

ANZA BORREGO DESERT
INTEGRATED REGIONAL WATER MANAGEMENT PLAN
FACILITATION and TECHNICAL SUPPORT
FEASIBILITY ASSESSMENT

Interviews Conducted by
Center for Collaborative Policy
RMC – WRIME
November 2011



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OVERVIEW

The Anza Borrego Desert Integrated Regional Water Management Plan (ABD IRWMP) covers the Anza Borrego Desert Region (ABD Region) which includes all areas within San Diego County east of the Peninsular Range and south of Borrego Valley to the Border with Mexico. The Borrego Valley groundwater basin is the sole source of water for the ABD Region. The groundwater drains toward the Colorado River. The ABD Region was accepted by the Department of Water Resources (DWR) in 2009. In order to achieve this status, three public agencies, two with water authority, were required for the region to be accepted by the California Department of Water Resources. These agencies are the County of San Diego, the Resource Conservation District of Greater San Diego County and the Borrego Water District.

The Anza Borrego Desert State Park (State Park) encompasses more than 600,000 acres and makes up 70 percent of the ABD IRWM area. The State Park hosts more than one million visitors each year. Borrego Springs, a retirement and resort community, is the largest in the region (population about 3,000) and is surrounded by the State Park. Tourism is the number one industry – several seasonal residents frequent the State Park and the golf courses.

Based on various reports to-date, the main aquifer of the Borrego Valley groundwater basin is in a serious state of overdraft. There are numerous conflicting reports on the useful life of the aquifer system, ranging from 50 to 200 years. The most significant water use in the Region is for agriculture and the golf industry.

PURPOSE OF THE ASSESSMENT

The ABD IRWMP submitted a planning grant application to DWR in 2010 for the first round of Proposition 84 Planning grant funding. The grant funding application was not successful.

In order to increase the possibility of a successful planning grant application and to facilitate a robust stakeholder process, DWR project manager for ABD IRWMP requested that DWR, through its contract with Center for Collaborative Policy (CCP), provide facilitation services to the ABD IRWMP stakeholders. The request, granted by DWR Regional Planning Branch, included a scope of work with two phases:

- During Phase 1, CCP would draft interview questions and conduct interviews of potential stakeholders in the ABD Region to determine the feasibility of providing facilitation services in support of the development of an ABD IRWMP. Questions to be addressed included: Will stakeholders from the key organizations in the Region participate in IRWMP planning in order to make it a legitimate process? What are the main water issues and challenges that need to be addressed in the Plan? Will the region be successful in addressing those issues in spite of obstacles that might derail the development of the plan?

In addition, RMC-WRIME through a 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 IRWMP.

- If recommended, in Phase 2, DWR would fund CCP facilitation of several meetings and limited stakeholder outreach during the development of the ABD IRWMP.

APPROACH

- I. CCP and RMC-WRIME attended a special board meeting of the Borrego Water District (BWD) (July 19, 2011) in order to get acquainted with BWD board members, staff and other attendees and to discuss the possible facilitation and technical support offered by DWR for the drafting of an ABD IRWMP.

Among the issues identified at the meeting were:

- Attaining consensus that the problem in the Borrego groundwater basin is that there is an overdraft and the problem is large enough that it must be addressed soon. Also, there was consensus that the problem cannot be addressed by only one group and/or sector; it needs a collective effort by the partners in the Region in an open and transparent environment.
- Deciding whose problem it is – education necessary for public to even be aware there is a problem, and the proportion that each entity/water user sector has contributed to the problem.
- Governance issues - need for a clear governance and decision-making structure.
- Problems with attracting vested stakeholders to participate in the process- The region is sparsely populated and spread out – four small communities are included in the region but only Borrego Springs is currently participating in IRWMP meetings. “It is 50 miles in any direction to this desert community’s (Borrego Springs) nearest neighbors”.

- II. Stakeholder Interviews

A total of ten formal interviews were conducted, two in-person, and eight phone interviews. RMC/WRIME participated in the two in-person interviews and two phone interviews. In addition, informal interviews were conducted with Borrego Water District (BWD) General Manager and a Board member. *(See attached list of interviewees and interview questions.)*

All interviews were confidential. The interviewers have not attributed specific comments to individuals in this report. They will not share interview data with any agencies or interest groups. CCP and RMC-WRIME have summarized the

information gathered through the assessment to identify stakeholder concerns, areas of agreement and areas of discord in order to develop recommendations related to facilitation and technical support in drafting the Anza Borrego Desert IRWMP. **All information in this report was supplied by the interviewees. Data has not been verified by CCP or WRIME.**

The interviewees represent a variety of professions, vocations and interests in the Borrego Region. Interviewees identified community members as retirees living on fixed incomes, seasonal and winter residents, business owners and workers (agriculture, golf, services), including a large Hispanic population. Many are long time residents and expressed a love for the Borrego way of life. As one interviewee put it, in Borrego, “you can do nothing or you can be busy”.

INTERVIEW FINDINGS

WATER ISSUES

1. Water supply

The number one issue identified by the interviewees was that the Borrego groundwater basin is in overdraft; the water level in the aquifer continues to decline, and there is not enough natural replenishment to compensate for the water usage. (An interviewee noted that the groundwater recharge on an annual basin is estimated to be 4,000-5,000AF. The demand is estimated to be 14,000-18,000AF. (There is no consensus on these figures, and they would need independent verification.) Several interviewees noted that they have been aware of the problem for a long time - in the State Park, mesquite which reportedly have 80 feet deep roots, were observed dying over twenty years ago. Some interviewees noted that the community seems to be becoming more aware of water issues and realizes that something has to be done. Indeed, it was noted by one interviewee that water is the number one issue addressed in the Borrego Community Plan. However, it was also noted that some community members think there is plenty of water and are distrustful of information concerning an overdraft disseminated by BWD.

Interviewees pointed out that there is no consensus as to how large the overdraft is and when the wells will run dry. Much work has been done to develop physical characteristics and conditions of the basin, some of which are complimentary, but some are contradictory. Opinions expressed were that the water would run out in 50-100 years considering the current usage. Speculation is that as the aquifer is drawn down, the cost will rise so that farmers will change to more water conservative plants or not farm at all because it would not be economical. The same would happen with the golf industry; golf courses would convert to more desert friendly landscaping or close down. Most interviewees thought that there would still be water available for residents. One interviewee noted that water supply is not an immediate problem – BWD has a good producing well for the short term, but it will not be sustainable for the long term. Several studies of the water supply in the basin have been conducted. But agreement on data analysis is needed.

One interviewee said that instead of asking how long it will be before the water runs out, the questions to address are: when are the impacts of the overdraft going

to occur; how long will it be before it is necessary to supplement the groundwater supply; and how expensive is that going to be?

Possible Solutions to Water Supply Issue

Interviewees noted that there are a limited number of solutions to stop or slow down the overdraft of the basin. The first is to reduce demand and conserve more water.

- Fallowing – leaving farm land unplanted - would reduce demand and conserve water.

Several interviewees suggested fallowing as a possible near term solution by both farmers and golf owners. To be successful, fallowing would have to be equitable – the farmers or golf course owners would have to get a fair price for their land which could be quite costly for the purchaser. Some observed that a negative result of fallowing would be a loss of jobs and a reduction of the tax base for Borrego, but they concluded that that would probably not be an insurmountable obstacle. Fallowing is not a permanent fix but may be the most feasible in the near term.

It was also suggested that fallowed land could be a source for solar energy. Borrego has been cited as being a very favorable area for production of solar energy. Currently one stakeholder has a power purchase agreement with SG&E for 300 acres for a solar project. Residents noted that they preferred solar projects on disturbed rather than undisturbed land. One drawback is that water is necessary to produce solar energy. But it was noted that not as much water is needed to produce solar energy as is needed to grow citrus. Also, there are new water saving technologies in producing solar energy that could be employed. There has been community support expressed for solar projects which would provide jobs and income for the Borrego region.

- Water credits

The use of water credits was suggested as a partial solution. If a land owner takes a portion of land out of production permanently, the water used on that portion of land could be turned into water credits which could then be sold by BWD. However, it may be a problem to find buyers for these credits. This option will require detail investigation of the short-term and long-term water rights implications. In addition, detail analysis of hydrologic benefits of

this option needs to be evaluated in the context of land use conversion, and other hydrologic aspects

- Conservation measures

Golf course irrigation – Older courses have to maintain substantial turf which reportedly can require an average of approximately 7 AF of water to irrigate an acre of land. Although it is in the best interest of the golf course owners to pump less water and thereby reduce their pumping costs, there has to be a balance between cutting back on water use and maintaining the quality of the golf course required by the clients. Some of the newer courses have their wells monitored and metered and have become more efficient in their use of water. One golf course has reported being able to use only 4 AF of water per acre for irrigation.

Several interviewees suggested incorporating native vegetation on golf courses which has been done successfully in Tucson and Las Vegas. However, interviewees pointed out that it is costly to convert from turf to native vegetation. It is an economic problem.

Agriculture –It was reported that most farmers in the Borrego region are aware of water conservation methods and employ them whenever possible. It is of benefit to the farmers to pump less, as the cost of electricity to run the pumps is very high.

Some suggestions for conservation on farm lands included: mulching; switching to less water demanding crops; and employing more efficient watering methods.

- Importation of Water

All agree that there is plenty of storage in the Borrego basin, but acknowledge the huge obstacles to be overcome in order to import water into the basin. Firstly, there is the cost of importing water. According to one stakeholder, DWR conducted a study on importation of water into the Borrego basin in 1984 at which time the cost was \$100 million. Building pipelines could potentially cost \$30 to \$60 million based on the DWR report. In addition, the State Park most likely would not be interested in giving an easement across parkland for a pipeline.

Another problem is that a source must be found who is willing to supply water to Borrego. How receptive are other regions to sending water to Borrego for storage, for example, Coachella or Imperial? It was noted that a “managed basin” will be necessary in order to import water for water banking. (A managed basin was defined as a basin that has a plan to address the overdraft including a plan for the costs.)

One interviewee suggested purchasing water from the Vista Irrigation District which has access to Colorado River water and State Project water, then transferring that water to the Borrego groundwater basin

2. Water Quality

One interviewee noted that degradation of water quality will be a problem before water supply. As the groundwater level declines, the potential for nitrate concentration will increase. It was noted that studies have not been conducted concerning when water will have to be treated and how to prepare for that time.

AGRICULTURE

Interviewees disagreed as to the value of agriculture to the economy. One view was that agriculture brings money into the area. Farmers are taxed at \$15,000 to \$25,000 per acre. Farmers live in Borrego and their children attend Borrego schools – if their children did not attend, the schools would not have enough students to stay open. Farmers support local businesses.

However, another opinion expressed was that agriculture does not contribute to the Borrego economy. Agriculture is the main contributor to the overdraft; growing palms and citrus is water intensive. Farmers use the majority of the water to grow crops that they export from the Borrego Region. Farmers employ migrant workers on their farms. There are only a few local residents among the agriculture community.

Others disagreed and reiterated that farmers and farm workers do live in the community – there are many permanent full time employees. Migrant workers are brought in as crews to pick fruit at harvest time. Interviewees acknowledged that crops are exported out of the Borrego Region, but citrus, dates and other crops are available to locals at stands and the farmers’ market.

GOLF INDUSTRY

Golf course owners and managers are aware that wells are dropping and the groundwater is being depleted. It was noted that it is necessary to drill down 600 – 700 feet to pump 700 – 1000 gallons per minute. As noted above, water usage on gold courses varies. Some have more turf to maintain than others. Conversion from turf to native landscape is very costly. The golf industry faces financial challenges including a drop in membership and rise in the cost of electricity necessary to pump water. (One interviewee noted that Asian golfers were frequent visitors to Borrego to play golf, but recently, the Chinese and other Asian countries have built golf courses to accommodate their golfing population.)

CONFLICTS AMONG WATER USERS

Interviewees agreed that all interest groups need to talk with one another and work together which is not currently happening. As one interviewee put it, “there is a disconnect among user groups”.

It was noted that there has been hostility expressed against agriculture. Agriculture is the largest water user (approximately 70%) and several interviewees expressed the opinion that if agriculture were eliminated in Borrego, that would eliminate the problem (overdraft of aquifer).

However, many of the farmers want to continue to farm in Borrego – it is a way of life. Some may want to quit farming but they need an incentive to get out of the farming business.

BORREGO WATER DISTRICT (BWD)

Interviewees expressed divergent opinions about the BWD management and board members.

Current Board of Directors

Some interviewees think that the current Board is an energetic group who is more in tune with reality and trying to get the water district finances in order, but some were critical that the Board has raised rates by 30%.

Others noted that the current Board is not favorable to farming and there is no longer a farmer representative on the Board. They are of the opinion that the current Board is in favor of adjudication of the Basin which they do not support.

Previous management

Some interviewees found that it was difficult to work with the previous management of BWD. It was noted that excess funds were spent for studies and land was purchased with no recharge ability.

Others commented that the management was seeking solutions to the overdraft problem and was trying to obtain grant funding. It was noted that there was farmer representation on the previous Board and more cooperation with farmers.

INTEGRATED WATER MANAGEMENT PLANS (IRWMPS)

Familiarity with IRWMPS

Most interviewees had no clear understanding of what an IRWMP is. They questioned the purpose of the Plan and how it could benefit the Anza Borrego Region. Several interviewees have attended meetings at BWD, but these were not necessarily IRWMP meetings. BWD holds a town hall meeting each year to update the community about water issues. Among the interviewees who have attended previous IRWMP meetings, four reported that they quit attending because they did not think that the meetings were productive.

Once informed about the purpose and benefits of the IRWMP, all were in favor of drafting a Plan. As one stakeholder put it, “we are all in this together”. Comments included: A plan is needed that will encompass the residents and other vested stakeholders including agriculture and golf; the process should be all inclusive; water is everyone’s problem; outreach is necessary to inform stakeholders about the importance of the IRWMP and their participation; we need outreach to “reluctant participants”.

Some thoughts on what the plan should be and do.

- The plan should be a clear vision based on reality – “a realistic plan”
- The plan should be solution oriented
- The plan should be drafted using a unified stakeholder process
- Stakeholders need to agree on the scale of the problems and issues faced by the Anza Borrego Desert Region

The following interviewees expressed their willingness to participate:

- San Diego County – Jim Bennett – participate via conference calls when necessary
- Anza Borrego State Park – Kathy Dice – a Park representative will participate

- Resource Conservation District – Marty Leavitt – could not attend meetings, but could help as a resource, for example, on a steering committee or possibly as an editor as the plan is being drafted.
- Golf – Bob Moore – if BWD needs golf’s participation, and golf has added value by its attendance, golf would participate.
- Agriculture – Brad Ray, Duane Young, Jim Seeley – AAWARE has begun to have meetings and is in favor of having agriculture represented in the meetings to draft the IRWMP.
- Community Sponsor Group – Abby King – it would be hard to attend daytime meetings due to her job, but she would make an effort.
- Chamber of Commerce – Gwenn Marie – would not attend herself, but suggested a possible stakeholder who could represent business interests.
- Anza Borrego Foundation – John Peterson – would attend if the group would build on data already in place instead of doing another study.

Interviewees identified possible obstacles to be addressed during the development of the IRWMP

- Lack of participation by some of the vested stakeholders
- Lack of cooperation among stakeholders
- Lack of time and money necessary to develop the plan
- Non-productive meetings

When questioned about how to fund the IRWMP, interviewees noted that finding funding sources would be difficult. The commented that the Borrego Water District is in financial straits. Borrego is a very small part of San Diego County and the big players in the County are the ones who receive funding, for example, San Diego Water Authority. The County is not a water manager, but regulates land use and it does not have funding for the water planning. Grants are a potential source of some funds. One interviewee expressed the opinion that all who would benefit from replenishment should contribute.

RECOMMENDATIONS

In order to determine the feasibility of providing facilitation to the ABD IRWMP effort, the assessment needed to provide the answers to the following questions.

Is it possible for Anza Borrego Desert Region to convene a group of stakeholders representing appropriate agencies, interest groups, and businesses to draft an IRWMP for the region?

The results of the assessment confirm the commitment of several stakeholder groups to participate in the preparation of the IRWMP including key stakeholder groups in the Region such as the ABD State Park, agriculture, golf, business and non-government organizations.

Future meetings will determine if the stakeholder groups follow through on their commitment.

Note that not all possible stakeholder groups, agencies, or organizations were interviewed. There are some small communities within the region (ex. Canebrake) who had previously declined to participate and some stakeholders who have not been approached. **An effort should be made to identify possible stakeholders and include them as they may have timely issues that need to be addressed.**

Is it reasonable to assume that the stakeholders will work together toward the goal of producing a viable IRWMP?

It was noted by several interviewees that one of the main problems will be to get the stakeholders to communicate with each other and work together toward a common goal. Most were optimistic that in spite of the differences of opinion, with some education of the public about Borrego water issues, and some facilitation provided during a solution seeking process, the stakeholders can work together and compile a successful IRWMP.

Is it economically feasible for DWR to provide facilitation from CCP as outlined in task order 7-11 for the Borrego IRWMP effort?

A round trip from the north end of the L.A. area to Borrego Springs by auto takes approximately 9 hours. Borrego Springs is approximately 190 miles from the Los Angeles area. Travel expenses would include car rental, gasoline, lodging, and meals.

One IRWMP meeting including strategic planning, consultation and coordination, meeting preparation, meeting facilitation, meeting debrief, travel to and from the meeting from Los Angeles area could take up 30 hours.

Both labor and travel would be charged for the facilitation effort for ABD IRWMP. In order to complete Phase II of the proposal it will be necessary to facilitate six to eight meetings in the Borrego Region to establish a viable stakeholder process and governance structure and to facilitate technical discussions among the stakeholders with information presented by RMC-WRIME.

CCP does not consider travel from the L.A. area to Borrego region to facilitate each meeting the most economically feasible option for DWR.

Other options can be considered to reduce facilitation costs:

- Set meeting date and time to coincide with other meetings CCP already facilitates in the area.
 - Example – CCP facilitates a meeting in the Hemet/San Jacinto area on the second Monday of the month. If the meeting in Borrego could be scheduled on the second Tuesday of the month, travel time and expenses could be divided between projects. **This option is preferable to CCP.**
- Set travel schedule to coincide with travel schedule of other consultants thereby reducing travel logistic costs.

Is it feasible for RMC/WRIME to conduct additional research to ascertain the status of technical information, determine technical needs and provide technical support to assist in the drafting of the Anza Borrego Desert IRWMP?

In order to assist in the completion of the ABD IRWMP, RMC-WRIME recommends that the following steps occur through the DWR – RMC-WRIME contract:

- Collect available technical data and information about the Borrego basin and any available information about the surrounding aquifers.
- Review the literature and information
- Develop an impartial understanding of the state of the science in the Borrego Region. This can result into a report which would document the “state of the Borrego Basin”, or depending on the level of data available, can include remaining parts of the Region, beyond the Basin as well.
- Identify and describe gaps in the data, information and analysis.
- Work with stakeholder representatives to develop a consensus on the scale of the problem and state of basin.
- Develop a workplan on potential options to address the issues.

The deliverables would be a state of the basin report as well as an outline of the work plan to define the next steps.

CONCLUSION

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 with CCP and RMC-WRIME to develop an understanding of the scale of the problem and state of the basin and to develop a workplan to address the issues.

APPENDIX

Persons Interviewed

Jim Bennett	San Diego County DPLU
Lyle Brecht	Borrego Water District Board of Directors
Kathy Dice	Anza Borrego Desert State Park
Abby King	Community Sponsor Group
Marty Leavitt	RCD of Greater SD County
Gwen Marie	Chamber of Commerce
Bob Moore	Springs at Borrego Golf Course
John Peterson	Anza Borrego Foundation
Brad Ray	Seeley Ranch
Jerry Rolwing	Borrego Water District
Jim Seeley	Seeley Ranch
Duane Young	Road Runner Tree Farm

BORREGO IRWMP ASSESSMENT INTERVIEW QUESTIONS

INTRODUCTION

- Purpose of Interview
- Facilitator Role
- How information will be used

BACKGROUND INFORMATION - INTERVIEWEE

- Describe your organization and its involvement in water issues in the Borrego region.
- Are you familiar with the Borrego basin? The water supply? Who are the main users of the water?

WATER ISSUES AND CHALLENGES IN THE REGION

- What are the main water issues or challenges in the Borrego Region that need to be addressed?
- What are the main issues your organization experience related to water?
- Are there conflicts among water users in the Borrego Region that need to be addressed?

INTERGRATED REGIONAL WATER MANAGEMENT PLANNING

- Are you familiar with IRWMPs?
 - If so, what is your understanding of the IRWMP process?
- Is your organization in favor of the development of an IRWMP?
- What potential benefits and /or drawbacks do you associate with the development of an IRWMP?
- What obstacles might derail the development of the IRWMP? Any suggestions to overcome them?
- Who do you think should contribute to the funding of the process?

STAKEHOLDER INVOLVEMENT IN THE IRWMP PROCESS

- Has your organization participated in the IRMP meetings?
 - If so, how frequently?

- In person or by phone?
- Have you participated in decisions concerning governance?
- Have you participated in decisions concerning project selection?
- Have you participated in decisions concerning goals and objectives of the plan?
- Are you willing to participate in future planning meetings?
 - How extensively?
- Are there other key organizations that should be included in the IRWMP process?
 - How would you outreach to them?

CONCLUSION

- Do you have any questions or concerns not addressed?

CENTER FOR COLLABORATIVE POLICY

The Center for Collaborative Policy is a program of California State University, Sacramento. The mission of the Center is to build capacity of public agencies, stakeholder groups and the public to use collaborative strategies to improve policy outcomes. The Center has approximately 40 mediators and facilitators working throughout California and neighboring states.

Dale Schafer is a senior mediator and program manager for CCP of the facilitation services provided to DWR accepted regions. She is currently facilitating several IRWM and groundwater planning efforts in Southern California including Hemet/San Jacinto management area and the Imperial IRWMP. Ms. Schafer received a J.D. from Pepperdine University School of Law and a Master's of Dispute Resolution from the Strauss Institute at the Pepperdine School of law.

RMC-WRIME

RMC-WRIME is a consulting engineering firm, located in Sacramento, CA. WRIME has been the water resources planning and management consultants for the DWR over the past 10 years, providing technical services to the DWR headquarters as well as the local and regional partners in the areas of water resources, conjunctive water use management, and integrated water management planning. In January 2011, WRIME has merged with RMC Water and Environment, the resulting firm has expanded mix of services, including civil engineering design and construction.

Ali Taghavi is a Principal at RMC-WRIME, specializing in evaluation of hydrologic conditions as well as hydrologic model development and applications, including water resources planning and management, integrated hydrologic analysis, infrastructure planning, and cost estimation. He received his B.S. from UC Berkeley, and M.S., and Ph.D. from UC Davis. Dr. Taghavi has been the program coordinator for the RMC-WRIME DWR contract, and has managed several regional technical support projects, such as the Hemet-San Jacinto, Sacramento County, Yolo County, Sacramento and San Joaquin Valley, and Kings groundwater Basin.