868.75	\$ 9,949.48			Cost exceeding match amount prior to Grant Start Date of 8-6-12 is not reimbursable		
Grant Subtask 1.3 Draft Recycled Water Master Plan				\$ 324,000.00						
Grant Subtask 1.4 Final Recycled Water Master Plan				\$ 36,000.00						
Total				\$ 360,000.00						
Submit this for total reimbursement since match amount is already met										

Appendix D: Budget Proposals - Round 2

USCR IRWMP R2 Prop 84_Recycled Water Master Plan Update Task 1												
Classification:												
Hourly Rate:												
	Brian Folsom	Jeff Ford	Jason Yim	Lauren Everett	Kathy Fendel	Total Hours	Total Labor Fees	Sub Consultant Fees	ODCs Fees	Total Expenses	Total Labor + Expenses	
Task 1 - Recycled Water Master Plan Update												
Subtask 1.1 Recycled Water User Map and Hydraulic Model Update	See next backup sheet									\$50,000	\$50,000	
Subtask 1.2 - Draft Recycled Water System Analysis	See next backup sheet									\$70,000	\$70,000	
Subtask 1.3 - Draft Recycled Water Master Plan						0	\$0			\$0	\$0	
1.3.1 Review Previous Documents	10	10	20	60	20	120	\$8,920			\$0	\$8,920	
1.3.2 Incorporate Regulations	10	10	10	20	0	50	\$4,600			\$0	\$4,600	
1.3.3 Finalize Analysis & Coordinate w/ Purveyors & SCV Sanitation District	20	40	80	20	40	200	\$17,380		\$500	\$500	\$17,880	
1.3.4 Identify and Evaluate Recycled Water System Implementation Phases	60	60	80	40	0	240	\$24,240			\$0	\$24,240	
1.3.5 Revise Recycled Water Hydraulic Model	40	16	60	10	0	126	\$12,694	\$180,000		\$180,000	\$192,694	
1.3.6 Prepare Draft Recycled Water Master Plan	40	20	100	120	80	360	\$27,320		\$2,000	\$2,000	\$29,320	
1.3.7 Present and Coordinate Draft RWMP with Purveyors and SCV Sanitation District	20	20	20	10	16	86	\$8,078			\$0	\$8,078	
Subtask 1.4 - Final Recycled Water Master Plan						0	\$0			\$0	\$0	
1.4.1 Review comments on Draft RWMP	10	10	40	16	10	86	\$7,348			\$0	\$7,348	
1.4.2 Finalize Hydraulic Model	40	10	60	20	10	140	\$13,060	\$30,000		\$30,000	\$43,060	
1.4.3 Prepare Final RWMP	20	20	40	80	40	200	\$15,320		\$1,500	\$1,500	\$16,820	
1.4.4 Present Final RWMP to Purveyors and SCV Sanitation District	10	10	20	16	16	72	\$5,956		\$500	\$500	\$6,456	
Task 3 - Subtotal	280	226	530	412	232	1680	\$144,916	\$210,000	\$4,500	\$334,500	\$479,416	
All Tasks Total	280	226	530	412	232	1680	\$144,916	\$210,000	\$4,500	\$334,500	\$479,416	

Appendix D: Budget Proposals - Round 2

USCR IRWMP R2 Prop 84_Recycled Water Master Plan Update EIR Task 2														
Classification:	Jeff Ford		Lauren Everett		Nancy Wartel		Total Hours	Total Labor		Comm. Charges	Sub Consultant		Total Expenses	Total Labor + Expenses
	Hourly Rate:	\$124	\$63	\$44	0%	Fees		Fees	Fees		Fees			
Task 2 - Recycled Water Master Plan Update EIR														
Subtask 2.1 Project Kick-Off	8	20	2				30	\$2,340	\$0	\$0	\$150	\$162	\$2,502	
Subtask 2.2 - Notice of Preparation	60	120	80				260	\$18,520	\$0	\$0	\$1,500	\$1,500	\$20,020	
Subtask 2.3 - Conduct Regular Meetings	14	40	6				60	\$4,520	\$0	\$0	\$500	\$500	\$5,020	
Subtask 2.4 - Prepare Draft EIR	140	180	64				384	\$31,516	\$0	\$115,000	\$1,000	\$116,000	\$147,516	
Subtask 2.5 - Review Comments on Draft EIR	40	59	30				129	\$9,997	\$0	\$0	\$0	\$0	\$9,997	
Subtask 2.6 - Prepare Final EIR	20	44	16				80	\$5,956	\$0	\$35,000	\$4,000	\$39,000	\$44,956	
Subtask 2.7 -Direct Project Management	60	165	27				252	\$19,023	\$0	\$0	\$1,000	\$1,000	\$20,023	
Task 2 - Subtotal	342	628	225				1195	\$91,872	\$0	\$150,000	\$8,150	\$158,162	\$250,034	
All Tasks Total	342	628	225				1195	\$91,872	\$0	\$150,000	\$8,150	\$158,162	\$250,034	

Appendix D: Budget Proposals - Round 2

USCR IRWMP R2 Prop 84_Santa Clarita Valley Water Use Efficiency Strategic Plan Task 3																						
Classification:	Dirk Marks		Cathy Hollomon		Matt Dickens		Stephanie Anangson		Robert McLaughlan		Nancy Wartel		Total		Labor		Sub		Total Expenses		Total Labor + Expenses	
	Hourly Rate:	\$123	\$67	\$61	\$54	\$44	\$40	\$44	\$40	\$44	\$44	Hours	Fees	Fees	Fees	Fees	Fees	Fees	Fees	Fees	Fees	Fees
Task 3 - Santa Clarita Valley Water Use Efficiency Plan Update																						
Subtask 3.1 - Analysis of Data	10	10	10	20	10	20	10	20	10	20	10	20	90	\$5,310	\$45,000	\$200	\$45,216	\$50,526				\$50,526
Subtask 3.2 - Assess Conservation Efforts	10	20	20	40	20	40	20	40	20	40	20	80	210	\$11,150	\$20,000	\$100	\$20,100	\$31,250				\$31,250
Subtask 3.3 - Identify and Develop Water Conservation Measures	10	5	5	40	5	40	5	40	5	40	5	40	110	\$6,210	\$25,000	\$100	\$25,100	\$31,310				\$31,310
Subtask 3.4 - Assess Cost-Effectiveness	10	5	5	20	5	20	5	20	5	20	5	20	70	\$4,250	\$25,000	\$500	\$25,500	\$29,750				\$29,750
Subtask 3.5 - Develop Conservation Plan	10	30	30	90	30	90	30	90	30	90	30	90	310	\$16,410	\$75,000	\$1,500	\$76,500	\$92,910				\$92,910
Subtask 3.6 -Project Management	10	0	0	200	0	200	0	200	0	200	0	200	250	\$13,790	\$500	\$500	\$500	\$14,290				\$14,290
Task 3 - Subtotal	60	70	70	410	70	290	70	290	70	290	70	290	1040	\$57,120	\$190,000	\$2,900	\$192,916	\$250,036				\$250,036
All Tasks Total	60	70	70	410	70	290	70	290	70	290	70	290	1040	\$57,120	\$190,000	\$2,900	\$192,916	\$250,036				\$250,036

Appendix D: Budget Proposals - Round 2

USCR IRWMP R2 Prop 84_Grant Admin Task 4													
Classification:	Jeff Ford			Lauren Everett			Nancy Warfel			Total		Total Labor + Expenses	
	Hourly Rate:								Hours	Fees	ODCs	Fees	
Task 4 - Reports													
Subtask 4.1 Quarterly Report 1	5	12	12	12	29	\$1,904	\$25	\$1,929				\$1,929	
Subtask 4.1 - Quarterly Report 2	5	12	12	12	29	\$1,904	\$25	\$1,929				\$1,929	
Subtask 4.1 - Quarterly Report 3	5	12	12	12	29	\$1,904	\$25	\$1,929				\$1,929	
Subtask 4.1 - Quarterly Report 4	5	12	12	12	29	\$1,904	\$25	\$1,929				\$1,929	
Subtask 4.1 - Quarterly Report 5	5	12	12	12	29	\$1,904	\$25	\$1,929				\$1,929	
Subtask 4.1 -Quarterly Report 6	5	12	12	12	29	\$1,904	\$25	\$1,929				\$1,929	
Subtask 4.1 -Quarterly Report 7	5	12	12	12	29	\$1,904	\$25	\$1,929				\$1,929	
Subtask 4.1 -Quarterly Report 8	5	12	12	12	29	\$1,904	\$25	\$1,929				\$1,929	
Subtask 4.1- Quarterly Report 9	5	12	12	12	29	\$1,904	\$25	\$1,929				\$1,929	
Subtask 4.2- Grant Agreement Completion Final Report	12	48	24	24	84	\$5,568	\$100	\$5,668				\$5,668	
Subtask 1.3- Administration	40	100	50	50	190	\$13,460	\$260	\$13,720				\$13,720	
Task 1 - Subtotal	97	256	182	182	535	\$36,164	\$585	\$36,749				\$36,749	
All Tasks Total	97	256	182	182	535	\$36,164	\$585	\$36,749				\$36,749	

<i>Attachment</i> 4	Anza Borrego Desert Integrated Regional Water Management Planning Grant Proposal Budget
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Attachment 4 consists of the following items:

✓ **Proposal Budget**

The proposal budget provides a budget estimate for each Work Plan task, as well as a breakdown of the proposed funding match and requested grant funds.

The proposal budget provides a budget estimate for each Work Plan task, as well as a breakdown of the proposed funding match and requested grant funds. Supporting information provided in the tables includes labor categories, hourly billing rates, and time estimates for each work task.

Total Proposal Cost Estimate

As described in Attachment 3, the *ABD IRWM Planning Grant Proposal* involves implementation of four tasks that will lead to development of a standards-compliant IRWM Plan, including:

- Task 1: Stakeholder Outreach & Program Administration
- Task 2: Regional Water Resources Plans
- Task 3: Prepare and Adopt the ABD-IRWM Plan
- Task 4: Grant Administration

The total budget for this proposal is \$1,256,062. Of this amount, \$414,283 (33% percent) is being provided as funding match and \$841,779 (67% percent) is being requested from DWR through the IRWM Grant Program.

Table 4-1 presents the overall grant request, while Table 4-2 presents the overall funding match, and Table 4-3 provides an overall budget for the entire *ABD IRWM Planning Grant Proposal*. The specific work items outlined in Attachment 3 are reflected in the detailed cost estimates.

Table 4-1: Cost Estimate for Grant Request

Tasks	Mtgs	Consultant Fee		Grant Request: County	Grant Request: BWD	Grant Request: RCD	Total Grant Request	Task Totals
		Total Hours	Grant Request: Consultant					
Task 1: Stakeholder Outreach and Program Administration			\$302,140	\$0	\$59,200	\$0	\$361,340	\$361,340
Task 1-1: Stakeholder Outreach (Including DACs and Tribes)	10	684	\$128,080	\$0	\$16,000	\$0	\$144,080	
1-1.1: Increase and Sustain Stakeholder Involvement	6	352	\$65,760	\$0	\$9,600	\$0	\$75,360	
1-1.2: Increase and Sustain Involvement from DAC and Tribal Entities	4	332	\$62,320	\$0	\$6,400	\$0	\$68,720	
Task 1-2: RWMG / Stakeholders Committee Meetings	48	808	\$150,760	\$0	\$38,400	\$0	\$189,160	
1-2.1: RWMG Meetings	24	404	\$75,380	\$0	\$19,200	\$0	\$94,580	
1-2.2: Stakeholders Committee Meetings including DACs and Tribes	24	404	\$75,380	\$0	\$19,200	\$0	\$94,580	
Task 1-3: Coordination with Other IRWM Regions	6	116	\$23,300	\$0	\$4,800	\$0	\$28,100	
Task 2: Regional Water Resources Plans	17	0	\$294,850	\$0	\$0	\$0	\$294,850	\$294,850
Task 2-1: Characterization of Current Regional Water Supply	2	0	\$0	\$0	\$0	\$0	\$0	\$0
2-1.1. Compilation of Available Hydrogeologic Data	0	0	\$0	\$0	\$0	\$0	\$0	\$0
2-1.2. Collection and Analysis of New Data	0	0	\$0	\$0	\$0	\$0	\$0	\$0
2-1.3. Conversion of Fine-Element Model into MODFLOW	0	0	\$0	\$0	\$0	\$0	\$0	\$0
2-1-4: Update the Model with Current Information	0	0	\$0	\$0	\$0	\$0	\$0	\$0
2-1-5: Prepare Reports	0	0	\$0	\$0	\$0	\$0	\$0	\$0
Task 2-2: Managing the Region's Groundwater Basins	5	567	\$124,620	\$0	\$0	\$0	\$124,620	\$124,620
2-2.1. Alternative Strategies for Establishing Managed Basins	226	226	\$49,180	\$0	\$0	\$0	\$49,180	
2-2.2. Mechanisms for Funding Groundwater Management Alternatives	237	237	\$51,960	\$0	\$0	\$0	\$51,960	
2-2.3. Addressing Environmental Integrity Issues	104	104	\$23,480	\$0	\$0	\$0	\$23,480	
Task 2-3: Forecasting Changes in Water Quality as the Groundwater Basins are Dewatered	5	498	\$102,210	\$0	\$0	\$0	\$102,210	\$102,210
2-3.1. Methodologies for Developing Water Quality Forecasts	252	252	\$51,780	\$0	\$0	\$0	\$51,780	
2-3.2. Analyze Potential Economic Impacts and Impact Timeframes	184	184	\$38,360	\$0	\$0	\$0	\$38,360	
2-3.3. Addressing Environmental Integrity Issues	62	62	\$12,070	\$0	\$0	\$0	\$12,070	
Task 2-4: Anticipating the Impacts of Climate Change on Regional Water Resources	5	356	\$68,020	\$0	\$0	\$0	\$68,020	\$68,020
2-4.1. Climate Change Vulnerability Analysis and Prioritization	224	224	\$42,720	\$0	\$0	\$0	\$42,720	
2-4.2. Flood Control and Other Adaptation Strategies	90	90	\$17,130	\$0	\$0	\$0	\$17,130	
2-4.3. Addressing Environmental Integrity Issues	42	42	\$8,170	\$0	\$0	\$0	\$8,170	

Table 4-1: Cost Estimate for Grant Request

Tasks	Mtg	Consultant Fee		Grant Request: County	Grant Request: BWD	Grant Request: RCD	Total Grant Request	Task Totals
		Total Hours	Grant Request: Consultant					
Task 3: Prepare and Adopt the ABD IRWM Plan			\$143,500	\$0	\$0	\$0	\$143,500	\$143,500
Task 3-1: Updates to Governance and Financing Plan	0	48	\$9,020	\$0	\$0	\$0	\$9,020	
Task 3-2: Refine IRWM Plan Goals, Objectives, and Priorities	0	48	\$9,020	\$0	\$0	\$0	\$9,020	
Task 3-3: Develop Data Management Plan	0	48	\$9,880	\$0	\$0	\$0	\$9,880	
Task 3-4: Develop Performance and Monitoring Methods	0	36	\$6,900	\$0	\$0	\$0	\$6,900	
Task 3-5: Describe IRWM Process relating to Local Land Use Planning	0	40	\$7,560	\$0	\$0	\$0	\$7,560	
Task 3-6: Prepare IRWM Plan per State Guidelines	0	608	\$101,120	\$0	\$0	\$0	\$101,120	
1. Introduction		16	\$2,920	\$0	\$0	\$0	\$2,920	
2. Region Description, Issues and Needs		60	\$9,800	\$0	\$0	\$0	\$9,800	
3. Governance and Stakeholder Involvement		24	\$3,920	\$0	\$0	\$0	\$3,920	
4. Vision, Mission, Goals, and Objectives		16	\$2,920	\$0	\$0	\$0	\$2,920	
5. Resource Management Strategies		32	\$5,840	\$0	\$0	\$0	\$5,840	
6. Integration Opportunities		24	\$4,240	\$0	\$0	\$0	\$4,240	
7. Project Evaluation and Prioritization		48	\$8,300	\$0	\$0	\$0	\$8,300	
8. Data Management and Technical Analysis		16	\$2,920	\$0	\$0	\$0	\$2,920	
9. Framework for Implementation		48	\$8,300	\$0	\$0	\$0	\$8,300	
Production of Administrative Draft IRWM Plan		124	\$19,920	\$0	\$0	\$0	\$19,920	
Production of Public Draft IRWM Plan		108	\$17,920	\$0	\$0	\$0	\$17,920	
Production of Final IRWM Plan & Executive Summary		92	\$14,120	\$0	\$0	\$0	\$14,120	
Task 4: Grant Administration	0	0	\$0	\$0	\$42,089	\$0	\$42,089	\$42,089
TOTAL:		3,857	\$740,490	\$0	\$101,289	\$0	\$841,779	\$841,779

Notes:
Costs for consultant labor based on RMC estimate.

Table 4-2: Cost Estimate for Funding Match

Tasks										
Tasks	Mtgs	Total Hours	Funding Match: Consultant	Funding Match: BWD	Funding Match: County	Funding Match: RCD	Total Funding Match	Task Totals		
Task 1: Stakeholder Outreach and Program Administration			\$0	\$0	\$0	\$0	\$0	\$0		
Task 1-1: Stakeholder Outreach (Including DACs and Tribes)	10	0	\$0	\$0	\$0	\$0	\$0	\$0		
Task 1-2: RWMG / Stakeholders Committee Meetings	48	0	\$0	\$0	\$0	\$0	\$0	\$0		
Task 1-3: Coordination with Other IRWM Regions	6	0	\$0	\$0	\$0	\$0	\$0	\$0		
Task 2: Regional Water Resources Plans			\$0	\$414,283	\$0	\$0	\$414,283	\$414,283		
Task 2-1: Characterization of Current Regional Water Supply	2	0	\$0	\$414,283	\$0	\$0	\$414,283	\$414,283		
2-1.1. <i>Compilation of Available Hydrogeologic Data</i>		0	\$0	\$50,169	\$0	\$0	\$50,169	\$50,169		
2-1.2. <i>Collection and Analysis of New Data</i>		0	\$0	\$118,992	\$0	\$0	\$118,992	\$118,992		
2-1.3. <i>Conversion of Fine-Element Model into MODFLOW</i>		0	\$0	\$8,108	\$0	\$0	\$8,108	\$8,108		
2-1-4: <i>Update the Model with Current Information</i>		0	\$0	\$186,613	\$0	\$0	\$186,613	\$186,613		
2-1-5: <i>Prepare Reports</i>		0	\$0	\$50,401	\$0	\$0	\$50,401	\$50,401		
Task 2-2: Managing the Region's Groundwater Basins	5	0	\$0	\$0	\$0	\$0	\$0	\$0		
2-2.1. <i>Alternative Strategies for Establishing Managed Basins</i>		0	\$0	\$0	\$0	\$0	\$0	\$0		
2-2.2. <i>Mechanisms for Funding Groundwater Management Alternatives</i>		0	\$0	\$0	\$0	\$0	\$0	\$0		
2-2.3. <i>Addressing Environmental Integrity Issues</i>		0	\$0	\$0	\$0	\$0	\$0	\$0		
Task 2-3: Forecasting Changes in Water Quality as the Groundwater Basins are Dewatered	5	0	\$0	\$0	\$0	\$0	\$0	\$0		
2-3.1. <i>Methodologies for Developing Water Quality Forecasts</i>		0	\$0	\$0	\$0	\$0	\$0	\$0		
2-3.2. <i>Analyze Potential Economic Impacts and Impact Timeframes</i>		0	\$0	\$0	\$0	\$0	\$0	\$0		
2-3.3. <i>Addressing Environmental Integrity Issues</i>		0	\$0	\$0	\$0	\$0	\$0	\$0		
Task 2-4: Anticipating the Impacts of Climate Change on Regional Water Resources	5	0	\$0	\$0	\$0	\$0	\$0	\$0		
2-4.1. <i>Climate Change Vulnerability Analysis and Prioritization</i>		0	\$0	\$0	\$0	\$0	\$0	\$0		
2-4.2. <i>Flood Control and Other Adaptation Strategies</i>		0	\$0	\$0	\$0	\$0	\$0	\$0		
2-4.3. <i>Addressing Environmental Integrity Issues</i>		0	\$0	\$0	\$0	\$0	\$0	\$0		
Task 3: Prepare and Adopt the ABD IRWM Plan			\$0	\$0	\$0	\$0	\$0	\$0		
Task 3-1: Updates to Governance and Financing Plan	0	0	\$0	\$0	\$0	\$0	\$0	\$0		
Task 3-2: Refine IRWM Plan Goals, Objectives, and Priorities	0	0	\$0	\$0	\$0	\$0	\$0	\$0		
Task 3-3: Develop Data Management Plan	0	0	\$0	\$0	\$0	\$0	\$0	\$0		
Task 3-4: Develop Performance and Monitoring Methods	0	0	\$0	\$0	\$0	\$0	\$0	\$0		

Table 4-2: Cost Estimate for Funding Match

Tasks	Mtgs	Total Hours	Funding Match: Consultant	Funding Match: BWD	Funding Match: County	Funding Match: RCD	Total Funding Match	Task Totals
Task 3-5: Describe IRWM Process relating to Local Land Use Planning	0	0	\$0	\$0	\$0	\$0	\$0	
Task 3-6: Prepare IRWM Plan per State Guidelines	0	0	\$0	\$0	\$0	\$0	\$0	
1. Introduction		0	\$0	\$0	\$0	\$0	\$0	
2. Region Description, Issues and Needs		0	\$0	\$0	\$0	\$0	\$0	
3. Governance and Stakeholder Involvement		0	\$0	\$0	\$0	\$0	\$0	
4. Vision, Mission, Goals, and Objectives		0	\$0	\$0	\$0	\$0	\$0	
5. Resource Management Strategies		0	\$0	\$0	\$0	\$0	\$0	
6. Integration Opportunities		0	\$0	\$0	\$0	\$0	\$0	
7. Project Evaluation and Prioritization		0	\$0	\$0	\$0	\$0	\$0	
8. Data Management and Technical Analysis		0	\$0	\$0	\$0	\$0	\$0	
9. Framework for Implementation		0	\$0	\$0	\$0	\$0	\$0	
Production of Administrative Draft IRWM Plan		0	\$0	\$0	\$0	\$0	\$0	
Production of Public Draft IRWM Plan		0	\$0	\$0	\$0	\$0	\$0	
Production of Final IRWM Plan & Executive Summary		0	\$0	\$0	\$0	\$0	\$0	
Task 4: Grant Administration	0	0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL:		0	0	\$414,283	\$0	\$0	\$414,283	\$414,283

Notes:

Costs are based on actual hourly rates and attendance assumptions for BWD, County, and RCD.

Table 4-3: Cost Estimate for Total Grant Proposal

Tasks	Mtgs	Total Grant Request	Total Funding Match	Total Proposal Cost	% Funding Match
Task 1: Stakeholder Outreach and Program Administration		\$361,340	\$0	\$361,340	0%
Task 1-1: Stakeholder Outreach (Including DACs and Tribes)	10	\$144,080	\$0	\$144,080	0%
Task 1-2: RWMG / Stakeholders Committee Meetings	48	\$189,160	\$0	\$189,160	0%
Task 1-3: Coordination with Other IRWM Regions	6	\$28,100	\$0	\$28,100	0%
Task 2: Regional Water Resources Plans		\$294,650	\$414,283	\$709,133	58%
Task 2-1: Characterization of Current Regional Water Supply	2	\$0	\$414,283	\$414,283	100%
2-1.1. Compilation of Available Hydrogeologic Data		\$0	\$50,169	\$50,169	100%
2-1.2. Collection and Analysis of New Data		\$0	\$118,992	\$118,992	100%
2-1.3. Conversion of Fine-Element Model into MODFLOW		\$0	\$8,108	\$8,108	100%
2-1-4: Update the Model with Current Information		\$0	\$186,613	\$186,613	100%
2-1-5: Prepare Reports		\$0	\$50,401	\$50,401	100%
Task 2-2: Managing the Region's Groundwater Basins	5	\$124,620	\$0	\$124,620	0%
2-2.1. Alternative Strategies for Establishing Managed Basins		\$49,180	\$0	\$49,180	0%
2-2.2. Mechanisms for Funding Groundwater Management Alternatives		\$51,960	\$0	\$51,960	0%
2-2.3. Addressing Environmental Integrity Issues		\$23,480	\$0	\$23,480	0%
Task 2-3: Forecasting Changes in Water Quality as the Groundwater Basins are Dewatered	5	\$102,210	\$0	\$102,210	0%
2-3.1. Methodologies for Developing Water Quality Forecasts		\$51,780	\$0	\$51,780	0%
2-3.2. Analyze Potential Economic Impacts and Impact Timeframes		\$38,360	\$0	\$38,360	0%
2-3.3. Addressing Environmental Integrity Issues		\$12,070	\$0	\$12,070	0%
Task 2-4: Anticipating the Impacts of Climate Change on Regional Water Resources	5	\$68,020	\$0	\$68,020	0%
2-4.1. Climate Change Vulnerability Analysis and Prioritization		\$42,720	\$0	\$42,720	0%
2-4.2. Flood Control and Other Adaptation Strategies		\$17,130	\$0	\$17,130	0%
2-4.3. Addressing Environmental Integrity Issues		\$8,170	\$0	\$8,170	0%
Task 3: Prepare and Adopt the ABD IRWM Plan		\$143,500	\$0	\$143,500	0%
Task 3-1: Updates to Governance and Financing Plan	0	\$9,020	\$0	\$9,020	0%
Task 3-2: Refine IRWM Plan Goals, Objectives, and Priorities	0	\$9,020	\$0	\$9,020	0%
Task 3-3: Develop Data Management Plan	0	\$9,880	\$0	\$9,880	0%

Table 4-3: Cost Estimate for Total Grant Proposal

Tasks	Mtgs	Total Grant Request	Total Funding Match	Total Proposal Cost	% Funding Match
Task 3-4: Develop Performance and Monitoring Methods	0	\$6,900	\$0	\$6,900	0%
Task 3-5: Describe IRWM Process relating to Local Land Use Planning	0	\$7,560	\$0	\$7,560	0%
Task 3-6: Prepare IRWM Plan per State Guidelines	0	\$101,120	\$0	\$101,120	0%
1. Introduction	0	\$2,920	\$0	\$2,920	0%
2. Region Description, Issues and Needs	0	\$9,800	\$0	\$9,800	0%
3. Governance and Stakeholder Involvement	0	\$3,920	\$0	\$3,920	0%
4. Vision, Mission, Goals, and Objectives	0	\$2,920	\$0	\$2,920	0%
5. Resource Management Strategies	0	\$5,840	\$0	\$5,840	0%
6. Integration Opportunities	0	\$4,240	\$0	\$4,240	0%
7. Project Evaluation and Prioritization	0	\$8,300	\$0	\$8,300	0%
8. Data Management and Technical Analysis	0	\$2,920	\$0	\$2,920	0%
9. Framework for Implementation	0	\$8,300	\$0	\$8,300	0%
Production of Administrative Draft IRWM Plan	0	\$19,920	\$0	\$19,920	0%
Production of Public Draft IRWM Plan	0	\$17,920	\$0	\$17,920	0%
Production of Final IRWM Plan & Executive Summary	0	\$14,120	\$0	\$14,120	0%
Task 4: Grant Administration	0	\$42,089	\$0	\$42,089	0%
TOTAL:	79	\$841,779	\$414,283	\$1,256,062	33%

Funding Match

The total funding match provided in the proposal is 33%. This funding match is comprised of the following non-State funds:

- Funds from the BWD to pay for the *Characterization of Current Regional Water Supply* study in Task 2-1.

Matching funds included under Task 2-1 include actual and projected costs that either were incurred or will be incurred by BWD for the *Characterization of Current Regional Water Supply* study. **Exhibit A** to this attachment includes backup documentation that demonstrates actual costs incurred or to be incurred under the BWD-USGS contract. Costs were calculated as actual costs billed for each task, multiplied by a factor of 2/3 (approximately 67%), which takes into consideration the funding agreement between BWD and USGS.

Detailed Work Item Budgets

The following sections describe how the budget estimates included within Tables 4-1 through Table 4-3 were developed. This includes supporting information for the budget such as labor categories, hourly rates, and labor time estimates.

Task 1: Stakeholder Outreach and Program Administration

The total costs for Task 1: Stakeholder Outreach and Program Administration are \$361,340. This total amount is being requested under the *Proposition 84 Planning Grant*. Table 4-4 below provides a detailed listing of all applicable costs. All costs are based upon estimates of the amount of hours required to complete each task and the persons required to complete each task. Please note that with respect to the grant request for BWD, time was calculated for two (2) persons to attend each meeting outlined within Task 1 at a standard billing rate of \$100 per hour. Hourly assumptions associated with each task are described in detail below.

Table 4-4: Budget Breakdown for Task 1: Stakeholder Outreach & Program Administration

Task	Discipline	Hourly Wage (\$/hr)	Number of Hours	Funding Match	Grant Request	Total
Consultant Labor						
1-1	Principal	\$265	32	\$0	\$8,480	\$8,480
1-1	Project Manager	\$200	260	\$0	\$52,000	\$52,000
1-1	Project Planner	\$165	240	\$0	\$39,600	\$39,600
1-1	Graphics	\$125	32	\$0	\$4,000	\$4,000
1-1	Administrator	\$95	0	\$0	\$0	\$0
1-1	Facilitator	\$200	120	\$0	\$24,000	\$24,000
Staff Labor – Grant Request						
1-1	BWD Staff	\$100	80	\$0	\$8,000	\$8,000
1-1	BWD Staff or Board Member	\$100	80	\$0	\$8,000	\$8,000
Task 1-1 Subtotal				\$0	\$144,080	\$144,080
Consultant Labor						
1-2	Principal	\$265	40	\$0	\$10,600	\$10,600
1-2	Project Manager	\$200	384	\$0	\$76,800	\$76,800
1-2	Project Planner	\$165	240	\$0	\$39,600	\$39,600
1-2	Graphics	\$125	0	\$0	\$0	\$0
1-2	Administrator	\$95	48	\$0	\$4,560	\$4,560
1-2	Facilitator	\$200	96	\$0	\$19,200	\$19,200
In-Kind Staff Labor						
1-2	BWD Staff	\$100	192	\$0	\$19,200	\$19,200
1-2	BWD Staff or Board Member	\$100	192	\$0	\$19,200	\$19,200
Task 1-2 Subtotal				\$0	\$189,160	\$189,160
Consultant Labor						
1-3	Principal	\$265	8	\$0	\$2,120	\$2,120
1-3	Project Manager	\$200	72	\$0	\$14,400	\$14,400
1-3	Project Planner	\$165	12	\$0	\$1,980	\$1,980
1-3	Graphics	\$125	0	\$0	\$0	\$0
1-3	Administrator	\$95	0	\$0	\$0	\$0
1-3	Facilitator	\$200	24	\$0	\$4,800	\$4,800
In-Kind Staff Labor						
1-3	BWD Staff	\$100	24	\$0	\$2,400	\$2,400
1-3	BWD Staff or Board Member	\$100	24	\$0	\$2,400	\$2,400
Task 1-3 Subtotal				\$0	\$28,100	\$28,100
Task 1 Total				\$0	\$361,340	\$361,340

Task 1-1 Stakeholder Outreach (Including DACs and Tribes):

This task includes up to 10 total meetings, including the following:

- Up to six (6) public workshops, and
- Up to four (4) tribal and DAC outreach meetings.

It is assumed that each public workshop and DAC and tribal meeting will require approximately 8 hours from the team members and BWD staff and/or board representatives participating in each meeting (refer to the hourly assumptions in Table 4-4 above). In addition to meetings, this task will include production of outreach materials. The costs for outreach materials are factored into the hourly costs for the consultant team anticipated to complete the majority of this work. As such, the total costs for this task are those

shown above in Table 4-4, and total \$144,080. \$0 of this is anticipated as funding match; therefore, \$144,080 is included within the grant request.

Task 1-2 RWMG and Stakeholders Committee Meetings (Including DACs and Tribes):

This task includes up to 48 total meetings, including RWMG Meetings and Stakeholders Committee Meetings. It is assumed that half (approximately 12) of the Stakeholders Committee meetings will be held in-person at BWD in Borrego Springs, and half will be held via conference call and webinar. Any costs associated with production of materials such as handouts, meeting notes, and webinars are included within the person-hours estimate included within Table 4-4. Further, BWD staff and board representatives are assumed to attend each meeting, which will therefore require four (4) hours of time from each BWD staff or board representative per meeting. As such, the total costs for this task are those shown above in Table 4-4, and total \$189,160. \$0 of this is anticipated as funding match; therefore, \$189,160 is included within the grant request.

Task 1-3 Coordination with other IRWM Regions:

This task includes up to six (6) total meetings involving inter-regional IRWM regions within the Colorado River Funding Area. Any costs associated with production of materials such as handouts, meeting notes, and webinars are included within the person-hours estimate included within Table 4-4. Further, BWD staff and board representatives are assumed to attend each meeting, which will therefore require four (4) hours of time from each BWD staff or board representative per meeting. As such, the total costs for this task are those shown above in Table 4-4, and total \$28,100. \$0 of this is anticipated as funding match; therefore, \$28,100 is included within the grant request.

Task 2: Regional Water Resources Plans

The total cost for Task 2: Regional Water Resources Plans is \$709,133. Table 4-5 below provides a detailed listing of all applicable costs for each task included within Task 2. All costs are based upon estimates of the amount of hours required to complete each task and the persons required to complete each task. For Task 2-1, costs are presented in lump sums because they represent actual incurred costs (refer to **Exhibit A**). The following sections provide cost breakdowns for each task on a subtask level.

Table 4-5: Budget Breakdown for Task 2 Regional Water Resources Plans

Task	Discipline	Hourly Wage (\$/hr)	Number of Hours	Funding Match	Grant Request	Total
Consultant Labor						
2-1	All Consultant Disciplines	N/A	0	\$0	\$0	\$0
BWD and USGS Input						
2-1	Lump Sum (refer to Table 4-6 and Exhibit A)			\$414,283	\$0	\$414,283
Task 2-1 Subtotal				\$414,283	\$0	\$414,283
Consultant Labor						
2-2	Principal	\$265	56	\$0	\$14,840	\$14,840
2-2	Sr. Project Manager	\$225	32	\$0	\$7,200	\$7,200
2-2	Project Manager	\$200	108	\$0	\$21,600	\$21,600
2-2	Project Engineer	\$185	60	\$0	\$11,100	\$11,100
2-2	Project Planner	\$165	16	\$0	\$2,640	\$2,640
2-2	Graphics	\$125	8	\$0	\$1,000	\$1,000
2-2	Administrator	\$95	0	\$0	\$0	\$0
2-2	Facilitator	\$200	32	\$0	\$6,400	\$6,400
2-2	Economist	\$200	125	\$0	\$25,000	\$25,000
2-2	Attorney	\$268	130	\$0	\$34,840	\$34,840
In-Kind Staff Labor						
2-2	All RWMG Staff	N/A	0	\$0	\$0	\$0
Task 2-2 Subtotal				\$0	\$124,620	\$124,620
Consultant Labor						
2-3	Principal	\$265	42	\$0	\$11,130	\$11,130
2-3	Sr. Project Manager	\$225	104	\$0	\$23,400	\$23,400
2-3	Project Manager	\$200	152	\$0	\$30,400	\$30,400
2-3	Project Engineer	\$185	104	\$0	\$19,240	\$19,240
2-3	Project Planner	\$165	16	\$0	\$2,640	\$2,640
2-3	Graphics	\$125	8	\$0	\$1,000	\$1,000
2-3	Administrator	\$95	0	\$0	\$0	\$0
2-3	Facilitator	\$200	32	\$0	\$6,400	\$6,400
2-3	Economist	\$200	40	\$0	\$8,000	\$8,000
2-3	Attorney	\$268	0	\$0	\$0	\$0
In-Kind Staff Labor						
2-3	All RWMG Staff	N/A	0	\$0	\$0	\$0
Task 2-3 Subtotal				\$0	\$102,210	\$102,210
Consultant Labor						
2-4	Principal	\$265	12	\$0	\$3,180	\$3,180
2-4	Sr. Project Manager	\$225	84	\$0	\$18,900	\$18,900
2-4	Project Manager	\$200	96	\$0	\$19,200	\$19,200
2-4	Project Engineer	\$185	0	\$0	\$0	\$0
2-4	Project Planner	\$165	156	\$0	\$25,740	\$25,740

Appendix D: Budget Proposals - Round 2

Anza Borrego Desert Planning Grant Proposal
Attachment 4: Budget

2-4	Graphics	\$125	8	\$0	\$1,000	\$1,000
2-4	Administrator	\$95	0	\$0	\$0	\$0
2-4	Facilitator	\$200	0	\$0	\$0	\$0
2-4	Economist	\$200	0	\$0	\$0	\$0
2-4	Attorney	\$268	0	\$0	\$0	\$0
In-Kind Staff Labor						
2-4	All RWMG Staff	N/A	0	\$0	\$0	\$0
Task 2-4 Subtotal				\$0	\$68,020	\$68,020
Task 2 Total				\$414,283	\$294,850	\$709,133

Task 2-1 Characterization of Current Regional Water Supply

The total costs for this task are included in detail in Table 4-6 below. Please note that the costs included within this table are in the form of lump sum because these costs reflect actual costs that have been expended through the BWD-USGS contract. Supporting documentation for these costs, which are being utilized as funding match, are included within **Exhibit A** of this attachment.

Table 4-6: Budget Breakdown for Task 2-1 Characterization of Current Regional Water Supply

Task	Subtasks	Lump Sum	Total	Funding Match	Grant Request
2-1.1	Compilation of Available Hydrogeologic Data	\$50,169	\$50,169	\$50,169	\$0
2-1.2	Collection and Analysis of New Data	\$118,992	\$118,992	\$118,992	\$0
2-1.3	Conversion of Fine-Element Model into MODFLOW	\$8,108	\$8,108	\$8,108	\$0
2-1.4	Update the Model with Current Information	\$186,613	\$186,613	\$186,613	\$0
2-1.5	Prepare Reports	\$50,401	\$50,401	\$50,401	\$0
Task 2-1 Total			\$414,283	\$414,283	\$0

Task 2-2 Managing the Region’s Groundwater Basins:

This task includes up to five (5) Stakeholders Committee meetings; draft and final Groundwater Management Technical Memorandum; and integration of conclusions and results from the Groundwater Management Technical Memorandum into the ABD IRWM Plan. The costs for producing deliverables are factored into the hourly costs for the consultant team anticipated to complete this work. As such, the total costs for this task are those shown below in Table 4-7, and total \$124,620. \$0 of this is anticipated as funding match, and \$124,620 is part of the grant request.

Table 4-7: Budget Breakdown for Task 2-2 Managing the Region’s Groundwater Basins

Task	Discipline	Hourly Wage (\$/hr)	Number of Hours	Funding Match	Grant Request	Total
Consultant Labor						
2-2.1	Principal	\$265	32	\$0	\$8,480	\$8,480
2-2.1	Sr. Project Manager	\$225	0	\$0	\$0	\$0
2-2.1	Project Manager	\$200	60	\$0	\$12,000	\$12,000
2-2.1	Project Engineer	\$185	60	\$0	\$11,100	\$11,100
2-2.1	Project Planner	\$165	0	\$0	\$0	\$0
2-2.1	Graphics	\$125	8	\$0	\$1,000	\$1,000
2-2.1	Administrator	\$95	0	\$0	\$0	\$0
2-2.1	Facilitator	\$200	16	\$0	\$3,200	\$3,200
2-2.1	Attorney	\$268	50	\$0	\$13,400	\$13,400
In-Kind Staff Labor						
2-2.1	All RWMG Staff	N/A	0	\$0	\$0	\$0
Subtask 2-2.1 Subtotal				\$0	\$49,180	\$49,180
Consultant Labor						
2-2.2	Principal	\$265	16	\$0	\$4,240	\$4,240
2-2.2	Sr. Project Manager	\$225	32	\$0	\$7,200	\$7,200
2-2.2	Project Manager	\$200	8	\$0	\$1,600	\$1,600
2-2.2	Project Engineer	\$185	0	\$0	\$0	\$0
2-2.2	Project Planner	\$165	0	\$0	\$0	\$0
2-2.2	Graphics	\$125	0	\$0	\$0	\$0
2-2.2	Administrator	\$95	0	\$0	\$0	\$0
2-2.2	Facilitator	\$200	16	\$0	\$3,200	\$3,200
2-2.2	Economist	\$200	125	\$0	\$25,000	\$25,000
2-2.2	Attorney	\$268	40	\$0	\$10,720	\$10,720
In-Kind Staff Labor						
2-2.2	All RWMG Staff	N/A	0	\$0	\$0	\$0
Subtask 2-2.2 Subtotal				\$0	\$51,960	\$51,960
Consultant Labor						
2-2.3	Principal	\$265	8	\$0	\$2,120	\$2,120
2-2.3	Sr. Project Manager	\$225	0	\$0	\$0	\$0
2-2.3	Project Manager	\$200	40	\$0	\$8,000	\$8,000
2-2.3	Project Engineer	\$185	0	\$0	\$0	\$0
2-2.3	Project Planner	\$165	16	\$0	\$2,640	\$2,640
2-2.3	Graphics	\$125	0	\$0	\$0	\$0
2-2.3	Administrator	\$95	0	\$0	\$0	\$0
2-2.3	Facilitator	\$200	0	\$0	\$0	\$0
2-2.3	Economist	\$200	0	\$0	\$0	\$0
2-2.3	Attorney	\$268	40	\$0	\$10,720	\$10,720
In-Kind Staff Labor						
2-2.3	All RWMG Staff	N/A	0	\$0	\$0	\$0
Subtask 2-2.3 Subtotal				\$0	\$23,480	\$23,480
Task 2-2 Total				\$0	\$124,620	\$124,620

Task 2-3 Forecasting Changes in Water Quality as the Groundwater Basins are Dewatered

This task includes up to five (5) Stakeholders Committee meetings; draft and final Water Quality Technical Memorandum; and integration of conclusions and results from the Water Quality Technical Memorandum into the ABD IRWM Plan. The costs for producing deliverables are factored into the hourly costs for the consultant team anticipated to complete this work. As such, the total costs for this task are those shown below in Table 4-8, and total \$102,210. \$0 of this is anticipated as funding match, and \$102,210 is part of the grant request.

Table 4-8: Budget Breakdown for Task 2-3 Forecasting Changes in Water Quality as the Groundwater Basins are Dewatered

Task	Discipline	Hourly Wage (\$/hr)	Number of Hours	Funding Match	Grant Request	Total
Consultant Labor						
2-3.1	Principal	\$265	24	\$0	\$6,360	\$6,360
2-3.1	Sr. Project Manager	\$225	60	\$0	\$13,500	\$13,500
2-3.1	Project Manager	\$200	72	\$0	\$14,400	\$14,400
2-3.1	Project Engineer	\$185	72	\$0	\$13,320	\$13,320
2-3.1	Project Planner	\$165	0	\$0	\$0	\$0
2-3.1	Graphics	\$125	8	\$0	\$1,000	\$1,000
2-3.1	Administrator	\$95	0	\$0	\$0	\$0
2-3.1	Facilitator	\$200	16	\$0	\$3,200	\$3,200
2-3.1	Economist	\$200	0	\$0	\$0	\$0
In-Kind Staff Labor						
2-3.1	All RWMG Staff	N/A	0	\$0	\$0	\$0
Subtask 2-3.1 Subtotal				\$0	\$51,780	\$51,780
Consultant Labor						
2-3.2	Principal	\$265	16	\$0	\$4,240	\$4,240
2-3.2	Sr. Project Manager	\$225	40	\$0	\$9,000	\$9,000
2-3.2	Project Manager	\$200	40	\$0	\$8,000	\$8,000
2-3.2	Project Engineer	\$185	32	\$0	\$5,920	\$5,920
2-3.2	Project Planner	\$165	0	\$0	\$0	\$0
2-3.2	Graphics	\$125	0	\$0	\$0	\$0
2-3.2	Administrator	\$95	0	\$0	\$0	\$0
2-3.2	Facilitator	\$200	16	\$0	\$3,200	\$3,200
2-3.2	Economist	\$200	40	\$0	\$8,000	\$8,000
In-Kind Staff Labor						
2-3.2	All RWMG Staff	N/A	0	\$0	\$0	\$0
Subtask 2-3.2 Subtotal				\$0	\$38,360	\$38,360
Consultant Labor						
2-3.3	Principal	\$265	2	\$0	\$530	\$530
2-3.3	Sr. Project Manager	\$225	4	\$0	\$900	\$900
2-3.3	Project Manager	\$200	40	\$0	\$8,000	\$8,000
2-3.3	Project Engineer	\$185	0	\$0	\$0	\$0
2-3.3	Project Planner	\$165	16	\$0	\$2,640	\$2,640
2-3.3	Graphics	\$125	0	\$0	\$0	\$0
2-3.3	Administrator	\$95	0	\$0	\$0	\$0
2-3.3	Facilitator	\$200	0	\$0	\$0	\$0
2-3.3	Economist	\$200	0	\$0	\$0	\$0
In-Kind Staff Labor						
2-3.3	All RWMG Staff	N/A	0	\$0	\$0	\$0
Subtask 2-3.3 Subtotal				\$0	\$12,070	\$12,070
Task 2-3 Total				\$0	\$102,210	\$102,210

Task 2-4 Anticipating the Impacts of Climate Change on Regional Water Resources

This task includes up to five (5) Stakeholders Committee meetings; draft and final Climate Change Technical Memorandum; and integration of conclusions and results from the Climate Change Technical Memorandum into the ABD IRWM Plan. The costs for producing deliverables are factored into the hourly costs for the consultant team anticipated to complete this work. As such, the total costs for this task are those shown below in Table 4-9, and total \$68,020. \$0 of this is anticipated as funding match, and \$68,020 is part of the grant request.

Table 4-9: Budget Breakdown for Task 2-4 Anticipating the Impacts of Climate Change on Regional Water Resources

Task	Discipline	Hourly Wage (\$/hr)	Number of Hours	Funding Match	Grant Request	Total
Consultant Labor						
2-4.1	Principal	\$265	8	\$0	\$2,120	\$2,120
2-4.1	Sr. Project Manager	\$225	60	\$0	\$13,500	\$13,500
2-4.1	Project Manager	\$200	48	\$0	\$9,600	\$9,600
2-4.1	Project Engineer	\$185	0	\$0	\$0	\$0
2-4.1	Project Planner	\$165	100	\$0	\$16,500	\$16,500
2-4.1	Graphics	\$125	8	\$0	\$1,000	\$1,000
2-4.1	Administrator	\$95	0	\$0	\$0	\$0
2-4.1	Facilitator	\$200	0	\$0	\$0	\$0
2-4.1	Economist	\$200	0	\$0	\$0	\$0
In-Kind Staff Labor						
2-4.1	All RWMG Staff	N/A	0	\$0	\$0	\$0
Subtask 2-4.1 Subtotal				\$0	\$42,720	\$42,720
Consultant Labor						
2-4.2	Principal	\$265	2	\$0	\$530	\$530
2-4.2	Sr. Project Manager	\$225	16	\$0	\$3,600	\$3,600
2-4.2	Project Manager	\$200	32	\$0	\$6,400	\$6,400
2-4.2	Project Engineer	\$185	0	\$0	\$0	\$0
2-4.2	Project Planner	\$165	40	\$0	\$6,600	\$6,600
2-4.2	Graphics	\$125	0	\$0	\$0	\$0
2-4.2	Administrator	\$95	0	\$0	\$0	\$0
2-4.2	Facilitator	\$200	0	\$0	\$0	\$0
2-4.2	Economist	\$200	0	\$0	\$0	\$0
In-Kind Staff Labor						
2-4.2	All RWMG Staff	N/A	0	\$0	\$0	\$0
Subtask 2-4.2 Subtotal				\$0	\$17,130	\$17,130
Consultant Labor						
2-4.3	Principal	\$265	2	\$0	\$530	\$530
2-4.3	Sr. Project Manager	\$225	8	\$0	\$1,800	\$1,800
2-4.3	Project Manager	\$200	16	\$0	\$3,200	\$3,200
2-4.3	Project Engineer	\$185	0	\$0	\$0	\$0
2-4.3	Project Planner	\$165	16	\$0	\$2,640	\$2,640
2-4.3	Graphics	\$125	0	\$0	\$0	\$0
2-4.3	Administrator	\$95	0	\$0	\$0	\$0
2-4.3	Facilitator	\$200	0	\$0	\$0	\$0
2-4.3	Economist	\$200	0	\$0	\$0	\$0
In-Kind Staff Labor						

**Anza Borrego Desert Planning Grant Proposal
Attachment 4: Budget**

2-4.3	All RWMG Staff	N/A	0	\$0	\$0	\$0
Subtask 2-4.3 Subtotal				\$0	\$8,170	\$8,170
Task 2-4 Total				\$0	\$68,020	\$68,020

Task 3: Prepare and Adopt the ABD IRWM Plan

The total cost for Task 3: Prepare and Adopt the ABD IRWM Plan is \$143,500. Table 4-10 below provides an overall listing of all applicable costs for each task included within Task 3. All costs are based upon estimates of the amount of hours required to complete each task and the persons required to complete each task. The following sections provide cost breakdowns for each task on a subtask level.

Table 4-10: Budget Breakdown for Task 3 Updating the ABD IRWM Plan

Task	Discipline	Hourly Wage (\$/hr)	Number of Hours	Total	Funding Match	Grant Request
3-1	Lump Sum (refer to Table 4-11)			\$9,020	\$0	\$9,020
3-2	Lump Sum (refer to Table 4-12)			\$9,020	\$0	\$9,020
3-3	Lump Sum (refer to Table 4-13)			\$9,880	\$0	\$9,880
3-4	Lump Sum (refer to Table 4-14)			\$6,900	\$0	\$6,900
3-5	Lump Sum (refer to Table 4-15)			\$7,560	\$0	\$7,560
3-6	Lump Sum (refer to Table 4-16)			\$101,120	\$0	\$101,120
Task 3 Total				\$143,500	\$0	\$143,500

Task 3-1 Updates to Governance and Financing Plan

This task includes as-needed Stakeholders Committee meetings; draft and final Long-Term Governance recommendations; and draft and final formal governance agreements. Please note that budget for the Stakeholders Committee meetings included within this task are included under Subtask 1-2, and not budgeted here. The costs for producing deliverables are factored into the hourly costs for the consultant team anticipated to complete this work. As such, the total costs for this task are those shown below in Table 4-11, and total \$9,020. \$0 of this is anticipated as funding match, and \$9,020 is part of the grant request.

Table 4-11: Budget Breakdown for Task 3-1 Updates to Governance and Financing Plan

Task	Discipline	Hourly Wage (\$/hr)	Number of Hours	Funding Match	Grant Request	Total
Consultant Labor						
3-1	Principal	\$265	4	\$0	\$1,060	\$1,060
3-1	Sr. Project Manager	\$225	0	\$0	\$0	\$0
3-1	Project Manager	\$200	20	\$0	\$4,000	\$4,000
3-1	Project Engineer	\$185	0	\$0	\$0	\$0
3-1	Project Planner	\$165	24	\$0	\$3,960	\$3,960
3-1	Graphics	\$125	0	\$0	\$0	\$0
3-1	Administrator	\$95	0	\$0	\$0	\$0
3-1	Facilitator	\$200	0	\$0	\$0	\$0
3-1	Economist	\$200	0	\$0	\$0	\$0
In-Kind Staff Labor						
3-1	All RWMG Staff	N/A	0	\$0	\$0	\$0
Task 3-1 Total				\$0	\$9,020	\$9,020

Task 3-2 Refine IRWM Plan Goals, Objectives, and Priorities

This task includes as-needed Stakeholders Committee meetings; and draft and final IRWM Plan goals, objectives, and priorities. Please note that budget for the Stakeholders Committee meetings included within this task are included under Subtask 1-2, and not budgeted here. The costs for producing deliverables are factored into the hourly costs for the consultant team anticipated to complete this work. As such, the total costs for this task are those shown below in Table 4-12, and total \$9,020. \$0 of this is anticipated as funding match, and \$9,020 is part of the grant request.

Table 4-12: Budget Breakdown for Task 3-2 Refine IRWM Plan Goals, Objectives, and Priorities

Task	Discipline	Hourly Wage (\$/hr)	Number of Hours	Funding Match	Grant Request	Total
Consultant Labor						
3-2	Principal	\$265	4	\$0	\$1,060	\$1,060
3-2	Sr. Project Manager	\$225	0	\$0	\$0	\$0
3-2	Project Manager	\$200	20	\$0	\$4,000	\$4,000
3-2	Project Engineer	\$185	0	\$0	\$0	\$0
3-2	Project Planner	\$165	24	\$0	\$3,960	\$3,960
3-2	Graphics	\$125	0	\$0	\$0	\$0
3-2	Administrator	\$95	0	\$0	\$0	\$0
3-2	Facilitator	\$200	0	\$0	\$0	\$0
3-2	Economist	\$200	0	\$0	\$0	\$0
In-Kind Staff Labor						
3-2	All RWMG Staff	N/A	0	\$0	\$0	\$0
Task 3-2 Total				\$0	\$9,020	\$9,020

Task 3-3 Develop Data Management Plan

This task includes regional DMS with GIS data layers; and draft and final description of the ABD Data Management Plan. The costs for producing deliverables are factored into the hourly costs for the consultant team anticipated to complete this work. As such, the total costs for this task are those shown below in Table 4-13, and total \$9,880. \$0 of this is anticipated as funding match, and \$9,880 is part of the grant request.

Table 4-13: Budget Breakdown for Task 3-3 Develop Data Management Plan

Task	Discipline	Hourly Wage (\$/hr)	Number of Hours	Funding Match	Grant Request	Total
Consultant Labor						
3-3	Principal	\$265	4	\$0	\$1,060	\$1,060
3-3	Sr. Project Manager	\$225	16	\$0	\$3,600	\$3,600
3-3	Project Manager	\$200	8	\$0	\$1,600	\$1,600
3-3	Project Engineer	\$185	16	\$0	\$2,960	\$2,960
3-3	Project Planner	\$165	4	\$0	\$660	\$660
3-3	Graphics	\$125	0	\$0	\$0	\$0
3-3	Administrator	\$95	0	\$0	\$0	\$0
3-3	Facilitator	\$200	0	\$0	\$0	\$0
3-3	Economist	\$200	0	\$0	\$0	\$0
In-Kind Staff Labor						
3-3	All RWMG Staff	N/A	0	\$0	\$0	\$0
Task 3-3 Total				\$0	\$9,880	\$9,880

Task 3-4 Develop Performance and Monitoring Methods

This task includes as-needed Stakeholders Committee meetings; draft and final IRWM Plan metrics; draft and final IRWM Plan performance and monitoring methods; and draft and final template for the Annual Report. Please note that budget for the Stakeholders Committee meetings included within this task are included under Subtask 1-2, and not budgeted here. The costs for producing deliverables are factored into the hourly costs for the consultant team anticipated to complete this work. As such, the total costs for this task are those shown below in Table 4-14, and total \$6,900. \$0 of this is anticipated as funding match, and \$6,900 is part of the grant request.

Table 4-14: Budget Breakdown for Task 3-4 Develop Performance and Monitoring Methods

Task	Discipline	Hourly Wage (\$/hr)	Number of Hours	Funding Match	Grant Request	Total
Consultant Labor						
3-4	Principal	\$265	4	\$0	\$1,060	\$1,060
3-4	Sr. Project Manager	\$225	0	\$0	\$0	\$0
3-4	Project Manager	\$200	16	\$0	\$3,200	\$3,200
3-4	Project Engineer	\$185	0	\$0	\$0	\$0
3-4	Project Planner	\$165	16	\$0	\$2,640	\$2,640
3-4	Graphics	\$125	0	\$0	\$0	\$0
3-4	Administrator	\$95	0	\$0	\$0	\$0
3-4	Facilitator	\$200	0	\$0	\$0	\$0
3-4	Economist	\$200	0	\$0	\$0	\$0
In-Kind Staff Labor						
3-4	All RWMG Staff	N/A	0	\$0	\$0	\$0
Task 3-4 Total				\$0	\$6,900	\$6,900

Task 3-5 Describe IRWM Process Relating to Local Land Use and Water Planning

This task includes as-needed Stakeholders Committee meetings; and draft and final IRWM Plan text describing coordination between water management and land use planning. Please note that budget for the Stakeholders Committee meetings included within this task are included under Subtask 1-2, and not budgeted here. The costs for producing deliverables are factored into the hourly costs for the consultant team anticipated to complete this work. As such, the total costs for this task are those shown below in Table 4-15, and total \$7,560. \$0 of this is anticipated as funding match, and \$7,560 is part of the grant request.

Table 4-15: Budget Breakdown for Task 3-5 Describe IRWM Process Relating to Local Land Use and Water Planning

Task	Discipline	Hourly Wage (\$/hr)	Number of Hours	Funding Match	Grant Request	Total
Consultant Labor						
3-5	Principal	\$265	4	\$0	\$1,060	\$1,060
3-5	Sr. Project Manager	\$225	0	\$0	\$0	\$0
3-5	Project Manager	\$200	16	\$0	\$3,200	\$3,200
3-5	Project Engineer	\$185	0	\$0	\$0	\$0
3-5	Project Planner	\$165	20	\$0	\$3,300	\$3,300
3-5	Graphics	\$125	0	\$0	\$0	\$0
3-5	Administrator	\$95	0	\$0	\$0	\$0
3-5	Facilitator	\$200	0	\$0	\$0	\$0
3-5	Economist	\$200	0	\$0	\$0	\$0
In-Kind Staff Labor						
3-5	All RWMG Staff	N/A	0	\$0	\$0	\$0
Task 3-5 Total				\$0	\$7,560	\$7,560

Task 3-6 Prepare IRWM Plan per State Guidelines

This task includes an Administrative IRWM Plan, in accordance with State Guidelines; Public Review Draft IRWM Plan; compiled response to comments matrix; Administrative Final IRWM Plan; Final IRWM Plan; IRWM Plan Executive Summary; and presentation summarizing IRWM Plan for use at Board/Council hearings. The costs for producing deliverables are factored into the hourly costs for the consultant team anticipated to complete this work. As such, the total costs for this task are those shown below in Table 4-16, and total \$101,120. \$0 of this is anticipated as funding match, and \$101,120 is part of the grant request.

Table 4-16: Budget Breakdown for Task 3-6 Prepare IRWM Plan per State Guidelines

Task	Discipline	Hourly Wage (\$/hr)	Number of Hours	Funding Match	Grant Request	Total
Consultant Labor						
3-6	Principal	\$265	16	\$0	\$4,240	\$4,240
3-6	Sr. Project Manager	\$225	0	\$0	\$0	\$0
3-6	Project Manager	\$200	176	\$0	\$35,200	\$35,200
3-6	Project Engineer	\$185	0	\$0	\$0	\$0
3-6	Project Planner	\$165	284	\$0	\$46,860	\$46,860
3-6	Graphics	\$125	76	\$0	\$9,500	\$9,500
3-6	Administrator	\$95	56	\$0	\$5,320	\$5,320
3-6	Facilitator	\$200	0	\$0	\$0	\$0
3-6	Economist	\$200	0	\$0	\$0	\$0
In-Kind Staff Labor						
3-6	All RWMG Staff	N/A	0	\$0	\$0	\$0
Task 3-6 Total				\$0	\$101,120	\$101,120

Task 4: Grant Administration

The total cost for Task 4: Grant Administration is \$42,089. This value was calculated as 5% of the total grant request of \$841,779. The whole of this value is being requested as grant funding, and none of this task is anticipated to be paid for with matching funds.



United States Department of the Interior

U.S. GEOLOGICAL SURVEY

California Water Science Center
6000 J Street, Placer Hall
California State University
Sacramento, California 95819-6129
Phone: (916) 278-3000 Fax: (916) 278-3070
<http://water.wr.usgs.gov>

November 9, 2011

Mr. Jerry Rolwing, General Manager and Operations Manager
Borrego Water District
806 Palm Canyon Drive
Borrego Springs, California 92004

Dear Mr. Rolwing:

This letter confirms discussions between our respective staffs concerning the continuation of the cooperative water-resources program between the Borrego Water District (BWD) and the U.S. Geological Survey (USGS) to delineate the hydrogeology and water availability of the Borrego Valley, California. The agreement end date will be extended from October 31, 2011 to December 31, 2012 to allow time to collect and analyze depth-dependent water-quality data and to evaluate multiple water-management scenarios developed in consultation with BWD.

The study consists of five major tasks: (1) compile hydrogeologic data; (2) collect land-elevation data; (3) convert existing USGS finite element model to MODFLOW; (4) update model with current information, and (5) prepare reports. A detailed description of progress of these tasks in Federal Fiscal Year 2011 (FFY11) and plans and costs for these tasks in FFY12 and the first quarter of FFY13 is included as an attachment to this letter.

As originally proposed and agreed to in Joint Funding Agreement (JFA) 09W4CAD23400 A2, the FFY11 budget was \$161,950, with \$131,500 the responsibility of BWD and \$30,450 provided by USGS Federal matching funds (FMF). In May of 2011 USGS added an additional \$50,000 of USGS FMF, raising the USGS FMF to a total of \$80,450 09W4CAD23400 A3. During FFY11, approximately \$153,660 was expended on the project: \$76,830 of BWD funds and \$76,830 of USGS FMF. In addition, BWD provided \$8,217 to contract a pump in lieu of USGS providing the equipment and personnel. Therefore, a total of \$8,217 from Task 2, depth dependent data is reduced by this amount, and reflected in table 1. BWDs total contribution to the program to be reduced in this amendment agreement by \$8,217.

Mr. Jerry Rolwing, General Manager and Operations Manager, Borrego Water District

Subject to the availability of FMF, the USGS would provide an additional \$28,900 to assist in the completion of the study, providing a total of \$211,650.00. A breakdown of the costs associated with each task for the modified budget are provided in the enclosed table 1.

As agreed to at the commencement of this study, the USGS will provide amendments to the Joint Funding Agreement (JFA) yearly for this study. The amendments to the JFA document the amount of BWD and USGS funding that will be contributed to the study each Federal Fiscal Year. This JFA is for the period October 1, 2008 to December 31, 2012.

Enclosed, you will find three copies of JFA 09W4CAD23400, Amendment 4, for your approval. Work performed with funds from this agreement will be conducted on a fixed-price cost basis. If you are in agreement with this proposed program, please return two copies of the JFA with original signatures to our office for further processing. The third copy of the JFA is for your files. After signature by the USGS, a fully executed original of the JFA will be forwarded for your records.

The USGS is required to have an agreement in place prior to any work being performed on a project. Your immediate attention to processing this JFA would be greatly appreciated, so we can continue work on the project as soon as possible.

If you have any questions concerning this program, please contact Peter Martin, in our San Diego Project Office, at (619) 225-6127. If you have any administrative questions, please contact Irene Rios, in our San Diego Office, at (619) 225-6156.

Sincerely,



Eric G. Reichard
Director
USGS California Water Science Center

Enclosures

cc: Peter Martin, USGS CAWSC
Claudia C. Faunt, USGS CAWSC

Appendix D: Budget Proposals - Round 2

Table 1. Summary of costs by task and federal fiscal year.

Tasks	SUBTASKS	FY2009			FY2010			FY2011			FY2012			Total	
		Funding	Billed	Carryover*	Funding	Billed	Carryover*	Funding	Billed	Carryover*	Funding	To Be Billed	Planned	Actual	
Task 1: Compile Data	Compile Hydrogeology	\$55,800	\$40,409	\$15,391	\$20,000	\$35,391	\$0					\$0	\$75,800	\$75,800	
	BCM	\$20,000	\$20,000	\$0	\$5,000	\$5,000	\$0					\$0	\$25,000	\$25,000	
Task 2: Data Collection	GPS	\$35,000	\$35,000	\$0	\$12,000	\$12,000	\$0					\$0	\$47,000	\$47,000	
	InSar	\$18,000	\$18,000	\$0	\$18,000	\$18,000	\$0					\$0	\$36,000	\$36,000	
	Depth-dependent data			\$0			\$0					\$0	\$30,000	\$21,783	
	Analysis			\$0			\$0					\$3,620	\$50,000	\$50,000	
Task 3: Convert Model		\$12,250	\$12,250	\$0			\$0					\$0	\$12,250	\$12,250	
Task 4: Update Model		\$30,000	\$30,000	\$0	\$150,000	\$65,368	\$84,632	\$101,950	\$85,497	\$101,085	\$0	\$101,085	\$281,950	\$281,950	
Task 5: Prepare Report		\$7,000	\$7,000	\$0	\$10,250	\$10,250	\$0	\$30,000	\$0	\$30,000	\$28,900	\$58,900	\$76,150	\$76,150	
TOTAL Funding		\$178,050	\$162,659	\$15,391	\$215,250	\$146,009	\$84,632	\$211,950	\$153,660	\$142,922	\$28,900	\$163,605	\$634,150	\$625,933	
USGS matching funds		\$46,858	\$46,858	\$0	\$55,442	\$55,442	\$0	\$80,450	\$76,830	\$3,620	\$28,900	\$32,520	\$211,650	\$211,650	
Borrego Water District funds		\$131,192	\$115,801	\$15,391	\$159,808	\$90,567	\$84,632	\$131,500	\$76,830	\$139,302	-\$8,217	\$131,085	\$422,500	\$414,283	

a. Final costs reflect the expenditure of \$8,217 of BWD funds to contract the pump for completion of this task in lieu of USGS equipment and personnel to be credited back to BWD via Joint Funding Agreement (JFA) 09W4CAD23400 Amendment 4.

b. Federal Matching Funds available and applied in the amount of \$46,380 in FY11.

*Funding less billed for previous year

Form 9-1366
(Oct. 2005)

**U.S. Department of the Interior
U.S. Geological Survey
Joint Funding Agreement**

Customer #: 6000000968 CA234
Agreement #: 09W4CAD23400 A4
Project #:
TIN #: 95-3584612
Fixed Cost Agreement Yes No

Page 1 of 2

**FOR
WATER RESOURCES INVESTIGATIONS**

THIS AGREEMENT is entered into as of the 31 day of OCTOBER, 2011, by the U.S. GEOLOGICAL SURVEY, UNITED STATES DEPARTMENT OF THE INTERIOR, party of the first part, and the BORREGO WATER DISTRICT, party of the second part.

1. The parties hereto agree that subject to availability of appropriations and in accordance with their respective authorities there shall be maintained in cooperation to delineate the hydrogeology and water availability of the Borrego Valley, California, herein called the program. The USGS legal authority is 43 USC 36C; 43 USC 50; and 43 USC 50b.
2. The following amounts shall be contributed to cover all of the cost of the necessary field and analytical work directly related to this program. 2(b) includes In-Kind Services in the amount of \$0.

(a) \$28,900.00 by the party of the first part during the period
October 1, 2008 to December 31, 2012

(b) \$-8,217.00 by the party of the second part during the period
October 1, 2008 to December 31, 2012

USGS DUNS is 1761-38857. Total funding for the USGS portion of this agreement, including this amendment is \$211,650.00. Borrego Water District funding amount of \$422,500.00 is reduced to \$414,283.00 by the amount of \$8,217.00. Total funding for the Borrego Water District portion of this agreement, including this amendment is \$414,283.00.

- (c) Additional or reduced amounts by each party during the above period or succeeding periods as may be determined by mutual agreement and set forth in an exchange of letters between the parties.
- (d) The performance period may be changed by mutual agreement and set forth in an exchange of letters between the parties.
3. The costs of this program may be paid by either party in conformity with the laws and regulations respectively governing each party.
4. The field and analytical work pertaining to this program shall be under the direction of or subject to periodic review by an authorized representative of the party of the first part.
5. The areas to be included in the program shall be determined by mutual agreement between the parties hereto or their authorized representatives. The methods employed in the field and office shall be those adopted by the party of the first part to insure the required standards of accuracy subject to modification by mutual agreement.
6. During the course of this program, all field and analytical work of either party pertaining to this program shall be open to the inspection of the other party, and if the work is not being carried on in a mutually satisfactory manner, either party may terminate this agreement upon 60 days written notice to the other party.
7. The original records resulting from this program will be deposited in the office of origin of those records. Upon request, copies of the original records will be provided to the office of the other party.

Form 9-1366
continued

**U.S. Department of the Interior
U.S. Geological Survey
Joint Funding Agreement**

Customer #: 6000000968 CA234
Agreement #: 09W4CAD23400 A4
Project #:
TIN #: 95-3584612

8. The maps, records, or reports resulting from this program shall be made available to the public as promptly as possible. The maps, records, or reports normally will be published by the party of the first part. However, the party of the second part reserves the right to publish the results of this program and, if already published by the party of the first part shall, upon request, be furnished by the party of the first part, at costs, impressions suitable for purposes of reproduction similar to that for which the original copy was prepared. The maps, records, or reports published by either party shall contain a statement of the cooperative relations between the parties.
9. USGS will issue billings utilizing Department of the Interior Bill for Collection (form DI-1040). Billing documents are to be rendered **quarterly**. Payments of bills are due within 60 days after the billing date. If not paid by the due date, interest will be charged at the current Treasury rate for each 30 day period, or portion thereof, that the payment is delayed beyond the due date. (31 USC 3717; Comptroller General File B-212222, August 23, 1983).

**U.S. Geological Survey
United States
Department of the Interior**

BORREGO WATER DISTRICT

USGS Point of Contact

Customer Point of Contact

Name: Irene A. Rios, Budget Analyst
Address: 6000 J Street, Placer Hall
Sacramento, California 95819-6129
Telephone: 619-225-6156
Email: iaros@usgs.gov

Name: Jerry Rolwing, General Manager and
Operations Manager
Address: Borrego Water District
806 Palm Canyon Drive
Borrego Springs, California 92004
Telephone: 760-767-5806
Email: jerry@borregowd.org

Signatures

Signatures

By _____ Date _____
Name: Eric G. Reichard
Title: Director, USGS California Water
Science Center

By _____ Date _____
Name: Jerry Rolwing
Title: General Manager and Operations
Manager

By _____ Date _____
Name:
Title:

By _____ Date _____
Name:
Title:

By _____ Date _____
Name:
Title:

By _____ Date _____
Name:
Title: