

Borrego Water District Board of Directors
Special Meeting
Groundwater Sustainability Plan: Borrego Sub Basin
February 20, 2018 @ 9:00 a.m.
806 Palm Canyon Drive
Borrego Springs, CA 92004

- I. OPENING PROCEDURES**
- A. Call to Order
 - B. Pledge of Allegiance
 - C. Roll Call
 - D. Approval of Agenda
 - E. Public Comment & Requests for Future Agenda Items (may be limited to 3 min)
 - F. Correspondence received from Public
 - 1. Rudyville Impacts – David Garmon (3-42)
 - 2. Reduction Period for Borrego GSP – David Garmon (43)
 - G. Comments from Directors
- II. ITEMS FOR BOARD DISCUSSION, CONSIDERATION AND POSSIBLE ACTION**
- A. New Developer’s Policy – Anderson (44-55)
 - B. 2017-18 Capital Improvement Plan – Beltran/Poole/O and I Committee (56-87)
 - C. Farmland Fallowing & Land Restoration Standards – Poole (88-108)
 - D. Proposition One GSP Grant Status Update – Poole (109-159)
 - 1. Review of DRAFT Reimbursement Agreement with County of San Diego – Anderson/Poole
 - 2. Le Sar Development Corporation Socio Economic Analysis Scope of Work & Contract:
Prop One GSP Grant – Poole
 - 3. Dr. Jay Jones Modeling Program Scope of Work and Contract:
Prop One GSP Contract – Poole
 - E. Rams Hill Flood Control Study – Poole (160-164)
 - F. March 5th BWD Special Meeting Agenda: Socioeconomic Workshop - Poole (165-167)
- III. INFORMATIONAL ITEMS (168)**
- A. Sustainable Population Analysis – Poole
 - B. March 29 GSP Advisory Committee Agenda Review – BWD Core
 - C. GSP Advisory Committee – BWD Ratepayer Representative Update: Dave Duncan - Verbal Dave Duncan (169-179)
 - D. AT&T Cell Tower
 - E. Gypsum Mine Land Restoration Program – Poole

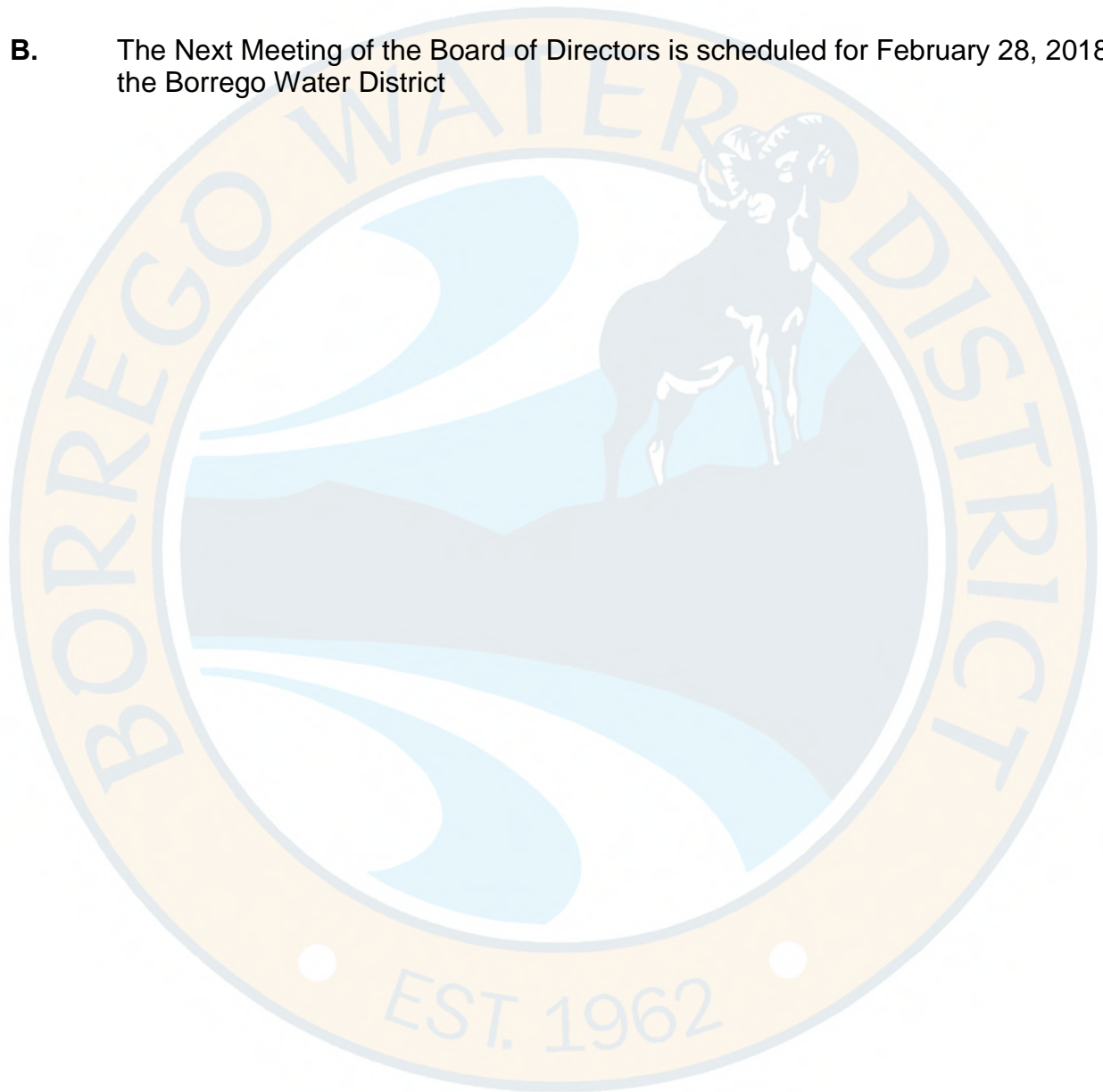
IV. **CLOSED SESSION:** Conference with legal counsel – anticipated litigation: Initiation of litigation pursuant to subdivision (d) (4) of Government Code Section 54956.9: three cases

V. **CLOSING PROCEDURE**

A. Suggested Items for Next/Future Agenda

1. Water Shortage Ordinances
2. 2018 Town Hall Agenda
3. Other...

B. The Next Meeting of the Board of Directors is scheduled for February 28, 2018 at the Borrego Water District





21 January 2018

County of San Diego
Planning and Development Services
Kevin.Johnston@sdcounty.ca.gov
pds.advanceplanning@sdcounty.ca.gov
5510 Overland Avenue #310
San Diego, California 92123

Re: Comments in response to the draft Subsequent Environmental Impact Report (SEIR) and General Plan Amendment (GPA) published December 14, 2017 as they pertain to Property Specific Request (PSR) Desert Subregion 24 (DS-24) proposed change from Semi-Rural (SR)-10 to SR-1 under the current San Diego County General Plan encompassing approximately 170 acres of undisturbed desert in Borrego Springs (APNs 198-320-01 and 198-320-26)

General Comments

Thank you for the opportunity to comment on the Property Specific Requests (PSRs) General Plan Amendment and Rezone (GPA 12-005; REZ 14-006) draft Subsequent Environmental Impact Report (SEIR). The comments below relate to both the Proposed Project and the Reduced Density Alternative for PSR Analysis Area DS-24.

The Tubb Canyon Desert Conservancy (TCDC) was established to preserve desert habitat and biodiversity, to protect native plants and wildlife, and to promote understanding of these special places. TCDC represents numerous landowners in the vicinity of the proposed DS-24 Property Specific Request located on approximately 170 acres (APNs 198-320-01 and 198-320-26). It is our assertion that any increase in density on the DS-24 site would adversely impact neighboring landowners, the Anza-Borrego Desert State Park, the Pinyon Ridge Wilderness, rare species, and the economy of Borrego Springs.

TCDC has provided comment at every possible occasion in this now decade-long process, beginning with a June 26, 2008 letter to the Department of Planning and Land Use in opposition to a Mitigated Negative Declaration that had been requested by the developer. All concerns and questions outlined in that June 26, 2008 letter (attached below as Appendix A) are herewith incorporated by reference in this present comment letter.

TCDC representatives provided public testimony at the July 2012 hearings before the County Board of Supervisors and recommended DS-24 not be included in the list of those projects that are the subject of the current SEIR.

More recently, on February 3, 2016 TCDC provided written comments to the Department of Planning and Development Services regarding our continued concerns regarding the DS-24 PSR to increase residential density by a factor of ten. All the concerns and questions elaborated in that February 3, 2016 letter (attached below as Appendix B) are herewith incorporated by reference in this present comment letter.

In the more than ten years since the initial proposal of DS-24, none of the concerns that we have described have abated, diminished, or have been mitigated. And in several instances, outlined below, new circumstances have significantly increased the negative impacts of the DS-24. Chief among the new circumstances that have arisen since the initial proposal of DS-24 are 1) in 2016 the Borrego Valley was designated a critically overdrafted aquifer by the California Department of Water Resources (http://www.water.ca.gov/groundwater/sgm/pdfs/COD-basins_2016_Dec19.pdf), and 2) the “orphan” dike to the west of DS-24 that once partially shielded DS-24 from outflows from the Tubb Canyon-Culp watershed was breached in 2013.

Additional Questions

The following questions are submitted as additional questions to those that remain outstanding from the incorporated comment letters referenced above and attached below as appendices.

- 1) WHERE IS THE ANALYSIS OF THE INDIRECT ADVERSE IMPACT ON AGRICULTURE IN BORREGO SPRINGS IF THE DENSITY OF DS-24 IS INCREASED BY A FACTOR OF TEN?**

The economy of Borrego Springs has been dependent upon its agricultural industry for more than half a century. The Groundwater Sustainability Plan (GSP) currently

being crafted by the relevant Groundwater Sustainability Agencies (The County of San Diego and the Borrego Water District) has proposed a proportional reduction of water usage by 70% across all segments of water users—agricultural, residential, and commercial/recreational. If the density of DS-24 is increased from 17 residential units to approximately 170 units, the increased water usage for this residential development can only come from existing supplies, supplies that are already over drafted by 300%. Given that agriculture currently uses 70% of the water in the Borrego Basin, proportional reduction of water usage across all sectors means 70% of the “extra” water needed for increasing the density of DS-24 would come from agriculture. Thus, the agricultural sector would bear the lion’s share of the burden to provide the additional water to additional homes if the density of DS-24 is increased. **Where in the EIR or SEIR is the analysis of the impact on agriculture of increased residential density in the Borrego valley?**

2) WHAT ANALYSIS SUPPORTS THE “LEAPFROG” DEVELOPMENT THAT DS-24 WOULD CREATE? WHAT ANALYSIS SUPPORTS THE ABROGATION OF LU-2.1.1 OF THE BORREGO SPRINGS COMMUNITY PLAN?

The Borrego Springs Community Plan, which was adopted by the County Board of Supervisors on August 3, 2011 as part of the General Plan for San Diego County, specifically calls for increased residential development to be located near the “urban core” and on previously disturbed lands rather than pristine desert land¹. DS-24 fails on both these counts as elaborated on page 1 of our February 3, 2016 letter referenced above and incorporated herewith.

3) WHAT ANALYSIS HAS BEEN DONE REGARDING DS-24’S IMPACT ON BORREGO SPRINGS DARK SKY DESIGNTION AND TOURISM ECONOMY?

The economy of Borrego Springs is more and more dependent upon tourism, and a significant portion of that tourism is based on the community’s designation as a Dark Sky Community. Borrego Springs was the second community in the world to achieve this designation and the first in the United States; it is now one of seventeen such communities in the U.S. and abroad.² This designation is a critical component of Borrego Springs’ emerging tourism economy. **What analysis has been done regarding the economic impact of DS-24’s PSR on Borrego’s Dark Sky Designation and subsequent impact on tourism?**

¹ Borrego Springs Community Plan, LU-2.1.1, pg. 27.

² <http://www.darksky.org/idsp/communities/>, as viewed 21 January 2018

4) WHAT ANALYSIS HAS BEEN DONE REGARDING FLOOD MITIGATION MEASURES THAT WOULD HAVE TO BE TAKEN AS A CONSEQUENCE OF THE 2013 BREACHING OF THE “ORPHAN” DIKE TO THE WEST OF DS-24?

As we pointed out in our February 3, 2016 letter, the document, “Flood Hazard Evaluation for Borrego Country Club Estates,” that was prepared by Walter F. Crampton, Principal Engineer for TerraCosta Consulting Company, to analyze flood issues for the DS-24 site, and dated August 27, 2007, incorrectly states:

“The 2,700-foot-long existing dike within the headwaters of the Culp-Tubb Canyon drainage was constructed by the County in the 1970s to divert flood flows to the south away from the populated east of Country Club Road, and has effectively done so for the last 40+ years.”

The earthen dike in question was *not* built by San Diego County, nor does the County own or maintain that dike or the smaller sub-dikes located northwest of the main dike across the Tubb Canyon Bajada. No easements vesting these dikes in the public domain have ever been granted or recorded. The main dike and sub-dikes were actually built in the early 1960s by the Army Corps of Engineers, some would argue illicitly, and without the permission of the original landowners.

Of greater relevance now is the fact that the dike in question, which is not claimed or maintained by any governmental agency, was breached at its northernmost extent in severe flooding in 2013. The flood that breached the dike may be seen in a video on the Tubb Canyon Desert Conservancy Facebook page.

Historic drainage channels across Tubb Canyon bajada restored by 2013 storm waters breaching the dike are readily visible spreading across the DS-24 site in photo 4 on page 2 (Areal and Site Photos) of the County Analysis DS-24 Worksheet created by the Department of Planning and Development Services. **What analysis supports the creation and additional burden on emergency services and neighboring property owners of 150 new residential lots in a known flood plain that encompasses a natural desert riparian wash system?**

5) HOW HAVE THE INCREMENTAL EFFECTS ON GROUNDWATER OF DS-24 BEEN ADDRESSED IN THE SEIR, WHEN VIEWED IN CONNECTION WITH THE EFFECTS OF PAST PROJECTS, THE EFFECTS OF OTHER CURRENT PROJECTS, AND THE EFFECTS OF PROBABLE FUTURE PROJECTS?

According to the SEIR (page 4-36), estimates show that over 10,000 additional dwelling units would be possible when considering existing legally buildable vacant

lots plus the additional subdivision and multi-family development potential in the current Land Use Map for the community.

Table 1-11 in the SEIR lists projects currently being processed by the County. The following three are listed for the Desert in the vicinity of Borrego Springs and PSR Analysis DS-24:

Mesquite Trails Ranch	480 dwelling units
Borrego West SPA	177 dwelling units
Borrego Springs Country Club	255 dwelling units

The combined total number of proposed dwelling units for these in-process projects plus those in DS-8 and DS-24 is over 1400 additional dwelling units. Also, Table 1-13 lists an additional eight private projects in the desert community.

County Policy LU-8.2 requires new developments to identify adequate groundwater resources in groundwater dependent areas, as follows: “In areas dependent on currently identified groundwater overdrafted basins, prohibit new development from exacerbating overdraft conditions.”

County Policy LU-13.2 requires new development “to identify adequate water resources, in accordance with State law, to support the development prior to approval.”

County Policy LU-2.2 of the Community Plan calls for GPAs to “consider the extent of existing vacant lots in evaluating density increases.”

Given the groundwater basin overdraft and the estimate of over 10,000 dwelling units from the current Land Use Map for the community, there are cumulatively considerable impacts related to overdraft of the groundwater basin. **How and where does the SEIR address these cumulative impacts on groundwater vis-à-vis DS-24?**

Conclusion

The community of Borrego Springs has uniformly opposed DS-24. The Borrego Springs Community Sponsor Group first voiced its opposition in a March 1, 2012 letter to the Department of Planning and Land Use. The Borrego Water District signaled its opposition to DS-24 in its public statement dated March 23, 2016. The Borrego Springs Chamber of Commerce elaborated its opposition to DS-24 in a letter to the Department of Planning and Development Services dated April 7, 2016.

The significant environmental impacts of DS-24 are manifold. The DS-24 PSR does not conform to the principles of the General Plan, or the Borrego Springs Community Plan. Without DS-24, and at the current rate of land sales, there is already a 30-year inventory of vacant, zoned residential lots in Borrego Springs. Increasing the zoning density of DS-24 would provide residential lots that are patently not needed, and would needlessly exacerbate the water crisis in Borrego Springs. Any attempt at flood mitigation for DS-24 would have severe adverse impacts on private property adjacent to, and upslope of, DS-24 and would be opposed by impacted landowners and by property rights activists in perpetuity.

The current analysis demonstrates beyond a reasonable doubt that approval of the DS-24 PSR would result in significant irreversible environmental change as well as in an irretrievable commitment of groundwater resources. Thus DS-24 is noted throughout the SEIR to have multiple “significant and unavoidable impacts.” I suggest the significant negative impacts of the DS-24 PSR are in fact avoidable. They are avoided by selecting the **No Project Alternative**.

A **No Project Alternative** conclusion is particularly justified by the fact that DS-24 *does not represent an existing subdivision in process as there is no active application for such a project.* “Borrego Country Club Estates” (DS-24) is a phantom project that exists nowhere in County Planning except the idle subdivision application file. *Granting a zoning density increase to landowners who had no active project application in process at the time the General Plan was approved* would grant unmerited special privilege to these landowners, a privilege that has been denied to neighboring residents and landowners restricted by identical zoning limitations.

We trust that because of the facts outlined above and in the attached prior documentation, the **No Project Alternative** will be the recommendation of the Department of Planning and Development Services and eventually of the County Planning Commission, and that the **No Project Alternative** will be ratified by the County Board of Supervisors.

Sincerely yours,

J. David Garmon, M.D.

J. David Garmon, M.D.
President, Tubb Canyon Desert Conservancy

Appendix A

**LOUNSBERY FERGUSON
ALTONA & PEAK LLP**

ATTORNEYS AT LAW

960 Canterbury Place, Suite 300
Escondido, California 92025-3870
Telephone (760) 743-1201
Facsimile (760) 743-9926
www.LFAP.com

OF COUNSEL:
GARTH O. REID

SPECIAL COUNSEL:
JOHN W. WITT

June 26, 2008

Mr. Mark Slovick
Land Use Environmental Planner/Project Manager
County of San Diego
Department of Planning and Land Use
5201 Ruffin Road, Suite B
San Diego, CA 92123-1666
Telephone: (858) 495-5172
Facsimile: (858) 694-3373
mark.slovick@sdcounty.ca.gov

**SUBJECT: NEED FOR AN EIR FOR THE BORREGO COUNTRY
CLUB ESTATES PROJECT**

Dear Mr. Slovick:

I. INTRODUCTION

This firm represents Dr. Ann Irwin and Ms. Lori Paul who are the principals in a group comprised of 25 property owners in the Borrego Community. We have been asked to review the documents prepared to date with respect to the Mitigated Negative Declaration (“MND”) proposed for the development of Borrego Country Club Estates (“the Project”).

The Project is a residential subdivision containing 149 lots on approximately 173 acres. The project is located north of Country Club Road and south east of Star Road, between Wagon Road and Borrego Springs Road in Borrego Springs, California.

A. PUBLIC RECORDS ACT REQUEST

Pursuant to our clients' authorization, we lodged a Public Records Act request seeking copies of all documentation filed to date with respect to the processing of the noted MND by the County. See the letter, attached. The documents received in April 2008, pursuant to our PRA request have been reviewed and are the basis for this comment letter. Documents filed with the County since April 2008, if any, have not been provided or reviewed.

On August 29, 2006, the County issued to the developer a letter, which, at page three, stated, "It will be necessary to prepare and submit a draft EIR to satisfy the requirements of the CEQA." Since that time, the developer has hired a team of consultants who apparently convinced County officials to accept a more abbreviated study of the project, a MND. After reviewing all documents revealed by the PRA request, it is the position of our clients that the Project does not qualify for such abbreviated treatment. Rather, its scope and potential impact mandate the preparation of a full-scale Environmental Impact Report ("EIR").

To support its position, the client group, with the help of this firm, has reviewed the substance of those reports prepared and filed to date which, purportedly, would support the developer's assertion that a MND provides a sufficient level of environmental review. However, a critical analysis of the Project compels a very different conclusion. The facts, when compared to the applicable law, mandate the preparation of an EIR.

B. SUMMARY FINDINGS

In fact, there are numerous points of weakness in the reports and studies prepared in support of the Project; particularly fatal are the following:

1. Incomplete and misleading analysis of significant biological impacts, such as the mischaracterized impacts on the Peninsular Bighorn sheep, the Burrowing Owl, and other species as well as the inadequate or nonexistent mitigation measures;
2. Misleading and incomplete analysis of the use of and impact on water resources;
3. Statements regarding use of mitigation land which the Project developers do not own, and have not offered to purchase;
4. Lack of analysis of numerous impacts such as noise and air quality;
5. Inadequate analysis of areas such as visual impacts.³

C. TIMELINESS

³ This list is not all inclusive and simply highlights the most critical points set forth in this letter.

The client group fully recognizes that this letter is submitted prior to that point in time when comment letters are typically filed. In the ordinary course, the MND draft would be completed and made available for review and comment. It might be argued that, the process not yet having been completed, it is premature to comment. However, it is not too early to state the position that the MND environmental review process being pursued is wrong. This project does not qualify for an abbreviated review, as will be demonstrated below.

II. GENERAL COMMENTS

At the outset, it is helpful to briefly outline the law which governs the process of environmental review applying to the Project.

“Only through an accurate view of [a] project may affected outsiders and public decision-makers balance the proposal's benefit against its environmental cost, consider mitigation measures, assess the advantage of terminating the proposal ... and weigh other alternatives in the balance.... An accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR. The defined project and not some different project must be the EIR's bona fide subject.” (*County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 192-193 & 199)

The four basic purposes of the California Environmental Quality Act (CEQA)⁴, as described in CEQA Guidelines §15002, are to:

- (1) Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.
- (2) Identify the ways that environmental damage can be avoided or significantly reduced.
- (3) Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
- (4) Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

In order to accomplish these purposes, a public agency must prepare an EIR when there is substantial evidence that a project may have a significant effect on the environment

⁴ California Pub. Res. Code §21000, *et seq.*

(CEQA Guidelines §15002(f)(1)). The courts have long affirmed that CEQA is to be used as an informational tool which protects not only the environment but also informed self-government (*Cadiz Land Co., Inc. v. Rail Cycle, L.P.* (2000) 83 Cal.App.4th 74). The *Laurel Heights* court stated that an EIR is a document of accountability and serves as an environmental alarm bell to agencies **and** the general public *before* the project has taken on overwhelming “bureaucratic and financial momentum” (*Laurel Heights Improvement Association v. Regents of the University of California* (1988) 47 Cal.3d 376, 395 – boldface emphasis added). The EIR’s function is to ensure that government officials who approve a project do so with a full understanding of the environmental consequences and, equally important, that the public is assured those consequences have been taken into account (*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 449). An EIR must provide its readers with the ability to understand the scope of the project seeking approval, as well as its potential impacts. Thus, an EIR which is confusing, misleading or otherwise faulty is a disservice to the government officials tasked with reviewing the project and the public they serve.

In short, an adequate documentary study must be “prepared with a sufficient degree of analysis to provide decisionmakers with information which enables them to make a decision which intelligently takes account of environmental consequences.” (CEQA Guidelines §15151) If CEQA is scrupulously followed, the public will know the basis on which its responsible officials either approve or reject environmentally significant action, and the public, being duly informed, can respond accordingly to action with which it disagrees. (*Laurel Heights at p. 392*) An environmental impact report “must include detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project.” (*Id. at p. 405*) If an environmental impact report is intended to provide “accountability and serve[s] as an environmental alarm bell to agencies and the general public” then the study documents submitted in support of a MND fail this basic legal test and must be denied certification.

III. PROJECT DESCRIPTION:

As set forth above, the Project is a residential subdivision containing 149 to 150 lots on approximately 173 acres, located north of Country Club Road and south east of Star Road, between Wagon Road and Borrego Springs Road in Borrego Springs, California.

The 173-acre site is undeveloped property consisting of undisturbed natural terrain that is situated on portions of two alluvial fans created by Culp-Tubb Canyon and Dry Canyon, conveying runoff west to east, ultimately to the Borrego Sink in the southeast portion of Borrego Valley. Per Borrego Valley General Plan for Flood Control Improvements, July 1972, Culp-Tubb Canyon watershed is 12.2 square-miles and generates approximately 7,700 cfs during 100-year storm events. Dry Canyon watershed is 1.6 square-miles, generates approximately 1,300 cfs during 100-year storm events, and confluences with Culp-Tubb Canyon approximately 2,000–ft downstream of the existing

diversion dike. Prior to 1960, potential flash floods from these canyons during rainfall events had the potential to cause flooding of the project site and surrounding areas. In an effort to mitigate this potential flooding, a diversion dike was constructed upstream of the project site to divert flood flows from Culp-Tubb Canyon to the south, around the community, eliminating the confluence of runoff from Culp-Tubb Canyon and Dry Canyon.

Studies in support of the Project state that despite the fact that the dike has not failed over the last forty years, and that it is in good condition and functioning to divert flows, the armoring of the dike does not meet Federal standards. As a result, the Project studies claim that FEMA mapping ignores the dike altogether during 100-year storm events. The study concludes that improvements to the existing dike and additional diversion structures are necessary.

Among the proposed Alternatives is the construction of a diversion structure (Alternative 2), or construct a 200-foot wide soil cement channel (Alternative 6). However, the studies discussing the Project Alternatives fail to fully analyze their impacts on the surrounding area.

IV. LEGAL FRAMEWORK

We began this comment letter with a reminder of the general purposes of the CEQA law; what follows is a relatively detailed discussion of the facts known to date about the Project. It is now timely to compare those facts to the law as it should be applied to this stage of the process of review.

At the outset, presumably as a result of an initial study, the County concluded that a full-scale EIR would have to be prepared for the Project. However, the County was subsequently convinced to consider a diminished level of review by the preparation of a MND. Whether as a review of the documentation purporting to support a MND, or as part of the continuing consideration of an initial study, it is now imperative to measure the necessity for a full EIR.

CEQA authorizes a MND for a project when the initial study has identified potentially significant effects on the environment but:

(1) revisions in the project plans or proposals made by, or agreed to by, the applicant before the proposed negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where **clearly** no significant effect on the environment would occur, and (2) there is **no substantial evidence in light of the whole record** before the public agency that

the project, as revised, may have a significant effect on the environment” (CEQA § 21064.5, emphasis added).⁵

An EIR therefore may be dispensed with only if the lead agency finds no substantial evidence in the initial study or elsewhere in the record that the project **may** significantly affect the environment. In the present case, the only issue that is clear is that the information provided to date is insufficient to preclude preparation of an EIR. Indeed, the opposite is true. The documents of record conclude that the project will have a significant impact on the environment, virtually precluding an abbreviated review process.

A strong presumption in favor of the preparation of an EIR is built into CEQA; “[t]here is ‘a low threshold requirement for preparation of an EIR’ (*No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 84) and a ‘preference for resolving doubts in favor of environmental review’ (*Sierra Club v. County of Sonoma* (1992) 6 Cal.App.4th 1307, 1316-1317). This presumption is reflected in the “fair argument” standard, under which the County **MUST** prepare an EIR whenever substantial evidence in the record supports a fair argument that a project may have a significant effect on the environment (*Mejia v. City of Los Angeles* (2005) 130 Cal. App. 4th 322, 332).

A lead agency must find that a project may have a significant effect on the environment and must prepare an EIR if the project meets any one of the following conditions:

(1) The project has the potential to substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; substantially reduce the number or restrict the range of an endangered, rare or threatened species; or eliminate important examples of the major periods of California history or prehistory.

(2) The project has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.

(3) The project has possible environmental effects that are individually limited but cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

⁵ CEQA defines a “significant effect on the environment” as “a substantial, or potentially substantial, adverse change in the environment” (CEQA §§ 21068; see also, California Code of Regulations § 15382).

(4) The environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly. (14 California Code of Regulations § 15065(a)(1))

Matching the facts, as demonstrated by the findings of the biologist (see below), to the applicable law, a mandatory finding of a significant impact on the environment is compelled; thus the preparation of a full EIR is required.

V. SPECIFIC COMMENTS

Biology Impacts:

1. The Project Will Have A Significant Biological Impact.

The Biological Technical Report prepared by REC Consultants, Inc. in support of the Project immediately acknowledges that the Project “will directly impact 100% of the habitat within the proposed project boundary and associated infrastructure. **This is considered a significant impact and will require mitigation.**” (See Section 1.0) [Emphasis added.]

In reaching the conclusion that the Project will have a significant impact that will require mitigation, the Report relies on the CEQA definition of a significant impact as an impact that will:

substantially degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of major periods of California history or prehistory. (See Section 6.0)

Despite their acknowledgement of this significant fact, the Report attempts to downplay the effect of the Project on certain species and, in fact attempts to disregard or misstate that effect.

2. The Report Is Incomplete And Requires Further Study.

At Sections 1.0 – 4.0 the Report lists the biological surveys conducted in the Project area (approximately 172.7 acres). The surveys were conducted between 2004 and 2007. Wildlife species were identified via sight, vocalizations, scat, tracks or burros and plants were identified onsite or collected for identification.

The California Department of Fish and Game has not conducted a wildlife survey on the Project site; and any study that has been or will be conducted must be conducted at such time and season that the affected species will be present. For example, a brief survey conducted in the hot summer months and during a severe drought when annual seeds are dormant, would necessarily report the absence of certain species that naturally migrate away from the area at such times. A complete environmental analysis, therefore, must be done at different times of the year, and the Project cannot be approved unless and until it is completed and carefully considered.

As discussed above, the studies conducted for the Project at this time do not provide a complete picture of the biological impacts, or the necessary mitigation. A more complete study is necessary in order to cover the following, at a minimum. For example, of the four surveys conducted, the first was in the fall of 2004, the second in April, 2005 and the third in April 2005. The fourth survey was conducted in the summer of 2007. The Report does not discuss the impact of the seasons during which the particular surveys were conducted. This is a significant factor in that certain species are present and apparent during certain seasonal cycles and more elusive depending on breeding patterns, migrational patterns, etc. For example, rare desert horned lizards, a fringe toed lizard of unknown species, raptors including at least one burrowing owl exist on the Project property, and have not yet been documented.

This would lend itself to the lack of observation of animals that are known to be in the Anza Borrego Desert, and in the Project area in particular.

Moreover, the Report fails to refer to other well known biological surveys of the area which provide authority that additional species animals can be found therein, and support the impact of the Project on those species.

3. The Project is located in a Riparian Desert Habitat and Desert Riparian Watershed Which Sets Forth Protections/Canyon Outflow

On August 2006, the County acknowledged that the natural drainage may qualify as a wetland under the San Diego County Resources Protection Ordinance, which prohibits impacts to wetlands and wetland buffers. The County specifically requested a wetland survey using the County's definitions because they varied from the federal U.S. Army Corps of Engineers' definition; and, to the extent there is a disagreement over the extent of the wetlands, further study will need to be conducted (Attachment D). The County seems to have accepted the applicant's Report that indicates two areas of potential water flow observed on the western side of the Project were shallow channels that did not contain vegetation. The County also seems to have accepted the applicant's conclusion in the Report that the two areas do not qualify as United States Army Corps Waters of the U.S. because they are not tributaries to navigable waters; do not qualify as Army Corps jurisdictional wetlands because they do not support wetland vegetation; do not fall under

the jurisdiction of the California Department of Fish and Game because they do not contain standing water or riparian vegetation; and, do not qualify as Resource Protection Ordinance wetlands because they lack wetland vegetation, hydric soils or a non-soil substance.

The County has accepted the applicant's conclusion regarding this important topic, despite the applicant failing to provide any explanation, analysis or source for its conclusions.

4. **The Report Omits Discussion Of Important Species Such As The Burrowing Owl.**

Section 4.2 describes the wildlife found on the Project site. Of the birds, only the mourning dove (*Zenaida macroura*), Say's phoebe (*Sayornis saya*), and house finch (*Carpodacus mexicanus*), together with the more common greater roadrunner (*Geococcyx californianus*), cactus wren (*Campylorhynchus brunneicapillus*), phainopepla (*Phainopepla nitens*) and red tailed hawk (*Buteo lineatus*). The Report does not reference burrowing owl (*Athene cunicularia*), for example, a known endangered species, listed by the USFWS that has its habitat in the Anza Borrego. And Appendix D, which lists the USFWS sensitive animal species misstates that the habitat for the burrowing owl does not occur on site.

In fact, as discussed above, the burrowing owl has been seen in the area of the Project. Our client, Lori Paul, brought this to your attention, with actual photographic evidence, on August 31, 2007 and then again on October 30, 2007. Not only are these owls on the Project site, but as discussed further herein, they are directly within the line of construction of the levee which is among the items to be constructed in the furtherance of the Project. Disturbance of this endangered species simply cannot be contemplated.

Appendix D inaccurately represents that most, if not all of the USFWS sensitive animals known to be in the Borrego area either have not been observed on site, their habitat does not occur onsite, or these animals have no roosting sites on the Project site. And the Report has reached that conclusion by conducting merely four surveys between 2004 and 2007.

5. **The Report Omits Discussion Of The Flat Tailed Horned Lizards.**

The flat tailed horned lizard (*Phrynosoma mcalli*) is another species which has been documented at the Project site and which the Report omits. And once again, Appendix D attempts to misleadingly imply that the flat tailed horned lizard's habitat "does not occur onsite". The reality is that it does, and that the Project threatens to take their habitat.

The Biological Technical Report also ignores the significant impact the Project will have on these animals. In fact, the status of these animals is currently undergoing research and review due to a startling discovery made in 2002. These lizards require native ant populations for food and *cannot survive on the*

*invasive and aggressive Argentine ants that radiate out from housing developments.*⁶ The Project will no doubt increase the Argentine ant population which, in turn, will adversely impact the horned lizards beyond the loss of their important habitat.

Thus, the impact on the lizard is inadequately and misleadingly addressed in the Report, and requires significantly more study.

6. The Report Misstates The Impact Of The Project On The Bighorn Sheep, And Provides No Mitigation Measures.

Section 4.3.3 the Biological Technical Report specifically states that the Peninsular Bighorn Sheep, sensitive animals according to the USFWS (2005), CDFG (2005) or candidates for those lists, have the potential to occur onsite.

The Report goes on to say that the Bighorn traverse the land impacted by the Project, then contradicts itself by asserting that “there were no rare, threatened, or endangered animal species” observed on site. Report further misstates facts by asserting that states that “**no sensitive habitats were identified on site.**” (See section 4.3.1)[Emphasis added.] First, this statement totally ignores the obvious fact that this site is classified as a sensitive habitat in numerous ways discussed herein, including the Riparian Desert Habitat discussed above. Most importantly the Report attempts to mislead the County by asserting that that no mitigation measures to alleviate the impact on the Bighorn are necessary because the Project site is not a “viable wildlife corridor”. (Section 5.1.2).

The reality is that the Bighorn do migrate through the Project area, and since it has been acknowledged that 100% of the habitat within the Project area will be impacted, the Bighorn will be threatened and that threat cannot be mitigated, in any way but to abstain from building the Project in the planned location.

The Bighorn occur in the Peninsular Ranges of southern California, which include the Tubb Canyon area. The continued existence of the Bighorn Sheep population in these mountains relies heavily upon maintaining connectivity between all subpopulations, so that gene flow can continue and subpopulations will be resilient. The USFWS has prepared a *Recovery Plan for Bighorn Sheep in the Peninsular Ranges, California*, in accordance with the Endangered Species Act of 1973, as amended (Act) (16 U.S.C. 1531 et seq.) (“Recovery Plan”). The “objective” of the Recovery Plan is to:

[S]ecure habitat and alleviate threats to the overall

⁶ See *Proliferation Of Argentine Ants In California Linked To Declines In Coastal Horned Lizards*, UCSD Science and Engineering Press release, February 26, 2002, <http://ucsdnews.ucsd.edu/newsrel/science/mclizard.htm>

Peninsular bighorn sheep population so that population levels will increase to the point that this species may be downlisted to threatened status, and ultimately delisted. (see the *Notice of Availability of a Draft Recovery Plan for the Bighorn Sheep in the Peninsular Ranges for Review and Comment*, [Federal Register: December 29, 1999 (Volume 64, Number 249)]

Contrary to the assertions in the Biological Technical Report of “no sensitive habitat” being identified, the Recovery Plan identifies contiguous habitat, such as the Bighorn sheep habitat in the Tubb Canyon area, as **key** to its recovery goals and provides guidelines for maintaining connectivity between populations. In addition, the Recovery Plan states that Bighorn sheep must be found in 9 recovery regions within this habitat for full recovery to occur.⁷

Tubb Canyon is located in one of these 9 recovery regions, near the middle of the narrow ribbon of habitat. Approximately 38 Bighorn Sheep, referred to as the “south San Ysidro Mountains subpopulation,” reside in this area. According the USFWS’s Recover Plan presence of Bighorn sheep in the Tubb Canyon area is critical to the persistence and recovery of the entire endangered population, because they provide the crucial link between sheep in the northern and southern portions of their narrow range. Tubb Canyon and its bajada provide essential habitat, including crucial water and forage resources, for this subpopulation. Within this relatively small range, this group of Bighorn sheep must find all the resources necessary for survival in the desert, including food, cover (from predators or inclement weather), and water. Thus, the Bighorn Sheep and their essential habitat in Tubb Canyon justify the attention, concern, and protection, which are now afforded by the law, and which the Project and the Reports in support of the Project ignore.

Bighorn Sheep in the Tubb Canyon area are currently in lambing season, with most lambs born during the months of February through April, and some born during summer months. Female Bighorn sheep will seek remote, quiet places when they are ready to give birth. Females with young lambs are particularly susceptible to disturbance, which can occur via a number of human activities.

As the lambing season ends, Bighorn Sheep face one of their toughest times of the year - the harsh conditions of the Anza Borrego Desert summer. During the summer, the

⁷ Moreover, in 2007, there was a proposed Taxonomic Revision of the *Designation of Critical Habitat for the Peninsular Bighorn Sheep*, which highlighted the Anza Borrego Desert as a significant portion of their critical habitat. This revision indicates that many of the areas of critical habitat within the Anza Borrego will require “special management” in order to “decrease the effects of human disturbance.”

south San Ysidro Mountains subpopulation relies heavily on Tubb Canyon, due to the presence of two natural springs and an artificial drinker, constructed and maintained by one of the landowners in Tubb Canyon. These water sources may be especially important this summer, due to the prolonged, current drought.

The Project, its construction, ongoing existence and associated traffic will no doubt disturb the Bighorn sheep during sensitive periods. The intrusion the Project will simply add to the cumulative negative impacts that already threaten the future recovery of this endangered population.

7. **The Report states that 1:1 Mitigation Is Necessary For The Sonoran Creosote Bush Scrub, But Ignores The Fact That It Is Insufficient For other Federally listed critical species**

The substantial evidence available to the County in this instance is unusually revealing and persuasive. Such evidence is provided by nothing more than the Biological Technical Report prepared by the developers' expert. The Report attempts to suggest a 1:1 mitigation measure for the Sonoran creosote bush scrub, which would address the impact on the plant. Without arguing about the adequacy of the 1:1 mitigation plan proposed, it is elemental to question what plan is proposed to address the impact on the Bighorn? It could be concluded from the report that the diminution of the Bighorn range as a result of the Project is of no great consequence requiring no mitigation whatsoever. Such a conclusion is so irresponsible as to be an unintended interpretation.

Yet, it is only slightly more credible to extrapolate and apply the biologist's 1:1 mitigation formula to the Bighorn. If the mitigation formula is the suggested solution, it would propose that the 21 acres of Bighorn habitat lost to the Project be replaced in kind.

The land impacted by the development of the Project is habitat which is peculiar to one particular flock of Bighorn sheep – it is specific to their very being. One cannot “add” to the flock's habitat – it is what it is. If more land is to be purchased and set aside for other purposes, it would not add to the range of the flock, which is fixed and in place. The loss of any portion of such habitat would remain a net loss.

This particular land is not some generic environmental asset which can be replaced in kind at another location through a standard mitigation plan. Even if the mitigation ratio were changed to 20:1, it would not help this particular population of endangered species. An extension of the proposed mitigation plan would be to relocate the flock to some larger habitat - a truly ludicrous solution but a logical extension of the consultant's solution.

The conclusion is inescapable – the loss of habitat for the Bighorn sheep as a result of the development of the Project would be un-mitigatable. So, do these facts

support a finding of significance regarding the threatened environmental impact of the project? Most certainly.⁸

Water Impacts:

There are significant issues affecting water that have not been sufficiently studied, or even addressed. What has been included are a number of descriptions, without any answers to crucial questions such as: quantifying the Project's discharge during construction and thereafter; the impact to the Clark Water shed, to which the Project is a tributary; the impact to the local plant and animal environment; the effect the Project will have on local, state and national water conservation efforts; and, the effect on potential flooding and flood control measures. This failure does not allow the County or the public to understand the full impact of the Project as would be provided by a proper EIR.

The following is a survey of the issues that must be addressed and studied in depth, as is only possible with a full EIR:

1. Impacts to Surface and Ground Water

In the Storm Water Management Plan dated November 7, 2005 ("SWMP"), the applicant indicated that receiving waters would not be affected by the project throughout the project life cycle and that there are no high risk areas within the project limits (high risk areas being municipal or domestic water supply reservoirs or groundwater percolation facilities). However, the applicant acknowledged the following anticipated pollutants: sediments, nutrients, trash and debris, oxygen demanding substances, oil and grease, bacteria and viruses and pesticides and that since the Project would include work in channels, there is an increase in the velocity or volume of downstream flow, discharge to unlined channels, increase in potential sediment load of downstream flow.

On August 29, 2006, the County's Department of Planning & Land Use ("DPLU"), in turn, has determined that since the project will use groundwater, a technical investigation into the available groundwater resources will be required (Appendix L). Neither the applicant nor the County, however, have sufficiently considered the extent or significance of the water impacts beyond superficially identifying that there may be concerns.

The relationship between groundwater and surface water is well-known to professional hydrologists but neither is sufficiently discussed or analyzed in any of the documents provided. In fact, the applicant failed to provide information on the beneficial uses for inland surface waters and ground waters, as requested in the SWMP. Although

⁸ Moreover, it is important to note that 233 acres of the proposed mitigation land is currently owned by Tim Skogen, not the developer of the Project. In fact, Mr. Skogen has made it clear that he has no intention of selling that land to the proponents of the Project.

surface water is not a major source of water, there are still concerns with possible contamination and depletion. The Project proposes to divert drainage as a flood control measure and cites the need to obtain a waiver and release from all affected downstream property owners. This is not only an inadequate proposal for flood control, but again fails to address the impact on the environment, for which waivers and releases are not available.⁹ Water from contributing basins along with run-off generated on the Project site will travel through the site via shallow overland flow, continuing downstream through existing subdivisions and ultimately to Borrego Sink, the lowest point in valley to which all natural drainage is directed.

As much as 8,000 acres around the Borrego Sink is home to mesquite woodland, some of which has been a protected feature under County of San Diego land use regulations. Every year there is increased evidence that the otherwise adaptable mesquite in the Borrego Sink are dying of thirst.¹⁰ Although plant and animal life can adapt to change when it occurs gradually, what happens when the change is not so gradual as will occur with the addition of the Project- a high-density subdivision on 173- acres? This is only a preliminary question that has not been answered and cannot be adequately studied in the absence of an EIR.

2. Water Conservation Impacts

For approximately fifty years, groundwater levels in the Borrego Valley have been dropping in response to a continuing overdraft of the aquifer, the valley's sole source of water which is being insufficiently recharged by the area's very sparse rainfall. The most commonly accepted figures for storage, use and inflow indicate that at the current level of usage, the usable supply of groundwater could last approximately 100 years; however, the current levels of usage will not remain static as the population and water use continues to grow and the cost of extraction will increase as the water levels decline.¹¹

Borrego Valley has no access or right to any imported water, from either the Colorado River or Northern California water, partly because of cost, but mainly because these sources are already oversubscribed. Similarly, obtaining water from adjacent areas such as San Felipe Creek, Clark Dry Lake and Ocotillo Wells is possible but extremely unlikely as there is only limited water available, in most cases it is of poor quality and the

⁹ In addition, such diversion is strictly prohibited pursuant to San Diego County Code, Ordinance 9426, Part G, section G.3.1.2, which states: "Measures to control flow rates and velocities shall not disrupt flows and flow patterns that are necessary to support downstream wetlands or riparian habitats. Diversion of runoff to regional facilities shall not be allowed to deprive immediate downstream habitats of the minimum flows and /or over-bank flow events they need."

¹⁰ See for example, the concerns outlined by the Borrego Water District, *Groundwater Management Study March 2001*, available at http://www.borregowd.org/Downloadable_Files.html, p. 26).

¹¹ *Id.*

facilities to transmit and treat the water would be prohibitively expensive.¹² For example, building a pipeline to import water (from either the Colorado River or the Imperial Irrigation District canal approximately thirty-eight miles away) would cost approximately \$60 million.¹³

According to the description provided by the applicant, the Project will be served by on-site septic systems and groundwater from the Borrego Water District, which will require 1) the construction of an on-site well that would be tied into the district water system; 2) upgrading or increasing the pipe sizes surrounding the property; and, 3) upgrading the existing water tank located to the west of the Project. However, the applicant fails to include estimated water usage and potential alternatives to the planned water source, given the very real and immediate water crisis facing the area. In addition, the applicant does not quantify or otherwise analyze the need/ use of new potable water versus reclaimed water or the amount of reclaimed water that might be produced and the associated costs and benefits of reusing water.

As outlined below, a major function of an EIR is to ensure all reasonable alternatives to proposed projects are thoroughly considered, analyzed and assessed. It is not enough to merely designate the source of the water; water is at a premium and any development will impact the flow of water, water use, water reuse and the only way to adequately study the associated environmental impacts is with an EIR.

3. Flood Control

As noted in Flood Hazard Evaluation, prepared on August 27, 2007 in support of the MND, approximately 60% of the proposed residential development is within the flood plain as is significant neighboring developments immediately to the north of the project and significant flood-prone development downstream of Borrego Springs Road (at p. 19). The report further acknowledges the uniqueness of the Project in that the central portion, which includes approximately sixty (60) lots, is elevated out of the flood plain, with the majority of the remaining lots in the flood plain (p. 19).

Despite acknowledging the significant flood potential, the discussion in the reports of the solutions to the potential problems of flooding are graphic examples of the flawed approach to the environmental analysis process.

Six different flood control alternatives are pro-offered, some of which are stand-alone solutions, while others would have to be undertaken conjunctively. The point to be

¹² See, Borrego Water District, *Groundwater Management Study March 2001*, available at http://www.borregowd.org/Downloadable_Files.html.

¹³ Mike Lee San Diego Union Tribune. Aquifer is Drying Up in Borrego Springs, <http://signonsandiego.printthis.clickability.com/pt/cpt?action=cpt&title=Aquifer+is+dryin...> (April 4, 2008, last accessed on April 11, 2008).

made is that no one approach is clearly designated as the preferred solution. Thus, the environmental review must analyze the impacts of each and every such potential solution. Of course, absolutely no such impacts have been environmentally analyzed.

The developer's engineer did, however, present a preferred engineering solution to the threat of flood waters. He recommended the reconstruction of the pre-existing 2700 foot (4000+ foot?) Culp- Tubb Canyon dike, and the construction of 5,800 feet of a new perimeter levee. While we have no way of completely filling the analytical gap regarding this engineering solution, several concerns come immediately to mind.

Existing Dikes. Reconstruction of the dikes now in place presents problems of nearly insurmountable magnitude. First, the existing berms are home to the burrowing owl, an endangered species. That fact has been brought to your attention by our client, Lori Paul. On August 31, 2007 and then again on October 30, 2007, Ms. Paul presented written and photographic evidence of the existence of burrowing owls in the berm situated on her property. As discussed above, disturbance of this endangered species simply cannot be contemplated.

Second, the existing levees identified for reconstruction are all on private property. They were first built in 1963 by the Army Corps of Engineers with the consent of the then owners of record. No easements vesting the levees in the public domain have ever been granted or recorded. The berms are privately owned. The current owners have expressed their adamant opposition to the reconstruction of any of the levees located on their properties. If reconstruction is contemplated, it could only be accomplished through a forced taking of the property, which each and every owner promises to stoutly appose.

Third, the recommended method of financing the berm construction and reconstruction work noted above must be addressed. While there is a split of authority regarding the reach of CEQA into economic matters, there can be no doubt that, in this instance, the suggested financing vehicle for the levee work raises grave environmental concerns. Stated differently, if the financing vehicle is deemed feasible, the work which it funds will have a dramatic environmental impact on the entire Borrego Valley.

The developer's engineer recommends the formation of an assessment district to finance the reconstruction of certain of the existing dikes, and the construction of 5,800 feet of new dike. Simplified, the boundaries of an assessment district are formed by defining all the properties which could be said to benefit by the completion of the infrastructural work being completed – the dikes. Any property that is to be benefited will have to pay an assessment – a tax burden added to the property – in proportion to the predicted benefit, which is measured by an engineer experienced in analyzing such benefits.

In this instance, the engineer does not specifically identify these “benefited properties” but he broadly describes an area of benefit both upstream and downstream from the subject development. This could include most of the Borrego Valley.

Fortunately, the formation of an assessment district is subject to the consent of those property owners whose lands would be affected. A vote must be conducted within the proposed district and a majority of the impacted owners must approve the assessments. If a majority of the owners “protests” the assessments, formation of the district fails.¹⁴

Obviously, the developer’s engineer has proposed an element of the Project which presents financial and political issues that CEQA does not necessarily require to be analyzed (CEQA § 21080 (b)(8)) . However, the same element does present an issue which CEQA is designed to address. There can be no doubt that the reach and scope of the dike construction constitutes a “project” under CEQA § 21065. Any such “project” is required by CEQA to be analyzed, and the superficial study afforded by a MND will simply not suffice. No public agency, in good conscience, could allow a public works project of this scope and magnitude to proceed without the preparation of a full-scale EIR (*Lighthouse Field Beach Rescue v. City of Santa Cruz* (2005) 131 Cal. App. 4th 1170, 1202), especially when, as is the present case, the agency has failed to provide an accurate project description, or fails to gather information and undertake an adequate environmental analysis in its initial study (see, *City of Redlands v. County of San Bernardino* (2002) 96 Cal.App.4th 398, 406, 408).

For this reason alone, not to mention the others covered herein, the County must abandon the preparation of a MND and order the completion of the more comprehensive environmental review which the Project requires.

Land Use Impacts:

At this time the County has not yet implemented its General Plan Update which would decrease the density requirements for the Project area and the Anza Borrego Desert in general. Nonetheless, it is our understanding that the General Plan Update is in the process of being approved by the County Board of Supervisors. This Update will limit the permissible density to one residence per 20, 40 or 80 acres, which is totally incompatible with the planned density of the Project, which is a high density project consisting of 149 lots on approximately 173 acres.

We have been advised that the requisite applications for the Project were not submitted in a manner that would allow it to be grandfathered in under the General Plan

¹⁴ It must be noted that in certain limited instances, the majority protest can be overridden by the local legislative body; the Board of Supervisors. Flood control facilities are one example of public improvements for which the majority protest over-ride is possible

Update (or the 2020 Plan). Thus, it will not be compatible with the area upon the Plan Update's approval.

Landform Alteration/Visual Quality Impacts:

One must appreciate the visual and aesthetic qualities of the Anza Borrego Desert, and the Tubb Canyon area, qualities which are profoundly threatened by the proposed Project. It is important to note that the analysis contained in the Studies in support of the Project are incomplete as they do not adequately address the significant and unavoidable visual impacts.

It is clear that the studies and reports in support of the Project do not take the necessary next step and analyze the project's effects on the "wilderness experience" in the Anza Borrego Desert. Unlike urban and suburban projects that create visual quality impacts within the context of mostly man-made structures, this Project creates visual impacts in an area that provides a wild, natural haven for those individuals who enjoy the outdoors and need a break from the stresses of city life.

For example, the Project will consist of a residential community being constructed on 149 to 150 lots, where there is currently natural terrain. This construction, the necessary roads, the accompanying vehicles and traffic and the resulting development, will be widely visible throughout the surrounding areas, including higher elevation impacts.

In addition, both the diversionary structure and the channel will create significant visual impacts on surrounding properties, as well as higher elevation viewpoints. The area is specifically known for its natural resources, landscape and natural untouched scenery. The structural intrusions will cause unavoidable disruption, as will the construction of these large structures.

Traffic Impacts:

The Project is located on the west side of Borrego Springs Road (S-3) just south of Tilting T Drive. The Transportation Analysis demonstrates that the project will have significant impacts on Palm Canyon Drive between Country Club Road and Borrego Springs Road by adding significant traffic. For example, the Project is expected to generate approximately 1,480 average daily vehicle trips, 118 occurring the AM peak hour and 148 in the PM peak hour.

The recommended mitigation measure set forth in the Transportation Analysis is to add a local and regional fee to mitigate development impacts based on the Estimated Dwelling Units (EDU). As estimated by the Transportation Analysis, the Project will generate 1,480 trips, generating 123.33 EDU based on 12 trips/EDU. The Total TIF fee recommended is \$352,610.00.

Clearly the need to add a local and regional fee to the tune of \$352,610.00 demonstrates that there are currently insufficient funds to mitigate the traffic impacts on the area. Moreover, should the fee be implemented, the Transportation Analysis does not indicate how it will be utilized to mitigate the impacts as the amount of daily trips and the consequent traffic will be an unavoidable side effect of the Project, and its resulting increase in the population of the area¹⁵.

Air Quality Impacts:

Without explanation or analysis, the County¹⁶ determined that no significant impacts to air quality have been identified. Given the current undisturbed nature of the site and the scope of the Project, this conclusion is hard to believe and the public deserves an explanation based on a complete analysis.

The potential adverse impacts to air quality include, but are not limited to: the accelerated wind and flood erosion of the relict sand dune after the removal of natural vegetation (the established ocotillo/ creosote plants) and the emissions from construction earthmoving activities. Extremely high winds frequently blow through Tubb Canyon and surrounding canyons. Depending on the wind direction, newly exposed and/ or the displaced sand will clearly and negatively affect a number of local residents and properties. The exposure to fine particulates blowing from the grading site may present a serious health risk to the elderly and those with respiratory conditions. The irony is that many people moved to Borrego Springs for the benefit of the clean, dry desert air. The further irony is that the existing sand dune is a natural barrier for wind and traffic sound; the Project will not only be causing adverse impacts to air quality, noise and traffic (discussed in other sections), but will be eliminating the natural protection already in existence.

Another potential adverse impact that needs further analysis and study is whether or not the site will be subject to inversion layers which increased traffic will exacerbate. Most valleys face this issue, and given that the site is within the Borrego Valley, this issue deserves consideration. The failure to provide any explanation regarding air quality impacts is just another of the gaps in the study of material issues which must be addressed in order for a full and complete environmental review to be conducted.

Noise/Odor Impacts:

Once again, there has been no study conducted with regard to the potential impacts of noise and odor on the surrounding areas. Given that the Project plans on grading a site

¹⁵ In many aspects, including the lack of clarity as to how the TIF will be applied, this Transportation Analysis fails to address the points raised in the proposed Memorandum of Understanding attached as Exhibit C to the County of San Diego's August 29, 2006 letter addressing the Project application for a Tentative Map.

¹⁶ Ltr. from William Stocks, Project Manager, Regulatory Planning Division, County of SD, DPLU, to David Davis (August 29, 2006), Attachment J.

that currently has a natural barrier in the form of the ridge in the middle of the site, it is hard to believe that no consideration has been given to noise and odor impacts. At the very least, there will be a large adverse impact during grading and construction.

Like the apparent gaps in information addressed above, this serves to demonstrate the Project is not the appropriate project for the Borrego Springs area, or that at a minimum, it cannot be adequately addressed by a Mitigated Negative Declaration. In passing, in the Biological Technical Report, Section 6.1.1, states that “noise pollution is not expected to be a problem.” Again, no supporting statement or analysis is referenced.

At a minimum, the fact that, as set forth in the Transportation Analysis, the Project will an additional 1,480 average daily vehicle trips, 118 occurring the AM peak hour and 148 in the PM peak hour, must be addressed.

Growth Inducement Impacts:

As with many areas discussed above, the studies prepared in support of the Project are silent as to the population growth impacts. With 149 to 150 lots, and the resulting residential construction on those lots, the increase in the population and its impact on the resources of the surrounding area is a significant impact; one which cannot be disregarded or ignored as is being done in this instance.

Socio-Economic Impacts:

The studies fail to discuss the socio-economic impacts of the Project when there is a clear threatened impact to the surrounding sparsely populated Borrego Springs area, both with regard to undeveloped and developed properties. This omission is in direct contradiction to the requirements of the court. (*Bakersfield Citizens for Local Control v City of Bakersfield* (2004) 123 Cal. App. 4th 777, 793).

School District Impacts:

The studies fail to discuss the impacts of the Project on the local school district and all of its constituent schools as required. (*El Dorado Union High School District v City of Placerville* (1983) 144 Cal. App. 3d 123). This failure is surprising considering that a project of this magnitude has potentially significant health, safety and welfare impacts on these sensitive receptors in terms of odor, air quality, noise and traffic, many of which have not been addressed by the Study. For instance, the increased traffic on the road will directly compete with school buses, teacher’s and parent’s vehicles and student drivers themselves. Not only is this a potentially significant issue with regard to schedule due to additional traffic delays, but it creates a more dangerous road condition to have so many additional large vehicles on the roads near to schools. The omission of this analysis is likely one of self-interest, as the County would be hard-pressed to wave off the public’s apprehension when the Project’s impacts are shown to affect children.

Cumulative Impacts:

Again, characteristic of the studies' utter disregard of essential points, the cumulative impacts of the Project are not addressed.

Project Alternatives:

A major function of an EIR is to ensure that all reasonable alternatives to proposed projects are thoroughly assessed by the responsible official. (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 735). The CEQA Guidelines explain that an EIR "shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. A potential alternative should not be excluded from consideration merely because it would impede to some degree the attainment of the project objectives, or would be more costly. (*Preservation Action Council v. City of San Jose* (2006) 141 Cal.App.4th 1336, 1354, quoting CEQA Guidelines, §15126.6(b)). In determining the nature and scope of alternatives to be examined in an EIR, ... local agencies shall be guided by the doctrine of 'feasibility.'" (*Citizens of Goleta Valley v. Board of Supervisors*, (1990) 52 Cal.3d 553, 565). Feasible, in this context, means "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors." (CEQA §21061.1).

As project alternatives are not addressed in the studies in support of the Project, an EIR is absolutely necessary.

VI. CONCLUSION

For the reasons set forth above, we find that the studies in support of the Project are defective and incomplete, making it evident that either the Project should not go forward, or at a minimum should undergo the scrutiny of a full EIR rather than simply a Mitigated Negative Declaration as suggested by the studies. The Project, if implemented, will create significant unmitigated impacts beyond those which would fall within the confines of a MND, in contravention to the stated purpose of CEQA. We recommend that, considering the massive oversights by the Project proponents, at a minimum, the County require an EIR for the Project.

Our recommendation is more than timely. As we noted above, this comment letter would, typically, be filed in response to the circulation of a draft MND. Thanks to the information provided in response to our PRA request, we are in a position to address corrective measures sooner rather than later. The net affect of the decision, now, to prepare

a full EIR, will save the developer and the County the expense of a pointless exercise - the completion of a draft MND.

No fair-minded observer of the Project – whether critic or supporter – could fail but to conclude that a draft MND will never pass judicial muster under CEQA. Preparation of a full EIR will be compelled, either by the reasoned conclusion of the County, or by judicial mandate. The client group urges that the County follow the law and order the preparation of a full-scale EIR.

Thank you for your consideration of our thoughts and concerns.

Very truly yours,

LOUNSBERY FERGUSON ALTONA & PEAK,

LLP

Kenneth H. Lounsbery, Esq.

KHL/rmq



3 February 2016

**County of San Diego
Planning and Development
Services**
Peter.Eichar@sdcounty.ca.gov
Kevin.Johnston@sdcounty.ca.gov
5510 Overland Avenue #310
San Diego, California 92123

Re: Opposition to Property Specific Request Desert Subregion 24 (DS-24) proposed change from Semi-Rural (SR)-10 to SR-1 under the current San Diego County General Plan encompassing ~172 acres of pristine desert (APNs 198-320-01 and 198-320-26)

Dear San Diego County Advanced Planning Staff,

Tubb Canyon Desert Conservancy (TCDC) was established to preserve desert habitat and biodiversity, to protect native plants and wildlife, and to promote understanding of these special places. Tubb Canyon Desert Conservancy represents numerous desert landowners and visitors to the Anza-Borrego Desert in the vicinity of the proposed DS-24 Property Specific Request located on ~172 acres (APNs 198-320-01 and 198-320-26). It is our strong assertion that any increase in density on the DS-24 site would adversely impact neighboring landowners, Anza-Borrego Desert State Park, Pinyon Ridge Wilderness, rare species, and the associated economy of Borrego Springs.

DS-24 is located at the southern edge of the unincorporated San Diego County community of Borrego Springs. **The high conservation and pastoral recreational value of the two subject parcels was broadly recognized during the protracted San Diego County General Plan process, resulting in the final determination to include DS-24 in the lower density SR-10 zoning designation. This decision was correct and fair and should not be altered.** The current owners of the property had the same opportunity as all landowners in the immediate vicinity to provide input during the lengthy General Plan update process.

The high density of buildable lots surrounding the sand dune and a dense ocotillo forest on the DS-24 site as represented on the County planning maps for DS-24 is not reflected in reality and actual land use. DS-24 is not, as described by the property owner, "in-fill" to existing residential housing. In spite of the name "Country Club Road," there is no country club or high-density development in the area around DS-24. In fact, many local residents in the immediate area have deliberately "self-zoned" at lower density than the current SR-2, SR-1 or Village Residential (VR)-2 permits by purchasing vacant land (lots) on one or more sides of their own homes to prevent future development, which, in turn, preserves natural vegetation and wildlife habitat, maintains their semi-rural lifestyle, and protects their scenic views. Many more residents desire to purchase the vacant lot or lots around their homes; however, they cannot yet afford to acquire those parcels. Allowing DS-24, currently zoned low-density SR-10, to become a more "urban" SR-1 would result in smaller lots than currently exist in the surrounding residential area. See the attached aerial photos that document the actual low density of the neighboring homes adjacent to the DS-24 parcel as well as the floodplain and dune complex on the site.

The approved General Plan appropriately took the discrepancy between the County-specified density and reality into consideration, along with other germane factors, in lowering the zoning density for the open space parcels: APNs 198-320-01 and 198-320-26. It should also be noted that the two, large **DS-24 parcels have never been subdivided and have no certificate of compliance.**

In this context, **the owners of DS-24 should not be granted a special zoning change that has been denied to other adjacent landowners of large parcels.** All property owners should abide equally with the new, lower density zoning in the region. Area landowners recognize the importance of a low-density, natural habitat buffer zone around their homes (or planned homes) that complements and protects adjacent Anza-Borrego Desert State Park. Area landowners, that is, excluding the owners of DS-24, notably Rudy Monica, David Davis, and Chris Brown. It is unacceptable that these property owners, *who had no active application in County Planning for any project at the time the General Plan was approved*, should be granted a free Subsequent EIR, conducted at taxpayers expense, to further their desire to be granted special privileges that other County landowners in the immediate area will not receive and that would be contrary to public interest.

In fact, local opposition to the numerous incarnations of the proposed high-density subdivision promoted by owner Rudy Monica has been consistent and so strong over the years, that immediate neighbors of the site, the larger community, state park personnel, local news media and even some law enforcement and utility company staff routinely refer to the DS-24 project as “Rudyville.” This is because the ostentatious name of “Borrego Country Club Estates” used in past Project documents and at Borrego Springs County Sponsor Group meetings, was perceived as absurd for what has become, over the years, a scheme to grade 172 acres of pristine desert into a grid of small, vacant lots for sale. Borrego Springs already has a large surplus of buildable lots for the foreseeable future, especially considering the new limitations on water resources in Borrego Valley.

The density proposed under the requested change for DS-24 would no longer be acceptable in the current, critically overdrafted state of the Borrego Valley Groundwater Basin (BVGB).

Regarding water resource limitations on land use planning mandated by the adopted Groundwater Management Plan (GSP) under the Sustainable Groundwater Management Act (SGMA), please refer to the comment letter from TCDC dated 17 December 2015 at the Notice of Preparation public hearing (copy attached).

In a related matter, TCDC is concerned about **inadequate construction of water service infrastructure and the wastewater disposal system for any increased density development proposed on the DS-24 parcels.** In a letter dated July 24, 2008 sent to the San Diego Department of Land Use and Planning, Kenneth H. Lounsbery, of Lounsbery Ferguson Altona and Peak LLC Attorneys at Law, wrote the following:

According to the description provided by the developer, the Project will be served by on-site septic systems and groundwater from the Borrego Water District, which will require: 1) the construction of an off-site well that would be tied in to the District water system; 2) upgrading or increasing the pipe sizes surrounding the property; and, 3) upgrading the existing water tank located to the west of the Project with trenching and land disturbance to connect the project area to the tank.

Regardless of whether a well is even feasible (there is reason to believe it is not, since a nearby well is going dry with minimal water supplies remaining), the developer's plans are more problematic than considered in the Project's reports. The plan is for the developer to dig a viable yield well elsewhere in Borrego Valley, then lease or donate the well to the Borrego

Water District. The Borrego Water District would, in turn, import water to the large storage tank to the west of the Project site and pipe it to the development. This will require additional trenching for the pipes, over land that has recently been donated to Anza-Borrego Desert State Park.

Because Borrego Springs is in the Colorado River District, it falls under the jurisdiction of the Regional Water Quality Control Board, which has started to require treatment plants for housing developments with ten (10) or more units. [Kurt Schauppner Desert Trail, "Who has Sewer Power? The City" March 2, 2007] The only indication that the developer has considered wastewater disposal systems is by a reference in a letter dated February 18, 2008 from the County of San Diego Department of Environmental Health, Land and Water Quality Division which notes deficiencies in the developer's replacement of the Tentative Map, dated December 19, 2007. According to this letter, with the increase in the number of lots, the developer failed to provide percolation test data on certain lots; failed to include the layout of the existing well, or the layout for the proposed onsite wastewater disposal system and reserve area. Lastly, the letter notes that "leach lines may not exceed 24 inches of cover and lines may not be placed in fill or in areas of disturbed soil." The fact is that all of the lots in the Project area would be elevated on sand fill from the graded down dune.

The Department of Environmental Health did not recommend approval of the subdivision proposal or the associated preliminary grading plan.

Not surprisingly, there is also a dearth of information in the record on plans for wastewater disposal and / or sewage treatment plans, either on the tentative maps or the preliminary grading plans. Given the Department of Environmental Health's concerns and the possible restrictions by the Regional Water Quality Control Board, the property owners in the Borrego Community (and the County) should be wondering what the developer plans on doing with the sewage from 150+ residences. Apparently, the developer is proposing to grade lots for sale and is not planning on building a planned development.

Most egregiously, the proposed development of the DS-24 parcels involves an unpublicized, covert preferred alternative to infringe on the property rights of neighboring landowners, through eminent domain and local "assessment district" fees, in order to build the subdivision in a hazardous floodplain. ~60% of the proposed project site is located in a desert riparian floodplain susceptible to periodic flash flooding. Such floods in the desert are a periodic, natural, and beneficial phenomenon that brings water to an otherwise parched landscape. Floods move soil nutrients for vegetation from higher locations to lowlands. Floods also form the ephemeral streams and ponds that numerous species, such as frogs and waterfowl, require for sustenance and reproduction. There are even certain native plants, such as smoke trees, whose seeds have evolved to only germinate after a flood has rolled and battered their tough outer surface. Flood damage to the seed coat signals that there is water present to nourish the seedling, which in turn triggers germination at the right time. Regardless of the role flash floods play in Nature, desert floodplains are an unsafe and unwise location to build homes.

The document and accompanying maps, "Flood Hazard Evaluation for Borrego Country Club Estates" was prepared by Walter F. Crampton, Principal Engineer for TerraCosta Consulting Company, to analyze flood issues for the DS-24 site; dated August 27, 2007. The report incorrectly states:

"The 2,700-foot-long existing dike within the headwaters of the Culp-Tubb Canyon drainage was constructed by the County in the 1970s to divert flood flows to the south away from the populated east of Country Club Road, and has effectively done so for the last 40+ years."

Tubb Canyon Desert Conservancy

SEIR Comments

January 21, 2018

Page 32 of 40

The earthen dike in question was *not* built by San Diego County, nor does the County own or even maintain that dike or the smaller sub-dikes located northwest of the main dike across Tubb Canyon Bajada. No easements vesting the levees in the public domain have ever been granted or recorded. The main dike and sub-dikes were actually built by the Army Corps of Engineers, some would argue illicitly without the permission of the original landowners. Examination of historic aerial photos will confirm this along with the consistent recollections of long-time local residents of the area. Why were the earthen dikes built by the Corps? During a year of serious floods across the U. S. Southwest, the Army Corps of Engineers was assigned to protect public safety and property by constructing emergency levees in many locations, including in Borrego Valley. The dike in question, which is being allowed to naturalize over time, is privately owned. Burrowing owls live on the east side of the main dike berm. Eventually, the floods from Tubb Canyon and adjacent mountains will erode the levee and water will once again flow across the bajada and into Anza-Borrego Desert State Park.

None of the owners on whose property the old earthen dike and sub-dikes exist would allow the County or any other agency to construct a new, 5,800 foot long concrete dam to federal standards across their land. Nor would neighboring property owners east of the dike approve the construction of concrete channels down unpaved Tubb Canyon Road, per the proposed plans to protect the DS-24 parcels from future floods. Only a forced taking of private property, which each and every owner has promised to oppose, would enable a major dam system to be built on the natural desert. Apparently, the developers who own the DS-24 parcels have considered exactly that approach.

In the "Flood Hazard Evaluation for Borrego Country Club Estates," author Walter F. Crampton recommends the formation of a "Geologic Hazard Abatement District (GHAD)" to finance the design and construction of an expanded dam, flood channels, and additional dikes. An abatement district levees a tax burden on all the neighboring properties alleged to "benefit" from the project.

This covert Draconian flood control plan to enable a high-density subdivision to be built where it does not belong presents grave environmental concerns. Blocking natural flood waters from desert trees and ocotillo in the State Park would degrade the high diversity currently thriving on the bajada. An expanded concrete dam and channel system would also be a visual blight marring the scenic vistas and state park. More ominous is the fact that this extensive dam system and channels, including full blueprints, was never publicized by the developers, not to the affected neighbors who would lose their properties and not to the Borrego Springs Sponsor Group during the many briefings and discussions about the "Rudyville" project. This sort of subterfuge is chilling. It makes one wonder what else is not known about this project. The intent to charge neighbors through a special assessment district, as well as to take private land by eminent domain, in order to build a large development for their own profit, is unacceptable on multiple levels. This massive flood control plan should be definitively opposed by San Diego County. TCDC and the affected landowners oppose this plan along with any attempt to impose an assessment fee on surrounding neighbors.

DS-24 is located within walking distance of Anza-Borrego Desert State Park and is a component of the transition zone between the Sonoran Desert (Colorado Subdivision) at its western terminus with foothill chaparral. **As with most transition zones, the DS-24 site supports significant biodiversity and listed species** due to the variety of vegetation regimes and terrain located in close proximity. The slightly wetter transition habitat where DS-24 is located encompasses the westernmost complex of Sonoran desert sand dunes, home to numerous lizard species, including the Flat-tailed Horned Lizard (*Phrynosoma mcallii*), a California Species of Special Concern, which favors stable dunes and desert riparian gravel flats. See the annotated California Department of Fish & Wildlife map attached. The property in question is also an attractive hunting ground for a resident population of Burrowing Owls (*Athene cunicularia*), another California Species of Special Concern. Burrowing Owl populations remain in decline across much of their range.

DS-24 is adjacent (within walking distance) to the federal recovery area for the endangered Peninsular Desert Bighorn Sheep (*Ovis canadensis nelsonii* / *cremnobates*). See the annotated U.S. Fish & Wildlife Service map attached.

The varied terrain on the DS-24 site attracts a variety of migratory birds to its ephemeral water sources and ancient ocotillo forest, including several species of hummingbirds, hawks, warblers, and orioles. Bats roost nearby within local cliff cracks and small caves, flying out at night to feed on abundant insects present around seasonal water sources. The full spectrum of species living within the subject area has not been fully documented, merits further study, and is deserving of full protection from destruction.

As noted by County planners, **the current designation of SR-10 for the undisturbed desert on the DS-24 parcels qualifies for habitat reservation measures under the Conservation Subdivision Program** (<http://www.sandiegocounty.gov/pds/advance/conservationsubdivision.html>). **The requested SR-1 designation would not qualify for that program.**

As previously mentioned, a vast majority of neighbors and visitors familiar with “Rudyville” have strongly opposed the project in all its various forms over the years. Local neighbors and landowners greatly value the wildlife, wildflowers, and a large, ancient ocotillo forest located on the subject site that was once a popular destination highlighted on local tourist maps. **Development of DS-24 threatens the quality of life and property values of neighboring residents.**

Grading the stable dune and ocotillo forest into rows and rows of elevated vacant lots would result in unconsolidated sand and fine particulates becoming airborne in the frequent high winds (60 to 80 mph) that blow across Tubb Canyon Bajada from the western mountains. Dust storms created by vacant lots would blow into other neighborhoods and pollute the clean, dark skies that are highly valued in Borrego Valley. Borrego Springs is one of only nine IDA-certified “International Dark Sky Communities” in the United States: <http://darksky.org/idsp/communities/>. The tourism value of the Dark Sky designation would be diminished by the proposed development, as would business to a variety of local overnight accommodation and eating establishments, and other businesses supported by tourism.

Destabilizing the sand dune would also increase health risk in the community. Many persons move to the desert to improve their health, including seniors and those with allergies and other respiratory conditions. DS-24 is located in a high wind corridor that would pick up fine sand and dust particles from the 172+ acre denuded dune and graded floodplain, creating localized dust storms that would lower air quality to an unacceptable level, both in the immediate area and farther away in residential and recreational areas “downwind.” The resulting degraded air quality would also diminish the tourist value of Borrego Springs and the surrounding State Park, resulting in harm to the local economy. Tourism revenues have decreased in other communities where a nearby land use change has resulted in an increase in thick haze, high airborne particulate counts, and more frequent asthmatic, allergic, and other negative respiratory reactions in visitors and local residents.

Country Club Road across the DS-24 acreage is not paved. **Roads planned through any future subdivision, along with the numerous vehicles associated with a higher density of homes, would bring undesirable and intrusive traffic through on existing narrow roads and through quiet neighborhoods, thereby changing the pleasant character of the semi-rural streets and sparsely spaced desert homes.** According to the 2006 Transportation Analysis for developing the DS-24 site, the proposed subdivision would generate approximately 1,480 average daily vehicle trips, with 118 occurring during morning peak hour and 148 in the PM peak hour. Much of this traffic would be directed onto West Star and East Star Roads to the north of the site. These roads are both

narrow (~20 feet wide), rural in nature, and insufficient for increased 2-way traffic flow. Redirecting traffic out via those low density roads will require extensive widening and redesign that will adversely impact adjacent, established homes, and increase danger to pedestrians and animals, including wildlife and horses. Increased commercial vehicle traffic serving the proposed subdivision, such as heavy garbage trucks, UPS and Federal express delivery trucks, etc. will greatly accelerate road wear, necessitating more frequent and costly road maintenance and repair.

Increased traffic, private and commercial, would also contribute to higher ambient noise levels generated by a concentration of houses in what is an otherwise very low-density location. **Noise generated by an increased density of homes and associated human activities on the DS-24 parcels would reverberate off the nearby mountains and canyons, causing unacceptably high noise levels locally and across the adjacent State Park.** Noise is potentially destructive to both wildlife and the tranquil setting visitors expect in the State Park. Neighbors who moved to the outskirts of town for added solitude highly value the subtle sounds of nature around their homes, including bird songs, the chorus of frogs and toads after rain, as well as serenades by coyotes out on the bajada. All this would be lost if the DS-24 site is ever developed.

Increased traffic also has the potential adverse impact of vehicle emissions generating an inversion layer, further degrading air quality and visibility in the Borrego Valley. This consequence of increased traffic needs to be fully evaluated.

A higher density subdivision would destroy ancient Native American sites. Tubb Canyon Bajada was once heavily used by the local Cahuilla for their seasonal harvest of agave. Nearby canyons and arroyos were a reliable source water in the desert from both nearby springs and ephemeral floods. Potsherds, stone hand tools, and other artifacts are often found in the surrounding area and are no doubt present on the DS-24 site.

Lastly, it has come to our attention that an owner / investor in DS-24, Chris Brown, is allegedly a former San Diego County employee who has worked directly for Supervisor Bill Horn in matters of regional planning. This relationship raises conflict of interest questions originating at the 2012 Board of Supervisors hearing that authorized a Property Specific Request (PSR) for the DS-24 site... in spite of strong, ongoing community and Borrego Springs Sponsor Group opposition... and, in spite of the fact that there was *no active application for any subdivision project on the DS-24 parcels* in the County planning system for *several years* before the new General Plan was ratified. The value of a “free” EIR for the landowners of DS-24 is immense, because this costly process may lead to special privileges for Mr. Brown not granted other landowners in the same area, and likely involving eminent domain “taking” of nearby properties for the purpose of a future subdivision.

This PSR is particularly unjustified considering the fact the owners’ original project plan for “Borrego Country Club Estates” (TM5487) had been in the County “dead file” *for years* at the time of General Plan approval. All this, along with the substantial impacts raised in this letter, generates suspicion about how a Project Specific Request for DS-24 ever qualified for County consideration.

Based on all of the reasons and evidence presented herein, TCDC urges the County to disqualify and remove DS-24 from the collective Property Specific Request SEIR process (thereby saving taxpayer funds and conserving limited County resources, including valuable staff time). In any case, the County should deny the zoning change that the owners of DS-24 have requested.

Sincerely,



J. David Garmon, MD
President, Tubb Canyon Desert Conservancy

Enc





Close up of a burrowing owl "pellet" (~2 inches long). Fur, bones, insect chitin and other indigestible parts of prey collect in the bird's gizzard where they are compressed into a pellet form, then regurgitated by the owl. Note the leg bones and piece of rodent skull above the pellet. Several pellets were taken from the DS-24 site as tangible, physical proof of the burrowing owl's existence on the property.

Photo by L. Paul

Burrowing Owls on DS-24 Parcels

Active burrowing owl burrow on the DS-24 property proposed for complete grading and leveling. Red arrows (upper left of image) indicate greyish owl pellets above the hole (located just left of one "observation perch" in the creosote bush that extends over the burrow's entrance). There is a back entrance (exit) to the burrow on the other side of the bush.

Photo by L. Paul

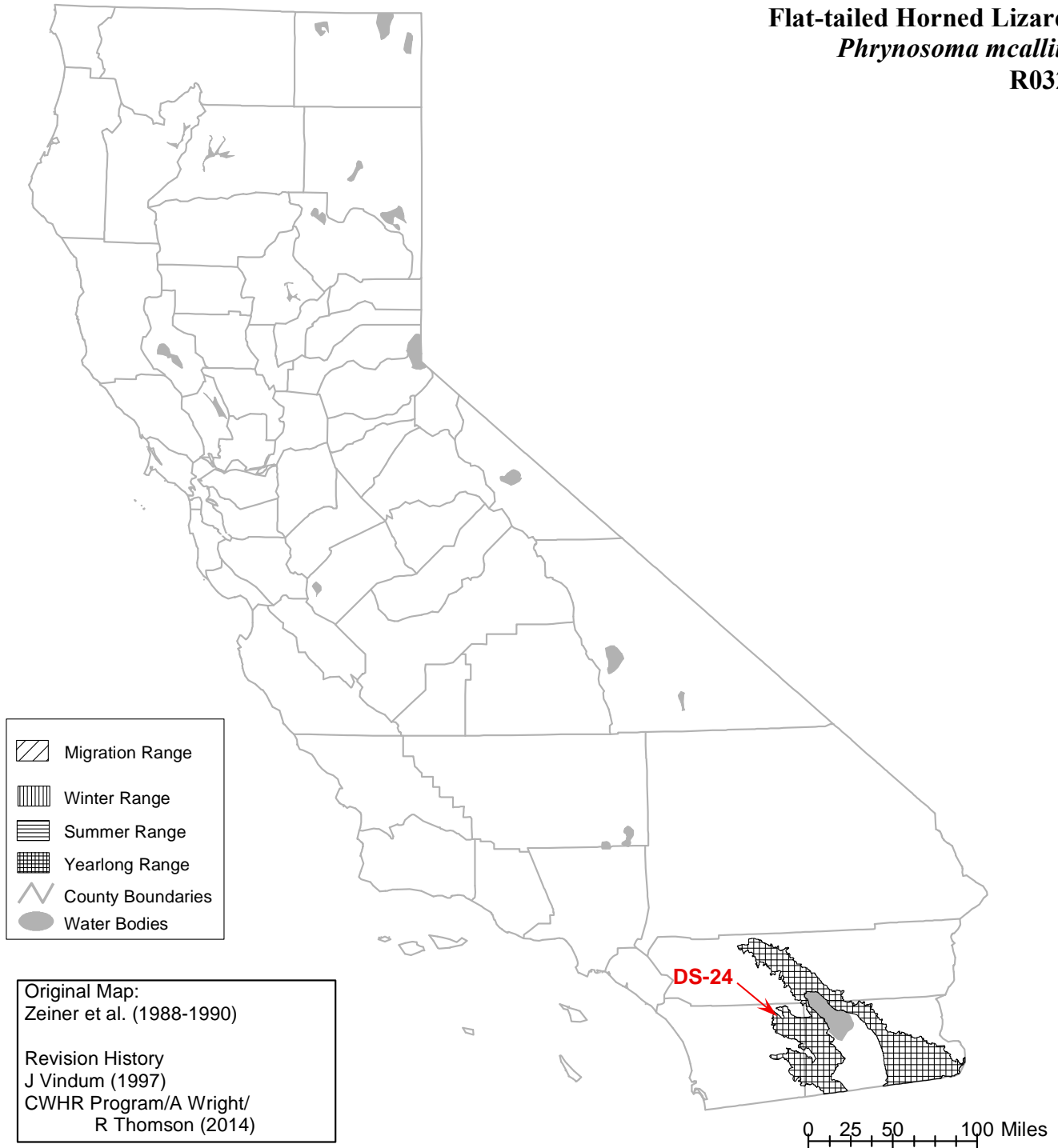


Burrowing Owl (*Athene cunicularia*) near property. Burrowing owls are a California Dept. of Fish & Wildlife Species of Special Concern. Photo by Thad McManus (used with permission)

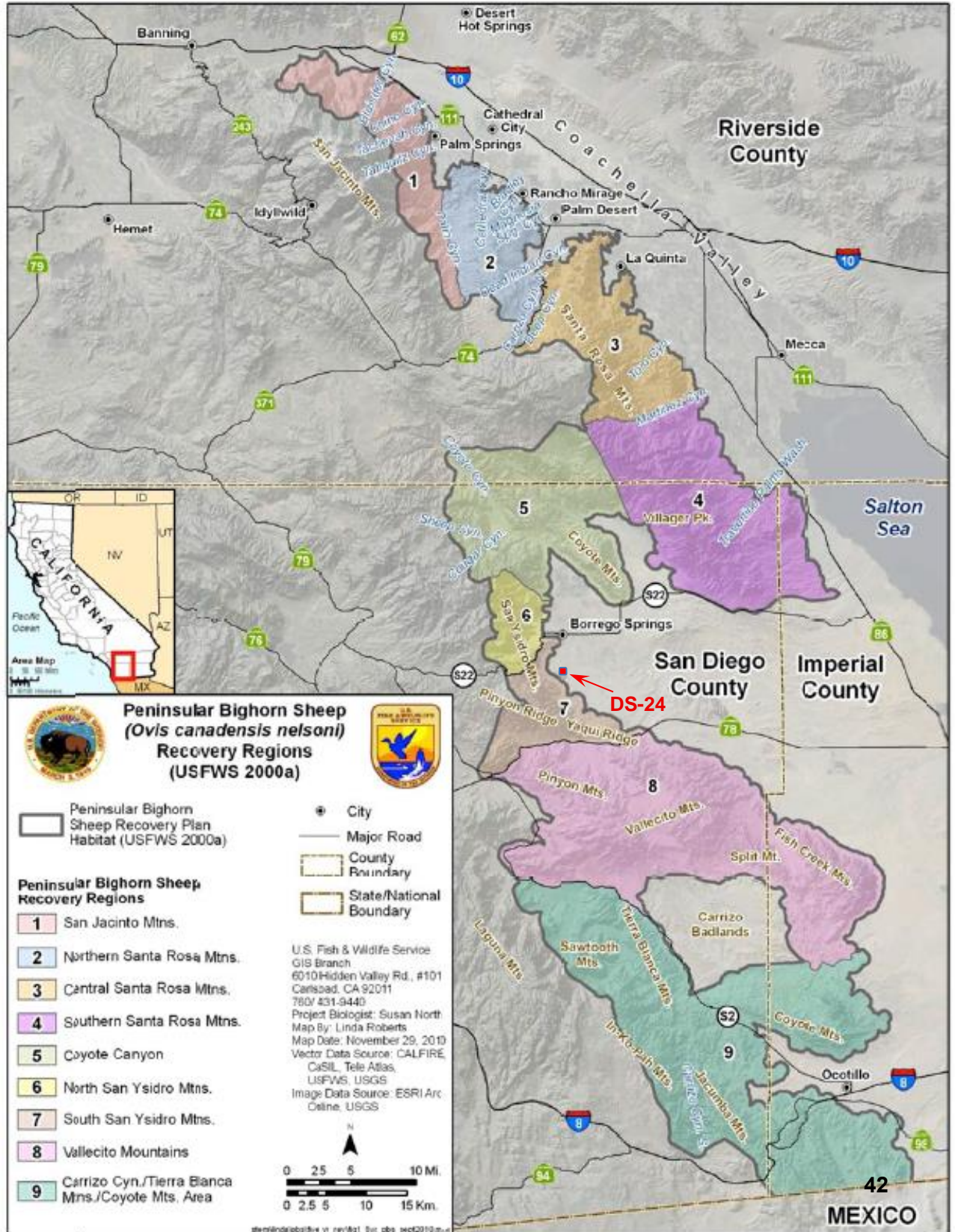
California Wildlife Habitat Relationships System

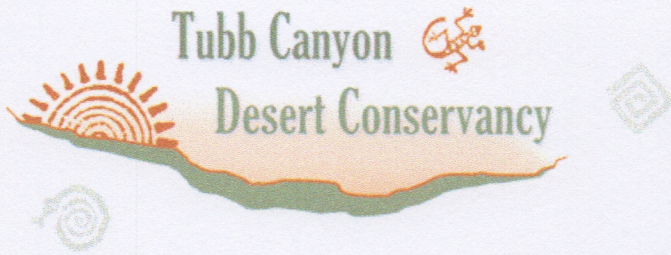
California Department of Fish and Wildlife
California Interagency Wildlife Task Group

Flat-tailed Horned Lizard *Phrynosoma mcallii* R032



DS-24 is located at the boundary of the South San Ysidro Mountains / Region 7 of the Recovery Plan Habitat for the federally listed (endangered) Peninsular Bighorn Sheep. [Map excerpted from page 11 of the "Peninsular Bighorn Sheep (*Ovis Canadensis nelsonii*) 5-Year Review" by the U.S. Fish and Wildlife Service, April 21, 2011. Estimated location of DS-24 parcels added.]





February 6, 2018

GSA Core Team
Borrego Water District Board of Directors
Geoff Poole

To Whom It May Concern:

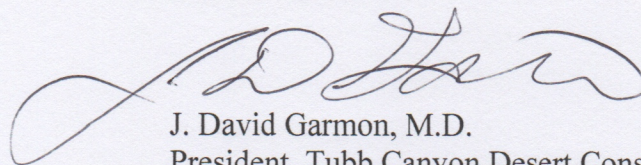
I am writing in follow up to my letter of August 29, 2017 to the Core Team, which I have enclosed for ease of reference. In that letter I requested to know **the analytical basis for using the year 2040 as the target date for the Borrego Basin to reach sustainable yield.** Thus far I have received no information regarding my question.

If there is an analytical basis for the use of 2040 as the target date for sustainable yield, please forward it to me or direct me to it. If there is no analytical basis for using 2040 as the target date, what efforts have been, or will be, undertaken to establish an analytically valid target date for the Borrego Basin to reach sustainable yield.

In my view, establishing a valid target date for sustainable yield is one of the more critical issues confronting the GSA's. The most brilliant, comprehensive, community-supported Groundwater Sustainability Plan that has 2040 as a target date would be utterly worthless if the target date that would leave us with a viable community is really 2030. We must have this information if the GSP is to have credibility.

I look forward to your response to this specific question at your earliest convenience.

Sincerely yours,

A handwritten signature in black ink, appearing to read "J. David Garmon".

J. David Garmon, M.D.
President, Tubb Canyon Desert Conservancy

Tubb Canyon Desert Conservancy

8899 University Center Lane #170, San Diego, CA 92122 * 858.535.9121 * contact.tcdc@tubbcanyondesertconservancy.org
www.TubbCanyonDesertConservancy.Org

BORREGO WATER DISTRICT
BOARD OF DIRECTORS MEETING – FEBRUARY 20, 2018
AGENDA BILL 2.A

February 14, 2017

TO: Board of Directors, Borrego Water District
FROM: Geoff Poole, General Manager
SUBJECT: New Developer's Policy – Anderson

RECOMMENDED ACTION:

Discuss updated Draft Developers Policy and direct staff to schedule Public Hearing

ITEM EXPLANATION:

The BWD Board recently reviewed potential changes to the New Developers' Policy. During the Board Meeting, representatives from Rams Hill and Borrego Springs Resort had questions. Staff was directed to work with Legal Counsel on addressing the concerns from the RH and BSR, and a Draft was presented. The attached Draft Policy clarifies the areas where questions existed.

Following review of the document by the Board on 2-20, staff recommends authorization to schedule a Public Hearing at a future meeting.

FISCAL IMPACT:

N/A

ATTACHMENTS:

1. Draft New Developers Policy

BORREGO WATER DISTRICT

POLICY STATEMENT

SUBJECT: Policy on New Development

NO. 2005-6-1

ADOPTED: June 22, 2005
 AMENDED: December 27, 2006
 AMENDED: February 20, 2013
 AMENDED: March 23, 2016
 AMENDED: March 14, 2017
 AMENDED: ~~January~~February ____, 2018

Background: The Borrego Water District (“District”) requires new development to pay its own way, so that current ratepayers are not asked to subsidize development projects. Sometimes, however, [the](#) District desires to extend a water or sewer line at its own cost whenever the result will be an improvement to the system that benefits current and future ratepayers. Because these are differing directions, the differences can sometimes become blurred. [The](#) District therefore has attempted to resolve the issues with its [updated](#) developer policy. This policy will need to be reviewed from time to time to determine its applicability. What is needed for effective strategic planning is a statement of policy on the subject affirming the general direction.

Policy: It is the policy of the District to encourage responsible growth by requiring developers to install water and sewer transmission, distribution and collection lines at the developer’s expense, in addition to the assessment of capacity charges and connection fees for each new connection to pay for any improvements required to connect to the existing District system and the use of existing system capacity and any necessary expansion of available capacity, consistent with the most current District rate setting ordinance and rate study.

POLICY FOR WATER AND SEWER INFRASTRUCTURE FOR NEW DEVELOPMENTS

~~_____ (date)~~
February __, 2018

This Policy outlines the procedures and obligations for any developer, contractor, property owner, and others (hereinafter “developers”) proposing “new development” of any size to meet the infrastructure requirements attendant to obtaining water and sewer service from the Borrego Water District (hereinafter “District”). The term “new development” includes: (i) any existing property currently connected to the District’s water or sewer system that increases its demand on the District’s water supply and/or distribution system and/or its sewer collection and treatment system whether by increasing the intensity of use or by altering the use of land; and (ii) development requesting to connect to the District’s water or sewer system), whether or not approved by the County of San Diego (the “County”) under its land use authority.

This Policy ~~governs~~addresses issues related to connection fees, capacity charges, exactions, and other District charges for new development. However, developers should primarily review the District’s most current rate-setting resolution / ordinance and rate study for the most up to date information on fees.

The District has ~~or will establish~~adopted separate ~~policy or~~ policies related to ~~the~~water supply for new development, including but not limited to the Borrego Water District Demand Offset Mitigation Water Credits Policy, as updated through District Resolution No. 2016-01-01 (WCP). The District’s review of requests for will serve letters for water and sewer service for proposed new development as well as related issues regarding ensuring water supply sufficiency for new development: (collectively, “Water and Sewer Availability Letters”) will continue to be informed by the most updated version of the WCP, as well as other applicable laws and policies. The District also expects that the WCP and this Policy will be updated as necessary to comply with the finally approved groundwater sustainability plan for the Borrego Valley—Borrego Springs Subbasin (“Basin”).

1. Application of Policy

This Policy provides information and general guidelines regarding the procedures for the District to process requests for ~~a commitment for~~ Water and Sewer ~~service for new developments~~ as Availability Letters for new development. Water and Sewer Availability Letter requests will be reviewed for compliance with the requirements of the WCP and this Policy, including as to how such requests relate to infrastructure needed to serve new development. However, any such request for a Water and Sewer Availability Letter may be subject to review on a case-by-case basis, in the sole discretion of the District. The District Board of Directors reserves the right to review and approve/disapprove all requests for Water and Sewer Availability Letters. The District Board of Directors also reserves the right to process requests for Water and Sewer Availability Letters by way of separate agreement between the District and the any developer.

When a developer requests a commitment for water and sewer service for a “major subdivision,” as defined in the San Diego County Code of Regulatory Ordinances at section 81.102(y) as “a subdivision creating five or more lots or units”, or any other residential, commercial or other project that may substantially impact the District’s existing water supply capacity and/or sewer treatment capacity, or that may require major improvements to the District’s water production, treatment, collection or distribution systems and/or to the District’s sewer treatment plant or collection system, such requests ~~shall~~will always be considered on a case-by-case basis. The District may modify or add to the provisions of this Policy in reviewing an application from any new development project. It is also suggested that developers review any applicable County of San Diego requirements related to water, including but not limited to the County Groundwater Ordinance, with the understanding that the District’s requirements are distinct from (though in many cases consistent with) those imposed by the County. Developers should also be aware that the District is and will not be under any obligation to provide sewer or water service to new development unless and until all District requirements are met, to the satisfaction of and with written approval of the District.

2. Application for Water and Sewer Service

(a) ~~The~~To begin the process of seeking District water/sewer service, the developer must obtain an Application for Water and Sewer Service (the “Application”) from the District. With the Application the developer shall submit a preliminary plat of the new development which shall include the number of lots to be served, the type of units to be built within the new development, the size of the lots in the new development, the estimated build-out of the new development and any other information that will assist the District in determining the water and sewer needs of the new development.

(b) The developer must return the completed Application to the District. The developer shall provide any other information requested by the District that the District deems necessary to determine the District facilities needed for or impacted by the new development.

(c) When the Application requests water and sewer service for a major subdivision or larger new development, the developer shall pay a deposit (the “Deposit”) based upon a fee schedule set by the Board of Directors. The District General Manager also has the discretion to seek a Deposit from new development smaller than a major subdivision seeking District service. The District General Manager shall have discretion to modify the amount of the Deposit, depending upon the size, nature, and any other circumstances affecting the proposed new development project. The Deposit shall cover the anticipated cost to the District of reviewing the new development project, obtaining any engineering report on the feasibility of the water and sewer service requested for the new development project and making a preliminary determination of the on-site and off-site system improvements necessary to provide the water and sewer service requested. The Deposit shall be replenished by the developer in the event it is fully utilized by the District. The District may refuse to continue processing the Application until the Deposit is replenished. Any unused Deposit shall be refunded to the developer within 60 days after the developer gives written notice to the District that the subject new development has been

completed or is no longer going forward. The Deposit will be utilized to offset all District expenses related to the Application, including, but not limited to, staff, consultant, and legal costs.

(d) The developer must timely notify the District of any changes in the information submitted with the Application.

(e) When the Application is complete and the Deposit is paid, the District will determine, with the assistance of the District's engineer as necessary, whether any off-site water and sewer system improvements must be made to the District's water and sewer system to properly serve the new development and maintain the current level of water and sewer service to the District's existing customers.

(f) When the District has completed its review, the developer will be notified of the preliminary conclusions of the District as to the feasibility of serving the developer's new development and the infrastructure required to provide water and sewer service to the new development. Further information about the process for the District to accept developer improvements into the District water and/or sewer system is described in Sections 4 and 5, below. As noted above, the District may condition the provision of water / sewer service on the developer entering into a separate agreement with the District regarding such service.

3. Conditions on Availability of Water and Sewer Service

(a) The District, in its sole discretion, has the right to issue, or not issue, a Water and/or Sewer Availability Letter (~~aka "Will Serve Letter"~~) to any new development. If issued, such ~~a~~-letters shall be valid for a maximum of 2 (two) years; provided, however, that unexpired Water and Sewer Availability Letters may be extended for further periods of no more than two years, upon request of the developer and approval of the District Board of Directors. If a Water and Sewer Availability Letter expires, the developer will be required to begin the Application process anew, unless otherwise determined by the District Board of Directors. A Water and Sewer Availability Letter may be revoked or not honored unless and until the developer enters into ~~all applicable~~any required contracts with the District and timely pays all applicable District fees and charges related to the new development.

(b) The District's consideration of a request for a Water and Sewer Availability Letter shall be subject to actual availability of groundwater supply to serve the new development per the WCP and other applicable policies, the developer's commitments to enter into needed agreements with the District, the developer and the District agreeing as to the infrastructure needed to serve the proposed new development, any other District policies or ordinances in place at the time the Application / request for Water and Sewer Availability Letter is submitted, and any other matter deemed applicable by the District, including the existence of a water shortage or water shortage emergency being declared ~~within~~by the District, including any related regulations, policies or guidelines adopted by the District Board of Directors.

(c) Under no circumstances will a County of San Diego Planning and Development Services PROJECT FACILITY AVAILABILITY – WATER form or comparable form or forms,

whether or not signed by the District, constitute a Water and Sewer Availability Letter that is binding upon the District. Only a Water and Sewer Availability Letter issued by the District under the process guidelines described herein will be honored by the District.

(d) In determining whether water and sewer service is available for a particular proposed new development, the District may require that the developer provide an accurate projection of the water demand and sewer demand and treatment needs, by a registered engineer, for the entire new development or any phase thereof requested to be served by the District within the Application.

(e) The District may issue any Water and Sewer Availability Letter with limitations or conditions on the maximum amount of water that may be provided to the new development and the maximum amount of (estimated) wastewater that can be collected and treated for the new development. Any maximum limits on water and sewer service for the new development shall be included in the Water and Sewer Availability or water service contract with the developer ~~under Section 4.1.~~

4. Water and Sewer Service Contract

(a) Before water and sewer system improvements are installed for any new development, the District, with the assistance of the District's legal counsel if necessary, ~~will~~ prepare a contract regarding developer-funded improvements needed to serve the new development as further described in Section 5, below, or incorporate such requirements into the District-developer agreement referenced in Section 2(f), above.

(b) The District may incorporate in ~~the water and sewer service~~ such District-developer contract the maximum amount of water that can be furnished and the maximum amount of wastewater from the project/new development that can be collected and treated by the District. In the event the developer's demand for water and sewer service exceeds the developer's projected demand during the build out of the new development, the District shall have no obligation to furnish water or provide wastewater collection and treatment services in excess of the amounts set forth in the water and sewer service contract / Water and Sewer Service Availability Letter. Any request for water and sewer service in excess of the amounts projected by the developer and included in the ~~Water and Sewer Service~~ such contract shall be treated as a new request for water and sewer service under this Policy.

(c) ~~A Water and Sewer Service~~ Any District-developer contract cannot be assigned to any successor in interest of the developer without the express written consent of the District.

5. Installation of Improvements

(a) Cost of Installation. At its own expense and at no cost and expense to the District, the developer shall furnish, install, lay and construct all on-site and off-site water and sewer system improvements, including all labor and material, as required by the District to be installed to serve the development, to maintain the current level of water and sewer service to

existing customers and to meet the District's plan for the level of service to be made available in the general area of the development. The construction and installation of the water and sewer system improvements shall be in strict accordance with the plans, specifications and requirements approved by the District. All construction and installation work shall be performed by qualified contractors licensed in the State of California. The developer shall execute an agreement with the District establishing its obligations related to the water and/or sewer system improvements, as described herein. In addition, the developer shall indemnify and hold the District free and harmless from any claims, demands, losses, damages, or expenses that may directly or indirectly result from the developer's construction, maintenance, use, or repair of water and sewer system improvements, including any loss, damage or expense arising out of (1) loss of or damage to property; and (2) injury to or death of persons, except for any loss, damage, or expense resulting from the sole negligence or willful misconduct of the District, its directors, officers, agents, or employees.

(b) Notification of Construction. The District shall be notified at least forty-eight (48) hours before construction is to begin regarding developer installation of water or sewer improvements sought to be later dedicated to the District. Thereafter, the developer shall notify the District of every day during which construction will be in progress in order for the District's inspector to be on the job site during construction. ~~District~~The District's review of plans and inspection of such facilities during instruction shall, as with all other costs absorbed by the District in acting upon an Application, be reimbursable to the District through the Deposit arrangement described above.

(c) Inspections. All water and sewer system improvement projects shall be subject to inspection during construction and upon completion of the construction by an authorized representative of the District. Inspection may consist of full-time resident inspection or part-time inspection at the sole discretion of the District. The presence or absence of an inspector during construction does not relieve the developer from adherence to approved plans and specifications. Materials and workmanship found not meeting the requirements of approved plans and specifications shall be immediately brought into conformity with said plans and specifications at the developer's expense.

(d) Final Inspection. An authorized representative of the District shall make a final inspection of the water and sewer system improvements for the development after completion to determine acceptability of the work. Before this final inspection can be made, the owner, developer or engineer responsible for the project shall notify the District's Manager in writing that the work has been completed in accordance with approved plans and specifications.

(e) Final Acceptance. When the water and sewer system improvements pass the District's final inspection, the District will ordinarily accept dedication of the completed improvements, subject to the developer completing all necessary legal documentation to transfer ownership of such facilities as well as any attendant easements or access rights. Permanent monuments previously installed which are removed, altered, or destroyed during construction of the improvements shall be properly reinstalled by the developer prior to the District's acceptance of the improvements. The developer shall be responsible for seeing that the person paying the

cost of constructing such improvements shall furnish “as-built” drawings to the District at the end of each phase of water and sewer system construction and prior to final acceptance of water and sewer system improvements by the District. The date of final acceptance shall be that date on which the developer has fulfilled all conditions necessary for final acceptance, including passing a final inspection, submitting “as-built” drawings, payment of all fees due, and the placing of all water and sewer system improvements into service by the District. The District will not accept any facilities that are subject to any liens or other legal or financial constraints. The District will notify the developer in writing of the date of its acceptance of the completed facilities.

(f) “As-Built” Plans. The developer shall provide the District “as-built” plans, prepared by a registered engineer, which shall be drawn at a scale of one inch equals 50 feet and which shall indicate the location and size of all water and sewer system improvements installed for the development. The location of all water and sewer system improvements must be referenced off of two (2) permanent points such as power poles, right-of-way markers, concrete monuments, iron pins at property corners, drainage culverts, and building corners. The water and sewer system improvements shall also be shown in relationship to the edge of all paved surfaces and all other utilities located with 15 feet of either side of the improvements. All utility easements shall be shown in relationship to the improvements. In the event the actual construction differs from the recorded plat of the development, the developer will prepare and record in the Register's Office of San Diego County a revised plat showing the actual construction with the design features stated above clearly shown. The District may delay acceptance of such facilities, and any separately approved water and sewer service, until this requirement has been met.

(g) Warranty. The developer shall guarantee all work on the water and sewer system improvements it installs for a period of at least one (1) year from the date of final acceptance and shall immediately correct any deficiencies in the work due to material or workmanship that occurs during the one-year period. The warranty shall be insured by a maintenance bond in the amount specified by the District secured by an irrevocable bank letter of credit or such similar collateral as approved by the District. When a defect is discovered in any water or sewer system improvement under warranty by the developer, the cost of repairing the defect when performed by the District and the damages caused by the defect will be billed to the developer. Notwithstanding the foregoing, the developer's warranty obligations shall not be construed to limit the rights and remedies available to the District at law or in equity, including but not limited those prescribed by Code of Civil Procedure section 337.15.

(h) Conveyance of Water and Sewer System Improvements. Upon completion of the construction of the water and sewer improvements, upon final approval by the District, and upon the water and sewer system improvements being placed into service, the water and sewer system improvements shall immediately become the property of the District regardless of whether or not a formal written conveyance has been made, unless otherwise determined by the District. The developer and any other persons paying the cost of constructing such improvements shall execute all written instruments requested by the District necessary to provide evidence of the District's title to such improvements, including obtaining any lien releases from the material suppliers and subcontractors of the developer and/or its contractor. The water and sewer system

improvements shall become the property of the District free and clear of the claims of any persons, firms, or corporations.

6. Assessments and Collection of Fees and Charges

New development shall be responsible for paying all applicable District fees and charges before water or sewer service will commence. These fees and charges are set out in the most current District resolution or ordinance establishing fees, including but not limited to sewer and water connection and capacity fees, meter fees, and impact fees for sewer and wastewater treatment infrastructure.

7. Approval of Final Plat

The District will not sign a “Final Plat” of the development for submission to the County Planning Commission until the water and sewer system improvements for the development have been constructed, inspected and accepted for use by the District or until a performance bond secured by an irrevocable bank letter of credit issued by a bank with offices in San Diego County, California, or secured by other security specifically approved by the Board of Directors has been posted equal to the estimated cost of all necessary improvements and in favor of the District, any District-required Water and Sewer Service Contract has been fully executed, and all applicable fees have been paid. If the development is not a subdivision, the applicable fees must be paid at the time the contract for water and sewer service is signed.

8. Easements

(a) A minimum exclusive easement twenty (20) feet in width must be conveyed to the District for water and sewer main construction and exclusive easements for other water and sewer system improvements must be conveyed to the District as required by the District. All water and sewer lines that are to become the property of the District are to be located off the public right-of-way and within these exclusive easements on private property. All exceptions ~~are~~ to these requirements must be specifically approved by the District Board of Directors or its delegatee. In all such cases where the Board of Directors or its delegatee approves water or sewer line construction within public rights-of-way, the developer shall obtain consent from the political entity having authority over such rights-of-way for such construction.

(b) The expenses of obtaining, preparing and recording easements needed for water and sewer system improvements for the new development will be paid by the developer, including but without limitation, the consideration paid to the landowner.

(c) The easement grant must be on such terms and in such form and content as approved by the District.

(d) The developer is responsible for acquiring all such easements for both on-site and off-site water and sewer system improvement construction prior to the commencement of water and sewer system improvement construction.

9. Real Property Acquisition

In the event real property must be acquired for the installation of a water storage tank, a sewer treatment system, a pumping station or other water or sewer system improvement for the development, the expenses of obtaining, preparing, grading, constructing on and recording the acquisition documents for the real property will be paid by the developer, including, but without limitation, the consideration paid to the land owner.

10. Meters

(a) The developer shall pay for all water meters in the development, and the District shall install all residential water meters. The developer or lot owner at their expense shall install commercial water meters, defined herein as any meter greater than one (1) inch.

(b) Each family residence or each duplex or other property shall be served with a separate water meter not smaller than $\frac{3}{4}$ inch in size, except where prior arrangements have been made with the District for apartment complexes, other types of multi-family dwellings, or businesses.

(c) Consistent with Senate Bill 7 (2016), as a condition of new water service, each newly constructed multi-unit residential structure or newly constructed mixed-use residential and commercial structure for which an application for one or more water service connections is submitted after January 1, 2018, shall measure the quantity of water supplied to each individual residential dwelling unit, unless exempt under applicable law. The measurement may be by individual water meters or submeters. The owner of the structure shall install individual meters or submeters that comply with all laws and regulations governing the approval of meter types or the installation, maintenance, reading, billing, and testing of meters, including, but not limited to, the California Plumbing Code and California Water Code. Except as otherwise provided by law or District policy, the owner shall read submeters.

11. Permits

Before beginning construction, the developer or its contractor shall obtain all necessary permits as required by law. Such permits include, but are not limited to, those from [the](#) State of California and the county highway department for San Diego County.

12. Bonds

Before beginning construction, the developer or its contractor shall furnish the District with a performance bond in an amount equal to the cost of construction [of District-required improvements](#) and, if the project is more than \$25,000, a labor and material payment bond in an amount equal to one hundred percent (100%) of the performance bond. The bonds shall be on forms provided by the District and secured from an admitted surety company as defined in Code of Civil Procedure section 995.120, authorized to do business in the State of California and

acceptable to the District. To the extent permitted by law, the District, in its sole discretion, at any time may reject any bond or require the developer or its contractor to replace any bond or surety at the developer's or its contractor's own cost if the surety fails to meet the requirements of Code of Civil Procedure section 995.660. The bonds shall remain in effect throughout the duration of the work and expire by operation of law in accordance with California law.

13. Resolution of Disputes

Any controversy or claim arising out of or relating to this Policy or the Water and Sewer Service Contract, or the breach thereof, not resolvable informally shall be governed by the developer's agreement with the District and submitted to the Board of Directors, which may appoint a subcommittee of the board to negotiate the controversy or claim.

DRAFT

Summary report:	
Litéra® Change-Pro 7.5.0.135 Document comparison done on 1/25/2018 9:40:08 AM	
Style name: Default Style	
Intelligent Table Comparison: Active	
Original filename: Borrego Water District Developer Policy 2018_30301217_5.DOCX	
Modified filename: 30301217_6.docx	
Changes:	
Add	40
Delete	29
Move From	0
Move To	0
Table Insert	0
Table Delete	0
Table moves to	0
Table moves from	0
Embedded Graphics (Visio, ChemDraw, Images etc.)	0
Embedded Excel	0
Format changes	0
Total Changes:	69

BORREGO WATER DISTRICT
BOARD OF DIRECTORS MEETING – FEBRUARY 20, 2018
AGENDA BILL 2.B

February 14, 2017

TO: Board of Directors, Borrego Water District
FROM: Geoff Poole, General Manager
SUBJECT: 2017-18 Capital Improvement Plan – Beltran/Poole/O and I Committee

RECOMMENDED ACTION:

Discuss updated CIP and direct staff accordingly

ITEM EXPLANATION:

At the last meeting, BWD Board directed Staff to work with the new District Engineer, Carlos Beltran, and the O and I Committee on an evaluation of the existing Capital Improvement Plan. The forcing function behind the request is the planned BWD Bond Financing. Bond requirements mandate that all projects must be constructed within 3 years of the bond issue, so special attention was paid to the constructability of the planned improvements. Another factor considered in the CIP update is the project justification or the “why now” question for each improvement. Staff, Carlos and the O and I Committee has all reviewed the existing 2017-18 CIP and the updated version is attached.

Due to the fact that the CIP was thoroughly evaluated as part of the 2017-18 Budget process and all of the fundamental conditions/factors remain unchanged, there are no recommended changes in the Project List. Each Project budget and schedule were updated and language pertaining to constructability and why now was added.

FISCAL IMPACT:

N/A

ATTACHMENTS:

1. Draft 2017-18 CIP

M E M O R A N D U M

DATE: 2/12/18

TO: Board of Directors BWD

FROM: Carlos Beltran, BWD District Engineer & Geoff Poole, General Manager

Re: Borrego Water District – 2017-2025 CIP Project Summary and Narratives

The following table shows the summary of the 2017-2025 projects. The CIP projects are described in detail on the following pages.

CIP # CAPITAL IMPROVEMENT PROJECTS FISCAL YEARS 2017-2025 SUMMARY

WELLS, BOOSTER STATIONS, RESERVOIRS & ASSOCIATED TRANSMISSION MAINS	
1	Water Treatment Facility (phase 1)
2	Water Treatment Facility (phase 2)
3	New well assessments (Exploration Phase) and acquire land
4	Drill new wells
5	Country Club Tank Recoating, 1999 1.0 MG
6	New 900 Reservoir
7	Transmission line to convey well 16 water directly to ID1 900 Reservoir (Pipeline 1)
8	Transmission line to convey Well 5 water directly to C.C. Reservoir (Pipeline 2)
9	Transmission line to convey Well 12 water directly to Tilting T-Di Giorgio (Pipeline 3)
10	Transmission pipeline Slash M Rd. west to Country Club Tank
11	Replace Twin Tanks – Possible Prop 1 Grant
12	Replace Wilcox Diesel Motor – Possible Prop 1 Grant
13	Replace Indianhead Reservoir – Possible Prop 1 Grant
14	Rams Hill #2, 1980 galv. 0.44 MG recoating – Possible Prop 1 Grant

WASTEWATER TREATMENT FACILITIES	
15	Force main replacement at La Casa del Zorro; Cleanouts on existing force main
16	Sewer main replacement Club Circle
17	Lift station-Aeration and odor removal system
18	Plant-Grit removal at the headworks - Possible Prop 1 grant

PIPELINE REPLACEMENT /IMPROVEMENT PROGRAM	
19	Emergency water pipeline repairs
20	10" Bypass at ID1 Booster Station 2
21	Borrego Springs Road, Walking H Drive to Country Club Road Phase 1 (Pipeline 5)
22	Borrego Springs Road, Walking H Drive to Country Club Road Phase 2 (Pipeline 5)
23	T Anchor Drive, Frying Pan Road to Double O Road (Pipeline 6)
24	Weather Vane Drive, Frying Pan Road to Double O Road (Pipeline 7)
25	Frying Pan Road, north and south from T Anchor Drive (Pipeline 8)
26	Double O Road, north and south from T Anchor Drive (Pipeline 9)
27	Borrego Springs Road, Weather Vane Drive to Barrel Drive (Pipeline 10)
28	Pipeline for Santiago and ID5 (Pipeline 11)
29	De Anza Dr. 1600 block west from Yaqui Road (Pipeline 12)
30	Club Circle Pipeline Evaluation

CIP PROJECTS 2017-2025 NARRATIVES

Contents

Water Treatment Facility (Phase 1 and 2) 3

Exploration, Land Acquisition and Drill New Wells..... 5

Country Club Tank Rehabilitation 7

900 Tank (Formerly the 800 Tank) 9

Transmission Pipelines 10

Twin Tanks..... 11

Replace Wilcox Diesel Motor 14

Replace Indian Head Reservoir 16

Rams Hill #2 Recoating..... 19

Forcemain Replacement at La Casa Del Zorro; Cleanouts on existing forcemain 21

Sewer Main Replacement Club Circle 22

Lift Station – Aeration and Odor Removal System..... 24

Plant Grit Removal at the Headworks..... 25

Emergency Water Pipeline Repairs..... 27

Pipeline Replacement / Improvement Program 28

CIP ITEM No. 1 AND 2: Water Treatment Facility (Phase 1 and 2)

A. Project Description / Justification

Budget: \$1,535,000

The following are excerpts from “Draft Working Technical Memorandum” prepared by Dudek, written to the Borrego Water District dated June 16, 2017:

As a public water system, the BWD is regulated by the State Water Resources Control Board’s Department of Drinking Water. California regulations related to drinking water are contained within California Code of Regulations (CCR) Title 17 and Title 22. California drinking water MCLs that shall not be exceeded in the water supplied to the public are listed in CCR Title 22 Chapter 15. The BWD samples groundwater quality from water wells at intervals required by the DDW.

While none of the BWD’s wells currently exceed California drinking water MCLs, treatment alternatives for COCs are discussed herein to explore options in the event that groundwater quality were to become impaired. Non-treatment and treatment options to meet drinking water standards typically include blending, wellhead treatment, or supplementing the impaired source of supply.

The Borrego Springs Groundwater Subbasin of the Borrego Valley Groundwater Basin (BVGB) has been determined to be in overdraft. There is a potential risk associated with temporal changes in groundwater quality that may result in exceedances of California drinking water maximum contaminant levels (MCLs) in Borrego Water District (BWD) production wells due to the long-standing critical overdraft. Thus, it assesses current and historical groundwater quality data and the inter-relationship between groundwater levels and groundwater quality. The main constituents of concern (COCs) are arsenic, nitrate, sulfate, fluoride, total dissolved solids (TDS), and radionuclides. Of primary concern is the potential for water quality degradation and the relative risk that the groundwater supply will not meet MCLs.

The USGS found that concentrations of TDS and nitrate exceed their respective water quality standard thresholds in portions of the upper aquifer of the Borrego Springs Groundwater Subbasin (for reference with depth the BVGB is comprised of three aquifers: upper, middle, and lower). The highest concentrations of both constituents were generally found in the northern portion of the Borrego Springs Groundwater Subbasin, and the concentration of TDS was found to increase as groundwater levels decline. Sulfate, another COC, was also found to increase in concentration as groundwater levels decline. In addition to nitrate, TDS, and sulfate, other potential COCs in the BVGB include arsenic and gross alpha radiation, though the latter appears to be confined to the Ocotillo Wells Groundwater Subbasin. Since the compilation of available groundwater quality data by the USGS in 2015, additional data have been collected by the BWD for its active production wells in 2016 and for seven private wells located in the South Management Area (SMA) of the Borrego Springs Groundwater Subbasin. This recent data indicates that arsenic concentrations exceed the California drinking water MCL of 10 micrograms per liter ($\mu\text{g}/\text{L}$) in portions of the lower aquifer in the SMA. Additionally, review of historical arsenic data for BWD wells located in the SMA indicates an increasing arsenic trend in well ID1-2, and a linear regression analysis indicates a good correlation of fit among arsenic concentration, groundwater production, and declining groundwater levels in well ID1-8. Based on the 2-year lag linear regression of groundwater production and arsenic data from well ID1-8, groundwater production in excess of 300 AFY at well ID1-8 is possible and further analysis is needed before conclusions can be

reached. Thus, arsenic concentrations in the lower aquifer of the Borrego Springs Groundwater Subbasin are determined to be a primary COC. Because groundwater quality data for the Borrego Springs Groundwater Subbasin are limited, further data collection and evaluation is required to verify the predicted exceedance of the arsenic drinking water standards in well ID1-8 and potential for other wells in the Borrego Springs Groundwater Subbasin to exceed the arsenic drinking water standard or other COC.

B. Project Design / Process Flow:

Once it has been determined if a treatment process is necessary, an engineering report will be prepared indicating the best and most efficient method of treatment. The CIP breaks the treatment into phases. Environmental documents will be prepared and distributed. After approval, the project(s) will be sent out to public bidding and then constructed. The CIP shows these projects starting in FY 2022-23.

C. Cost Estimate:

Project costs are highly speculative at this time due to the fact that current water quality does not require treatment. Due to the falling groundwater table, this may change in the future with depth dependent water quality. The budget is \$1,535,000.

D. Project Estimated Timeline: Why is the project proposed for FY 2022 :

Since there is no immediate risk of water contamination in BWD Production wells, it is yet to be determined when and where future treatment will be necessary based on the factors outlined above. For planning purposes, it is assumed that treatment will be needed in FY 2022.

E. Impacts of Deferral:

It is risky to wait this long, but once contamination is realized, deferring the improvements is not an option. Fines, public backlash and other interventions from State regulators would occur if drinking water standards are not met.

CIP ITEM No. 3 AND 4: Exploration, Land Acquisition for Replacement Wells

A. Project Description / Justification

Budget: \$4,500,000

BWD has identified three wells that will need to be replaced within the next eight years. Wells ID1-8, ID4-4 and ID1-10 cannot be rehabilitated again will need to be replaced due to age and falling groundwater levels. Two high yield wells may replace these three wells.

B. Project Design / Process Flow:

Dudek prepared a report “Draft Working Technical Memorandum” dated June 16, 2017 that describes three separate Subbasin within the BWD service boundary. The report identifies that the Central Management Basin has the best chance for water that meets the requirements of California Code of Regulations (CCR) Title 17 and Title 22.

The BWD has already initiated preliminary review of potential new sources of supply in the Borrego Springs Subbasin and will further identify strategic sources of supply that meet Title 22 potable drinking water quality requirements.

Once a site has been selected, an exploration phase will commence. If the water quality and depth is acceptable, the land will be acquired for the wellsite and the well will be constructed to municipal standards.

C. Cost Estimate:

The cost estimate for the exploration and land acquisition phase is \$500,000. The wells are estimated to cost \$1,000,000 each to construct.

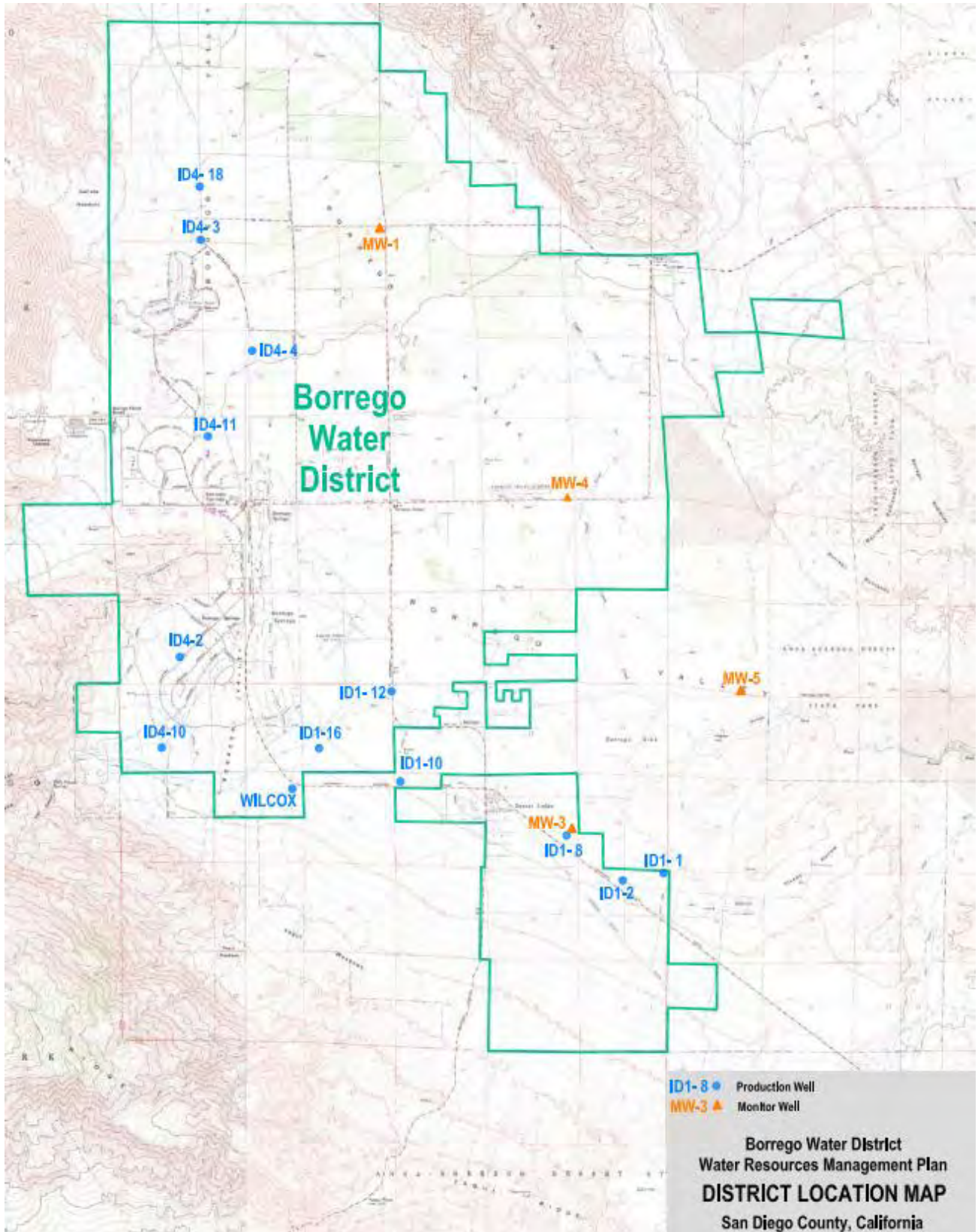
F. Project Estimated Timeline: Why is the project proposed for FY 2019 and beyond:

Due to the fact that certain BWD wells have reached the end of their useful life, it is imperative to investigate and construct the replacement wells before any existing well fails. Recent award of State of California to BWD provides initial funding for the investigation, there it is time to begin the process

Exploration and land acquisition for Replacement Well #1:	FY 2018-2019
Construct Replacement Well #1:	FY 2019-2020
Explore and Construct Replacement Well #2:	FY 2021-2022
Explore and Construct Replacement Well #3:	FY 2023-2024

G. Impacts of Deferral:

Construction of replacement wells is needed before complete failure to ensure maximum water availability flow, operations flexibility and emergency response for BWD Customers. Deferring installation of replacement wells increases the likelihood experiencing these problems in the future.



CIP ITEM No. 5: Country Club Tank Rehabilitation

A. Project Description / Justification

Budget \$ 250,000

The Country Club Tank is located approximately 1-½ mile west of the intersection of Title T and Borrego Springs Road (S3). The tank has a capacity of 1.0 million gallons and is composed of coated steel. The California Department of Health Services requires the District to physically inspect the inside of the domestic water reservoirs every three years. This service is performed by a consultant that utilizes divers and provides a written report as well as a video. The tank was constructed approximately 17 years ago. The tank is in good condition currently, but it is anticipated that it will need to be recoated on a regular schedule in fiscal year 2024-25.

B. Project Design / Process Flow:

After the inspection report is delivered and the tank needs recoating, the District Engineer will prepare engineering documents and the project will be sent out for public bidding with Board approval.

C. Cost Estimate:

Without a recent dive inspection, an accurate cost estimate is difficult because the number of metal repairs necessary is unknown. Experience with past projects gives an approximate cost estimate of \$250,000 to recoat and repair the tank.

D. Project Estimated Timeline. Why is Project Proposed for 2023:

Based on experience, it is estimated that a recoating will be needed in 2023. The actual date of recoating will be determined following the periodic video inspections. Following is the estimated schedule based on this timeline:

Dive Inspection:	February 2023
Receive Dive Inspection Report:	March 2023
Engineering/design completion:	March 2023 – April 2023
Project Bidding:	April 2024 – May 2024
Repair Recoat Tank:	June 2024 – July 2024

E. Impacts of Deferral:

Following completion of planned inspections, the magnitude of the corrosion will be known and a plan to repair developed. Deferral of the necessary maintenance could lead to increased repair costs or the need for replacement of the Reservoir completely before the end of its useful life.

Item	Quan	Unit	Description	Unit Cost	Amount
1	1	LS	Mobilization/ Demobilization, Temporary Facilities, Construction Sign, Insurance, Payment Bond, Taxes, Permits, Fees and Similar Expenses	\$22,500	\$ 22,500
2	18,800	SF	Sandblast Complete Interior Including Columns, Rafters, Appurtenances, Exterior Roof Coatings to SSPC-SP 10. Remove and Legally Dispose of Spent Blast Material.	\$ 3.75	\$ 70,500
3	1	LS	Remove and replace metal components as necessary	\$ 3,500	\$ 3,500
3	18,800	SF	Recoat Interior Surfaces. This Item to be Considered Lump Sum Unless the Area is Shown to be Materially Different than shown.	\$ 5.10	\$ 95,880
4	1	LS	Coating Inspection and Testing	\$ 3,500	\$ 3,500
5	1	EA	Replace Manway Gasket	\$ 750	\$ 750
6	1	LS	Hydrostatic Testing, VOC Testing, Disinfection of Tank, Bacteriological Testing	\$ 3,800	\$ 3,800

Construction Subtotal: \$200,430
Contingency (10%): \$ 20,043
Subtotal Construction: \$220,473

Engineering/Contract Document Preparation \$ 20,000
Construction Inspection: \$ 9,527
Total Project Estimate: \$250,000



Country Club Tank Location

CIP ITEM No. 6: 900 Tank

A. Project Description / Justification:

Budget \$ 525,000

A tank near Rams Hill is important to be able to serve the development and golf course. The existing 800 tank experienced various leaks in the past due to a failed liner which was replaced and repaired multiple times without long term success. Based on this experience, a decision was made to abandon the tank and construct a new one. Various operational advantages were realized by locating the tank up the hill at the Rams Hill #2 Tank site.

Replacing the R-2 tank with a potable water storage tank (900 tank) has been completed and provides direct feed of water from Well 16 and still serve the Rams Hill area, as well as ID-1. The tank stores Well 16 water only without major changes to the distribution system. In the future, this tank could be used for treatment if necessary.

B. Project Design / Process Flow:

The existing R-2 tank was replaced with a new potable water bolted steel tank (now called "900 tank" due to its elevation) without as many modifications to the distribution system. Most of the piping is already in place to allow for a direct feed from Well 16 to the 900 tank location. Some modifications would be necessary to the distribution system. There are existing rights to allow the District to install and operate a tank in this location.

C. Cost Estimate

The project has been bid at a cost of \$500,000.

D. Project Estimated Timeline:

Construction of tank: COMPLETE

CIP ITEM No. 7-10: Transmission Pipelines

A. Project Description / Justification

The District’s water distribution system was piecemealed together over time as the District took over smaller Districts in the area. The smaller pipelines were interconnected in partial measures. There is a need to deliver water in a more efficient manner. The District has identified four main transmission pipelines that should be installed for a more functional system. The transmission lines would have no service laterals connected, and would serve only to deliver water to the tanks or to another part of the distributions system. These projects are not considered pipeline replacement projects; they will enhance the distribution system operation.

B. Project Design / Process Flow:

Pipelines 1, 2 and 4 are projects that can possibly be installed by District staff over time; thus, saving District funds. Pipeline 3 (Well 12 to Tilting T and Di Giorgio) is a more complex project and may require professional design and implementation.

C. Cost Estimate

Estimates were derived using pipeline lengths and cost per unit length. Not enough information is available to do a detailed analysis at this time.

Transmission line to convey well 16 water directly to ID1 900 Reservoir (Pipeline 1)	\$112,000
Transmission line to convey Well 5 water directly to C.C. Reservoir (Pipeline 2)	\$625,000
Transmission line to convey Well 12 water directly to Tilting T-Di Giorgio (Pipeline 3)	\$668,000
Transmission line Slash M Rd. west to Country Club Tank (Pipeline 4)	\$175,700

Total: \$1,600,700

D. Project Estimated Timeline:

Transmission line to convey well 16 water directly to ID1 900 Reservoir (Pipeline 1)	FY 2018-19
Transmission line to convey Well 5 water directly to C.C. Reservoir (Pipeline 2)	FY 2017-23
Transmission line to convey Well 12 water directly to Tilting T-Di Giorgio (Pipeline 3)	FY 2022-23
Transmission line Slash M Rd. west to Country Club Tank (Pipeline 4)	FY 2019-20

E. Impacts of Deferral:

Pressure fluctuations and chlorine concentrations can vary in the operation of a pipeline coming directly from a well. Therefore, connecting water meters to these lines is not recommended and Transmission Mains from the well to the nearest reservoir is proposed. Deferral of these improvements only delays completion of the optimal configuration of service to BWD customers.

CIP ITEM No. 11: Twin Tanks

A. Project Description / Justification

The Twin Tanks are located approximately ½ mile southwest of the intersection of Palm Canyon Drive and Montezuma Valley Road (S22). The two tanks have a capacity of 220,000 gallons each and are composed of galvanized steel. The California Department of Health Services requires the District to physically inspect the inside of the domestic water reservoirs every three years. This service is performed by a consultant that utilizes divers and provides a written report as well as a video. The past inspection report recommended that the tanks be recoated and minor metal repairs made. The tank inspections were received in February 2017. The tanks are highly corroded. The tanks are scheduled for replacement in the 2017-2018 CIP. BWD is working with the State of California to receive Grant funding for this expenditure.

B. Project Design / Process Flow:

When the tanks were inspected in 2017, the divers installed a plug in the pipe that interconnects the tank because there is no valve there to allow for one tank to be taken out of service. Staff installed a permanent valve. After the inspection report was delivered, it was determined that the tanks need replacement.

There are two tanks. Twin Tank #1 is the south tank, and Twin Tank #2 is the north tank. The tanks will be replaced with a single 440,000 gallon bolted steel tank. No change in capacity is proposed. The tank will be installed at the same location as the existing tanks. The bolted steel tank will be approximately 55 feet in diameter and 24 feet high. The coating will be fusion or powder coated steel. The estimated life of the tank is approximately 30 years if it is properly maintained.

C. Cost Estimates:

Twin Tanks Replacement					
No.	Qua	Unit	Description	Unit Cost	Total Cost
1 Construction Cost					
1.1	2	LS	Mobilization/ Demobilization, Temporary Facilities, Insurance, Payment Bond, Taxes, Permits, Fees and Similar Expenses	\$ 25,000.00	\$ 50,000
1.2	2	LS	Demolish existing bolted 220,000 gallon steel tank. Remove and dispose of the tank.	\$ 13,500.00	\$ 27,000
1.3	2	LS	Provide tank submittal, stamped and signed by a Registered Engineer in the State of California. Payment after acceptance.	\$ 2,500.00	\$ 5,000
1.4	2	LS	Prepare Tank Pad – Install new galvanized steel ring around the perimeter of the tank. Install 1-inch No. 4 Rock eight inches thick. Install ½” Fiber expansion joint material on top of the rock.	\$ 14,000.00	\$ 28,000

1.5	2	LS	Furnish and Install OSHA exterior locking ladder kit and railing around the roof hatch	\$ 7,500.00	\$ 15,000
1.6	2	LS	Install fusion powder coated bolted steel tank, nominal dimensions 24' high and 38' diameter. After installation, complete holiday testing of interior coating and repair all holidays to the satisfaction of the engineer.	\$ 165,000.00	\$ 330,000
1.7	2	LS	Install piping, valves, transition couplings, fittings, Tideflex valve, expansion joints, check valves, pipe supports, ductile iron risers, thrust blocks, anti-vortex hardware, and other appurtenances. Connect to existing piping.	\$ 4,200.00	\$ 8,400
1.8	1	LS	Hydrostatic Testing, VOC Testing, Wash-down and Cleaning of the interior, Disinfection, and Bacteriological Testing. Water provided by the District at no charge.	\$ 3,800.00	\$ 3,800
				Project Construction Cost:	\$ 467,200
				10% Contingency:	\$ 46,720
				Total Construction Cost:	\$ 513,920
<hr/>					
2	Admin and Engineering				
2.01	1	LS	Preliminary Engineering, Engineering Plans and Specifications	\$	40,000
2.02	1	LS	Construction Management	\$	25,000
				TOTAL PRELIMINARY PROJECT ESTIMATED COST	\$ 578,920

D. Project Estimated Timeline: Why is 2017-18 Proposed?

The extent of the corrosion in the tank requires replacement as soon as possible. The project would have started earlier but construction is delayed due to the time needed to complete the Grant Application, which is scheduled for March of 2018.

Planning Initiated:	2017-18
Engineering/design completion:	2018-19
Project Bidding:	2018-19
Repair Recoat Tank:	2018-19

E. Impacts of Deferral:

Observed corrosion in the Twin Tanks has prompted BWD to recommend replacement instead of repair. Deferral of this Project leads to the potential for further degradation of the tank and possible failures.

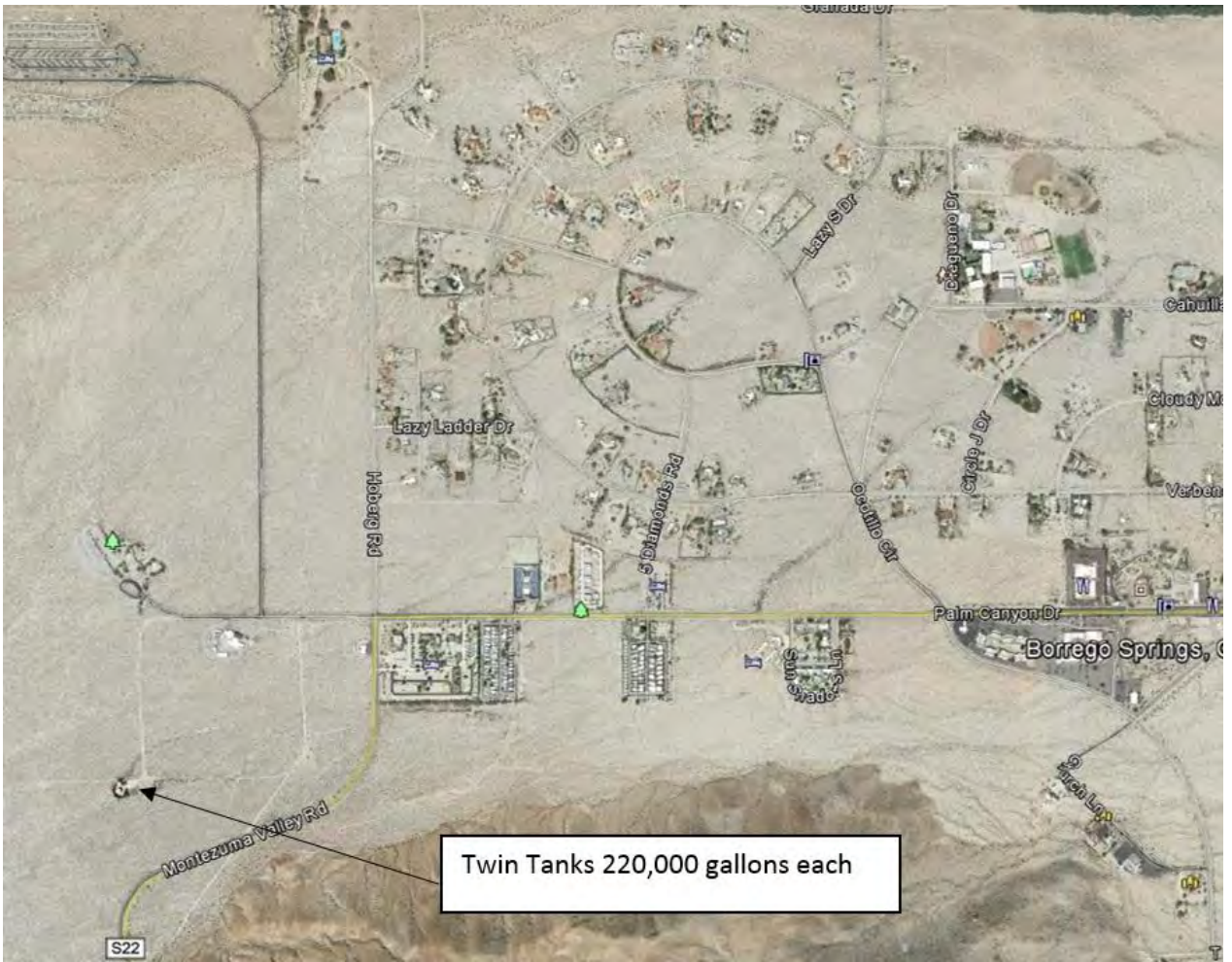


Figure 1 - Twin Tanks Location

CIP ITEM No. 12: Replace Wilcox Diesel Motor

A. Project Description / Justification

Budget \$59,000

The District has received a Notice of Violation (number 225200) from the APCD on July 7, 2015. In the violation notice, the APCD indicated that the diesel engine must be replaced with an emissions compliant engine, the engine must be refitted with emissions equipment or the engine taken out of service. Due to the age of the engine it is not feasible to install aftermarket controls to meet the new emissions requirement. Therefore, the options include replacement or taking the well out of service (revoking the existing permit to operate). The Wilcox Well is considered an emergency source of water when the electric power is out of service, so it is a critical component of the water distribution system and must be kept online. The alternative to replace the engine is the most cost effective and environmentally friendly option.

The proposed project includes new equipment purchase, necessary construction permits of the APCD, removal of the existing diesel engine and installation of the new compliant engine.

The proposed project includes replacing the existing 80hp diesel engine with a Tier 4 emissions compliant for standby diesel engines. This is considered a green component due to the enhanced energy efficiency of the engine and near-zero emissions. Replacing the existing diesel engine is much more cost effective than to bring electric power to the site and install an electric engine. BWD is working with the State of California to receive Grant funding for this expenditure.

B. Project Design / Process Flow

On May 11, 2004, EPA signed the final rule introducing Tier 4 emission standards, which are phased-in over the period of 2008-2015. The Tier 4 standards require that emissions of PM and NOx be further reduced by about 90%. Such emission reductions can be achieved through the use of control technologies, including advanced exhaust gas after treatment.

The new diesel engine will comply with EPA Tier 4 Final and EU Stage IV emissions standards. It will employ Diesel Oxidation Catalyst (DOC) technology or Diesel Particulate Filters (DPF) to meet the Tier 4 Final/Stage IIIB requirement for near-zero Particulate Matter (PM) emissions. The Tier 4 regulation and later amendments for Engine power between 75hp and 175hp have numeric not-to exceed values for various pollutants and also include a number of provisions:

- *Smoke Opacity*—Existing Tier 2-3 smoke opacity standards and procedures continue to apply in some engines. Exempted from smoke emission standards are engines certified to PM emission standards at or below 0.07 g/kWh (because an engine of such low PM level has inherently low smoke emission).
- *Crankcase Ventilation*—The Tier 4 regulation does not require closed crankcase ventilation in nonroad engines. However, in engines with open crankcases, crankcase emissions must be measured and added to exhaust emissions in assessing compliance.
- *DEF Refill Interval*—For SCR-equipped nonroad diesel engines, a minimum DEF (urea solution) refill interval is defined as at least as long (in engine-hours) as the vehicle's fuel capacity.

- *Emergency Operation*—To facilitate the use of certain nonroad engines in temporary emergency situations, the engines can be equipped with an AECD to override performance inducements related to the emission control system—for example, to allow engine operation without urea in the SCR system during an emergency. This flexibility is intended primarily for engines used in construction equipment and portable equipment used for temporary power generation and flood control.
- *ABT Program*—Similarly to earlier standards, the Tier 4 regulation includes such provisions as averaging, banking and trading of emission credits and FEL limits for emission averaging.

C. Cost Estimate:

Replace Wilcox Diesel Engine with APCD Compliant Engine						
No.	Qua	Unit	Description	Unit Cost	Total Cost	
1 Construction Cost						
1.1	1	LS	Replace Wilcox Diesel Engine	\$ 50,000.00	\$	50,000
				Project Construction Cost:	\$	50,000
				10% Contingency:	\$	5,000
				Total Construction Cost:	\$	55,000
2 Admin and Engineering						
2.1	1	LS	Preliminary Engineering, Engineering Plans and Specifications		\$	2,000
2.2	1	LS	Construction Management		\$	2,000
TOTAL PRELIMINARY PROJECT ESTIMATED COST					\$	59,000

D. Project Timeline. Why is 2018 Proposed?

APCD is requiring replacement of the motor to meet air quality standards. BWD staff has negotiated an agreement with APCD to defer enforcement until BWD receives State Grant proceeds are received, projected for mid 2018.

Planning Initiated:	2017-18
Bid Project:	2018-19
Construction:	2018-19

- E. Impact of Deferral: BWD was informed that APCD requirements mandate replacement of the motor. Deferral of this project creates the potential of further enforcement action by APCD.

CIP ITEM No. 13: Replace Indian Head Reservoir

A. Project Description / Justification

The District contracted a dive inspection on February 2, 2017 to determine the condition of the interior of the tanks. The last inspection occurred October 14, 2014. Inspections occur approximately every three years. The inspection of the Indian Head Tank identified that the tank may be at the end of its useful life and requires replacement. BWD is working with the State of California to receive Grant funding for this expenditure.

B. Project Design/Flow

The tank will be replaced with a single 220,000-gallon bolted steel tank. No change in capacity is proposed. The tank will be installed at the same location as the existing tank. The bolted steel tank will be approximately 38 feet in diameter and 24 feet high. The coating will be fusion or powder coated steel.

The estimated life of the tank is approximately 30 years if it is properly maintained. After completion of the tank, it will be filled with water. The water will be tested for Volatile Organic Compounds (VOC) and bacteria prior to putting the tank into service. No change in capacity is proposed.



Figure 4 - Location of Indianhead tank

C. Cost Estimate:

Indian Head Tank Replacement					
No.	Qua	Unit	Description	Unit Cost	Total Cost
1 Construction Cost					
1.1	1	LS	Mobilization/ Demobilization, Temporary Facilities, Insurance, Payment Bond, Taxes, Permits, Fees and Similar Expenses	\$ 25,000.00	\$ 25,000
1.2	1	LS	Demolish existing bolted 220,000 gallon steel tank. Remove and dispose of the tank.	\$ 13,500.00	\$ 13,500
1.3	1	LS	Provide tank submittal, stamped and signed by a Registered Engineer in the State of California. Payment after acceptance.	\$ 2,500.00	\$ 2,500
1.4	1	LS	Prepare Tank Pad – Install new galvanized steel ring around the perimeter of the tank. Install 1-inch No. 4 Rock eight inches thick. Install ½” Fiber expansion joint material on top of the rock.	\$ 14,000.00	\$ 14,000
1.5	1	LS	Furnish and Install OSHA exterior locking ladder kit and railing around the roof hatch	\$ 7,500.00	\$ 7,500
1.6	1	LS	Install fusion powder coated bolted steel tank, nominal dimensions 24’ high and 38’ diameter. After installation, complete holiday testing of interior coating and repair all holidays to the satisfaction of the engineer.	\$165,000.00	\$ 165,000
1.7	1	LS	Install piping, valves, transition couplings, fittings, Tideflex valve, expansion joints, check valves, pipe supports, ductile iron risers, thrust blocks, anti-vortex hardware, and other appurtenances. Connect to existing piping.	\$ 4,200.00	\$ 4,200
1.8	1	LS	Hydrostatic Testing, VOC Testing, Wash-down and Cleaning of the interior, Disinfection, and Bacteriological Testing. Water provided by the District at no charge.	\$ 3,800.00	\$ 3,800
				Project Construction Cost:	\$ 235,500
				10% Contingency:	\$ 23,550
				Total Construction Cost:	\$ 259,050
2 Admin and Engineering					
2.01	1	LS	Preliminary Engineering, Engineering Plans and Specifications		\$ 20,000
2.02	1	LS	Construction Management		\$ 15,000
TOTAL PRELIMINARY PROJECT ESTIMATED COST					\$ 294,050

D. Project Estimated Timeline: Why is 2017-18 Proposed?

The extent of the corrosion in the tank requires replacement as soon as possible. The project would have started earlier but construction is delayed due to the time needed to complete the Grant Application, which is scheduled for March of 2018.

Planning Initiated:	2017-18
Bid Project:	2018-19
Construction:	2018-19

E. Impact of Deferral

Observed corrosion in the Indian Head Tank has prompted BWD to recommend replacement instead of repair. Deferral of this Project leads to the potential for further degradation of the tank and possible failures.

CIP ITEM No. 14: Rams Hill #2 Tank Recoating

A. Project Description / Justification

Budget: \$190,528

The District contracted a dive inspection on October 19, 2016 to determine the condition of the interior of the tanks. The last inspection occurred in 2012. Inspections occur approximately every three years. The inspection of the Twin Tanks has identified areas inside the tank that require repair. BWD is working with the State of California to receive Grant funding for this expenditure.

Rams Hill #2 Tank Areas	
55'	Diameter
24'	Height
FT^2	Area
4147	interior walls
2376	Interior floor
2376	interior roof
38	Center Support
600	Rafters/etc.
9536	Total Interior
FT^2	Area
2376	exterior roof
4147	exterior shell
6523	Total Exterior
SF=square feet	

B. Project Design/Flow

The interior of the galvanized steel tank will be sandblasted - including the columns, rafters, appurtenances to SSPC-SP 10. The exterior shell requires recoating; the roof will be sandblasted to SSPC-SP10 along with any areas that have corroded. The remaining exterior will be pressure washed prior to coating. The contractor is to remove and legally dispose of the spent blast material. OSHA and Cal-OSHA require a safety railing on the roof structure that will be installed on the tank. Some metal repairs inside the tank will be required. The inspection report identified corrosion on the shell, floor, centerpole, roof structure and interior of the drain and level sensor lines. One rafter is missing, and there appear to be some bolts loose. The loose bolts will be replaced along with the missing rafter. Seventy percent of the bolt runs are estimated to be covered with corrosion. Some attachment hardware will need to be replaced on the shell and floor panels. The full extent of the metal repairs will not be known until after the sandblasting is complete. According to the tank inspection report, if the corrosion is left unaddressed, metal loss could lead to water leakage. The exterior of the tank is in fair condition, only a few small areas will be repainted. The estimated life of the coating is approximately 30 years if it is properly maintained.

After completion of the recoating, the tanks will be filled with water. The water will be tested for Volatile Organic Compounds (VOC) and bacteria prior to putting them back into service. No change in capacity is proposed.

C. Cost Estimate:

Rams Hill #2 Rehabilitation					
No.	Qua	Unit	Description	Unit Cost	Total Cost
1 Construction Cost					
1.1	1	LS	Mobilization/ Demobilization, Temporary Facilities, Construction Sign, Insurance, Payment Bond, Taxes, Permits, Fees and Similar Expenses	\$ 16,000.00	\$ 16,000.00
1.2	1	LS	Test for lead, chromium and arsenic in interior of tank.	\$ 700.00	\$ 700.00
1.3	11,912	SF	Sandblast Complete Interior Including Columns, Rafters, Appurtenances, Exterior Roof Coatings and Small Localized Areas on the Exterior Shell (to be located in the field), to SSPC-SP 10. Remove and Legally Dispose of Spent Blast Material.	\$ 3.50	\$ 41,692.00
1.4	1	LS	Metal Repair Estimate	\$ 11,500.00	\$ 11,500.00
1.5	9,536	SF	Recoat Interior Surfaces.	\$ 4.50	\$ 42,912.00
1.6	6,523	SF	Coat Exterior Surfaces	\$ 3.50	\$ 22,830.50
1.7	1	LS	Coating Inspection and Testing	\$ 5,500.00	\$ 5,500.00
1.8	2	EA	Replace Manway Gaskets	\$ 500.00	\$ 1,000.00
1.9	1	LS	Hydrostatic Testing, VOC Testing, Disinfection of Tank, Bacteriological Testing	\$ 3,800.00	\$ 3,800.00
				Project Construction Cost:	\$ 145,935
				10% Contingency:	\$ 14,593
				Total Construction Cost:	\$ 160,528
2 Admin and Engineering					
2.1	1	LS	Preliminary Engineering, Engineering Plans and Specifications	\$	15,000
2.2	1	LS	Construction Management	\$	15,000
TOTAL PRELIMINARY PROJECT ESTIMATED COST				\$	190,528

D. Project Timeline: Why is 2019 Proposed?

Observed corrosion in the tank has prompted BWD to proceed with re-coating as soon as possible. This project is also part of the ongoing State Grant process, which has delayed construction.

Project scheduled to be completed in FY 2018-19

E. Impact of Deferral

Observed corrosion in RH #2 has prompted BWD to recommend repairs. Deferral of this Project leads to the potential for further degradation of the tank and possible failures.

CIP ITEM No. 15: La Casa Del Zorro area sewer system & forcemain cleanout

A. Project Description / Justification

Budget: \$150,000

The Wastewater Treatment Facility services approximately 20 percent of the community of Borrego Springs. Specifically, it serves the Rams Hill residential community and the Town Center area, which includes hotels, a motel, and small business along Palm Canyon Drive. The remaining 80 percent of Borrego Springs is serviced by individual septic tank-subsurface disposal systems.

The sewer is collected and flows by gravity to a pump station located along Borrego Valley Road, approximately 0.6 miles north of Tilting T Drive. The pump station was installed within the past 10 years. The raw sewage is pumped via a sewer forcemain approximately 2.8 miles to a point 150 feet north of Borrego Springs Road at Yaqui Pass Road. The sewer then flows by gravity inside the La Casa Del Zorro Resort property (located at 3845 Yaqui Pass Road in Borrego Springs, CA) via an 18" PVC gravity main owned by the District and then along Borrego Springs Road to the wastewater treatment plant located at 4861 Borrego Springs Road.

There has been a history of high hydrogen sulfide gas levels and odors detected at manholes located downstream of where the sewer force main discharges into the 18-inch gravity pipeline, at or near the La Casa Del Zorro Resort, especially during the high residency season (November through March) and during holidays.

The intention of this project is to install cleanouts on the existing forcemain to allow the District to clean the forcemain.

B. Project Design/Flow

The District will install cleanouts every approximate 500 feet in the existing forcemain. There will be approximately 30 cleanouts to be installed.

C. Cost Estimate:

It is estimated that each cleanout will cost approximately \$5,000, therefore the project cost estimate is \$150,000.00.

D. Project Timeline: Why is 2019 Proposed?

Hydrogen sulfide contributes to odors as well as corrosion of infrastructure. Much needed maintenance on the forcemain is also planned for improved operations and reduced corrosion-related issues.

The projects are scheduled to be started FY 2018-19

E. Impacts of Deferral:

The proposed improvements are needed for odor control in the sewer collection system and deferral of these improvements could lead to continued odors as well as corrosion of infrastructure.

CIP ITEM No. 16: Sewer Main Replacement Club Circle

A. Project Description / Reasons for Capital Expense

Budget: \$400,000

The District acquired Improvement District 5 (ID-5) in 2008. Club Circle is part of ID-5, and the infrastructure therein was installed in 1960's. The sewer collection system pipelines are composed of a clay material and are at the end of their expected lifetime. The collection system should be replaced within the next eight years and has been scheduled in the CIP.

B. Project Design/Flow

The design will start with a topographic survey that will show the elevations of all the existing tops of manholes, inverts of existing sewer pipe, identify the type and size of pipe, other utilities, rights of ways, existing structures, etc. The design plan will show the locations, size and type of the new sewer pipelines and manholes. The existing sewer system will remain in service until the new sewer collection system is installed. As an alternative, the sewer pipelines may be sliplined, depending on the engineer's recommendations. Sliplining is used to repair leaks or restore structural stability to an existing pipeline. Sliplining is completed by installing a smaller, "carrier pipe" into a larger "host pipe", grouting the annular space between the two pipes, and sealing the ends. The most common material used to slipline an existing pipe is high-density polyethylene (HDPE), but fiberglass-reinforced pipe (FRP) and PVC are also common. Sliplining can be used to stop infiltration and restore structural integrity to an existing pipe. There are two methods used to install a slipline: continuous and segmental.

Continuous sliplining uses a long continuous pipe, such as HDPE, Fusible PVC, or Welded Steel Pipe, that are connected into continuous pieces of any length prior to installation. The continuous carrier pipe is pulled through the existing host pipe starting at an insertion pit and continuing to a receiving pit. Either the insertion pit, the receiving pit, or both can be manholes or other existing access points if the size and material of the new carrier pipe can maneuver the existing facilities.

Segmental sliplining is very similar to continuous sliplining. The difference is primarily based on the pipe material used as the new carrier pipe. When using any bell and spigot pipe such as FRP, PVC, HDPE or Spirally Welded Steel Pipe, the individual pieces of pipe are lowered into place, pushed together, and pushed along the existing pipe corridor. Using either method the annular space between the two pipes must be grouted. In the case of sanitary sewer lines, the service laterals must be reconnected via excavation.

C. Cost Estimate

A budget of \$400,000 was allocated in the CIP for this project. Actual costs will depend on the type of rehabilitation or construction selected.

D. Project Timeline. Why is 2020 proposed?

Due to the age of the Club Circle system, the materials used and degradation over time needs to be investigated further. Although no serious issues have been experienced yet, investigation of the condition of the system is needed to prevent sewer collection system issues.

The projects are proposed to begin in FY 2019-20 and continue in FY 2021-22 and FY 2024-25.

E. Impact of Deferral:

Further investigative work is needed to determine the condition of the Club Circle sewer system. Deferring this item could contribute to reduced service and possible failures in extreme situations.

CIP ITEM No. 17: Town Center Sewer La Casa Bypass

A. Project Description / Justification

Budget \$500,000

The Wastewater Treatment Facility services approximately 20 percent of the community of Borrego Springs. Specifically it serves the Rams Hill residential community and the Town Center area, which includes hotels, a motel, and small business along Palm Canyon Drive. The remaining 80 percent of Borrego Springs is serviced by individual septic tank-subsurface disposal systems.

The sewer is collected and flows by gravity to a pump station located along Borrego Valley Road, approximately 0.6 miles north of Tilting T Drive. The pump station was installed within the past 10 years. The raw sewage is pumped via a sewer forcemain approximately 2.8 miles to a point 150 feet north of Borrego Springs Road at Yaqui Pass Road. The sewer then flows by gravity inside the La Casa Del Zorro Resort property (located at 3845 Yaqui Pass Road in Borrego Springs, CA) via an 18" PVC gravity main owned by the District and then along Borrego Springs Road to the wastewater treatment plant located at 4861 Borrego Springs Road.

There has been a history of high hydrogen sulfide gas levels and odors detected at manholes located downstream of where the sewer force main discharges into the 18-inch gravity pipeline, at or near the La Casa Del Zorro Resort, especially during the high residency season (November through March) and during holidays.

The La Casa Del Zorro Resort has recently installed P-traps upstream of multiple lateral service connections to the Borrego Water District sanitary sewer system. There have been no odor complaints since the P-traps have been installed.

B. Project Design/Flow

To be proactive in case the problem resurfaces, the District has completed an engineering investigation to determine the best course of action. CIP Project # 15 is recommended as a Phase one to minimize the odors. In the event the odor problem continues, this proposed re-alignment of the sewerline is needed as a conditional Phase 2 project. When the Phase One work is complete a decision can be made regarding Phase Two.

C. Cost Estimate:

A placeholder was put in the CIP for \$500,000.

D. Project Timeline – Why is 2020 Proposed?

It is expected that following completion of phase one, it will take approximately 6 months to determine the success of Phase One (CIP #15) = 2020

Estimated project completion date is FY 2019-20

E. Impact of Deferral

Deferral of this project will perpetuate the potential for odor and high hydrogen sulfide concentrations.

CIP ITEM No. 18: Plant Grit Removal at the Headworks

A. Project Description / Reasons for Capital Expense

Budget \$100,000

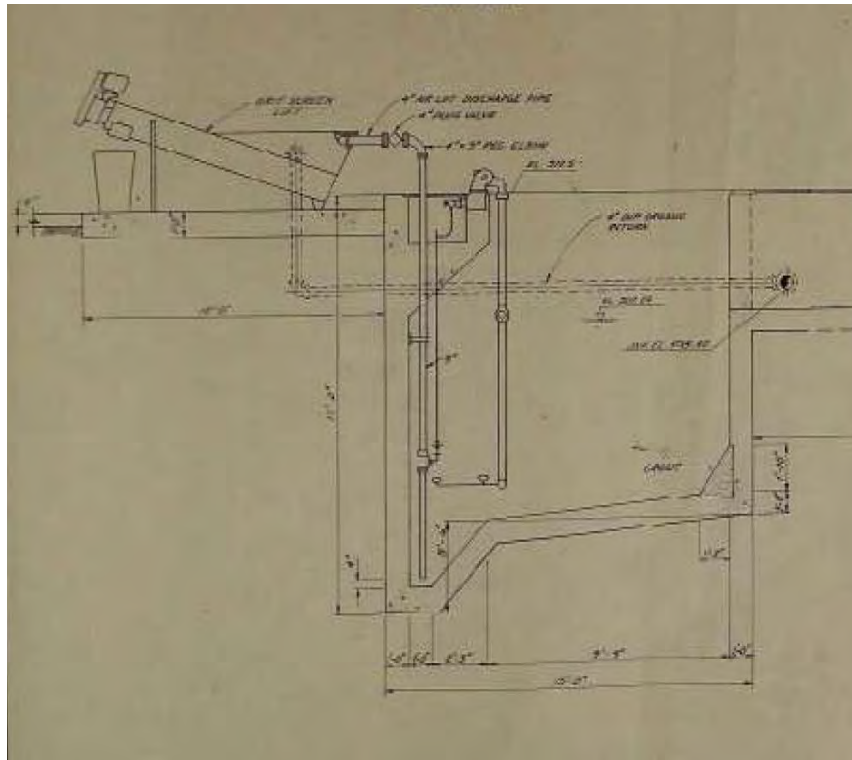
The wastewater treatment facility headworks consist of an influent flowmeter (Parshall Flume), a grit settling basin, positive displacement air blower system, and an “auger-style” grit separator. Recent improvements to the headworks include installation of a new ultrasonic flow meter unit, repair of the original bar screen, replacement of comminutor (Muffin Monster) unit, and replacement of the positive-displacement style blower unit that provides aeration to the aerobic sludge digester.

The existing “auger-style” grit separator housing and drive unit are extremely corroded (see photos below), do not adequately process settled grit, and leak raw influent wastewater onto the surface area. Furthermore, according to operations staff, the original air-lift system has not worked properly for quite some time, and should be replaced with a fluid pumping system capable of pumping settled grit and solids from the bottom of the grit chamber to the separator. Without a functional grit removal system, floating solids are transported through the WWTF facility. BWD is working with the State of California to receive Grant funding for this expenditure.



B. Project Design/Flow:

The headworks dimensions are 54” tall x 30” wide x 18 ½’ Long. The primary channel includes a Muffin Monster Grinder. There is also a by-pass stationary bar screen. The onsite power is 240V 3 phase 60 Hz. The alternatives for this are to replace the existing failed grit separator, or no action. If nothing is done, solids and particulate matter can enter the WWTF, causing problems with the treatment process and possible effluent violations.



WWTF Headworks Drawing (profile view)

C. Cost Estimate:

ALTERNATIVE 1 - REPLACE GRIT REMOVAL AUGER						
No.	Qua	Unit	Description	Unit Cost	Total Cost	
1 Construction Cost						
1.00	1	LS	Replace Grit Remover	\$ 80,182.00	\$ 80,182	
				Project Construction Cost:	\$	80,182
				10% Contingency:	\$	8,018
				Total Construction Cost:	\$	88,200
2 Admin and Engineering						
2.01	1	LS	Preliminary Engineering, Engineering Plans and Specifications	\$	4,000	
2.02	1	LS	Construction Management	\$	3,000	
TOTAL PRELIMINARY PROJECT ESTIMATED COST					\$	95,200

D. Project Timeline. Why is 2019 Proposed?

The grit auger is a critical component at the beginning of the waste water treatment process. The existing equipment is very close to the end of its useful life.

The project is scheduled to be completed in FY 2018-19

E. Impact of Deferral:

Replacement of the Grit Removal Auger will improve WWTP Plant operations and deferral of this improvement increases the risk of maintenance issues and/or equipment failure.

CIP ITEM No. 20: Emergency Water Pipeline Repairs

A. Project Description / Reasons for Capital Expense

Budget \$225,000 (average \$28,125 per fiscal year)

The District's water distribution system is aging. Some parts of the distribution system were installed in the 1960's and are starting to reach their life expectancy. The pressure in the system is over 100psi in many areas. Each year there are water pipe breaks that the District repairs. The CIP has included these costs as routine repairs each year.

B. Project Design/Flow

When a pipeline breaks, the District responds immediately to repair the leak. If the roadway is affected, the County sends an inspector to the project site.

C. Cost Estimate

The cost in the CIP is based on historical trends.

D. Timeline

The schedule for this item is based on whenever the pipelines break and deferral is not an option.

CIP ITEM No. 21-31: Pipeline Replacement / Improvement Program

A. Project Description/ Reason for expense.

Water pipelines are out of sight and “out of mind” until there are breaks and water leaks. Many parts of the distribution system are approaching their useful life. Every year the District is proactive in replacing and installing new water pipelines in the distribution system. The District has identified and prioritized several sections of pipelines within the distribution system. They are the following:

10" Bypass at ID1 Booster Station 2
Borrego Springs Road, Walking H Drive to Country Club Road Phase 1 (Pipeline 5)
Borrego Springs Road, Walking H Drive to Country Club Road Phase 2 (Pipeline 5)
T Anchor Drive, Frying Pan Road to Double O Road (Pipeline 6)
Weather Vane Drive, Frying Pan Road to Double O Road (Pipeline 7)
Frying Pan Road, north and south from T Anchor Drive (Pipeline 8)
Double O Road, north and south from T Anchor Drive (Pipeline 9)
Borrego Springs Road, Weather Vane Drive to Barrel Drive (Pipeline 10)
Pipeline for Santiago and ID5 (Pipeline 11)
De Anza Dr. 1600 block west from Yaqui Road (Pipeline 12)

B. Project Design/ Flow

The regularly scheduled water pipeline replacement program is to be completed by in house District staff as they become available.

C. Cost Estimate

Pipeline 5	8" Water Main from the intersection of Borrego Springs Road and Walking H Drive to the intersection of
CIP Line 30	Borrego Springs Road and Country Club Road.
CIP Line 31	Total length 5850 feet at \$70.00 per foot Estimated cost \$409,500.00
Pipeline 6	6" Water Main going west to east on T Anchor Drive from Frying Pan Road to Double O Road.
CIP Line 32	Total length 525 feet at \$65.00 per foot Estimated cost \$34,125.00

Pipeline 7 CIP Line 33	6" Water Main going west to east on Weather Vane Drive from Frying Pan Road to Double O Road. Total length 525 feet at \$65.00 per foot Estimated cost \$34,125.00
Pipeline 8 CIP Line 34	6" Water Main going north and south on Frying Pan Road from T Anchor Drive. Total length 3110 feet at \$80.00 per foot Estimated cost \$248,000.00
Pipeline 9 CIP Line 35	6" Water Main going north and south on Double O Road from T Anchor Drive. Total length 3920 feet at \$80.00 per foot Estimated cost \$313,600.00
Pipeline 10 CIP Line 36	8" Water Main from intersection of Borrego Springs Road and Weather Vane Drive to the intersection of Borrego Springs Road and Barrel Drive. Total length 1500 feet at \$70.00 per foot Estimated cost \$105,000.00
Pipeline 11 CIP Line 37	6" Water Main going east from Double O Road to Di Giorgio Total length 1700 feet at \$65.00 per foot Estimated cost \$214,000
Pipeline 12 CIP Line 40	6" Water Main 1600 Block of De Anza Drive Total length 1260 feet at \$200.00 per foot Estimated cost \$252,000

D. Project Timeline

The CIP shows these projects starting in FY 2017-18 and finishing in FY 2021-22. The completion of these projects is dependent on staff availability, and if there are any unanticipated emergency water pipeline breaks that will change the priority of the replacement schedule. The projects are needed to replace aging infrastructure, improve system redundancy and water flow.

BWD Bond Financing Use of Funds & Scheduling

Use of Funds:

The Projects identified in this CIP will be prioritized and selected BWD fully expects that substantially all 2018 Bond proceeds dedicated to Capital Improvements and deposited in the Construction Fund created under the Indenture will be expended within three years, as follows.

2018-19

Project #3: BWD Production Well Replacement-Investigation	\$ 265,000
Project #7: Transmission Main from Well 16 to ID1 900 Reservoir	112,000
Project #16: Forcemain Repair near La Casa del Zorro =	150,000
Project #17: La Casa Bypass Design	100,000
Project #28: Frying Pan Road, north and south from T Anchor Drive	165,000
Project #31: Pipeline for Santiago and ID5	110,000

2019-20

Project #3: BWD Production Well Replacement – Construction	\$1,235,000
Project #8: Well 5 water directly to C.C. Reservoir	120,000
Project #14: Slash M Rd. west to Country Club Tank	175,700
Project #15: Club Circle Sewerline Assessment	200,000
Project #17: La Casa Bypass Construction	500,000

2020-21

Project #23: BS Rd, Walking H Drive to Country Club Road Phase 1	\$ 205,000
Project #28 Double O Road, north and south from T Anchor Dr	313,600
Project #29 BS Rd, Weather Vane Drive to Barrel Dr	105,000
Project #31 De Anza Dr. 1600 block west from Yaqui Road	252,000

Total = \$4,008,700

Project Schedule

Project	2018-19	2019-2020	2020-2021
Project #3			
Well Exploration	\$260,000		
Construction		\$1,240,000	
Project #7			
Design/Construction	112,000		
Project #16			
Forcemain Repair	150,000		
Project #17			
Bypass Design	100,000		
Construction		500,000	
Project #28			
Design/Construction	165,000		
Project #31			
Design/Construction	110,000		
Project #8			
Design/Construction		120,000	
Project #14			
Design/Construction		175,700	
Project #15			
Design/Construction		200,000	
Project #23			
Design/Construction			205,000
Project #28			
Design/Construction			313,600
Project #29			
Design/Construction			105,000
Project #31			
Design/Construction			<u>252,000</u>
TOTALS	\$897,000	\$2,235,700	\$875,600

BORREGO WATER DISTRICT
BOARD OF DIRECTORS MEETING – FEBRUARY 20, 2018
AGENDA BILL 2.C

February 14, 2017

TO: Board of Directors, Borrego Water District
FROM: Geoff Poole, General Manager
SUBJECT: Farmland Fallowing & Land Restoration Standards - Poole

RECOMMENDED ACTION:

Discuss Farmland Fallowing Proposals, receive presentation from Consultants and direct staff accordingly

ITEM EXPLANATION:

At the January Special Meeting, BWD Board discussed the need to develop farmland fallowing and land restoration standards for land in Borrego Springs. Proposals from University of California, Irvine and the Desert Research Institute were received and representatives from both consulting firms will be available to discuss their Proposals at the 2-20 Board Meeting.

FISCAL IMPACT

TBD

ATTACHMENTS

1. UCI Proposal
2. DRI Proposal



Proposed Approach for Support to the Borrego Water District Groundwater Sustainability Program

Goal

To reduce groundwater pumping and evapotranspiration (ET) loss in the Borrego Groundwater Basin, fallowing of farmland is very likely to be one of the primary strategies to achieve groundwater sustainability. Development of effective desert habitat repurposing practices and procedures is essential to minimize environmental impacts in the areas of the Basin no longer being actively farmed.

Background

The community of Borrego Springs is located in an unincorporated area northeast of San Diego within the Borrego Basin. The Basin is comprised of Borrego Valley (about 110 square miles) and portions of the surrounding 600,000 acre Anza-Borrego Desert State Park (ABDSP). There is currently limited development within the community with approximately 3,400 residents documented in the 2010 census.

The US Geological Survey (USGS) has identified a Basin inflow of 5700 acre-feet per year (afy) and an outflow of 19,100 afy, which creates an approximate 70% deficit in terms of a sustainable groundwater resource. Due to this imbalance, the California Department of Water Resources has classified the Basin as being in Critical Overdraft and therefore a GSP must be developed and finalized by January 2020. The County of San Diego and BWD recently commenced this process.

The current estimated water use in the Basin is: agriculture 70%, recreation 20%, and municipal 10%. The BWD and all other water users in the Basin must reduce its water use by approximately 70% over the next 20 years to meet GSP requirements. One mechanism to meet this requirement is to fallow and repurpose high-water use agricultural properties and eliminate water use on the property.

Proposed DRI Scope

To provide technical expertise, analysis, and decision support for BWD to meet its need for reclamation of fallowed farmland while minimizing the environmental impacts.

DRI is familiar with the conditions in the Borrego Basin and the challenges being addressed by BWD and other stakeholders. We propose to support BWD in a 3-phase approach as delineated below.

Phase I: Problem Identification

Task 1. Project Management and Support to BWD for Fallowing and Repurposing of Irrigated Farmlands

DRI will provide technical advice and decision support on the development of land reclamation practices for properties that were formerly irrigated farmland. DRI will work with BWD and stakeholders including ABDSP and others to understand stakeholder desires and needs regarding land repurposing, including visions for how the repurposed land should appear and function. A kickoff meeting and site tour will be coordinated with BWD and other stakeholders wherein we will discuss the intent and goals for the project, extant data and data needs, site access, project timeline, and any constraints, and we will receive feedback regarding stakeholder needs and desires.

Task 2. Establish Initial Conditions

DRI will collect and synthesize existing data and information for the vicinity of Borrego Springs, as well as research literature and best practices regarding agricultural fallowing, desert restoration, and fugitive dust control. We will perform a field reconnaissance and collect data and information to determine the condition of the proposed site(s) for potential repurposing to natural conditions and/or low-water productive land uses. This examination will include ecological parameters of adjacent lands. We will examine adjacent parcels of developed and undeveloped land to place the repurposed lands in context and provide a basis for identifying and mitigating potential hydrologic and other consequences of repurposing activities. In preliminary discussion with BWD staff, it appears 240 acres of the Oasis Ranch may be the best candidate for reclamation and this parcel may be available in the near future. This parcel will be specifically evaluated as part of this task.

Task 3. Develop Mutual Desired End State for Fallowing and Repurposing of Irrigated Farmlands

DRI will work with BWD and stakeholders including ABDSP and others to develop a consensus-based vision for the desired end state for repurposing the land. Issues to be considered may include extent of land use repurposing, desired habitat values, aesthetics, overall timelines for fallowing, and whether to include low-water crops in the mix of solutions in order to preserve the local agricultural economy.

This will also include describing any regulatory, policy-based, or other constraints that must be considered. The intent is to develop a shared vision for the end state of this project, to understand institutional factors bearing upon the success and acceptance of the project, and to develop stakeholder “buy-in” for the project.

Task 4. Evaluation of Alternatives to Repurpose High-Water Use Agricultural Lands to Meet GSP Requirements

DRI will develop and evaluate the benefits and costs of alternatives for fallowing and repurposing of agricultural lands, returning them to natural conditions and/or a different lower-water productive



use. It is envisioned that some parcels are more amenable to restoration to desert conditions (for example: alluvial plain, low-gradient alluvial fan, active channel within a wash, and similar landforms), while other land forms may be desired for continued production of some form such as aloe, jojoba, or similar crops to be determined. Different reclamation practices with varying degrees of effort may need to be developed since not all parcels in the Borrego Basin are candidates for full desert habitat reclamation.

DRI will consider such techniques as sand fencing, furrowing, grading/contouring, cover plantings, lower-water use crops, and other methods to control re-vegetation, fugitive dust, and stormwater runoff, as well as disposition of wood and other debris from fallowed fields/orchards.

If the State Park system or another stakeholder possesses land reclamation standards that must be taken into account, then DRI will include consideration of these in alternatives development.

DRI will evaluate the alternatives and support the BWD decision-making process. The process will include prioritization of sites and proposed sequencing of fallowing progression. This process will be iterative with opportunities for BWD and stakeholder feedback. A Draft Report will be submitted for review and comment. Comments will be incorporated into the published Final Report.

We will also work with the BWD to determine whether this process requires CEQA documentation, and if so, whether this may be tiered off other existing CEQA analyses and/or covered within the GSP process.

Phase I Deliverables: Regular Progress Updates; Meeting attendance; Draft and Final Report for Phase I Evaluation of Alternatives to Repurpose High-Water Use Agricultural Lands; Draft Fallowing Reclamation Practices.

Desired End State: BWD selects alternative(s) for repurposing of high-water use agricultural lands and begin discussion of Draft Reclamation Practices with Stakeholders

Phase II: Solution Testing

In Phase 2 we will rigorously test proposed methods for fallowing and repurposing before scaling up so that stakeholders can be confident that resources allocated for full-field projects will not be wasted on methods that appear good in concept but do not pan out during implementation.

Task 1. Project Management and Support to BWD for GSP Development

DRI will continue to provide technical advice and decision support as BWD navigates the process of GSP development and initiates implementation. The focus for work during this phase will be testing and evaluation of methods for achieving the alternative(s) selected by BWD at the end of Phase I. DRI will keep the BWD, ADBSP, and other stakeholders informed and involved as the project progresses.

Task 2. Testing and Modeling Estimation of Key Site Parameters

DRI will perform testing and modeling to determine projected ET, water recharge, carbon/biomass production, mitigation of fugitive dust emissions, and other factors to achieve effective land repurposing and use of low-water crops. Laboratory facilities may include greenhouses and EcoPods at DRI or in the vicinity of, or in-situ at, the Borrego Basin. Modeling may address restoration of site hydrology, hydraulics, and sediment transport with consideration of stormwater management as required to protect adjacent and downstream land uses.

Task 3. Pilot Testing / Field Optimization in Borrego Basin

Information developed in Task 2 will be translated into action in the field during Task 3. DRI will perform pilot tests in the Basin to evaluate performance of selected methods and to provide an opportunity to capitalize on lessons learned prior to scaling up the repurposing activities. This work will include development of site safety, stormwater runoff, and QA/QC control plans for the test site. DRI will work with the BWD for regulatory permitting if necessary for the pilot test.

A Report regarding the laboratory testing, modeling, and pilot test will be developed to document methods and findings, recommend reclamation practices, and provide information useful for other land reclamation initiatives within the Borrego Basin and elsewhere. The Draft Report will be submitted for review and comment. Comments will be incorporated into the published Final Report.

Phase II Deliverables: Regular Progress Updates; Meeting attendance; Draft and Final Reports for Phase II Solution Testing to Fallow and Repurpose High-Water Use Agricultural Lands; Maps to support decision-making process; data; Revised Reclamation Practices.

Desired End State: Development of an implementation plan for repurposing the land and reducing water use and the knowledge necessary to successfully perform the repurposing and achieve the BWD's water savings goals without detrimental consequences and in keeping with stakeholder needs and desires.

Phase III: Scale-up and Implementation Support

Task 1. Project Management and Support to BWD for GSP Implementation

DRI will continue to provide technical advice and decision support as BWD implements the GSP. The focus for work during this phase will be performing land fallowing and repurposing. DRI will keep the BWD, ADBSP, and other stakeholders informed and involved as the project progresses.

Task 2. Scale-up Analysis and Design Repurposing



DRI will design and oversee performance of the land repurposing project(s). This work will include development of site safety, stormwater runoff, and QA/QC control plans. DRI will work with the BWD for regulatory permitting as necessary.

DRI will consider plant mix, dust control methods, and runoff issues relative to areas down-gradient that have yet to be fallowed or are developed.

Task 3. Assessment of Implementation Results

DRI will assess results of fallowing and repurposing projects in the field. A Draft Report regarding the implementation and assessment will be submitted for review and comment. Comments will be incorporated into the published Final Report.

Phase III Deliverables: Regular Progress Updates; Meeting attendance; Draft and Final Report for Phase III Fallowing and Repurposing of High-Water Use Agricultural Lands; Maps to support decision-making process; data; Final Reclamation Practices.

Desired End States: Successful land repurposing to natural conditions and/or low-water use production. Annual water savings necessary for the BWD to meet GSP obligations.

DRI Key Personnel

Scott Thomas, Ph.D. – Project Manager

Mr. Thomas is an experienced ecologist, natural resources specialist, and project manager with over 25 years of experience working in the arid regions of Southern California. His area of expertise is in advising agencies and watershed managers in developing sustainable solutions for land and water resource degradation. Recent relevant research includes groundwater management planning, fluvial geomorphological analyses, and stormwater capture and reuse/recharge in arid and semi-arid regions of San Diego, Riverside, and San Bernardino Counties.

Steve Bacon – M.S., C.E.G., P.G. – GeoHydrology and Geomorphology

Mr. Bacon is a geologist with over 15 years of experience specializing in field investigations associated with geomorphology, engineering geology related to terrain and geotechnical site characterizations, landscape evolution, and geologic hazards. He recently completed a characterization of the Borrego Basin's active and inactive alluvial fan areas within a 61 square mile area of the watershed per FEMA guidance (Figure 1 below). Historical aerial photographs, satellite imagery, and on-site analysis were employed to identify high- and low-gradient alluvial fans within an ArcGIS platform during geomorphic mapping. Recent relevant research also includes geomorphic-based predictive terrain modeling of mobility and dust emission hazards.

Mary E. Cablk, Ph.D. – Ecology and Scenario Evaluation

Dr. Cablk is a landscape ecologist, remote sensing specialist and has expertise in desert ecosystem assessment including scenario modeling and futures evaluation. She has worked with federal and state agencies to interface on large-scale desert programs including the statewide (NV) National Science Foundation Sponsored Solar Nexus Project and the DOD funded Mojave Desert Alternative Future Scenario Project. Additional recent relevant research includes developing methods for quantifying and modeling flood extent on desert playas, assessing ecological impacts and recovery from wildfire in desert ecosystems of the southwestern US, and contributing to groundwater assessments in desert ecosystems through vegetation mapping and modeling from high-resolution satellite imagery.

Brittany Kruger, Ph.D. – Ecology and Land Reclamation/Revegetation

Ms. Kruger is an ecologist who focuses on water policy issues and scientific evaluation of aqueous or water-impacted environments. Recent relevant experience includes assessment of soil recovery from wildfire disturbance in the Mojave Desert, focusing on microbiological re-colonization that can contribute to biological crust formation and soil stability.

Jayson Medema – Geographic Information Systems and Remote Sensing

Mr. Medema is a technical analyst with experience in geospatial science projects including: GIS based infrastructure analytical products, remote sensing, 3D modeling, and environmental monitoring.

Other DRI specialists in the fields of restoration ecology, hydrology, soils science, geomorphology, air quality and dust control, and related fields are available as needed to support this work.

Proposed Budget

- Phase I: \$77,200
- Phase II: \$121,900
- Phase III: TBD during Phase II based on alternatives developed and selected.

Preliminary Schedule

- Dec 2017 – Aug 2018 Phase I
- Aug 2018 – Apr 2020 Phase II
- 2020+ Phase III

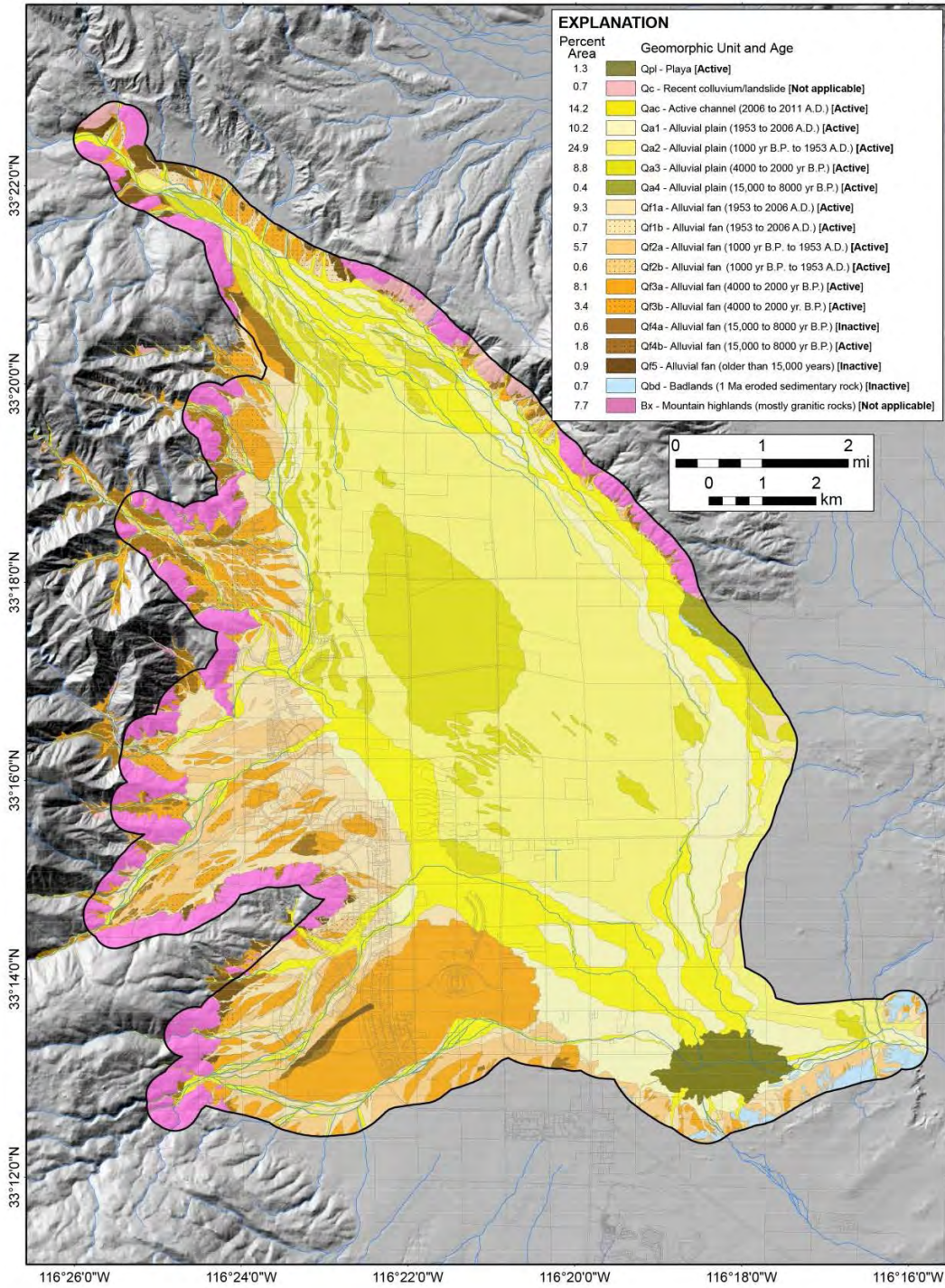
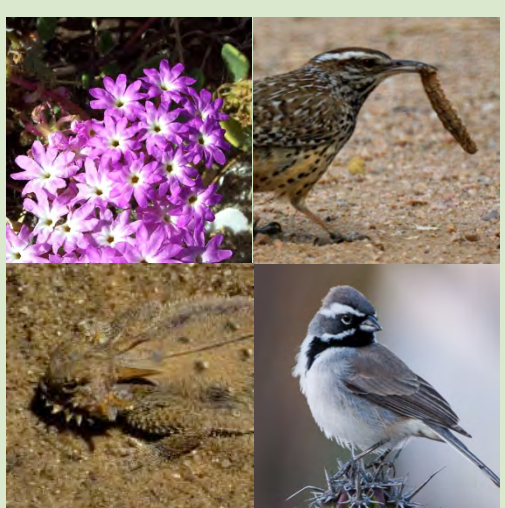


Figure 1. Geomorphologic map of the Borrego Valley watershed and study area showing unit descriptors, landform type, age, and percent area of each map unit. The geomorphologic and hydraulic activity level is noted in bold. Source: Bacon, S., J. Miller, and R. French. Borrego Springs Alluvial Fan Active and Inactive Area Mapping, County of San Diego, California. Prepared by the Desert Research Institute.



Technical & Cost Proposal

Concept Feasibility Plan for Rehabilitation of Fallowed Irrigated
Agricultural Land in the Borrego Valley Groundwater Basin

Submitted to:

Lyle Brecht • Borrego Water District
806 Palm Canyon Drive • Borrego Springs, CA 92004

October 9, 2017

Submitted by:





October 9, 2017

Lyle Brecht
Borrego Water District
806 Palm Canyon Drive
Borrego Springs, CA 92004

RE: Letter of Transmittal for a Technical and Cost Proposal—Concept Feasibility Plan for Rehabilitation of Fallowed Irrigated Agricultural Land in the Borrego Valley Groundwater Basin

Dear Mr. Brecht,

The Land IQ/UCI Team is pleased to submit our proposal to develop a Concept Feasibility Plan (Plan) to improve fallowing practices for the Borrego Valley Groundwater Basin. The cost for the Project is a not-to-exceed price of \$374,450.

The Land IQ/UCI Team is uniquely qualified to provide the full range of necessary services to meet the goals of the Plan to reduce water consumption, manage dust, and increase natural habitat value in a sustainable manner. Our areas of expertise include agricultural and natural systems, remote sensing, native plant and land systems management, and ecological restoration. This expertise along with technical skills in plant ecology and physiology, research study design, and data analysis, enables our Team to determine optimal solutions to complex problems in our environment.

Our Team has demonstrated experience planning and successfully developing innovative solutions to challenging environmental problems throughout California. Notable experience for this project includes Land IQ's work developing dust mitigation measures on Owens Lake for the Los Angeles Department of Water and Power, and most recently, our 2014 Statewide Crop Mapping product published to the State Department of Water Resources (DWR) Land Use Viewer, which is a resource for land use and water managers, including Groundwater Sustainability Agencies (GSAs). The new web map is viewable here: <https://gis.water.ca.gov/app/CADWRLandUseViewer/>. UCI staff brings experience working with land managers to identify optimum restoration techniques, as well as a vested interest in Borrego Springs through the University's Steele/Burnand Anza-Borrego Desert Research Center (within UCI-NATURE), the UCI Center for Environmental Biology (CEB), and their partnership with Anza Borrego State Park and the Anza Borrego Foundation. UCI-NATURE and CEB staff work to facilitate this partnership and connect scholars and researchers with Park staff and the community.

Land IQ staff and UCI have worked together on successful habitat restoration projects, such as the restoration of cactus scrub habitat for the cactus wren on the UCI Nature Reserve. And, we are actively integrating monitoring and habitat restoration planning efforts for the Orange County Central-Coastal Natural Community Conservation Plan & Habitat Conservation Plan (NCCP/HCP). We formulate our habitat restoration plans from careful consideration of landscape position, hydrology, and soils to determine the most appropriate habitat enhancement and restoration for each project site based on data analysis of existing information and comprehensive study design in highly complex environments. We generally bring fresh and efficient approaches to planning projects that can result in cost savings without sacrificing ecological function. For example, Land IQ pioneered direct seeding of saltgrass dominated meadows at Owens Lake that provide more efficient use of water to control dust on the lake while balancing open shorebird habitat.

Our Team has the experience to collectively address the scientific and practical challenges of rehabilitating farmland for the benefit of the community and the natural landscape and the professional capacity to carry such a project to completion. Our Team looks forward to working with Borrego Water District and its partners on this challenge.

Land IQ is a DGS Certified Small Business (Supplier No. 1748303).

Sincerely,



Mica Heilmann, CPSS
Land IQ
Owner | Soil & Agricultural
Scientist



Margot Griswold, PhD
Land IQ
Senior Restoration Ecologist



Travis E. Huxman, PhD
University of California, Irvine
Professor, Ecology and Evolutionary Biology
Director, Center for Environmental Biology
Faculty Rep, Steele/Burnand Anza-Borrego
Desert Research Center



Table *of* Contents

1	Scope of Work.....	2
2	Project Schedule	6
3	Project Team Organization.....	7
4	Statement of Qualifications	8
5	Cost.....	10

CONFIDENTIALITY: This proposal approach is considered confidential in nature, and is intended for review and consideration only by the Borrego Water District and It’s affiliates. No recreation or use of these proposal components is permitted without consent of Land IQ, LLC.

Scope of Work

Task 1

Project Management & QA/QC

Task 2

Review & Analysis of Existing Data

- 2.1 Kick-off Meeting
- 2.2 Literature Review
- 2.3 Interviews with Key Stakeholders and Experts
- 2.4 Project Geodatabase Creation
- 2.5 Farmland Water Consumption
- 2.6 Review of Historical Data

Task 3

Field Study

- 3.1 Field Observations of a Time Series of Existing Fallowed Farmland Physical and Biological Conditions
- 3.2 Field Sampling of Reference Natural Habitat to Guide Farmland Restoration Potential

Task 4

Brush Pile Wildlife Sand Fence Case Study

- 4.1 Identify Manipulative Sites for Sand Fences
- 4.2 Design and Construct Sample Sand Fences
- 4.3 Baseline Observations of Sand Fence Function and Wildlife Value

Task 5

Farmland Fallowing Rehabilitation Strategies

- 5.1 Develop Conceptual Models for Key Rehabilitation Processes
- 5.2 Design Rehabilitation Strategies
- 5.3 Farmland Fallowing Best Practice Recommendations

Task 6

Farmland Fallowing Prioritization

- 6.1 Prioritization Model for Fallowing Farmland Ranked by Benefits of Water Conservation and Rehabilitation Potential

Approach

Given the significant overdraft of the Borrego Valley Groundwater Basin (BVGB), the Borrego Water District (BWD) has instituted a 'Water Credit Policy' that encourages the voluntary reduction of water consumption. One of the most significant means of reducing water consumption will be permanently fallowing irrigated agricultural land in the BVGB. There are serious potential and realized risks to the natural desert landscape and the local community from standard fallowing practice, including dust, invasive plants, visual blight and barriers to the establishment of native habitat.

In order to manage those risks and to take advantage of opportunities for rehabilitation of the land, we will develop strategies for fallowing farmland in the BVGB, with the following goals:

- 1) Reduce water consumption
- 2) Manage dust
- 3) Increase natural biodiversity and habitat value
- 4) Maintain or enhance values pertinent to the Anza Borrego State Park mission and Borrego Springs residents (e.g. invasive species control and reducing visual blight)

Rehabilitation or restoration strategies will be the basis for writing best practices for agricultural land fallowing for incorporation into the draft Groundwater Sustainability Plan that is currently in development.

Drawing upon the collective experiences of Land IQ managing dust issues for the Los Angeles Department of Water and Power on Owens Lake, and the Imperial Irrigation District on the Salton Sea, and UCI research on ecological restoration and desert ecology, we have developed a scope of work that will produce spatially explicit strategies for fallowing retired citrus orchard lands based upon the potential for rehabilitation given known environmental constraints.

We will initiate work with gathering and synthesizing existing information resources: utilizing geospatial datasets, the literature, and interviewing industry experts and people knowledgeable in land use management and history in the vicinity of Borrego Springs. We will build upon this information with ground measurements stratified across major ecological units based on plant community type and physical properties of the landscape. Potential for rehabilitation and methodological approach across these units will be further informed by measurements of life history stages and microsite characteristics critical to plant recruitment and establishment among a series of successional stages or land use states (recently fallowed, fallowed 5-10 years, existing natural reference sites, and existing citrus).

A unique challenge presented by the fallowing of citrus orchards in the BVGB is how to manage dust, make use or dispose of dead trees, and facilitate physical and biological processes important to the development of a natural desert landscape. For this Proposal we have developed a citrus tree removal strategy that is conducive to both dust management and increasing natural habitat value, while minimizing visual blight in the short term. We will conduct a case study to inform the development of best practices and create sample "Brush Pile Wildlife Sand Fences" with cut citrus tree material placed strategically to manage wind/dust patterns. The Sand Fences will serve multiple functions including dust control by reducing soil particle velocity, safe sites for native plant recruitment through moisture retention and shading, and wildlife habitat by providing perches and cover. Furthermore, by not mulching the trees there will be a cost savings and avoidance of altered carbon cycles inconsistent with the native ecosystem, which can impact plant community succession.

The study area will be approximately 3,000 acres and encompass the extent of agriculture in the BVGB and any appropriate adjacent natural open space suitable for reference conditions for habitat restoration planning.

For the farmland that has potential for permanent fallowing, we will develop a prioritization model to assist the BWD in strategic planning to reduce water consumption and rehabilitate the natural landscape.

Task 1. Project Management and QA/QC

1.1 Project Management and QA/QC. The staffing structure and internal project control procedures will ensure clear lines of communication between the District and the technical and scientific staff at Land IQ and UCI. The Project Manager, Travis Brooks, will be the point of contact for District communications.

Land IQ has a strong commitment to producing high-quality work products on time and within budget. We accomplish this goal through strong working relationships with our clients, depth of experience, following QA/QC procedures, phased and prioritized project schedules and budget control through the use of up-to-date accounting tools and dedicated budget management staff.

Land IQ's technical document editors, cartographers and geospatial experts are well versed in biological resource management, monitoring and planning. Materials will be edited for clarity, grammar, punctuation and spelling before incorporation into final documentation. In addition to technical editorial review, deliverables will be reviewed at multiple stages of development by senior staff, including Margot Griswold, Joel Kimmelshue and Travis Huxman, in order to help safeguard that work is consistent with our legacy of excellent biological resource management and technical analysis.

Task 2. Review and Analysis of Existing Data

2.1 Kick-off Meeting. Kick-off meeting with attendance of key staff.

2.2 Literature Review. Literature review; data mining from existing reports; and written summary of relevant information for report.

2.3 Interviews with Key Stakeholders and Experts. Interview local and subject matter experts.

2.4 Project Geodatabase Creation. Creation of Project Geodatabase for relevant land use and environmental thematic layers, including, but not limited to: topography, flow accumulation, soil characteristics, and wind patterns.

2.5 Farmland Water Consumption. Collect water consumption data from BWD; update parcel level Geographic Information System (GIS) data, as necessary; calculate water consumption by parcel and, digitization of new data layers, as necessary.

2.6 Review of Historical Data. Review of historical maps, search of available historical records (e.g. herbarium records and historical accounts); georeference available historical maps and old place name references; synthesize information to describe site specific historical ecology; and include comparison of historical and current vegetation cover densities. Provide guidance on feasible restoration targets.

Task 3. Field Study

3.1 Field Observations of a Time Series of Existing Fallowed Farmland. Interviews with past and current BWD staff about experience with fallowed fields, field visits, and data collection of existing conditions.

3.2 Field Sampling of Reference Natural Habitat to Guide Farmland Restoration Potential. Use GIS layers to stratify landscape in the Valley, including the agricultural land into similar geomorphic features for sampling; sample cover data, analyze and interpret reference conditions to identify a range of reasonable habitat restoration targets for fallowed farmland.

Task 4. Brush Pile Wildlife Sand Fence Case Study

- 4.1 Identify Manipulative Sites for Sand Fences.** Working on BWD land, identify one or multiple sites, based on feasibility, for construction of Sand Fences.
- 4.2 Design and Construct Sample Sand Fences.** Working directly with crews in the field, identify the most economical method of construction, and build variations on the design, as appropriate.
- 4.3 Baseline Observations of Sand Fence Function and Wildlife Value.** Take baseline data for comparison to future datasets, and to characterize the habitat and dust control value of the Sand Fences.

Task 5. Farmland Fallowing Rehabilitation Strategies

- 5.1 Develop Conceptual Models for Key Rehabilitation Processes.** Based on literature review, geodatabase indices and analysis, field study results, and expert interviews, develop conceptual models of key processes involved in dust, native recruitment and habitat restoration of fallowed farmland.
- 5.2 Design Rehabilitation Strategies.** Develop Rehabilitation Strategies for Fallowed Farmland based on conceptual models, the range of potential for rehabilitation based on site level measurements across the study area, and project goals.
- 5.3 Farmland Fallowing Best Practice Recommendations.** Recommendations for Best Practice Language for Fallowing of Farmland to be incorporated into the GSP. Identify gaps in knowledge for future monitoring and study to improve best practice adaptively as land begins to be fallowed for water conservation.

Task 6. Farmland Fallowing Prioritization

- 6.1 Prioritization Model for Fallowing Farmland Ranked by Benefits of Water Conservation and Rehabilitation Potential.** Develop a model for prioritizing acquisition of farmland for fallowing based on the reduction of water consumption, and likelihood of success of the rehabilitation strategies.

Proposal Photo Credits:

https://commons.wikimedia.org/wiki/File:Blooming_desert.jpg

<https://www.flickr.com/photos/roebot/33368655616/in/photostream/>

[https://commons.wikimedia.org/wiki/File:Black-throated_Sparrow_\(Amphispiza_bilineata\)_\(8079397370\).jpg](https://commons.wikimedia.org/wiki/File:Black-throated_Sparrow_(Amphispiza_bilineata)_(8079397370).jpg)

<https://www.flickr.com/photos/pazzani/4537157969>

https://commons.wikimedia.org/wiki/File:Phrynosoma_mcallii.jpg

[https://commons.wikimedia.org/wiki/File:Large_lemon_orchard_prepared_for_irrigation_in_the_San_Fernando_Valley,_California,_ca.1900_\(CHS-1773\).jpg](https://commons.wikimedia.org/wiki/File:Large_lemon_orchard_prepared_for_irrigation_in_the_San_Fernando_Valley,_California,_ca.1900_(CHS-1773).jpg)

https://commons.wikimedia.org/wiki/File:Abronia_villosa-3.jpg



Project Schedule

Task	Approx. Time to Complete in Months	Anticipated End Date	Deliverables
Notice to Proceed (NTP)	---	Jan. 2, 2018	
Task 1. Project Management and QA/QC	18	June 28, 2019	Quarterly Status Updates
Task 2. Review and Analysis of Existing Data	4	May 1, 2018	Kick-Off Meeting (3-4 weeks after NTP) Existing Data Summary
Task 3. Field Study	8	Sep. 4, 2018	Summary of Data Collection and Analysis
Task 4. Brush Pile Wildlife Sand Fence Case Study	8	Sep. 4, 2018	Constructed Sample Sand Fences
Task 5. Farmland Fallowing Rehabilitation Strategies	18	June 28, 2019	Draft and Final Rehabilitation Strategies and Best Practice for Fallowing
Task 6. Farmland Fallowing Prioritization	18	June 28, 2019	Geodatabase and Maps for Prioritization of Farmland Fallowing

Project Team Organization

Travis Brooks | Project Manager

Ecological Restoration, Geospatial Analysis

University of California, Irvine



Ecology &
Geosystems

Land IQ

Soil Science & Agriculture,
Geospatial Analysis, Invasive Species Control
Ecological Restoration

**Megan
Lulow**

UCI Project
Manager,
Experimental
Design,
Ecological Field
Data & Analysis

**Margot
Griswold**

Senior Ecological
Restoration
Oversight,
Invasive Species
Control

**Joel
Kimmelshue**

Experimental
Design,
Ecological Field
Data & Analysis

**Zongwu
Wang**

Geospatial
Analysis &
Remote Sensing

**Sarah
Kimball**

Data Manager,
Experimental
Design,
Ecological Field
Data & Analysis

**Travis
Huxman**

Ecology &
Geosystems,
Science
Oversight

**Melissa
Riedel-Lehrke**

Ecological
Restoration,
Ecological Field
Data, Invasive
Species Control

**UCI
Technicians**

Biological &
Physical
Sciences, Anza-
Borrego Desert
Research Center

**Seth
Mulder**

Soil Science &
Agriculture

**Christopher
Stall**

Soil Science &
Agriculture

FIRM INFORMATION

Land IQ is a specialized land-based (agricultural and natural systems) science and remote sensing firm that pairs scientific knowledge of agronomic, native plant and land systems management with advanced remote sensing technologies, custom modeling, and analytical methods to develop powerful and cost-effective client solutions. The Land IQ team has been operating for over 10 years and some of our firm's select certifications and achievements include:

- California Small Business Enterprise (Micro) #1748303
- Women Business Enterprise #13010130
- Sacramento Area Sustainable Business
- 2017 Professional Services Contractor of the Year – Los Angeles Department of Water and Power – Owens Lake Dust Mitigation Science & Regulatory Team

TECHNICAL EXPERTISE

Land IQ maintains a staff of soil scientists, agronomists, ecologists, and remote sensing and GIS specialists. Our staff average over 14 years professional experience and hold professional certifications including Certified Professional Soil Scientists and Agronomists, Registered Professional Soil Scientists, Biologists, Ecologists, and Certified Professionals in Erosion and Sediment Control Specialists.

The Land IQ Habitat Restoration Group offers a wide range of specialized services in natural resource planning, analysis, restoration, and management. Our achievements in revegetating and reclaiming drastically disturbed landscapes, monitoring for mitigation, and assessing and monitoring exotic species highlight our success in restoration ecology. Land IQ has assessed over 15,000 acres of land for habitat restoration potential and developed specific protocols for resource management plans.

Land IQ has existing working project relationships with a variety of technical experts and universities that may be resources for selected project efforts. We value and welcome cooperative efforts and our relationships include researchers and experts from CSUMB/NASA-Ames, Cal Poly ITRC, UC Davis, Fresno State, UC Irvine, UCLA, USC and UC Cooperative Extension.

PROJECT EXPERIENCE

- **Owens Lake Dust Mitigation Program** – Land IQ works with the Los Angeles Department of Water and Power to support the design of irrigation, grading and tillage plans, as well as the development of soil preparation and planting specifications specifically for the purpose of comprehensive dust control on the 100 square mile Owens Dry Lakebed. Land IQ specifically develops appropriate native seed mixes and manages the collection of local species to not only control dust but also enhance habitat value of the dust control areas.
- **Upper Chiquita Canyon Habitat Conservation Area Restoration & Management** - Land IQ is responsible for managing a 1,158-acre conservation easement in southern Orange County that supports important populations of California gnatcatchers and coastal cactus wrens. Land IQ staff has identified restoration opportunities on approximately 500 acres of land disturbed by historic dry-land farming and grazing, and developed efficient techniques for large-acreage restoration areas of cactus scrub, coastal sage scrub, native grassland, oak woodland habitats and rare plant species.
- **Stabilization of Exposed Salton Sea Floor** - Land IQ has consulted with the Imperial Irrigation District (IID) to identify strategies for stabilizing vast expanses of fragile, erodible exposed Sea floor by developing concepts for methods such as planting native cover, roughening surfaces to disrupt wind, or combinations of these approaches.

Center for Environmental Biology

The mission of UCI's Center for Environmental Biology (CEB) is to link academic research with ecosystem management and stewardship of natural resources, and to educate the next generation of environmental biologists and stewards. We carry out this mission by developing knowledge networks, which are opportunities for the academic community, local land managers, policy makers, and conservation organizations to share information with each other and to design research projects that provide innovative solutions to environmental problems – such community-engaged research is a hallmark of scholarship at the University of California, Irvine.

UCI-NATURE

UCI-NATURE oversees and promotes UC Irvine's reserves and field based assets to advance understanding of the natural environment and its relationship with human affairs. Staff work with University faculty and students to identify and facilitate opportunities for research, scholarship, education, and public service among these assets and the natural environments and human communities surrounding them. The Steele-Burnand Anza Borrego Desert Research Center serves as a nexus for interactions among researchers and scholars throughout the world with Anza Borrego State Park and the community of Borrego Springs.

Travis Huxman, Ph.D., Professor Ecology and Evolutionary Biology, Director, CEB

Travis is an ecologist who uses physiological and biogeochemical approaches to understand how plant species are combined in real communities in ways that lead to stability or degradation. His research addresses global change, biodiversity, species invasions, ecosystem services, restoration, and conservation. More and more Travis carries out community-engaged research, trying to advance basic understanding while also producing knowledge to improve decision-making. Travis has published over 150 peer-reviewed studies and has administered a number of research centers at the University of Arizona and University of California, Irvine over the last two decades.

Sarah Kimball, Ph.D., Project Scientist & Assistant Director, CEB

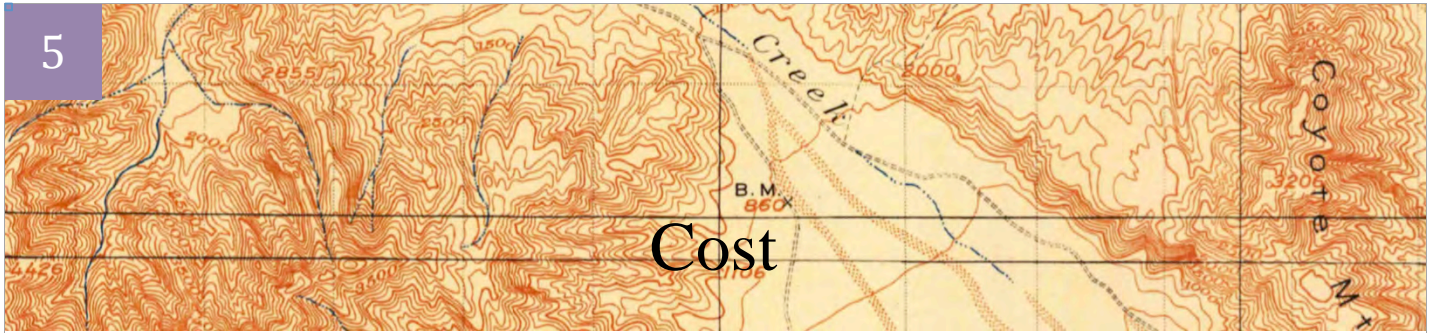
Sarah is an ecologist with broad interests, specializing in plants. She determines the research agenda for CEB, collaborating with local land managers to develop research projects that evaluate the effectiveness of conservation and restoration efforts. Sarah mentors students through the process of designing and carrying out ecological experiments. She has published over 25 studies in peer-reviewed journals, several of which focus on restoration ecology.

Megan Lulow, Ph.D., Administrative Director, UCI-NATURE

Megan works with UCI-NATURE staff and faculty, students and partners to implement the mission of UCI-NATURE. She has thirteen years of professional experience in natural lands management and has supervised several restoration projects over hundreds of acres. Throughout project planning and implementation Megan has collaborated with academics to ensure management practices are optimized for specific environments and goals. She has published several studies in peer-reviewed journals with a focus on restoration ecology.

Selected Citations

- Kimball, S., M. Lulow, Q. Sorenson, K. Balazs, Y. Fang, S. Davis, M. O'Connell, and Travis E. Huxman. 2015. Cost-effective ecological restoration. *Restoration Ecology*. 23(6):800-810.
- Adams HD, Luce CH, Breshears DD, Allen CD, Weiler M, Hale VC, Smith AMS, Huxman TE (2012) Ecohydrological consequences of drought- and infestation-triggered tree die-off: insights and hypotheses. *Ecohydrology* 5(1):145-159
- Wilson, K., M. Lulow, J. Burger, Y. Fang, C. Anderson, D. Olson, H. Possingham, M. O'Connell, and M.F. McBride. 2011. Optimal restoration: accounting for space, time, and uncertainty. *Journal of Applied Ecology*. 48(3):715-725.



Land IQ and UCI strive to provide cost-effective professional services to our clients. Based upon the agreed upon Scope of Work, we will make efficient use of staff to carry out tasks under the contract.

The total price for Concept Feasibility Plan for Rehabilitation of Fallowed Irrigated Agricultural Land in the Borrego Valley Groundwater Basin Project is a not-to-exceed price of \$374,450. Cost by Task is provided in the following table.

Task	Cost by Task
Task 1. Project Management and QA/QC	\$67,500
Task 2. Review and Analysis of Existing Data	\$89,000
Task 3. Field Study	\$84,450
Task 4. Brush Pile Wildlife Sand Fence Case Study	\$31,000
Task 5. Farmland Fallowing Rehabilitation Strategies	\$75,500
Task 6. Farmland Fallowing Prioritization	\$27,000
TOTAL	\$374,450

BORREGO WATER DISTRICT
BOARD OF DIRECTORS MEETING – FEBRUARY 20, 2018
AGENDA BILL 2.D

February 14, 2017

TO: Board of Directors, Borrego Water District
FROM: Geoff Poole, General Manager
SUBJECT: Proposition One GSP Grant Status Update - Poole
A. Review of DRAFT Reimbursement Agreement with County of San Diego - Anderson/Poole
B. Le Sar Development Corporation Socio Economic Analysis Scope of Work & Contract: Prop One GSP Grant - Poole
C. Dr. Jay Jones Modeling Program Scope of Work and Contract: Prop One GSP Grant - Poole

RECOMMENDED ACTION:

Receive Update on Proposition One GSP Grant process, discuss the next steps including initiation of work by Le Sar and Dr Jones and direct staff accordingly

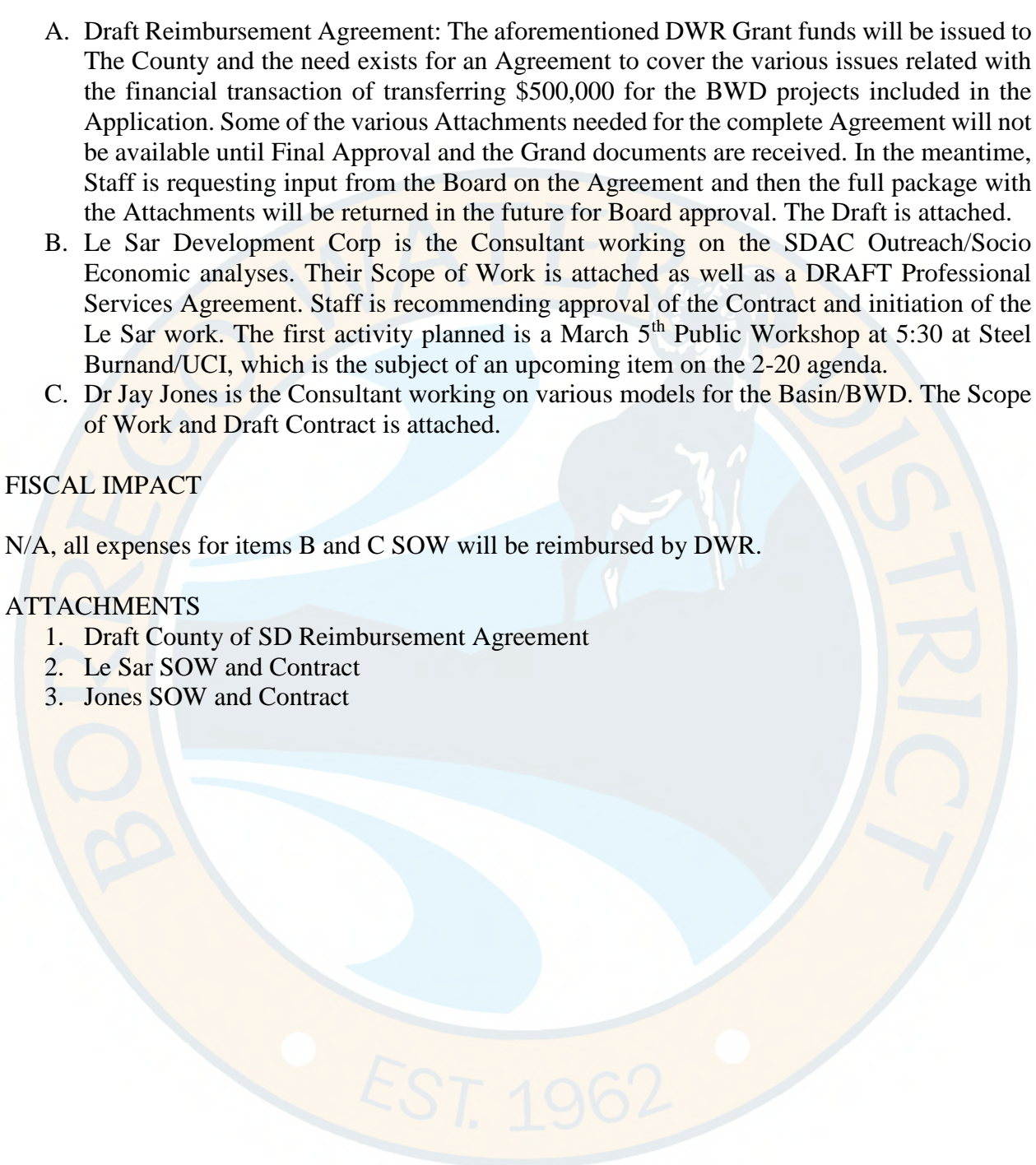
ITEM EXPLANATION:

On February 6, The Department of Water Resources announced its recommended awards for grants for groundwater sustainability projects that directly benefit severely disadvantaged communities and for local agency development of Groundwater Sustainability Plans (GSPs). The \$1 million joint application submitted by the County on behalf of BWD is recommended for full funding.

These funds support the goals of the Sustainable Groundwater Management Act (SGMA). DWR received 78 grant applications and is recommending that all receive awards, pending public comments and review of those comments. **The public comment period will close on February 21, 2018 at 5:00 P.M.**

The grants are funded by Proposition 1 and awarded on a competitive basis in two funding categories: 1) Projects that serve severely disadvantaged communities; and 2) Development of Groundwater Sustainability Plans. Of the \$85.8 million awarded:

- \$16.2 million is for severely disadvantaged communities to support groundwater sustainability planning and development, including the BWD/County Application.
- \$69.6 million is for local agency GSP development.

- 
- A. Draft Reimbursement Agreement: The aforementioned DWR Grant funds will be issued to The County and the need exists for an Agreement to cover the various issues related with the financial transaction of transferring \$500,000 for the BWD projects included in the Application. Some of the various Attachments needed for the complete Agreement will not be available until Final Approval and the Grand documents are received. In the meantime, Staff is requesting input from the Board on the Agreement and then the full package with the Attachments will be returned in the future for Board approval. The Draft is attached.
 - B. Le Sar Development Corp is the Consultant working on the SDAC Outreach/Socio Economic analyses. Their Scope of Work is attached as well as a DRAFT Professional Services Agreement. Staff is recommending approval of the Contract and initiation of the Le Sar work. The first activity planned is a March 5th Public Workshop at 5:30 at Steel Burnand/UCI, which is the subject of an upcoming item on the 2-20 agenda.
 - C. Dr Jay Jones is the Consultant working on various models for the Basin/BWD. The Scope of Work and Draft Contract is attached.

FISCAL IMPACT

N/A, all expenses for items B and C SOW will be reimbursed by DWR.

ATTACHMENTS

1. Draft County of SD Reimbursement Agreement
2. Le Sar SOW and Contract
3. Jones SOW and Contract

COST REIMBURSEMENT AGREEMENT BETWEEN THE COUNTY OF SAN DIEGO
AND BORREGO WATER DISTRICT FOR THE BORREGO VALLEY SEVERELY
DISADVANTAGED COMMUNITIES (SDAC) FOR THE SUSTAINABLE
GROUNDWATER PLANNING (SGWP) GRANT PROGRAM (COST AGREEMENT)

PROJECT NO. XXX
(AGREEMENT NO. 46000XXXXX)

This Cost Agreement between the County of San Diego (County), the Grantee, and the Borrego Water District (District), the Local Project Proponent (LPP), sets forth the understanding of the County and District (collectively Parties) for distribution of a grant award from the California Department of Water Resources (DWR) (Grant Agreement XXXX) for specific tasks (District Tasks) associated with the Borrego Valley Environmental Planning and Severely Disadvantaged Community (SDAC) Engagement Project (Project). The Effective Date of this Cost Agreement is

RECITALS:

1. WHEREAS, the County and District are part of a State of California sanctioned multi-agency Groundwater Sustainability Agency and have entered into a Memorandum of Understanding specifying the terms and conditions pertaining to Groundwater Sustainability Plan development and implementation.

2.

3. WHEREAS, Proposition 1, approved by the voters on November 4, 2014, authorized the legislature to appropriate funds to the Department of Water Resources (DWR) to establish the Sustainable Groundwater Planning (SGWP) Grant Program.

4. WHEREAS, the SGWP Grant Program provides funds for projects that develop and implement sustainable groundwater planning and projects consistent with groundwater planning requirements outlined in Division 6 of the California Water Code, commencing at §10000.

5. WHEREAS, the Project was part of the San Diego County GSP Development proposal dated November 2017, which was submitted to DWR in response to the Groundwater Sustainability Plans and Projects Proposal Solicitation Package.

6. WHEREAS, the Project will serve an SDAC and support groundwater sustainability planning and management in the Borrego Valley Groundwater Basin (Basin), identified as Basin Number 7.24, a Bulletin 118 designated (medium-priority) basin, as required by the SGWP Grant Program for Category 1 – SDAC Projects.

~~5.7.~~ WHEREAS, the County entered into an agreement (GRANT AGREEMENT NAME/#) with DWR on Date for the Project.

~~6.8.~~ WHEREAS, the County, as the Grantee for the Project, will be responsible for distribution of funds to the District from DWR for District Tasks and ensuring compliance with terms of the Grant Agreement (No. xxx).

~~7.9.~~ WHEREAS, the District's role is to serve as the Local Project Proponent (LPP) for portions of the Project, as defined.

~~8.10.~~ WHEREAS, the County and the District, as a multi-agency Groundwater Sustainability Agency (GSA), intend to prepare a Groundwater Sustainability Plan (Plan) and sustainably manage the Basin in accordance with the Sustainable Groundwater Management Act (SGMA).

~~9.11.~~ WHEREAS, the Project is intended to support the implementation of SGMA on the Basin.

~~10.12.~~ WHEREAS, the County and the District, as a single, multi-agency GSA, share a common interest arrangement throughout SGMA implementation and that information shared between the Parties and their respective legal counsels is privileged and designed to further the shared interests of the Parties.

The Recitals are incorporated herein, and the Parties do agree as follows:

1. **DEFINITIONS:** The following words and terms, unless otherwise defined, shall mean:
 - a) Cost Reimbursement Agreement (Cost Agreement) means this agreement between the County and the Local Project Proponent (District) for the performance of District Tasks and receipt of the grant funds allocated for those tasks.
 - b) District Tasks refer to Tasks numbered 1 through 5 of the Project on attached Budget (Exhibit B).
 - c) Grant Agreement means the Grant Agreement no. XXXX between the California Department of Water Resources and the County of San Diego, dated xxx, 2018, for the disbursement of \$3,000,000 in grant funds for San Diego County GSP Development, which includes (1) Borrego Valley Environmental Planning and SDAC Engagement; (2) Borrego Valley Groundwater Sustainability Plan Development; and (3) San Luis Rey Valley Groundwater Sustainability Plan Development.
 - d) Grantee for this Project refers to the County of San Diego.
 - e) LPP means Local Project Proponent. An LPP is a proponent of specific Project tasks. The LPP for this Cost Agreement is the District. The LPP shall be responsible for tasks associated with (1) SDAC Engagement; (2) SDAC Impact/Vulnerability

Analysis; (3) Decision Management Analysis; (4) Well Metering; and (5) Water Vulnerability/New Well Site Feasibility Study, as detailed in the Grant Agreement.

- f) Project means the Borrego Valley Environmental Planning and SDAC Engagement project, as detailed in Exhibit A through C.
2. **TERM OF AGREEMENT:** The term of this Cost Agreement begins on the Effective date and terminates on **DATE** or when all Parties' obligations under this Cost Agreement have been fully satisfied, whichever occurs earlier.
3. **TOTAL PROJECT COSTS:** The reasonable total cost of the District Tasks is estimated to be \$500,000. These costs are summarized in Exhibit B, Budget.
4. **GRANT AMOUNT:** The maximum amount payable by the County under this Cost Agreement for the District Tasks shall not exceed \$500,000. Any costs necessary to complete District Tasks that are incurred by the District in excess of the allotted \$500,000 shall be the responsibility of the District.
5. **LPP COST SHARE:** There is no funding match associated with the District Tasks since a Severely Disadvantaged Community project waiver has been granted by DWR.
6. **LPP RESPONSIBILITIES:**
 - a) Faithfully and expeditiously perform or cause to be performed all District Tasks project work (numbered 1-5) as described in Exhibit A (Workplan) and in accordance with Exhibit B (Budget) and Exhibit C (Schedule).
 - b) Accept and agree to comply with all terms, provisions, conditions, and written commitments of this Cost Agreement, including all incorporated documents, and to fulfill all assurances, declarations, representations, and statements made by LPP in the grant application, documents, amendments, and communications filed in support of its request for SGWP grant program funding.
 - c) Comply with all applicable California laws and regulations.
 - d) Implement the District Tasks in accordance with applicable provisions of the law.
 - e) Fulfill its obligations under the Cost and Grant Agreements, and be responsible for the performance of the District Tasks to completion.
 - f) Perform the Workplan for the District Tasks including project management, oversight, and compliance associated with the task. LPP shall also be solely responsible for work and for persons or entities engaged in work, including, but not limited to, subcontractors, suppliers, and all providers of services under this Cost Agreement. LPP shall fulfill its obligations in a manner that is consistent with this Cost Agreement, the Grant Agreement (**46000XXXX**) and the SGWP Program.

- g) Be responsible for all disputes arising out of its contracts for work including, but not limited to, bid disputes and payment disputes with its contractors and consultants or other entities. DWR, or County will not mediate disputes between the LPP and any other entity regarding performance of work.
 - h) Promptly perform, or cause to be performed, work as described in the Workplan for the District Tasks identified in Exhibit A, Workplan. LPP shall be responsible for oversight and compliance of District Tasks identified in the Grant Agreement.
 - i) LPP is solely responsible for the District Tasks identified in Exhibit A. Review or approval of plans, specifications, bid documents, or other construction documents by DWR or the County is solely for the purpose of proper administration of grant funds and shall not relieve or limit responsibilities of LPP with regard to its contractual obligations.
 - j) For District tasks which have deliverables that are part of GSP development, the Core Team shall be involved in reviewing work product for District tasks in accordance with current Core Team procedures.
7. **GENERAL CONDITIONS:** County is not obligated to provide any funds other than those received pursuant to the Grant Agreement, and in the event DWR does not provide the full funds described in the grant, then the county is under no obligation to fulfill distribution of funds. The County shall have no obligation to disburse money for a project under this Cost Agreement until LPP has satisfied the following conditions:
- a) For the term of this Cost Agreement, LPP must provide timely input to the County Grant Manager to ensure timely submission of Quarterly Progress Reports as required by DWR.
 - b) LPP shall submit all deliverables and fulfill reporting requirements associated with the District Tasks as specified in Exhibit A (Workplan) and Exhibit C (Schedule) in accordance with DWR requirements detailed in the Grant Agreement.
 - c) Prior to the commencement of construction or implementation activities, if applicable, LDD shall submit the following to the County for submission to DWR:
 - 1. Work that is subject to the California Environmental Quality Act (CEQA) and or environmental permitting shall not proceed under the Grant Agreement until the following actions are performed:
 - (i) Grantee submits to DWR all applicable environmental permits as indicated on the Environmental Information Form to DWR,
 - (ii) Documents that satisfy the CEQA process are received by DWR,
 - (iii) DWR has completed its CEQA compliance review as a Responsible Agency, and
 - (iv) Grantee receives written concurrence from DWR of Lead Agency's CEQA document(s) and DWR notice of verification of environmental permit submittal.

8. **DISBURSEMENT BY DWR AND PAYMENT BY THE COUNTY:** Following the review of each invoice, the County will approve the invoice and disburse payment subject to the availability of funds through normal DWR, and County processes. Funds will be disbursed by the County to District in response to each approved invoice within forty-five (45) days of receipt of funds from DWR. No disbursement shall be required at any time in any manner which is in violation of, or in conflict with federal or state laws, or regulations or which may require any rebates to the federal government or any loss of tax-free status on state bonds, pursuant to any federal statute or regulation. Any and all money disbursed by the County under this Cost Agreement and all interest earned by LPP shall be used solely to pay eligible costs.

9. **ELIGIBLE PROJECT COSTS:** Costs as described in Exhibit A, Workplan and in accordance with Exhibit B, Budget and Exhibit C, Schedule.

Advanced funds will not be provided. LPP shall apply DWR funds received only to Eligible Project Costs in accordance with applicable provisions of the law, Exhibit B, and the Grant Agreement. Work performed on the projects after July 1, 2017 shall be eligible for reimbursement with DWR grant funds.

Costs that are not eligible for reimbursement include those specified in the Grant Agreement (Exhibit D – Section 7).

10. **METHOD OF PAYMENT:** Submit a copy of invoice for costs incurred and supporting documentation to the County via email as directed by the County’s Grant Administrator. Invoices submitted shall include the information required in the Grant Agreement (Exhibit D – Section 8).

a) Reimbursement

1. Costs incurred for work performed in implementing the projects during the period identified in the particular invoice.
2. Invoices shall be submitted on forms provided by DWR and shall meet the following format requirements:
 - (i) Invoices must contain the date of the invoice, the time period covered by the invoice, and the total amount due.
 - (ii) Invoices must be itemized based on the categories (i.e., tasks) specified in Exhibit B. The amount claimed for salaries/wages/consultant fees must list the classification or title of each staff/consultant claiming labor costs and include a calculation formula (i.e., hours or days worked times the hourly or daily rate = the total amount claimed).
 - (iii) Sufficient evidence (i.e., receipts, copies of checks or other proof of payment, time sheets) as determined by DWR must be provided for all costs included in the invoice.
 - (iv) The County will notify the LPP, in a timely manner, when, upon review of an invoice, if DWR determines that any portion or portions of the costs claimed are not eligible costs or are not supported by documentation or receipts acceptable to DWR. LPP may, within seven (7) calendar days of

the date of receipt of such notice, submit additional documentation to the County to cure such deficiency(ies). If LPP fails to submit adequate documentation curing the deficiency(ies), the County will adjust the pending invoice by the amount of ineligible, unsupported or unapproved costs. Invoices shall be submitted no more frequently than quarterly. All invoices must be certified to be true and accurate and submitted by an official representative of the project.

Submit invoice to:

PDS.COR@sdcounty.ca.gov

- 11. WITHHOLDING OF GRANT REIMBURSEMENT BY THE COUNTY:** If the County or DWR determines that the Project is not being implemented in accordance with the provisions of this Cost Agreement, or that LPP has failed in any other respect to comply with the provisions of this Cost Agreement, and if LPP does not remedy any such failure to DWR's satisfaction, the County may withhold from LPP all or any portion of DWR funding and take any other action that it deems necessary to protect its interests. Where a portion of DWR funding has been disbursed to the LPP and DWR notifies the Grantee of its decision not to release funds that have been withheld pursuant to Paragraph 12, Default Provisions, the portion that has been disbursed shall thereafter be repaid immediately with interest at the California general obligation bond interest rate at the time the County notifies the LPP, as directed by DWR. The County may consider the LPP's refusal to repay the requested disbursed amount a contract breach subject to the default provisions in Paragraph 12, Default Provisions." If the County notifies the LPP of its decision to withhold the entire funding amount from LPP pursuant to this paragraph, this Cost Agreement shall terminate upon receipt of such notice by LPP and the County shall no longer be required to provide funds under this Cost Agreement and the Cost Agreement shall no longer be binding on either party.
- 12. DEFAULT PROVISIONS:** LPP will be in default under this Cost Agreement if any of the following occur:
- a) Substantial breaches of this Cost Agreement, or any supplement or amendment to it, or any other agreement between LPP and the County evidencing or securing LPP's obligations.
 - b) Making any false warranty, representation, or statement with respect to this Cost Agreement or the application filed to secure this Cost Agreement.
 - c) Failure to operate or the Project in accordance with this Cost Agreement.
 - d) Failure to make any remittance required by this Cost Agreement.
 - e) Failure to submit timely progress reports.
 - f) Failure to routinely invoice the County.

If an event of default occurs, the County shall provide a notice of default to the LPP and shall give LPP at least five (5) calendar days to cure the default from the date the notice

is sent via first-class mail to the LPP. If the LPP fails to cure the default within the time prescribed by the County, the County may do any of the following:

- a) Declare the funding be immediately repaid with interest, which shall be equal to State of California general obligation bond interest rate in effect at the time of the default.
- b) Terminate any obligation to make future payments to LPP.
- c) Terminate the Cost Agreement.
- d) Take any other action that it deems necessary to protect its interests.

13. **PERMITS, LICENSES, APPROVALS, AND LEGAL OBLIGATIONS:** LPP shall be responsible for obtaining any and all permits, licenses, and approvals required for performing any work under this Cost Agreement, as applicable. LPP shall be responsible for observing and complying with any applicable federal, state, and local laws, rules or regulations affecting any such work, specifically those including, but not limited to, environmental, procurement, and safety laws, rules, regulations, and ordinances. LPP shall provide copies of permits and approvals to the County, if requested.

14. **SUBMISSION OF REPORTS:** LPP shall provide input to Grantee for inclusion in the progress reports on a quarterly basis to meet DWR's requirement for disbursement of funds. Input shall include a brief description of the work performed during the reporting period including: LPP's activities, milestones achieved, any accomplishments, deliverables submitted, costs incurred during the period and to date, upcoming work and any problems encountered in the performance of the work under this Cost Agreement. Once input from LPP is received, Grantee will prepare a progress report for submission to DWR. All reports shall be submitted to the County's Grants Administrator via email or as directed by the County's Grants Administrator for submission to DWR.

15. **INDEMNIFICATION:**

To the fullest extent permitted by law, the LPP shall indemnify and hold and save the County, DWR, its officers, agents, and employees, free and harmless from any and all liabilities for any claims and damages (including inverse condemnation) that may arise out of the Projects and this Cost Agreement, including, but not limited to any claims or damages arising from planning, design, construction, maintenance and/or operation of this Project and any breach of this Cost Agreement. LPP shall require its contractors or subcontractors to name the County, DWR, its officers, agents and employees as additional insured on their liability insurance for activities undertaken pursuant to this Cost Agreement.

16. **CONFIDENTIALITY:**

The County and the District, as a single, multi-agency GSA, share a common interest arrangement and acknowledge that information shared between the Parties and their respective legal counsels is privileged and designed to further the shared interests of the Parties. The Parties and their Counsels believe that it is in their mutual best interest to coordinate their efforts and share certain privileged and confidential information,

without risk of waiving or diminishing any protection against discovery, disclosure, or misuse of common interest information under any applicable privileges or protections. The Parties and their Counsels agree that such exchange of legal advice and information among themselves will advance the Parties' common interests to develop and implement a GSP for the Basin in accordance with the requirements of SGMA. As such, the Parties agree to keep information confidential to the maximum extent allowed by law throughout SGMA implementation, in accordance with the Common Interest Doctrine.

17. **TERMINATION, IMMEDIATE REPAYMENT, INTEREST:** The Cost Agreement may be terminated by written notice at any time before completion of the District Tasks at the option of the County or DWR if LPP breaches the Cost Agreement and has been asked to cure the breach within a reasonable time and fails to do so. If the Cost Agreement is terminated, LPP shall, upon demand, immediately repay to DWR an amount equal to the amount of grant funds disbursed to LPP. Interest shall accrue on all amounts due at the legal rate of interest allowed by law from the date that notice of termination is mailed to LPP to the date of full repayment.
18. **PROJECT REPRESENTATIVES:** The Project Representatives during the term of this Cost Agreement are as follows:

LPP
Borrego Water District
Geoff Poole
General Manager
806 Palm Canyon Drive
Borrego Springs, CA 92004
Phone: (760) 767-5806
e-mail: geoff@borregowd.org

Grantee
County of San Diego
Leanne Crow
Grant Administrator
5510 Overland Avenue, Suite 310
San Diego CA 92123
Phone: (858) 495-5514
e-mail: Leanne.crow@sdcounty.ca.gov

Either party may change its Project Representative upon written notice to the other party.

19. **STANDARD PROVISIONS.** The following Exhibits are attached and made a part of this Cost Agreement by this reference:

Exhibit A – Workplan
Exhibit B – Budget
Exhibit C – Schedule
Exhibit D – Grant Agreement

20. **SIGNATURES:** The individuals executing this Cost Agreement represent and warrant that they have the legal capacity and authority to do so on behalf of their respective legal entities.

IN WITNESS WHEREOF, the parties have executed this Cost Agreement as of the last date below:

COUNTY OF SAN DIEGO (GRANTEE)

Approved as to form and legality:

By: _____
Mark Wardlaw
Director, Planning & Development Services

By: _____
Justin Crumley
Senior Deputy, County Counsel

Date: _____

Date: _____

BORREGO WATER DISTRICT (LOCAL PROJECT PROPONENT [LPP])

By: _____
Beth Hart
President, Board of Directors

Date: _____

Exhibit A (Workplan)

Exhibit B (Budget)

Exhibit C (Schedule)

Exhibit D (Grant Agreement)

ATTACHMENT II.D.2 – Le Sar Contract

BORREGO WATER DISTRICT AND LE SAR DEVELOPMENT PROFESSIONAL SERVICES AGREEMENT

1. Parties and Date.

This Agreement is made and entered into this 20th day of February, 2018 by and between the Borrego Water District, a California municipal water district, with its principal place of business at 806 Palm Canyon Drive, Borrego Springs, CA 92004 (“District”) and LeSar Development and its affiliate Estolano LeSar Advisors with its principal place of business at 404 Euclid Ave., Suite 212, San Diego, CA 92114 (“Consultant”). District and Consultant are sometimes individually referred to as “Party” and collectively as “Parties” in this Agreement.

2. Recitals.

2.1 Consultant.

Consultant desires to perform and assume responsibility for the provision of certain professional services required by District on the terms and conditions set forth in this Agreement. Consultant represents that it is experienced in providing Professional Services services to public clients, is licensed in the State of California, and is familiar with the plans of District.

2.2 Project.

District desires to engage Consultant to render such services for the Proposition One Grant SDAC Outreach and Socioeconomic Evaluation (Project”) as set forth in this Agreement.

3. Terms.

3.1 Scope and Schedule of Services.

3.1.1 General Scope of Services. Consultant promises and agrees to furnish to District all labor, materials, tools, equipment, services, and incidental and customary work necessary to fully and adequately supply the professional consulting services necessary for the Project (“Services”). The Services are more particularly described in Exhibit “A” attached hereto and incorporated herein by reference. All Services shall be subject to, and performed in accordance with, this Agreement, the exhibits attached hereto and incorporated herein by reference, and all applicable local, state and federal laws, rules, and regulations.

3.1.2 Term. The term of this Agreement shall be from February 20, 2018 to August 30, 2018, unless earlier terminated or amended as provided herein. Consultant shall complete the Services within the term of this Agreement, and shall meet any other established schedules and deadlines. The Parties may, by mutual, written consent, extend the term of this Agreement if necessary to complete the Services.

3.1.3 Schedule of Services. Consultant shall perform the Services expeditiously, within the term of this Agreement, and in accordance with Exhibit "A" attached hereto and incorporated herein by reference. Consultant represents that it has the professional and technical personnel required to perform the Services in conformance with such conditions. In order to facilitate Consultant's conformance with the Schedule, District shall respond to Consultant's submittals in a timely manner. Upon request of District, Consultant shall provide a more detailed schedule of anticipated performance to meet the Schedule of Services.

3.2 Fees and Payments.

3.2.1 Compensation. Consultant shall receive compensation, including authorized reimbursements, for all Services rendered and the total compensation shall not exceed One Hundred Twenty Five Thousand (\$125,000) without written approval by District. Extra Work may be authorized, as described below, and if authorized, will be compensated at the rates and manner set forth in this Agreement.

3.2.2 Payment. Consultant shall submit to District a monthly itemized statement which indicates work completed and hours of Services rendered by Consultant and percentage completion for each deliverable. The statement shall describe the Services and supplies provided since the initial commencement date, or since the start of the subsequent billing periods, as appropriate, through the date of the statement. District shall, within 45 days of receiving such statement, review the statement and pay all approved charges thereon.

3.2.3 Reimbursement for Expenses. Consultant shall not be reimbursed for any expenses unless authorized in writing by District.

3.2.4 Extra Work. At any time during the term of this Agreement, District may request that Consultant perform Extra Work. As used herein, "Extra Work" means any work which is determined by District to be necessary for the proper completion of the Project, but which the parties did not reasonably anticipate would be necessary at the execution of this Agreement. Consultant shall not perform, nor be compensated for, Extra Work without written authorization by District.

3.3 Responsibilities of Consultant.

3.3.1 Control and Payment of Subordinates; Independent Contractor. The Services shall be performed by Consultant or under its supervision. Consultant will determine the means, methods and details of performing the Services subject to the requirements of this Agreement. District

retains Consultant on an independent contractor basis and not as an employee. Consultant retains the right to perform similar or different services for others during the term of this Agreement. Any additional personnel performing the Services under this Agreement on behalf of Consultant shall also not be employees of District and shall at all times be under Consultant's exclusive direction and control. Consultant shall pay all wages, salaries, and other amounts due such personnel in connection with their performance of Services under this Agreement and as required by law. Consultant shall be responsible for all reports and obligations respecting such additional personnel, including, but not limited to: social security taxes, income tax withholding, unemployment insurance, disability insurance, and workers' compensation insurance.

3.3.2 Standard of Care; Performance of Employees. Consultant shall perform all Services under this Agreement in a skillful and competent manner, consistent with the standards generally recognized as being employed by professionals in the same discipline in the State of California. Consultant represents and maintains that it is skilled in the professional calling necessary to perform the Services. Consultant warrants that all employees and subconsultants shall have sufficient skill and experience to perform the Services assigned to them. Finally, Consultant represents that it, its employees and subconsultants have all licenses, permits, qualifications and approvals of whatever nature that are legally required to perform the Services, and that such licenses and approvals shall be maintained throughout the term of this Agreement. As provided for in the indemnification provisions of this Agreement, Consultant shall perform, at its own cost and expense and without reimbursement from District, any services necessary to correct errors or omissions which are caused by Consultant's failure to comply with the standard of care provided for herein. Any employee of Consultant or its subconsultants who is determined by District to be uncooperative, incompetent, a threat to the adequate or timely completion of the Project, a threat to the safety of persons or property, or any employee who fails or refuses to perform the Services in a manner acceptable to District, shall be promptly removed from the Project by Consultant and shall not be re-employed to perform any of the Services or to work on the Project.

3.3.3 Conformance to Applicable Requirements. All work prepared by Consultant shall be subject to the approval of District.

3.3.4 Substitution of Key Personnel. Consultant has represented to District that certain key personnel will perform and coordinate the Services under this Agreement. Should one or more of such personnel become unavailable, Consultant may substitute other personnel of at least equal competence upon written approval of District. In the event that District and Consultant cannot agree as to the substitution of key personnel, District shall be entitled to terminate this Agreement for cause. As discussed below, any personnel who fail or refuse to perform the Services in a manner acceptable to District, or who are determined by District to be uncooperative, incompetent, a threat to the adequate or timely completion of the Project or a threat to the safety of persons or property, shall be promptly removed from the Project by Consultant at the request of District. The key personnel for performance of this Agreement are as follows: Rachel Ralston for Le Sar Development Corp and Leah Hubbard for Estolano LeSar Advisors

3.3.5 Coordination of Services. Consultant agrees to work closely with District staff in the performance of Services and shall be available to District's staff, consultants and other staff at all reasonable times.

3.3.6 Laws and Regulations. Consultant shall keep itself fully informed of and in compliance with all local, state and federal laws, rules and regulations in any manner affecting the performance of the Project or the Services, including all Cal/OSHA requirements, and shall give all notices required by law. Consultant shall be liable for all violations of such laws and regulations in connection with Services. If Consultant performs any work knowing it to be contrary to such laws, rules and regulations, Consultant shall be solely responsible for all costs arising therefrom. Consultant shall defend, indemnify and hold District, its officials, directors, officers, employees, and agents free and harmless, pursuant to the indemnification provisions of this Agreement, from any claim or liability arising out of any failure or alleged failure to comply with such laws, rules or regulations.

3.3.7 Labor Code Provisions.

(a) Prevailing Wages. Consultant is aware of the requirements of California Labor Code Section 1720, et seq., and 1770, et seq., as well as California Code of Regulations, Title 8, Section 16000, et seq., ("Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on "public works" and "maintenance" projects. If the Services are being performed as part of an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and if the total compensation is \$1,000 or more, Consultant agrees to fully comply with such Prevailing Wage Laws. District shall provide Consultant with a copy of the prevailing rates of per diem wages in effect at the commencement of this Agreement. Consultant shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to execute the Services available to interested parties upon request, and shall post copies at Consultant's principal place of business and at the project site. Consultant shall defend, indemnify and hold District, its elected officials, officers, employees and agents free and harmless from any claim or liability arising out of any failure or alleged failure to comply with the Prevailing Wage Laws.

(b) Registration and Labor Compliance. If the services are being performed as part of an applicable "public works" or "maintenance" project, then, in addition to the foregoing, pursuant to Labor Code sections 1725.5 and 1771.1, Consultant and all subconsultants must be registered with the Department of Industrial Relations ("DIR"). Consultant shall maintain registration for the duration of the project and require the same of any subconsultants. This project may also be subject to compliance monitoring and enforcement by the Department of Industrial Relations. It shall be Consultant's sole responsibility to comply with all applicable registration and labor compliance requirements, including the submission of payroll records directly to the DIR.

(c) Labor Certification. By its signature hereunder, Consultant certifies that it is aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions of that Code, and agrees to comply with such provisions before commencing the performance of the Services.

3.3.8 Safety. Consultant shall execute and maintain its work so as to avoid injury or damage to any person or property. In carrying out its Services, Consultant shall at all times be in compliance with all applicable local, state and federal laws, rules and regulations, and shall exercise all

necessary precautions for the safety of employees appropriate to the nature of the work and the conditions under which the work is to be performed. Safety precautions as applicable shall include, but shall not be limited to: (A) adequate life protection and life-saving equipment and procedures; (B) instructions in accident prevention for all employees and subconsultants, such as safe walkways, scaffolds, fall protection ladders, bridges, gang planks, confined space procedures, trenching and shoring, equipment and other safety devices, equipment and wearing apparel as are necessary or lawfully required to prevent accidents or injuries; and (C) adequate facilities for the proper inspection and maintenance of all safety measures.

3.3.9 Accounting Records. Consultant shall maintain complete and accurate records with respect to all costs and expenses incurred under this Agreement. All such records shall be clearly identifiable. Consultant shall allow a representative of District during normal business hours to examine, audit, and make transcripts or copies of such records and any other documents created pursuant to this Agreement. Consultant shall allow inspection of all work, data, documents, proceedings, and activities related to the Agreement for a period of four (4) years from the date of final payment under this Agreement.

3.3.10 Air Quality. To the extent applicable, Consultant must fully comply with all applicable laws, rules and regulations in furnishing or using equipment and/or providing services, including, but not limited to, emissions limits and permitting requirements imposed by the South Coast Air Quality Management District (SCAQMD) and/or California Air Resources Board (CARB). Although the SCAQMD and CARB limits and requirements are more broad, Consultant shall specifically be aware of their application to "portable equipment", which definition is considered by SCAQMD and CARB to include any item of equipment with a fuel-powered engine. Consultant shall indemnify District against any fines or penalties imposed by SCAQMD, CARB, or any other governmental or regulatory agency for violations of applicable laws, rules and/or regulations by Consultant, its subconsultants, or others for whom Consultant is responsible under its indemnity obligations provided for in this Agreement.

3.4 Representatives of the Parties.

3.4.1 District's Representative. District hereby designates its General Manager or his or her designee, to act as its representative for the performance of this Agreement ("District's Representative"). Consultant shall not accept direction or orders from any person other than the District's Representative or his or her designee.

3.4.2 Consultant's Representative. Consultant hereby designates Rachel Ralston, or his or her designee, to act as its representative for the performance of this Agreement ("Consultant's Representative"). Consultant's Representative shall have full authority to represent and act on behalf of Consultant for all purposes under this Agreement. The Consultant's Representative shall supervise and direct the Services, using his best skill and attention, and shall be responsible for all means, methods, techniques, sequences, and procedures and for the satisfactory coordination of all portions of the Services under this Agreement.

3.5 Indemnification.

To the fullest extent permitted by law, Consultant shall immediately indemnify and hold District, its directors, officials, officers, employees, volunteers and agents free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury of any kind, in law or equity, to property or persons, including wrongful death, in any manner arising out of, pertaining to, or incident to any alleged acts, errors or omissions of Consultant, its officials, officers, employees, subcontractors, consultants or agents in connection with the performance of Consultant's Services, the Project or this Agreement, including without limitation the payment of all consequential damages, expert witness fees and attorneys' fees and other related costs and expenses. Notwithstanding the foregoing, to the extent Consultant's Services are subject to Civil Code Section 2782.8, the above indemnity shall be limited, to the extent required by Civil Code Section 2782.8, to claims that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of Consultant.

Consultant shall immediately defend, with Counsel of District's choosing and at Consultant's own cost, expense and risk, any and all claims, suits, actions or other proceedings of every kind that may be brought or instituted against District or its directors, officials, officers, employees, volunteers and agents. Consultant shall pay and satisfy any judgment, award or decree that may be rendered against District or its directors, officials, officers, employees, volunteers and agents as part of any such claim, suit, action or other proceeding. Consultant shall also reimburse District for the cost of any settlement paid by District or its directors, officials, officers, employees, agents or volunteers as part of any such claim, suit, action or other proceeding. Such reimbursement shall include payment for District's attorneys' fees and costs, including expert witness fees. Consultant shall reimburse District and its directors, officials, officers, employees, agents, and/or volunteers, for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided. Consultant's obligation to indemnify shall survive expiration or termination of this Agreement, and shall not be restricted to insurance proceeds, if any, received by District, its directors, officials, officers, employees, agents, or volunteers.

3.6 Insurance.

3.6.1 Time for Compliance. Consultant shall not commence work under this Agreement until it has provided evidence satisfactory to District that it has secured all insurance required under this section, in a form and with insurance companies acceptable to District. In addition, Consultant shall not allow any subcontractor to commence work on any subcontract until it has secured all insurance required under this section.

3.6.2 Minimum Requirements. Consultant shall, at its expense, procure and maintain for the duration of the Agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Agreement by Consultant, its agents, representatives, employees or subcontractors. Consultant shall also require all of its subcontractors to procure and maintain the same insurance for the duration of the Agreement. Such insurance shall meet at least the following minimum levels of coverage:

(A) Minimum Scope of Insurance. Coverage shall be at least as broad as the latest version of the following: (1) *General Liability*: Insurance Services Office Commercial General Liability coverage (occurrence form CG 0001 or exact equivalent); (2) *Automobile Liability*: Insurance Services Office Business Auto Coverage (form CA 0001, code 1 (any auto) or exact equivalent); and (3)

Workers' Compensation and Employer's Liability: Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.

(B) Minimum Limits of Insurance. Consultant shall maintain limits no less than: (1) *General Liability*: \$2,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with general aggregate limit is used, either the general aggregate limit shall apply separately to this Agreement/location or the general aggregate limit shall be twice the required occurrence limit; (2) *Automobile Liability*: \$1,000,000 per accident for bodily injury and property damage; and (3) *if Consultant has an employees, Workers' Compensation and Employer's Liability*: Workers' Compensation limits as required by the Labor Code of the State of California. Employer's Practices Liability limits of \$1,000,000 per accident.

3.6.3 Professional Liability. Consultant shall procure and maintain, and require its sub-consultants to procure and maintain, for a period of five (5) years following completion of the Project, errors and omissions liability insurance appropriate to their profession. Such insurance shall be in an amount not less than \$1,000,000 per claim. This insurance shall be endorsed to include contractual liability applicable to this Agreement and shall be written on a policy form coverage specifically designed to protect against acts, errors or omissions of Consultant. "Covered Professional Services" as designated in the policy must specifically include work performed under this Agreement. The policy must "pay on behalf of" the insured and must include a provision establishing the insurer's duty to defend.

3.6.4 Insurance Endorsements. The insurance policies shall contain the following provisions, or Consultant shall provide endorsements on forms approved by District to add the following provisions to the insurance policies:

(A) General Liability.

(i) Commercial General Liability Insurance must include coverage for (1) bodily Injury and property damage; (2) personal Injury/advertising Injury; (3) premises/operations liability; (4) products/completed operations liability; (5) aggregate limits that apply per Project; (6) explosion, collapse and underground (UCX) exclusion deleted; (7) contractual liability with respect to this Agreement; (8) broad form property damage; and (9) independent consultants coverage.

(ii) The policy shall contain no endorsements or provisions limiting coverage for (1) contractual liability; (2) cross liability exclusion for claims or suits by one insured against another; or (3) contain any other exclusion contrary to this Agreement.

(iii) The policy shall give District, its directors, officials, officers, employees, and agents insured status using ISO endorsement forms 20 10 10 01 and 20 37 10 01, or endorsements providing the exact same coverage.

(iv) The additional insured coverage under the policy shall be "primary and non-contributory" and will not seek contribution from District's insurance or self-insurance and shall be at least as broad as CG 20 01 04 13, or endorsements providing the exact same coverage.

(B) Automobile Liability. The automobile liability policy shall be endorsed to state that: (1) District, its directors, officials, officers, employees and agents shall be covered as additional insureds with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by Consultant or for which Consultant is responsible; and (2) the insurance coverage shall be primary insurance as respects District, its directors, officials, officers, employees and agents, or if excess, shall stand in an unbroken chain of coverage excess of Consultant's scheduled underlying coverage. Any insurance or self-insurance maintained by District, its directors, officials, officers, employees and agents shall be excess of Consultant's insurance and shall not be called upon to contribute with it in any way.

(C) Workers' Compensation and Employers Liability Coverage.

(i) Consultant certifies that he/she is aware of the provisions of Section 3700 of the California Labor Code which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and he/she will comply with such provisions before commencing work under this Agreement.

(ii) The insurer shall agree to waive all rights of subrogation against District, its directors, officials, officers, employees and agents for losses paid under the terms of the insurance policy which arise from work performed by Consultant.

(D) All Coverages.

(i) Defense costs shall be payable in addition to the limits set forth hereunder.

(ii) Requirements of specific coverage or limits contained in this section are not intended as a limitation on coverage, limits, or other requirement, or a waiver of any coverage normally provided by any insurance. It shall be a requirement under this Agreement that any available insurance proceeds broader than or in excess of the specified minimum insurance coverage requirements and/or limits set forth herein shall be available to District, its directors, officials, officers, employees and agents as additional insureds under said policies. Furthermore, the requirements for coverage and limits shall be (1) the minimum coverage and limits specified in this Agreement; or (2) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named insured; whichever is greater.

(iii) The limits of insurance required in this Agreement may be satisfied by a combination of primary and umbrella or excess insurance. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of District (if agreed to in a written contract or agreement) before District's own insurance or self-insurance shall be called upon to protect it as a named insured. The umbrella/excess policy shall be provided on a "following form" basis with coverage at least as broad as provided on the underlying policy(ies).

(iv) Consultant shall provide District at least thirty (30) days prior written notice of cancellation of any policy required by this Agreement, except that Consultant shall provide at least ten (10) days prior written notice of cancellation of any such policy due to non-payment of premium. If any of the required coverage is cancelled or expires during the term of this Agreement,

Consultant shall deliver renewal certificate(s) including the General Liability Additional Insured Endorsement to District at least ten (10) days prior to the effective date of cancellation or expiration.

(v) The retroactive date (if any) of each policy is to be no later than the effective date of this Agreement. Consultant shall maintain such coverage continuously for a period of at least three years after the completion of the work under this Agreement. Consultant shall purchase a one (1) year extended reporting period A) if the retroactive date is advanced past the effective date of this Agreement; B) if the policy is cancelled or not renewed; or C) if the policy is replaced by another claims-made policy with a retroactive date subsequent to the effective date of this Agreement.

(vi) The foregoing requirements as to the types and limits of insurance coverage to be maintained by Consultant, and any approval of said insurance by District, is not intended to and shall not in any manner limit or qualify the liabilities and obligations otherwise assumed by Consultant pursuant to this Agreement, including but not limited to, the provisions concerning indemnification.

(vii) If at any time during the life of the Agreement, any policy of insurance required under this Agreement does not comply with these specifications or is canceled and not replaced, District has the right but not the duty to obtain the insurance it deems necessary and any premium paid by District will be promptly reimbursed by Consultant or District will withhold amounts sufficient to pay premium from Consultant payments. In the alternative, District may cancel this Agreement. District may require Consultant to provide complete copies of all insurance policies in effect for the duration of the Project.

(viii) Neither District nor any of its directors, officials, officers, employees or agents shall be personally responsible for any liability arising under or by virtue of this Agreement.

Each insurance policy required by this Agreement shall be endorsed to state that:

3.6.5 Deductibles and Self-Insurance Retentions. Any deductibles or self-insured retentions must be declared to and approved by District. If District does not approve the deductibles or self-insured retentions as presented, Consultant shall guarantee that, at the option of District, either: (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects District, its directors, officials, officers, employees and agents; or, (2) Consultant shall procure a bond guaranteeing payment of losses and related investigation costs, claims and administrative and defense expenses.

3.6.6 Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating no less than A:VIII, licensed to do business in California, and satisfactory to District.

3.6.7 Verification of Coverage. Consultant shall furnish District with original certificates of insurance and endorsements effecting coverage required by this Agreement on forms satisfactory to District. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates and endorsements

must be received and approved by District before work commences. District reserves the right to require complete, certified copies of all required insurance policies, at any time.

3.6.8 Subconsultant Insurance Requirements. Consultant shall not allow any subcontractors or subconsultants to commence work on any subcontract until they have provided evidence satisfactory to District that they have secured all insurance required under this section. Policies of commercial general liability insurance provided by such subcontractors or subconsultants shall be endorsed to name District as an additional insured using ISO form CG 20 38 04 13 or an endorsement providing the exact same coverage. If requested by Consultant, District may approve different scopes or minimum limits of insurance for particular subcontractors or subconsultants.

3.7 Termination of Agreement.

3.7.1 Grounds for Termination. District may, by written notice to Consultant, terminate the whole or any part of this Agreement at any time and without cause by giving written notice to Consultant of such termination, and specifying the effective date thereof, at least seven (7) days before the effective date of such termination. Upon termination, Consultant shall be compensated only for those services which have been adequately rendered to District, and Consultant shall be entitled to no further compensation. Consultant may not terminate this Agreement except for cause.

3.7.2 Effect of Termination. If this Agreement is terminated as provided herein, District may require Consultant to provide all finished or unfinished Documents and Data and other information of any kind prepared by Consultant in connection with the performance of Services under this Agreement. Consultant shall be required to provide such document and other information within fifteen (15) days of the request.

3.7.3 Additional Services. In the event this Agreement is terminated in whole or in part as provided herein, District may procure, upon such terms and in such manner as it may determine appropriate, services similar to those terminated.

3.8 Ownership of Materials and Confidentiality.

3.8.1 Documents & Data; Licensing of Intellectual Property. This Agreement creates a non-exclusive and perpetual license for District to copy, use, modify, reuse, or sublicense any and all copyrights, designs, and other intellectual property embodied in plans, specifications, studies, drawings, estimates, and other documents or works of authorship fixed in any tangible medium of expression, including but not limited to, physical drawings or data magnetically or otherwise recorded on computer diskettes, which are prepared or caused to be prepared by Consultant under this Agreement ("Documents & Data"). All Documents & Data shall be and remain the property of District, and shall not be used in whole or in substantial part by Consultant on other projects without District's express written permission. Within thirty (30) days following the completion, suspension, abandonment or termination of this Agreement, Consultant shall provide to District reproducible copies of all Documents & Data, in a form and amount required by District. District reserves the right to select the method of document reproduction and to establish where the reproduction will be accomplished. The reproduction expense shall be borne by District at the actual cost of duplication. In the event of a dispute regarding the

amount of compensation to which Consultant is entitled under the termination provisions of this Agreement, Consultant shall provide all Documents & Data to District upon payment of the undisputed amount. Consultant shall have no right to retain or fail to provide to District any such documents pending resolution of the dispute. In addition, Consultant shall retain copies of all Documents & Data on file for a minimum of fifteen (15) years following completion of the Project, and shall make copies available to District upon the payment of actual reasonable duplication costs. Before destroying the Documents & Data following this retention period, Consultant shall make a reasonable effort to notify District and provide District with the opportunity to obtain the documents.

3.8.2 Subconsultants. Consultant shall require all subconsultants to agree in writing that District is granted a non-exclusive and perpetual license for any Documents & Data the subconsultant prepares under this Agreement. Consultant represents and warrants that Consultant has the legal right to license any and all Documents & Data. Consultant makes no such representation and warranty in regard to Documents & Data which were prepared by design professionals other than Consultant or its subconsultants, or those provided to Consultant by District.

3.8.3 Right to Use. District shall not be limited in any way in its use or reuse of the Documents and Data or any part of them at any time for purposes of this Project or another project, provided that any such use not within the purposes intended by this Agreement or on a project other than this Project without employing the services of Consultant shall be at District's sole risk. If District uses or reuses the Documents & Data on any project other than this Project, it shall remove Consultant's seal from the Documents & Data and indemnify and hold harmless Consultant and its officers, directors, agents and employees from claims arising out of the negligent use or re-use of the Documents & Data on such other project. Consultant shall be responsible and liable for its Documents & Data, pursuant to the terms of this Agreement, only with respect to the condition of the Documents & Data at the time they are provided to District upon completion, suspension, abandonment or termination. Consultant shall not be responsible or liable for any revisions to the Documents & Data made by any party other than Consultant, a party for whom Consultant is legally responsible or liable, or anyone approved by Consultant.

3.8.4 Indemnification. Consultant shall defend, indemnify and hold District, its directors, officials, officers, employees, volunteers and agents free and harmless, pursuant to the indemnification provisions of this Agreement, for any alleged infringement of any patent, copyright, trade secret, trade name, trademark, or any other proprietary right of any person or entity in consequence of the use on the Project by District of the Documents & Data, including any method, process, product, or concept specified or depicted.

3.8.5 Confidentiality. All Documents & Data, either created by or provided to Consultant in connection with the performance of this Agreement, shall be held confidential by Consultant. All Documents & Data shall not, without the prior written consent of District, be used or reproduced by Consultant for any purposes other than the performance of the Services. Consultant shall not disclose, cause or facilitate the disclosure of the Documents & Data to any person or entity not connected with the performance of the Services or the Project. Nothing furnished to Consultant that is otherwise known to Consultant or is generally known, or has become known, to the related industry shall be deemed confidential. Consultant shall not use District's name or insignia, photographs of the Project, or any publicity pertaining to the Services or the Project in any magazine, trade paper,

newspaper, television or radio production or other similar medium without the prior written consent of District.

3.9 Subcontracting/Subconsulting.

3.9.1 Prior Approval Required. Consultant shall not subcontract any portion of the work required by this Agreement, except as expressly stated herein, without prior written approval of District. Subcontracts, if any, shall contain a provision making them subject to all provisions stipulated in this Agreement.

3.10 General Provisions.

3.10.1 Delivery of Notices. All notices permitted or required under this Agreement shall be given to the respective parties at the following address, or at such other address as the respective parties may provide in writing for this purpose:

DISTRICT:

Borrego Water District
806 Palm Canyon Drive
Borrego Springs, CA 92004
Attn: Geoff Poole

CONSULTANT:

Le Sar Development Corp
404 Euclid Ave., Suite 212
San Diego, CA 92114
Attn: Rachel Ralston

Such notice shall be deemed made when personally delivered or when mailed, forty-eight (48) hours after deposit in the U.S. Mail, first class postage prepaid and addressed to the party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

3.10.2 Equal Opportunity Employment. Consultant represents that it is an equal opportunity employer and it shall not discriminate against any subconsultant, employee or applicant for employment because of race, religion, color, national origin, handicap, ancestry, sex or age. Such non-discrimination shall include, but not be limited to, all activities related to initial employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination. Consultant shall also comply with all relevant provisions of District's Minority Business Enterprise program, Affirmative Action Plan or other related programs or guidelines currently in effect or hereinafter enacted.

3.10.3 Time of Essence. Time is of the essence for each and every provision of this Agreement.

3.10.4 District's Right to Employ Other Consultants. District reserves right to employ other consultants in connection with this Project.

3.10.5 Successors and Assigns. This Agreement shall be binding on the successors and assigns of the parties.

3.10.6 Assignment or Transfer. Consultant shall not assign, hypothecate or transfer, either directly or by operation of law, this Agreement or any interest herein without the prior written consent of District. Any attempt to do so shall be null and void, and any assignees, hypothecates or transferees shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer.

3.10.7 Construction; References; Captions. Since the Parties or their agents have participated fully in the preparation of this Agreement, the language of this Agreement shall be construed simply, according to its fair meaning, and not strictly for or against any Party. Any term referencing time, days or period for performance shall be deemed calendar days and not work days. All references to Consultant include all personnel, employees, agents, and subconsultants of Consultant, except as otherwise specified in this Agreement. All references to District include its elected officials, officers, employees, agents, and volunteers except as otherwise specified in this Agreement. The captions of the various articles and paragraphs are for convenience and ease of reference only, and do not define, limit, augment, or describe the scope, content or intent of this Agreement.

3.10.8 Amendment; Modification. No supplement, modification or amendment of this Agreement shall be binding unless executed in writing and signed by both Parties.

3.10.9 Waiver. No waiver of any default shall constitute a waiver of any other default or breach, whether of the same or other covenant or condition. No waiver, benefit, privilege, or service voluntarily given or performed by a Party shall give the other Party any contractual rights by custom, estoppel or otherwise.

3.10.10 No Third Party Beneficiaries. There are no intended third party beneficiaries of any right or obligation assumed by the Parties.

3.10.11 Invalidity; Severability. If any portion of this Agreement is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

3.10.12 Prohibited Interests. Consultant maintains and warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Consultant, to solicit or secure this Agreement. Further, Consultant warrants that it has not paid nor has it agreed to pay any company or person, other than a bona fide employee working solely for Consultant, any fee, District, percentage, brokerage fee, gift or other consideration contingent upon or

resulting from the award or making of this Agreement. Consultant further agrees to file, or shall cause its employees or subconsultants to file, a Statement of Economic Interest with the District's Filing Officer as required under state law in the performance of the Services. For breach or violation of this warranty, District shall have the right to rescind this Agreement without liability. For the term of this Agreement, no member, officer or employee of District, during the term of his or her service with District, shall have any direct interest in this Agreement, or obtain any present or anticipated material benefit arising therefrom.

3.10.13 Cooperation; Further Acts. The Parties shall fully cooperate with one another, and shall take any additional acts or sign any additional documents as may be necessary, appropriate or convenient to attain the purposes of this Agreement.

3.10.14 Governing Law. This Agreement shall be governed by the laws of the State of California. Venue shall be in San Diego County.

3.10.15 Government Code Claim Compliance. In addition to any and all contract requirements pertaining to notices of and requests for compensation or payment for extra work, disputed work, claims and/or changed conditions, Consultant must comply with the claim procedures set forth in Government Code sections 900 et seq. prior to filing any lawsuit against District. Such Government Code claims and any subsequent lawsuit based upon the Government Code claims shall be limited to those matters that remain unresolved after all procedures pertaining to extra work, disputed work, claims, and/or changed conditions have been followed by Consultant. If no such Government Code claim is submitted, or if any prerequisite contractual requirements are not otherwise satisfied as specified herein, Consultant shall be barred from bringing and maintaining a valid lawsuit against District.

3.10.16 Attorneys' Fees. If either party commences an action against the other party, either legal, administrative or otherwise, arising out of or in connection with this Agreement, the prevailing party in such litigation shall be entitled to have and recover from the losing party reasonable attorneys' fees and all other costs of such action.

3.10.17 Authority to Enter Agreement. Consultant has all requisite power and authority to conduct its business and to execute, deliver, and perform the Agreement. Each Party warrants that the individuals who have signed this Agreement have the legal power, right, and authority to make this Agreement and bind each respective Party.

3.10.18 Counterparts. This Agreement may be signed in counterparts, each of which shall constitute an original.

3.10.19 Entire Agreement. This Agreement contains the entire Agreement of the parties with respect to the subject matter hereof, and supersedes all prior negotiations, understandings or agreements. This Agreement may only be modified by a writing signed by both parties.

SIGNATURE PAGE

**TO
BORREGO WATER DISTRICT
PROFESSIONAL SERVICES AGREEMENT**

BORREGO WATER DISTRICT

Le Sar Development Inc:

By: _____

By: _____

(Authorized Representative of
Vendor)

Printed Name: _____

Printed
Name: _____

Title: _____

Title: _____

Dated: _____

Dated: _____

EXHIBIT A SCOPE OF SERVICES

The Borrego SDAC Project will be run by BWD with contractors LeSar Development Consultants (LDC) on tasks as specified below. The project will include the following tasks:

TASK 1 SDAC ENGAGEMENT (*Percent Complete 0%*) **[LDC Responsibility]**

SDAC Engagement will include establishing baseline data on SDAC rate payers and the economic structure of Borrego Valley. This is aimed at providing technical assistance to the SDAC community of Borrego Springs and encouraging participation in groundwater sustainability planning activities. Although SDAC Engagement for this project will build on outreach activities conducted as part of the Proposition 1 *Counties with Stressed Basins* funding from DWR, the following tasks are not duplicative and are scheduled to begin after prior DWR funding has been exhausted.

TASK 1.1 COMMUNITY CHARACTERISTICS BASELINE DATA GATHERING

This task involves the preparation of a comprehensive demographic report and an economic overview of the

GSA management area that will integrate with information from ongoing GSP planning efforts and include the following research:

- a. Identify population and household information, including:
 - Median household income distribution
 - Retired versus working population; employment and employment types; immigration status
 - Other SDAC indicators, e.g., distribution of low-income households and within sub-populations, high unemployment, low levels of homeownership, high rent burdens, public health issues, low educational attainment levels, literacy/linguistic barriers, and digital isolation
- b. Explore local and regional economic landscapes, including:
 - Industries, e.g., agriculture, recreation, education, small businesses
 - Workforce composition, i.e., full-time, part-time, and seasonal
 - Wage composition
 - Housing affordability, both homeownership and rental
 - Present land uses (e.g., county zoning, development permits)
- c. Drinking water assessment – public and private
 - Public – BWD municipal data, including household water consumption records
 - Private
 - Estimated number of private wells and their pumping records and water quality data, as available
 - Number of public wells (present and future), including well locations and configurations, water quality, and pumping records. Much of the well data will be obtained from ongoing work being done by the GSA to prepare the GSP.

The research will utilize census demographic and employment data; County demographic, industry, and employment data; U.S. Geological Survey data and report; current GSP data-gathering efforts (County, Dudek); DWR; GIS mapping, CalEnviroscreen; additional outreach within local economy to obtain needed data (e.g., wage and workforce structures) as needed.

Deliverable:

Summary Report: Community Characteristics

TASK 1.2 SDAC ENGAGEMENT FOR GSP PLANNING AND IMPLEMENTATION ACTIVITIES

This task will provide an overview of GSP planning activities to date and an educational module on

groundwater sustainability management in accessible workshops and informal settings (e.g., door-to-door engagement). Engagement efforts will also provide updates and solicit feedback about GSP implementation and associated adaptive management strategies.

- As part of the SDAC outreach process, a consultant will engage members of the SDAC to assist with developing culturally appropriate engagement tools and effective strategies for information dissemination, education, needs assessment, and ongoing feedback.
- The consultant will solicit feedback from attendees through discussion and breakout groups to identify knowledge gaps, concerns related to GSP implementation, feedback on overall management efforts, assessment of needs, and what they would like to see in their community following implementation of the GSP.
- An additional online community feedback component in both English and Spanish may be employed to maximize the ability of diverse stakeholders to participate in the SDAC outreach process.

The GSA and consultant will utilize the Groundwater Sustainability Plan Stakeholder Communication and Guidance Document³, the Borrego Valley Groundwater Basin Stakeholder Engagement Plan⁴, SDAC impact/vulnerability analysis reference materials to complete this task.

Deliverables:

Summary Report: SDAC Engagement (includes identified needs and concerns)

³ http://www.water.ca.gov/groundwater/sgm/pdfs/GD_C&E_Final_2017-06-29.pdf

⁴ <http://www.sandiegocounty.gov/content/dam/sdc/pds/SGMA/StakeholderEngagement.pdf>

Workshop/Meeting Materials from all workshops and other forms of engagement

ATTACHMENT II.D.3 – ENS ATTACHMENT

BORREGO WATER DISTRICT AND ENVIRONMENTAL NAVIGATION SERVICES, INC PROFESSIONAL SERVICES AGREEMENT

1. Parties and Date.

This Agreement is made and entered into this 20th day of February, 2018 by and between the Borrego Water District, a California municipal water district, with its principal place of business at 806 Palm Canyon Drive, Borrego Springs, CA 92004 (“District”) and Environmental Navigation Services, Inc. a California Corporation with its mailing address of PO Box 231026, Encinitas, CA 92023-1026 (“Consultant”). District and Consultant are sometimes individually referred to as “Party” and collectively as “Parties” in this Agreement.

2 Recitals.

2.1 Consultant.

Consultant desires to perform and assume responsibility for the provision of certain professional services required by District on the terms and conditions set forth in this Agreement. Consultant represents that it is experienced in providing professional services to public clients, is licensed in the State of California, and is familiar with the plans of District.

2.2 Project.

District desires to engage Consultant to render such services for the Borrego Basin Modeling project (“Project”) as set forth in this Agreement.

3. Terms.

3.1 Scope and Schedule of Services.

3.1.1 **General Scope of Services.** Consultant promises and agrees to furnish to District all labor, materials, tools, equipment, services, and incidental and customary work necessary to fully and adequately supply the professional consulting services necessary for the Project (“Services”). The Services are more particularly described in Exhibit “A” attached hereto and incorporated herein by reference. All Services shall be subject to, and performed in accordance with, this Agreement, the exhibits attached hereto and incorporated herein by reference, and all applicable local, state and federal laws, rules, and regulations.

3.1.2 Term. The term of this Agreement shall be from February 20, 2018 to August 30, 2018, unless earlier terminated as provided herein. Consultant shall complete the Services within the term of this Agreement, and shall meet any other established schedules and deadlines. The Parties may, by mutual, written consent, extend the term of this Agreement if necessary to complete the Services.

3.1.3 Schedule of Services. Consultant shall perform the Services expeditiously, within the term of this Agreement, and in accordance with the Schedule of Services set forth in Exhibit "B" attached hereto and incorporated herein by reference. Consultant represents that it has the professional and technical personnel required to perform the Services in conformance with such conditions. In order to facilitate Consultant's conformance with the Schedule, District shall respond to Consultant's submittals in a timely manner. Upon request of District, Consultant shall provide a more detailed schedule of anticipated performance to meet the Schedule of Services.

3.2 Fees and Payments.

3.2.1 Compensation. Consultant shall receive compensation, including authorized reimbursements, for all Services rendered under this Agreement and incorporated herein by reference. The total compensation shall not exceed One Hundred Thirty-Five Thousand, (\$135,000) without written approval by District. Extra Work may be authorized, as described below, and if authorized, will be compensated at the rates and manner set forth in this Agreement.

3.2.2 Payment. Consultant shall submit to District a monthly itemized statement which indicates work completed and hours of Services rendered by Consultant. The statement shall describe the Services and supplies provided since the initial commencement date, or since the start of the subsequent billing periods, as appropriate, through the date of the statement. District shall, within 45 days of receiving such statement, review the statement and pay all approved charges thereon.

3.2.3 Reimbursement for Expenses. Consultant shall not be reimbursed for any expenses unless authorized in writing by District.

3.2.4 Extra Work. At any time during the term of this Agreement, District may request that Consultant perform Extra Work. As used herein, "Extra Work" means any work which is determined by District to be necessary for the proper completion of the Project, but which the parties did not reasonably anticipate would be necessary at the execution of this Agreement. Consultant shall not perform, nor be compensated for, Extra Work without written authorization by District.

3.3 Responsibilities of Consultant.

- 3.3.1 Control and Payment of Subordinates; Independent Contractor. The Services shall be performed by Consultant or under its supervision. Consultant will determine the means, methods and details of performing the Services subject to the requirements of this Agreement. District retains Consultant on an independent contractor basis and not as an employee. Consultant retains the right to perform similar or different services for others during the term of this Agreement. Any additional personnel performing the Services under this Agreement on behalf of Consultant shall also not be employees of District and shall at all times be under Consultant's exclusive direction and control. Consultant shall pay all wages, salaries, and other amounts due such personnel in connection with their performance of Services under this Agreement and as required by law. Consultant shall be responsible for all reports and obligations respecting such additional personnel, including, but not limited to: social security taxes, income tax withholding, unemployment insurance, disability insurance, and workers' compensation insurance.
- 3.3.2 Standard of Care; Performance of Employees. Consultant shall perform all Services under this Agreement in a skillful and competent manner, consistent with the standards generally recognized as being employed by professionals in the same discipline in the State of California. Consultant represents and maintains that it is skilled in the professional calling necessary to perform the Services. Consultant warrants that all employees and subconsultants shall have sufficient skill and experience to perform the Services assigned to them. Finally, Consultant represents that it, its employees and subconsultants have all licenses, permits, qualifications and approvals of whatever nature that are legally required to perform the Services, and that such licenses and approvals shall be maintained throughout the term of this Agreement. As provided for in the indemnification provisions of this Agreement, Consultant shall perform, at its own cost and expense and without reimbursement from District, any services necessary to correct errors or omissions which are caused by Consultant's failure to comply with the standard of care provided for herein. Any employee of Consultant or its sub-consultants who is determined by District to be uncooperative, incompetent, a threat to the adequate or timely completion of the Project, a threat to the safety of persons or property, or any employee who fails or refuses to perform the Services in a manner acceptable to District, shall be promptly removed from the Project by Consultant and shall not be re-employed to perform any of the Services or to work on the Project.
- 3.3.3 Conformance to Applicable Requirements. All work prepared by Consultant shall be subject to the approval of District.
- 3.3.4 Substitution of Key Personnel. Consultant has represented to District that certain key personnel will perform and coordinate the Services under this Agreement. Should one or more of such personnel become unavailable, Consultant may substitute other personnel of at least equal competence upon written approval of District. In the event that District and Consultant cannot

agree as to the substitution of key personnel, District shall be entitled to terminate this Agreement for cause. As discussed below, any personnel who fail or refuse to perform the Services in a manner acceptable to District, or who are determined by District to be uncooperative, incompetent, a threat to the adequate or timely completion of the Project or a threat to the safety of persons or property, shall be promptly removed from the Project by Consultant at the request of District. The key personnel for performance of this Agreement is as follows: Dr Jay Jones.

- 3.3.5 Coordination of Services. Consultant agrees to work closely with District staff in the performance of Services and shall be available to District's staff, consultants and other staff at all reasonable times.
- 3.3.6 Laws and Regulations. Consultant shall keep itself fully informed of and in compliance with all local, state and federal laws, rules and regulations in any manner affecting the performance of the Project or the Services, including all Cal/OSHA requirements, and shall give all notices required by law. Consultant shall be liable for all violations of such laws and regulations in connection with Services. If Consultant performs any work knowing it to be contrary to such laws, rules and regulations, Consultant shall be solely responsible for all costs arising therefrom. Consultant shall defend, indemnify and hold District, its officials, directors, officers, employees, and agents free and harmless, pursuant to the indemnification provisions of this Agreement, from any claim or liability arising out of any failure or alleged failure to comply with such laws, rules or regulations.
- 3.3.7 Labor Code Provisions.
- 3.3.7.1 Prevailing Wages. Consultant is aware of the requirements of California Labor Code Section 1720, et seq., and 1770, et seq., as well as California Code of Regulations, Title 8, Section 16000, et seq., ("Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on "public works" and "maintenance" projects. If the Services are being performed as part of an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and if the total compensation is \$1,000 or more, Consultant agrees to fully comply with such Prevailing Wage Laws. District shall provide Consultant with a copy of the prevailing rates of per diem wages in effect at the commencement of this Agreement. Consultant shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to execute the Services available to interested parties upon request, and shall post copies at Consultant's principal place of business and at the project site. Consultant shall defend, indemnify and hold District, its elected officials, officers, employees and agents free and harmless from any claim or liability arising out of any failure or alleged failure to comply with the Prevailing Wage Laws.

- 3.3.7.2 Registration and Labor Compliance. If the services are being performed as part of an applicable “public works” or “maintenance” project, then, in addition to the foregoing, pursuant to Labor Code sections 1725.5 and 1771.1, Consultant and all subconsultants must be registered with the Department of Industrial Relations (“DIR”). Consultant shall maintain registration for the duration of the project and require the same of any subconsultants. This project may also be subject to compliance monitoring and enforcement by the Department of Industrial Relations. It shall be Consultant’s sole responsibility to comply with all applicable registration and labor compliance requirements, including the submission of payroll records directly to the DIR.
- 3.3.7.3 Labor Certification. By its signature hereunder, Consultant certifies that it is aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for Worker’s Compensation or to undertake self-insurance in accordance with the provisions of that Code, and agrees to comply with such provisions before commencing the performance of the Services.
- 3.3.8 Safety. Consultant shall execute and maintain its work so as to avoid injury or damage to any person or property. In carrying out its Services, Consultant shall at all times be in compliance with all applicable local, state and federal laws, rules and regulations, and shall exercise all necessary precautions for the safety of employees appropriate to the nature of the work and the conditions under which the work is to be performed. Safety precautions as applicable shall include, but shall not be limited to: (A) adequate life protection and life-saving equipment and procedures; (B) instructions in accident prevention for all employees and subconsultants, such as safe walkways, scaffolds, fall protection ladders, bridges, gang planks, confined space procedures, trenching and shoring, equipment and other safety devices, equipment and wearing apparel as are necessary or lawfully required to prevent accidents or injuries; and (C) adequate facilities for the proper inspection and maintenance of all safety measures.
- 3.3.9 Accounting Records. Consultant shall maintain complete and accurate records with respect to all costs and expenses incurred under this Agreement. All such records shall be clearly identifiable. Consultant shall allow a representative of District during normal business hours to examine, audit, and make transcripts or copies of such records and any other documents created pursuant to this Agreement. Consultant shall allow inspection of all work, data, documents, proceedings, and activities related to the Agreement for a period of four (4) years from the date of final payment under this Agreement.
- 3.3.10 Air Quality. To the extent applicable, Consultant must fully comply with all applicable laws, rules and regulations in furnishing or using equipment and/or providing services, including, but not limited to, emissions limits and permitting requirements imposed by the South Coast Air Quality Management District (SCAQMD) and/or California Air Resources Board (CARB). Although the SCAQMD and CARB limits and requirements are more broad, Consultant

shall specifically be aware of their application to "portable equipment", which definition is considered by SCAQMD and CARB to include any item of equipment with a fuel-powered engine. Consultant shall indemnify District against any fines or penalties imposed by SCAQMD, CARB, or any other governmental or regulatory agency for violations of applicable laws, rules and/or regulations by Consultant, its subconsultants, or others for whom Consultant is responsible under its indemnity obligations provided for in this Agreement.

3.4 Representatives of the Parties.

3.4.1 District's Representative. District hereby designates its Director of Engineering, or his or her designee, to act as its representative for the performance of this Agreement ("District's Representative"). Consultant shall not accept direction or orders from any person other than the District's Representative or his or her designee.

3.4.2 Consultant's Representative. Consultant hereby designates Dr Jay Jones, or his or her designee, to act as its representative for the performance of this Agreement ("Consultant's Representative"). Consultant's Representative shall have full authority to represent and act on behalf of Consultant for all purposes under this Agreement. The Consultant's Representative shall supervise and direct the Services, using his best skill and attention, and shall be responsible for all means, methods, techniques, sequences, and procedures and for the satisfactory coordination of all portions of the Services under this Agreement.

3.5 Indemnification.

To the fullest extent permitted by law, Consultant shall immediately indemnify and hold District, its directors, officials, officers, employees, volunteers and agents free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury of any kind, in law or equity, to property or persons, including wrongful death, in any manner arising out of, pertaining to, or incident to any alleged acts, errors or omissions of Consultant, its officials, officers, employees, subcontractors, consultants or agents in connection with the performance of Consultant's Services, the Project or this Agreement, including without limitation the payment of all consequential damages, expert witness fees and attorneys' fees and other related costs and expenses. Notwithstanding the foregoing, to the extent Consultant's Services are subject to Civil Code Section 2782.8, the above indemnity shall be limited, to the extent required by Civil Code Section 2782.8, to claims that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of Consultant.

Consultant shall immediately defend, with Counsel of District's choosing and at Consultant's own cost, expense and risk, any and all claims, suits, actions or other proceedings of every kind that may be brought or instituted against District or its directors, officials, officers, employees, volunteers and agents. Consultant shall pay and satisfy any judgment, award or decree that may be rendered against District or its directors, officials, officers, employees, volunteers and agents as part of any such claim, suit, action or other proceeding. Consultant shall also reimburse District for the cost of any settlement paid by District or its directors, officials,

officers, employees, agents or volunteers as part of any such claim, suit, action or other proceeding. Such reimbursement shall include payment for District's attorneys' fees and costs, including expert witness fees. Consultant shall reimburse District and its directors, officials, officers, employees, agents, and/or volunteers, for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided. Consultant's obligation to indemnify shall survive expiration or termination of this Agreement, and shall not be restricted to insurance proceeds, if any, received by District, its directors, officials, officers, employees, agents, or volunteers.

3.6 Insurance.

3.6.1 Time for Compliance. Consultant shall not commence work under this Agreement until it has provided evidence satisfactory to District that it has secured all insurance required under this section, in a form and with insurance companies acceptable to District. In addition, Consultant shall not allow any subcontractor to commence work on any subcontract until it has secured all insurance required under this section.

3.6.2 Minimum Requirements. Consultant shall, at its expense, procure and maintain for the duration of the Agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Agreement by Consultant, its agents, representatives, employees or subcontractors. Consultant shall also require all of its subcontractors to procure and maintain the same insurance for the duration of the Agreement. Such insurance shall meet at least the following minimum levels of coverage:

(A) Minimum Scope of Insurance. Coverage shall be at least as broad as the latest version of the following: (1) *General Liability*: Insurance Services Office Commercial General Liability coverage (occurrence form CG 0001 or exact equivalent); (2) *Automobile Liability*: Insurance Services Office Business Auto Coverage (form CA 0001, code 1 (any auto) or exact equivalent); and (3) *Workers' Compensation and Employer's Liability*: Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.

(B) Minimum Limits of Insurance. Consultant shall maintain limits no less than: (1) *General Liability*: \$2,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with general aggregate limit is used, either the general aggregate limit shall apply separately to this Agreement/location or the general aggregate limit shall be twice the required occurrence limit; (2) *Automobile Liability*: \$1,000,000 per accident for bodily injury and property damage; and (3) *if Consultant has an employees, Workers' Compensation and Employer's Liability*: Workers' Compensation limits as required by the Labor Code of the State of California. Employer's Practices Liability limits of \$1,000,000 per accident.

3.6.3 Professional Liability. Consultant shall procure and maintain, and require its sub-consultants to procure and maintain, for a period of five (5) years following completion of the Project, errors and omissions liability insurance appropriate to their profession. Such insurance shall be in an amount not less than \$1,000,000 per claim. This insurance shall be endorsed to include contractual liability applicable to this Agreement and shall be written on a policy form coverage specifically designed to protect against acts, errors or omissions of Consultant. "Covered Professional Services" as designated in the policy must specifically include work performed under this Agreement. The policy must "pay on behalf of" the insured and must include a provision establishing the insurer's duty to defend.

3.6.4 Insurance Endorsements. The insurance policies shall contain the following provisions, or Consultant shall provide endorsements on forms approved by District to add the following provisions to the insurance policies:

(A) General Liability.

(i) Commercial General Liability Insurance must include coverage for (1) bodily Injury and property damage; (2) personal Injury/advertising Injury; (3) premises/operations liability; (4) products/completed operations liability; (5) aggregate limits that apply per Project; (6) explosion, collapse and underground (UCX) exclusion deleted; (7) contractual liability with respect to this Agreement; (8) broad form property damage; and (9) independent consultants coverage.

(ii) The policy shall contain no endorsements or provisions limiting coverage for (1) contractual liability; (2) cross liability exclusion for claims or suits by one insured against another; or (3) contain any other exclusion contrary to this Agreement.

(iii) The policy shall give District, its directors, officials, officers, employees, and agents insured status using ISO endorsement forms 20 10 10 01 and 20 37 10 01, or endorsements providing the exact same coverage.

(iv) The additional insured coverage under the policy shall be “primary and non-contributory” and will not seek contribution from District’s insurance or self-insurance and shall be at least as broad as CG 20 01 04 13, or endorsements providing the exact same coverage.

(B) Automobile Liability. The automobile liability policy shall be endorsed to state that: (1) District, its directors, officials, officers, employees and agents shall be covered as additional insureds with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by Consultant or for which Consultant is responsible; and (2) the insurance coverage shall be primary insurance as respects District, its directors, officials, officers, employees and agents, or in excess, shall stand in an unbroken chain of coverage excess of Consultant’s scheduled underlying coverage. Any insurance or self-insurance maintained by District, its directors, officials, officers, employees and agents shall be excess of Consultant’s insurance and shall not be called upon to contribute with it in any way.

(C) Workers’ Compensation and Employers Liability Coverage.

(i) Consultant certifies that he/she is aware of the provisions of Section 3700 of the California Labor Code which requires every employer to be insured against liability for workers’ compensation or to undertake self-insurance in accordance with the provisions of that code, and he/she will comply with such provisions before commencing work under this Agreement.

(ii) The insurer shall agree to waive all rights of subrogation against District, its directors, officials, officers, employees and agents for losses paid under the terms of the insurance policy which arise from work performed by Consultant.

(D) All Coverages.

(i) Defense costs shall be payable in addition to the limits set forth hereunder.

(ii) Requirements of specific coverage or limits contained in this section are not intended as a limitation on coverage, limits, or other requirement, or a waiver of any coverage normally provided by any insurance. It shall be a requirement under this Agreement that any available insurance proceeds broader than or in excess of the specified minimum insurance coverage requirements and/or limits set forth herein shall be available to District, its directors, officials, officers, employees and agents as additional insureds under said policies. Furthermore, the requirements for coverage and limits shall be (1) the minimum coverage and limits specified in this Agreement; or (2) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named insured; whichever is greater.

(iii) The limits of insurance required in this Agreement may be satisfied by a combination of primary and umbrella or excess insurance. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of District (if agreed to in a written contract or agreement) before District's own insurance or self-insurance shall be called upon to protect it as a named insured. The umbrella/excess policy shall be provided on a "following form" basis with coverage at least as broad as provided on the underlying policy(ies).

(iv) Consultant shall provide District at least thirty (30) days prior written notice of cancellation of any policy required by this Agreement, except that Consultant shall provide at least ten (10) days prior written notice of cancellation of any such policy due to non-payment of premium. If any of the required coverage is cancelled or expires during the term of this Agreement, Consultant shall deliver renewal certificate(s) including the General Liability Additional Insured Endorsement to District at least ten (10) days prior to the effective date of cancellation or expiration.

(v) The retroactive date (if any) of each policy is to be no later than the effective date of this Agreement. Consultant shall maintain such coverage continuously for a period of at least three years after the completion of the work under this Agreement. Consultant shall purchase a one (1) year extended reporting period A) if the retroactive date is advanced past the effective date of this Agreement; B) if the policy is cancelled or not renewed; or C) if the policy is replaced by another claims-made policy with a retroactive date subsequent to the effective date of this Agreement.

(vi) The foregoing requirements as to the types and limits of insurance coverage to be maintained by Consultant, and any approval of said insurance by District, is not intended to and shall not in any manner limit or qualify the liabilities and obligations otherwise assumed by Consultant pursuant to this Agreement, including but not limited to, the provisions concerning indemnification.

(vii) If at any time during the life of the Agreement, any policy of insurance required under this Agreement does not comply with these specifications or is canceled and not replaced, District has the right but not the duty to obtain the insurance it deems necessary and any premium paid by District will be promptly reimbursed by Consultant or District will withhold amounts sufficient to pay premium from Consultant payments. In the alternative, District may cancel this Agreement. District may require Consultant to provide complete copies of all insurance policies in effect for the duration of the Project.

(viii) Neither District nor any of its directors, officials, officers, employees or agents shall be personally responsible for any liability arising under or by virtue of this Agreement.

Each insurance policy required by this Agreement shall be endorsed to state that:

3.6.5 Deductibles and Self-Insurance Retentions. Any deductibles or self-insured retentions must be declared to and approved by District. If District does not approve the deductibles or self-insured retentions as presented, Consultant shall guarantee that, at the option of District, either: (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects District, its directors, officials, officers, employees and agents; or, (2) Consultant shall procure a bond guaranteeing payment of losses and related investigation costs, claims and administrative and defense expenses.

3.6.6 Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating no less than A:VIII, licensed to do business in California, and satisfactory to District.

3.6.7 Verification of Coverage. Consultant shall furnish District with original certificates of insurance and endorsements effecting coverage required by this Agreement on forms satisfactory to District. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates and endorsements must be received and approved by District before work commences. District reserves the right to require complete, certified copies of all required insurance policies, at any time.

3.6.8 Subconsultant Insurance Requirements. Consultant shall not allow any subcontractors or subconsultants to commence work on any subcontract until they have provided evidence satisfactory to District that they have secured all insurance required under this section. Policies of commercial general liability insurance provided by such subcontractors or subconsultants shall be endorsed to name District as an additional insured using ISO form CG 20 38 04 13 or an endorsement providing the exact same coverage. If requested by Consultant, District may approve different scopes or minimum limits of insurance for particular subcontractors or subconsultants.

3.7 Termination of Agreement.

3.7.1 Grounds for Termination. District may, by written notice to Consultant, terminate the whole or any part of this Agreement at any time and without cause by giving written notice to Consultant of such termination, and specifying the effective date thereof, at least seven (7) days before the effective date of such termination. Upon termination, Consultant shall be compensated only for those services which have been adequately rendered to District, and Consultant shall be entitled to no further compensation. Consultant may not terminate this Agreement except for cause.

3.7.2 Effect of Termination. If this Agreement is terminated as provided herein, District may require Consultant to provide all finished or unfinished Documents and Data and other information of any kind prepared by Consultant in connection with the performance of Services under this Agreement. Consultant shall be required to provide such document and other information within fifteen (15) days of the request.

3.7.3 Additional Services. In the event this Agreement is terminated in whole or in part as provided herein, District may procure, upon such terms and in such manner as it may determine appropriate, services similar to those terminated.

3.8 Ownership of Materials and Confidentiality.

- 3.8.1 Documents & Data; Licensing of Intellectual Property. This Agreement creates a non-exclusive and perpetual license for District to copy, use, modify, reuse, or sublicense any and all copyrights, designs, and other intellectual property embodied in plans, specifications, studies, drawings, estimates, and other documents or works of authorship fixed in any tangible medium of expression, including but not limited to, physical drawings or data magnetically or otherwise recorded on computer diskettes, which are prepared or caused to be prepared by Consultant under this Agreement ("Documents & Data"). All Documents & Data shall be and remain the property of District, and shall not be used in whole or in substantial part by Consultant on other projects without District's express written permission. Within thirty (30) days following the completion, suspension, abandonment or termination of this Agreement, Consultant shall provide to District reproducible copies of all Documents & Data, in a form and amount required by District. District reserves the right to select the method of document reproduction and to establish where the reproduction will be accomplished. The reproduction expense shall be borne by District at the actual cost of duplication. In the event of a dispute regarding the amount of compensation to which Consultant is entitled under the termination provisions of this Agreement, Consultant shall provide all Documents & Data to District upon payment of the undisputed amount. Consultant shall have no right to retain or fail to provide to District any such documents pending resolution of the dispute. In addition, Consultant shall retain copies of all Documents & Data on file for a minimum of fifteen (15) years following completion of the Project, and shall make copies available to District upon the payment of actual reasonable duplication costs. Before destroying the Documents & Data following this retention period, Consultant shall make a reasonable effort to notify District and provide District with the opportunity to obtain the documents.
- 3.8.2 Subconsultants. Consultant shall require all subconsultants to agree in writing that District is granted a non-exclusive and perpetual license for any Documents & Data the subconsultant prepares under this Agreement. Consultant represents and warrants that Consultant has the legal right to license any and all Documents & Data. Consultant makes no such representation and warranty in regard to Documents & Data which were prepared by design professionals other than Consultant or its subconsultants, or those provided to Consultant by District.
- 3.8.3 Right to Use. District shall not be limited in any way in its use or reuse of the Documents and Data or any part of them at any time for purposes of this Project or another project, provided that any such use not within the purposes intended by this Agreement or on a project other than this Project without employing the services of Consultant shall be at District's sole risk. If District uses or reuses the Documents & Data on any project other than this Project, it shall remove Consultant's seal from the Documents & Data and indemnify and hold harmless Consultant and its officers, directors, agents and employees from claims arising out of the negligent use or re-use of the Documents & Data

on such other project. Consultant shall be responsible and liable for its Documents & Data, pursuant to the terms of this Agreement, only with respect to the condition of the Documents & Data at the time they are provided to District upon completion, suspension, abandonment or termination. Consultant shall not be responsible or liable for any revisions to the Documents & Data made by any party other than Consultant, a party for whom Consultant is legally responsible or liable, or anyone approved by Consultant.

3.8.4 Indemnification. Consultant shall defend, indemnify and hold District, its directors, officials, officers, employees, volunteers and agents free and harmless, pursuant to the indemnification provisions of this Agreement, for any alleged infringement of any patent, copyright, trade secret, trade name, trademark, or any other proprietary right of any person or entity in consequence of the use on the Project by District of the Documents & Data, including any method, process, product, or concept specified or depicted.

3.8.5 Confidentiality. All Documents & Data, either created by or provided to Consultant in connection with the performance of this Agreement, shall be held confidential by Consultant. All Documents & Data shall not, without the prior written consent of District, be used or reproduced by Consultant for any purposes other than the performance of the Services. Consultant shall not disclose, cause or facilitate the disclosure of the Documents & Data to any person or entity not connected with the performance of the Services or the Project. Nothing furnished to Consultant that is otherwise known to Consultant or is generally known, or has become known, to the related industry shall be deemed confidential. Consultant shall not use District's name or insignia, photographs of the Project, or any publicity pertaining to the Services or the Project in any magazine, trade paper, newspaper, television or radio production or other similar medium without the prior written consent of District.

3.9 Subcontracting/Subconsulting.

3.9.1 Prior Approval Required. Consultant shall not subcontract any portion of the work required by this Agreement, except as expressly stated herein, without prior written approval of District. Subcontracts, if any, shall contain a provision making them subject to all provisions stipulated in this Agreement.

3.10 General Provisions.

3.10.1 Delivery of Notices. All notices permitted or required under this Agreement shall be given to the respective parties at the following address, or at such other address as the respective parties may provide in writing for this purpose:

DISTRICT:

CONSULTANT:

Borrego Water District
806 Palm Canyon Drive
Borrego Springs, CA 92004
Attn: Geoff Poole

Environmental Navigation Services Inc
PO Box 231026
Encinitas, CA 92023-1026
Attn: Dr Jay Jones

Such notice shall be deemed made when personally delivered or when mailed, forty-eight (48) hours after deposit in the U.S. Mail, first class postage prepaid and addressed to the party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

- 3.10.2 Equal Opportunity Employment. Consultant represents that it is an equal opportunity employer and it shall not discriminate against any subconsultant, employee or applicant for employment because of race, religion, color, national origin, handicap, ancestry, sex or age. Such non-discrimination shall include, but not be limited to, all activities related to initial employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination. Consultant shall also comply with all relevant provisions of District's Minority Business Enterprise program, Affirmative Action Plan or other related programs or guidelines currently in effect or hereinafter enacted.
- 3.10.3 Time of Essence. Time is of the essence for each and every provision of this Agreement.
- 3.10.4 District's Right to Employ Other Consultants. District reserves right to employ other consultants in connection with this Project.
- 3.10.5 Successors and Assigns. This Agreement shall be binding on the successors and assigns of the parties.
- 3.10.6 Assignment or Transfer. Consultant shall not assign, hypothecate or transfer, either directly or by operation of law, this Agreement or any interest herein without the prior written consent of District. Any attempt to do so shall be null and void, and any assignees, hypothecates or transferees shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer.
- 3.10.7 Construction; References; Captions. Since the Parties or their agents have participated fully in the preparation of this Agreement, the language of this Agreement shall be construed simply, according to its fair meaning, and not strictly for or against any Party. Any term referencing time, days or period for performance shall be deemed calendar days and not work days. All references to Consultant include all personnel, employees, agents, and subconsultants of Consultant, except as otherwise specified in this Agreement. All references to District include its elected officials, officers, employees, agents, and volunteers except as otherwise specified in this Agreement. The captions of the various articles and paragraphs are for convenience and ease of reference only, and do not define, limit, augment, or describe the scope, content or intent of this Agreement.

- 3.10.8 Amendment; Modification. No supplement, modification or amendment of this Agreement shall be binding unless executed in writing and signed by both Parties.
- 3.10.9 Waiver. No waiver of any default shall constitute a waiver of any other default or breach, whether of the same or other covenant or condition. No waiver, benefit, privilege, or service voluntarily given or performed by a Party shall give the other Party any contractual rights by custom, estoppel or otherwise.
- 3.10.10 No Third Party Beneficiaries. There are no intended third party beneficiaries of any right or obligation assumed by the Parties.
- 3.10.11 Invalidity; Severability. If any portion of this Agreement is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.
- 3.10.12 Prohibited Interests. Consultant warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Consultant, to solicit or secure this Agreement. Further, Consultant warrants that it has not paid nor has it agreed to pay any company or person, other than a bona fide employee working solely for Consultant, any fee, District, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Agreement. Consultant further agrees to file, or shall cause its employees or subconsultants to file, a Statement of Economic Interest with the District's Filing Officer as required under state law in the performance of the Services. For breach or violation of this warranty, District shall have the right to rescind this Agreement without liability. For the term of this Agreement, no member, officer or employee of District, during the term of his or her service with District, shall have any direct interest in this Agreement, or obtain any present or anticipated material benefit arising therefrom.
- 3.10.13 Cooperation; Further Acts. The Parties shall fully cooperate with one another, and shall take any additional acts or sign any additional documents as may be necessary, appropriate or convenient to attain the purposes of this Agreement.
- 3.10.14 Governing Law. This Agreement shall be governed by the laws of the State of California. Venue shall be in San Diego County.
- 3.10.15 Government Code Claim Compliance. In addition to any and all contract requirements pertaining to notices of and requests for compensation or payment for extra work, disputed work, claims and/or changed conditions, Consultant must comply with the claim procedures set forth in Government Code sections 900 et seq. prior to filing any lawsuit against District. Such

Government Code claims and any subsequent lawsuit based upon the Government Code claims shall be limited to those matters that remain unresolved after all procedures pertaining to extra work, disputed work, claims, and/or changed conditions have been followed by Consultant. If no such Government Code claim is submitted, or if any prerequisite contractual requirements are not otherwise satisfied as specified herein, Consultant shall be barred from bringing and maintaining a valid lawsuit against District.

3.10.16 Attorneys' Fees. If either party commences an action against the other party, either legal, administrative or otherwise, arising out of or in connection with this Agreement, the prevailing party in such litigation shall be entitled to have and recover from the losing party reasonable attorneys' fees and all other costs of such action.

3.10.17 Authority to Enter Agreement. Consultant has all requisite power and authority to conduct its business and to execute, deliver, and perform the Agreement. Each Party warrants that the individuals who have signed this Agreement have the legal power, right, and authority to make this Agreement and bind each respective Party.

3.10.18 Counterparts. This Agreement may be signed in counterparts, each of which shall constitute an original.

3.10.19 Entire Agreement. This Agreement contains the entire Agreement of the parties with respect to the subject matter hereof, and supersedes all prior negotiations, understandings or agreements. This Agreement may only be modified by a writing signed by both parties.

**SIGNATURE PAGE TO
BORREGO WATER DISTRICT
PROFESSIONAL SERVICES AGREEMENT**

BORREGO WATER DISTRICT

ENS:

By: _____

By: _____
(Authorized Representative of Vendor)

Printed Name: _____

Printed Name: _____

Title: _____

Title: _____

Dated: _____

Dated: _____

Exhibit A – Scope of Work – ENS

TASK 2 SDAC IMPACT/VULNERABILITY ANALYSIS (*Percent Complete 0%*) [ENS Responsibility]

The SDAC Impact/Vulnerability Analysis task is necessary to understand implications that the implementation of SGMA will have on the SDAC including impacts based on potential water reduction scenarios.

Task 2.1 Baseline Data Compilation on Water Use

This phase of work will draw from the information obtained in Task 1 and will be used to develop SDAC-specific metrics for subareas of the Borrego Valley. Costs for the BWD to supply subareas will be developed based on consultation with BWD specific to their overall water supply, water treatment, and distribution system. Areas outside of the BWD service area will also be evaluated. Limited field checks will be performed, as warranted.

- Drinking water (groundwater is the sole source of water)
 - Pumping records from all wells and records of water storage and demand (primarily information already being obtained for the GSP)
 - Water quality analyses and data – as related to drinking water standards
 - Water storage and infrastructure (reservoirs, tanks)
 - Water supply treatment (present and future)
 - SDAC accessibility
 - SDAC affordability and cost thresholds
 - Drinking water system issues, particularly related to projected declines in water quality related to the critical over-draft of the Borrego Basin
 - Assessment of potential need for intra-basin transfer of groundwater to meet municipal demands and related water transfer timing and costs
- Wastewater treatment
 - Type of systems in use
 - Insufficient wastewater system issues
 - Opportunities for wastewater reuse (gray water, local sewage treatment with reclamation, etc.)
- Storm water
 - Issues related to storm water, urban water runoff, flood management
 - Opportunities for storm water catchment (cistern to large-scale) and treatment or enhanced groundwater recharge
 - Community impacts related to enhanced storm water recharge for groundwater sustainability
- Other issues
 - Regulatory and compliance
 - Climate (climate change, drought, El Nino/La Nina cycle, etc.)
 - SDAC pollution burden – fugitive and potentially toxic airborne particulates associated with fallowed agricultural land. Analysis will include assessment of baseline air quality conditions resulting from agriculture, including pesticides, herbicides, nitrates and other chemicals.

This task will utilize BWD operational data and available reports, BWD cost projections for GSP implementation, ongoing GSP analyses specific to well locations, well use, water level and water quality projections. Local climate data models from Scripps Institute (La Jolla), as well as NOAA and NASA (and other satellite data). County of Diego Air Pollution Control District (APCD), County of San Diego GIS (SanGIS) database, San Diego Association of Governments (SANDAG), US Geological Survey water well records, and California SWRCB Well Completion Reports.

Deliverable:

Summary Report and Data: Baseline Water Use

TASK 2.2 WATER SUPPLY IMPACT/SDAC VULNERABILITY ANALYSIS/GSP IMPACTS ANALYSIS

This task will involve analyzing data obtained in Task 2.1 and identifying the primary vulnerabilities of the severely disadvantaged within each subarea. This task will also quantify the uncertainties associated with the BWD's water supply and related impacts. Excel spreadsheets will be utilized for tabulating and calculating metrics and statistics. Additional open source tools will be identified for data assessment.

Deliverable:

Summary Report: Water Supply Impact/SDAC Vulnerability Analysis/GSP Impacts Analysis.

TASK 3 DECISION MANAGEMENT ANALYSIS (Percent Complete 0%) [ENS Responsibility]

This Decision Management Analysis task will allow the BWD to look at potential water supply situations that may directly impact groundwater users in Borrego Springs, assess the odds that the problems may occur, and make decisions accordingly.

TASK 3.1 WATER SUPPLY UNCERTAINTIES

The GSP will restrict groundwater extractions to ensure sustainability in the basin and include a hydrogeologic conceptual model to provide the context to develop a water budget and monitoring network in addition to providing a general understanding of the geology and hydrogeology of the basin. This task will include an assessment of the potential range of outcomes of the groundwater extraction restrictions using Monte Carlo simulation methods and alike. The analysis will allow the BWD to look at water supply situations, such as the potential need for water treatment, or loss of individual supply wells due to ongoing groundwater overdraft, and be able to assess its probability of occurring. These problems, in turn, are of direct consequence to the highly vulnerable SDAC since the problems can directly affect their livelihood or create untenable costs for water. Only by planning ahead and understanding uncertainties can the BWD and GSA manage and plan for disruptive impacts to the vulnerable SDAC, in particular.

Deliverables:

Summary Report: Water Supply Uncertainties

Monte Carlo simulation model. This can be run to assess various water supply and infrastructure scenarios including additional water treatment plants; water reuse; rainfall and runoff catchment and reuse. Each scenario would be associated with costs and benefits.

TASK 3.2 BWD COST AND RATE STRUCTURE UNCERTAINTY AND IMPACT ANALYSIS

The aforementioned water supply uncertainty task effectively tracks all of the water in the water supply system and is physically based on the infrastructure used to extract, treat, and deliver water to all of BWD's customers. Analyses will be performed of the potential impacts of various water reduction scenarios on the SDAC, rate payers, and BWD infrastructure. This work will also examine water system financing models, which will:

- Identify rate structure scenarios (i.e., block, tiered) and constraints (e.g., Prop 218)
- Describe system financing needs (i.e., operation and maintenance costs, both present and potential future)
- Describe SDAC-related constraints to BWD rates and financing
- Describe potential future cost impacts related to groundwater extraction, treatment, and distribution, as well as extended groundwater explorations, monitoring, and chemical (water quality) analyses
- Describe potential future BWD costs for obtaining water and/or water rights for areas (e.g., need to purchase fallowed agricultural land)

This task will utilize GoldSim model (or equivalent) that will simulate the complex system, enable many "what-if" scenarios, and include Monte Carlo simulations developed in the first phase of Task 3; and potentially, additional open source tools (to be identified)

Deliverable:

Summary Report: Cost and Rate Structure Uncertainty and Impact Analysis

TASK 3.3 SDAC-SPECIFIC IMPACT ANALYSIS

An initial analysis of SDAC impacts will be conducted using the criteria and metrics along with the model (and uncertainty analysis) developed in previous tasks. The GSA (BWD and the County) will work with the consultant to identify management options and solutions in light of the SDAC impact criteria determined throughout the SDAC engagement task. This task will utilize Modflow groundwater model (as used for the GSP), SDAC water system assessments done for Task 2, Excel summary spreadsheets, GoldSim Modeling

Software, to simulate the complex water resources and supply system, including Monte Carlo Simulations; GoldSim model (or equivalent) that will simulate the complex system, and potentially, additional open source tools (to be identified); additional open source tools may be used as well (tools to be identified).

Deliverable:

Summary Report: SDAC-Specific Impact Analysis

TASK 3.4 SGMA/ENVIRONMENTAL/SOCIETAL/GOVERNMENT IMPACTS

A larger scale impact assessment will be developed that examines community-wide socioeconomic impacts and changes that will result from the GSP. The full scope of the assessment and determination of the metrics to be used (e.g. changes in MHI, employment opportunities per business sector, changes in property tax revenues) will be determined in collaboration with the GSA (BWD and the County) and local business and government representatives. This task may be used as a reference document for future County community plan updates. This task will utilize the Modflow groundwater model (as used for the GSP), SDAC water system assessments completed for Task 2, Excel summary spreadsheets, GoldSim Modeling Software (or equivalent) that will include Monte Carlo simulations; and potentially, additional open source tools (to be identified).

Deliverable:

Summary Report: SGMA/Environmental/Societal/Government Impacts

BORREGO WATER DISTRICT
BOARD OF DIRECTORS MEETING – FEBRUARY 20, 2018
AGENDA BILL 2.E

February 14, 2017

TO: Board of Directors, Borrego Water District
FROM: Geoff Poole, General Manager
SUBJECT: Rams Hill Flood Control System Evaluation – Poole

RECOMMENDED ACTION:

Discuss Engineering Evaluation, receive presentation from Consultant and direct staff accordingly

ITEM EXPLANATION

Months ago, BWD commissioned Dudek to evaluate the existing Flood Control System at Rams Hill, which is owned and maintained by BWD and income received through an assessment to Rams Hill residents. Attached is the results of the Evaluation.

FISCAL IMPACT

TBD

ATTACHMENTS

1. Rams Hill Flood Control Email Memo - Dudek

[Print](#) | [Close Window](#)

Subject: [FWD: FW: BV flood Control and Rams Hill Flood Control]
From: geoff@borregowd.org
Date: Thu, Feb 15, 2018 1:30 pm
To: esmeralda@borregowd.org
Attach: IMG_1021.jpg
IMG_0996.JPG

Attachment for 2E Rams Hill Flood Control (Attachemnt 2F - corrected eg)

Geoff Poole,
General Manager
Borrego Water District
760/767-5806

CONFIDENTIALITY NOTICE: This e-mail message is intended only for the use of the individual or entity to which it is addressed, and it may contain information that is privileged, confidential and/or exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify the sender immediately by telephone or return e-mail, delete the message from your computer system, and return any hard copies to us at the following address via the U.S. Postal Service: Borrego Water District, 806 Palm Canyon Drive, Borrego Springs, California 92004. Thank you.

For Board Members:

"Brown Act Precaution:

Pursuant to the provisions of the Brown Act the information contained herein is for the personal use and information of each Board Member. Nothing contained in this correspondence should be discussed with another Board Member unless it is at a properly noticed and held Board Meeting or Committee Meeting of the Borrego Water District. Thank you."

----- Original Message -----

Subject: FW: BV flood Control and Rams Hill Flood Control
From: Trey Driscoll <tdriscoll@dudek.com>
Date: Wed, January 24, 2018 2:54 pm
To: "geoff@borregowd.org" <geoff@borregowd.org>
Cc: "harry@borregowd.org" <harry@borregowd.org>

Geoff,

Below is Paul's review of the additional design drawings and reports provided to Dudek. We will update the draft letter report dated September 29, 2017 documenting findings and provide additional recommendations for maintenance/repairs. Sending draft letter report dated September 29, 2017 in separate e-mail to determine whether there are any District comments.

Cheers,
Trey

From: Paul Wisheropp
Sent: Tuesday, December 05, 2017 6:42 AM
To: Trey Driscoll
Cc: Paul Wisheropp
Subject: RE: BV flood Control and Rams Hill Flood Control

Trey:

I looked over the reports and they provide detailed information of the physics of sediment transport and also arrive at some basic design considerations but they aren't an "as built" regarding what was ultimately constructed. The design details of the gabion mattress are present (which is helpful) and some assumptions regarding aggradation and degradation of the channel bed. In the field, I observed signs of scour at the toe of the mattress which seems inconsistent with the report but is difficult to tell because the report speaks in general terms and not specific locations.

Overall, the facilities are working as designed (especially the soil cement on the east and west sides of Ram's Hill), but I don't know if this is because of the design or the absence of the design flood. The berm and channel on the south side (upslope of Ram's Hill) shows signs of erosion which may ultimately undermine the horizontal mattress. Additional riprap may be needed to reinforce the tow of the mattress.

The information in the reports could be updated to calibrate the sediment transport model based on observed conditions. This would be an additional effort.

Paul Wisheropp, PE CFM
Principal Engineer
Dudek
916-438-5307 (O)
916-947-2034 (C)
pwisheropp@dudek.com

From: Trey Driscoll
Sent: Tuesday, November 14, 2017 1:00 PM
To: Paul Wisheropp <pwisheropp@dudek.com>
Subject: FW: BV flood Control and Rams Hill Flood Control

Paul,

Will you take a look at the attached reports for Rams Hill.

Cheers,
Trey

From: esmeralda@borregowd.org [<mailto:esmeralda@borregowd.org>]
Sent: Tuesday, November 14, 2017 12:54 PM
To: Trey Driscoll
Subject: BV flood Control and Rams Hill Flood Control

Good Afternoon Trey,





BORREGO WATER DISTRICT
BOARD OF DIRECTORS MEETING – FEBRUARY 20, 2018
AGENDA BILL 2.F

February 14, 2017

TO: Board of Directors, Borrego Water District
FROM: Geoff Poole, General Manager
SUBJECT: March 5th BWD Special Meeting Agenda/Announcement: Socioeconomic Workshop - Poole

RECOMMENDED ACTION:

Discuss Agenda and proposed Meeting Announcement to be included in upcoming water billing mailer and direct staff accordingly

ITEM EXPLANATION:

At the January GSP Advisory Committee meeting the BWD Core Team agreed to organize a Socio Economic Workshop as a compliment to the current GSP process. A group of residents including Dave Duncan, Rebecca Falk, Diane Johnson and others have assisted with Agenda development as well as information on the meeting to be shared with BWD customers via an English and Spanish mailer in the next water bill. Staff and the Core tem is requesting input from the BWD Board on both the Agenda and Announcement.

FISCAL IMPACT

Minimal incremental cost for adding materials to existing outgoing water bills

ATTACHMENTS

1. Draft 3-5-18 Workshop Agenda

BORREGO SPRINGS GROUNDWATER SUSTAINABILITY PLAN

COMMUNITY MEETING AGENDA

Introductions and Purpose 20 min.

- Background and Need: Borrego’s Critically Overdrafted Basin and the Need to Regulate Groundwater
- Overview: Groundwater Sustainability Plan Development (GSP) and Implementation

Listening Session 45 min.

- Present Day: Issues and Concerns Related to Water Quality, Availability, and Usage
- GSP Implementation Concerns: Impacts on Rate Payers
- GSP Implementation Concerns: Economic Impacts

Identifying Solutions that Work 45 min.

- Brainstorm Potential Strategies to Mitigate Impacts

Wrap-up and Next Steps 10 min.

- Report Back
- Opportunities for Ongoing Feedback

Contact Information for Additional Feedback

Name, Title	Email	Phone
Rachel Ralston, Principal, LeSar Development Consultants	rachel@lesardevelopment.com	619.549.2584
Leah Hubbard, Estolano LeSar Advisors	leah@estolanolesar.com	213-612-4545

OVERVIEW OF THE GROUNDWATER SUSTAINABILITY PLAN

Background and Context

Borrego Springs is located within an area designated as a Severely Disadvantaged Community (SDAC) in which the bulk of the residents and workforce are connected to agriculture, golf courses, business that support them, and tourism. Groundwater is the sole source of water for the community. Growth and tourism in the area is constrained due to extremely limited groundwater availability and a state-mandated sustainability goal that requires an approximately 70% groundwater use reduction by 2040. As part of the area’s Groundwater Sustainability Plan (GSP) planning and implementation, the Borrego Water District and the County of San Diego must understand potential impacts to Borrego’s rate payers and ensure that they are educated about and able to provide feedback regarding GSP implementation projects and management actions.

The following primary objectives have been identified to reflect and benefit the needs of Borrego’s community:

1. To identify and engage disadvantaged community members whose participation in the outreach process has thus far been limited, e.g., due to cultural, economic, digital, or literacy/linguistic barriers;
2. To assess vulnerabilities and impacts (cost, environmental, economic) related to SDAC water supply, quality, and use in relation to drinking water, wastewater, storm water, the regulatory environment, and climate; and
3. To provide the County of San Diego with reference materials that will aid GSP outreach and decision-making efforts. The County is concurrently conducting environmental planning that is intended to streamline implementation.

The efforts outline above support GSP planning and projects by identifying vulnerabilities and potential impacts of the GSP process on water supply, accessibility, and usage, as well as assessing environmental, economic, cost, governance, and infrastructure concerns. Borrego Springs directly benefits from this project in multiple ways. First, outreach and GSP education activities will focus on traditionally underrepresented populations within the area, providing both BWD and the County with the opportunity to establish strong communication channels with these community members that will facilitate education and dialogue throughout GSP implementation. Second, impact and decision management analyses will help the GSA better understand how the complex interrelations among economic, environmental, governance, and infrastructure concerns affect all members of the SDAC, including rate-payers who may be adversely impacted by various management decisions. Third, water meter installations and well location vulnerability assessments will provide BWD the tools and decision-making information it needs to implement effective water use reduction strategies that maximize availability of potable drinking water for Borrego’s nearly 2,200 rate payers.

Borrego Springs Groundwater Sustainability Plan Development Timeline

Dates	Activity
March-June 2018	<ul style="list-style-type: none"> • Baseline Socioeconomic/Demographic Analysis • Socioeconomic and Environmental Baseline Impacts Modeling • Community Input Sessions to Inform Plan Development
June 2018	<ul style="list-style-type: none"> • Draft GSP Implementation Plan Due to State
July 2018-December 2019	<ul style="list-style-type: none"> • Community Input Sessions – Feedback on Draft Plan
January 2020	<ul style="list-style-type: none"> • Adoption of Final Plan

BORREGO WATER DISTRICT
BOARD OF DIRECTORS MEETING – FEBRUARY 20, 2018
INFORMATIONAL ITEMS

February 14, 2017

TO: Board of Directors, Borrego Water District

FROM: Geoff Poole, General Manager

SUBJECT: Informational Items – Poole

- A. Sustainable Population Analysis – Poole: Dudek, is required to perform an analysis for build out populations so BWD and The County are working on the best way to perform the analysis. Dudek has committed to create a summary of previous work at no cost to help with the County discussions on this topic.
- B. March 29 GSP Advisory Committee Agenda Review - BWD Core Team - Verbal
- C. GSP Advisory Committee – BWD Ratepayer Representative Update: Dave Duncan – Verbal
D Duncan
- D. AT&T Cell Tower – Poole: The BS Community Sponsor Group unanimously approved a recommendation in favor of the ATT Tower at Rams Hill. Staff has been working with Rams Hill and ATT to ensure the request of the local landowners are met in the area of landscaping. Rams Hill is also interested in talking to ATT about the possibility of providing a fiber optics connection for use in Rams Hill. Those discussions are underway.
- E. Gypsum Mine Land Restoration Program – Poole: Staff has been in contact with the gypsum mine and they have no budget line item nor written restorations plans. Staff intends to visit the site when time allows for information purposes only.

AGENDA
Borrego Valley Groundwater Basin: Borrego Springs Subbasin
Sustainable Groundwater Management Act (SGMA)
Advisory Committee (AC)
March 29, 2018 @ 10:00 AM – 3:00 PM
Location: University of California, Irvine
Steele/Burnand Anza-Borrego Desert Research Center
401 Tilting T Drive, Borrego Springs, CA 92004-2098

Remote Access: UPDATE Call-In: UPDATE Code: UPDATE

Lunch: Lunch will be provided at no charge for Advisory Committee members and \$10 for members of the public.

- I. OPENING PROCEDURES [10:00 am – 11:00 am]**
 - A. Call to Order
 - B. Pledge of Allegiance
 - C. Roll Call of Attendees
 - D. Review of Meeting Agenda
 - E. Approval of January 25, 2018 AC Meeting Minutes
 - F. Updates from the Core Team
 - a. Proposition 1 Funding
 - b. Water Supply and Water Quality Act of 2018
 - c. Groundwater Sustainability Plan (GSP) Development Schedule
 - G. Updates from Advisory Committee Members
- II. ITEMS FOR DISCUSSION AND POSSIBLE RECOMMENDATION [11:00 am – 12:00 pm]**
 - A. Draft Well Metering Plan
 - B. Sector Reductions and Allocations (Agricultural, Municipal, and Recreational)
- III. TECHNICAL AND POLICY ISSUES FOR INTRODUCTION OR DISCUSSION [12:30 pm – 2:30 pm]**
 - A. Projects and Management Actions to be Considered
 - a. Water Trading Program
 - b. Water Conservation and Efficiency Programs
 - c. Land Use
 - d. Agricultural Land Fallowing Program
 - e. Groundwater Quality Mitigation Program
 - f. Intrabasin Water Transfer
 - B. Proposition 1 Grant Tasks
 - a. Updates from BWD Severely Disadvantaged Community (SDAC) Proposition 1 Grant Pre-Scoping Meeting
 - b. Potential AC Subcommittee for BWD SDAC Grant Activities
- IV. INFORMATIONAL ITEMS [2:30 pm – 2:40 pm]**
 - A. Public Outreach Efforts
- V. CLOSING PROCEDURES [2:40 pm – 3:00 pm]**
 - A. Correspondence
 - B. General Public Comments (comments may be limited to 3 minutes)
 - C. Review Action Items from Previous AC Meetings, Next AC Meeting Date(s), and Next Steps

The next regular meeting of the Advisory Committee will be scheduled for **April, 2018** at the UCI Steele/ Burnand Anza-Borrego Desert Research Center (*location is subject to change).

Please be advised that times associated with agenda are approximations only. Public comment periods will be accommodated at the end of each item listed for discussion and possible action. The duration of each comment period will be at the discretion of the meeting Facilitator.

Any public record provided to the A/C less than 72 hours prior to the meeting, regarding any item on the open session portion of this agenda, is available for public inspection during normal business hours at the Office of the Borrego Water District, located at 806 Palm Canyon Drive, Borrego Springs CA 92004.

The Borrego Springs Water District complies with the Americans with Disabilities Act. Persons with special needs should call Geoff Poole at 760-767-5806 at least 48 hours in advance of the start of this meeting, in order to enable the District to make reasonable arrangements to ensure accessibility. Borrego SGMA Website: <http://www.sandiegocounty.gov/content/sdc/pds/SGMA/borrego-valley.html>

MINUTES
Borrego Valley Groundwater Basin: Borrego Springs Subbasin
Sustainable Groundwater Management Act (SGMA)
Advisory Committee (AC)
November 27, 2017 @ 10:00 AM – 3:00 PM
Location: University of California, Irvine
Steele/Burnand Anza-Borrego Desert Research Center
401 Tilting T Drive
Borrego Springs, CA 92004-2098

I. OPENING PROCEDURES

A. Call to Order

The meeting was called to order at 10:00 a.m. by Borrego Water District (BWD) President Beth Hart.

B. Pledge of Allegiance

Those present stood for the Pledge of Allegiance.

C. Roll Call of Attendees

Committee members: Present: Jim Seley, Jim Wilson, Rebecca Falk, Dave Duncan,
Bill Berkley, Gina Moran, Ryan Hall, Jack McGrory, Diane
Johnson

Core Team members: Beth Hart, BWD Jim Bennett, County of San Diego
Geoff Poole, BWD Leanne Crow, County of San Diego

Staff: Meagan Wylie, Center Wendy Quinn, Recording Secretary
for Collaborative Policy Trey Driscoll, Dudek, GSP Consultant
Derrick Kapalla, County of San Diego

Public: Michael Sadler, *Borrego Sun* Linda Haddock, Chamber of Commerce/
Betsy Knaak, ABDNHA Borrego Water Coalition (BWC)
Joe Gury, BWC Ray Shindler, independent ratepayers
Bill Bancroft Ray Burnand

D. Review of Meeting Agenda

Meagan Wylie reviewed the meeting ground rules, Agenda and Brown Act provisions.

E. Approval of October 26, 2017 AC Meeting Minutes

Upon motion by Member Falk, seconded by Member Berkley and unanimously carried, the Minutes of the October 26, 2017 AC Meeting were approved as written.

F. Updates from the Core Team

Geoff Poole reported that the Proposition 1 grant application had been submitted to the State of California (State). A response is expected in early 2018. Member Falk asked whether the socioeconomic component included community outreach, and Mr. Poole replied that it did. Plans include mailings and other contact methods for community members who do not receive water bills. President Hart announced that BWD was prepared to finance its projects in the grant application regardless of whether the grant is approved. Member Seley asked whether farmers who did not indicate their willingness to participate in voluntary metering when BWD distributed its survey could still participate. Mr. Poole explained that five extra meters had been included in the budget to account for this possibility.

Mr. Poole reported that he attended a ratepayers' meeting with Member Duncan, and the Core Team met since the last AC meeting. Member Moran reported that Mr. Poole and Trey Driscoll toured Coyote Canyon with her.

II. ITEMS FOR DISCUSSION AND POSSIBLE RECOMMENDATION

A. AC POLICY ISSUE #1: Metering Requirements for Non-de Minimis Wells

Mr. Poole noted that there was concern on the part of some farmers as to how metering records would be gathered, stored, transmitted and reported to the State. He and Jim Bennett met with Member Seley and the Agricultural Alliance for Water and Resource Education (AAWARE) to discuss these issues and other GSP topics.

Mr. Bennett pointed out that the AC had continued discussion on the metering policy issue at their September meeting. If the AC recommends required metering, there are two options proposed for data collection: The Groundwater Sustainability Agency (GSA) could inspect, monitor and read meters on a monthly basis and provide an annual statement to the State; or the property owner or an acceptable third party contractor could perform these monthly functions, with the accuracy of the data and the calibration of the meters verified semi-annually by a third party contractor who would then report to the State. The State Department of Water Resources (DWR), citing Government Code section 6254(e), allows the collection of data but exempts certain information, including metering statistics, from the Public Records Act. Legal Counsel for the County of San Diego (County) and BWD concurred.

The second option was a compromise developed by the Core Team with input from AAWARE since the last AC meeting. Member Falk expressed concern that she had not had an opportunity to discuss the revised second option with her constituent group, although they had originally preferred the first option, which had not changed. Member Wilson suggested using the first option, but with verification and calibration done semi-annually.

After further discussion, the AC voted to recommend that required metering for non-de minimis wells be included in the GSP. Using the established comfort levels (1- Agree wholeheartedly; 2- Accept as best option; 3- Can live with it but not enthused; 4- Do not fully agree and want to register view, but don't want to block the decision so will stand aside; 5- Need more work before consensus; and 6- Wants to block the decision), the vote was as follows: Member Moran 1, Member Seley 2, Member Hall 2, Member Berkley 1, Member Wilson 1, Member Duncan 1, Member Johnson 1, Member McGrory 1, Member Falk 1. As to monitoring Option 1, monitoring by GSA, the vote was as follows: Member Moran 1, Member Seley 5, Member Hall 5, Member Berkley 3, Member Wilson 2, Member Duncan 1, Member Johnson 5, Member McGrory 5, Member Falk 1. As to monitoring Option 2, monitoring by the property owner or third party with verification by an acceptable third party, the vote was as follows: Member Moran 5, Member Seley 1, Member Hall 1, Member Berkley 2, Member Wilson 1, Member Duncan 3, Member Johnson 4, Member McGrory 1, Member Falk 5.

B. AC POLICY ISSUE #2: Baseline Pumping Allocation

Mr. Bennett explained that the baseline pumping allocation is the amount of water pumped prior to the reductions under SGMA. A ten-year average was originally contemplated based on a BWC recommendation, but during subsequent discussions this was highlighted as a problem for some AC members. Trey Driscoll reported that Dudek had considered using a ten-year average, a ten-year maximum or a five-year maximum, and recommended the five-year maximum, using the period 1/1/10 to 1/1/15. Due to current lack of verifiable pumping data from the farmers, evapotranspiration rates are currently being used to estimate the farmers' pumping amounts. Mr. Driscoll reviewed data using each of the three baseline options, and noted that the five-year maximum method had been used in adjudication and prescriptive rights.

Member Berkley noted that at least one of Rams Hill's wells had once been owned by BWD, and for a time Rams Hill and BWD had shared the well. He pointed out that Rams Hill is now irrigating with non-potable water. Member Berkley suggested using aerial photos and evapotranspiration to estimate golf course water usage, as is contemplated for agriculture. Mr. Bennett said that if the farmers provide their extraction data to the Core Team by the end of the year, the information would be reviewed to determine if it could be used instead of the estimates.

The Committee broke for lunch at 12:15 p.m. and reconvened at 12:55 p.m.

Ms. Wylie suggested delaying the formal request for recommendation on baseline pumping allocation issue until the January AC meeting. In the meantime, Mr. Poole can work with Rams Hill to resolve the issue involving sharing and transfer of wells. Member McGrory expressed concern regarding the possibility that golf courses would have to reduce their water usage so much that the quality of golf would be reduced, affecting the local economy. Ms. Wylie requested that any specific issues/concerns related to this topic that AC or Core Team members want captured in detail, in addition to the summary provided in the minutes, be submitted in writing. The AC is anticipated to make a recommendation on the baseline pumping allocation in January.

III. TECHNICAL AND POLICY ISSUES FOR CONTINUED DISCUSSION

A. Pumping Allowance

Mr. Bennett introduced Mr. Driscoll's presentation, which would be a conceptual scenario of potential individual pumping allocations following a determination of the baseline. Member Falk pointed out that Mr. Driscoll's working draft technical memorandum referred to a 70 percent reduction in all sectors (agriculture, recreation and municipal), although the AC had not agreed to that. Mr. Driscoll explained that in this case it was simply used as an example.

Mr. Driscoll explained that the pumping allowance is the maximum allowable groundwater production for each well owner during a given year. It is based on the necessary groundwater pumping reduction to reach sustainable yield. Pumping allowances will be continually reevaluated during the 20-year reduction period. Mr. Driscoll presented three examples of varying levels of reduction, accompanied by illustrative charts and graphs. Based on a United States Geological Survey (USGS) report and the water budget, the Borrego Springs Subasin's sustainable yield is estimated at 5,700 acre-feet per year.

Mr. Bennett reported that the Core Team is proposing a court validation process of the GSP, once the GSP is finalized. This is not an adjudication, but will limit the time period during which the GSP can be legally contested. President Hart asked what would happen if a large pumper ceases pumping (for example, a farm is fallowed or a golf course closes). Mr. Driscoll said he was looking at ways in which the allocation might be transferred to another well owner. Member Johnson suggested including written information on water laws in the next AC agenda. President Hart suggested she talk to Michael Sadler at the *Borrego Sun* about writing an article for the paper, which can be included in the next AC meeting agenda packet.

B. Sustainability Period and Reduction Period

Mr. Driscoll presented the steps underway to develop the Borrego Springs Subasin's sustainability criteria: Assessment of sustainability indicators (significant and unreasonable conditions, management areas, representative monitoring sites), minimum thresholds, undesirable results, measurable objectives, interim milestones and sustainability goal. He explained that the three management areas, North, South and Central, have differences in water use, geology and other factors and may have different measurable objectives and thresholds. Interim milestones are target values representing measurable groundwater conditions in five-year increments. The measurable objectives are goals for the 20-year timeframe of GSP implementation. Minimum thresholds are quantitative values representing the groundwater condition at a representative monitoring site that when exceeded, may cause undesirable results; for example, a well running dry. Potential undesirable results must be identified for each sustainability indicator.

Member Falk asked whether undesirable results which occurred before 1/1/15, such as water quality degradation, could be dealt with in the GSP. Mr. Driscoll replied that they could, since we are in a critically overdrafted basin. He added that the GSP must develop sustainability goals and explain why each goal will lead to success and maintain it. Betsy Knaak asked whether impacts to the community and local economy, such as challenges faced by restaurants or individuals who have already reduced water use as much as possible, would be addressed. Mr. Driscoll explained that his presentation addressed quantitative issues, but socioeconomic issues are addressed in other SGMA components.

IV. INFORMATIONAL ITEMS

A. Stream Gauge Effort

Mr. Driscoll reported that the Anza Borrego Desert State Park (State Park), DWR, USGS and BWD had been involved in measurement of stream flows in Coyote Canyon. The gauges are no longer available, and when last in operation, were somewhat inaccurate due to the shifting channel and high sediment rate. Agencies involved met on November 2 to assess the potential of installing new stream gauges. Stream flow has been documented by USGS as the number one source of groundwater recharge in Borrego Springs. However, due to the shifting channel and high sediments, USGS did not recommend installing new gauges. DWR is considering monthly manual stream flow measurements, and the GSA will continue working with the other agencies to collect data and incorporate it into the groundwater model. Mr. Poole added that he is exploring funding available for stream gauges from the State. Member Moran pointed out there is an operable gauge in Palm Canyon.

V. CLOSING PROCEDURES

A. Correspondence

Ms. Wylie invited attention to the correspondence included in the agenda package on pages 31 through 38.

B. Updates and Comments from Advisory Committee Members

Member Falk expressed concern that the BWD website did not include a link to the County website, nor did it list the AC members. She felt this should be addressed as part of the public outreach component of the socioeconomic study, and offered to help with this effort.

Member Johnson reported that the Stewardship Council had discussed the fact that Borrego Springs had moved from an agricultural economy to a tourism focus.

Member Falk urged more of the AC members to publicize their e-mail addresses. Member Johnson agreed to share hers, and others wishing to do so were asked to contact Mr. Poole. Member Duncan noted that his BWD e-

mail address had been malfunctioning, and Mr. Poole agreed to work with him. Mr. Poole will establish BWD e-mail addresses for others upon request.

Member Johnson asked whether the AC could form subcommittees, and if so, how many members could participate in each committee. Ms. Wylie agreed to look into it.

C. General Public Comments

None.

D. Review Action Items from Previous AC Meetings, Next AC Meeting Date(s), and Next Steps

The next AC meeting was scheduled for January 25. Ms. Wylie will update the timeline and work with the Core Team to post minutes and presentations on the County website and the BWD website. Information for the agenda should be sent to Ms. Wylie.

There being no further business, the meeting was adjourned at 2:50 p.m.

January 22, 2018

TO: Advisory Committee

FROM: Core Team

SUBJECT: Item II.B: AC POLICY ISSUE #2: Baseline Pumping Allocation

*Information related to this AC Policy Issue was provided at the September 28, 2017, October 26, 2017, and November 27, 2017 Borrego AC meetings. **Based on feedback received during the October 26, 2017 Borrego AC meeting, revisions have been made to AC Policy Issue #2. The Core Team has revised the baseline pumping allocation to be based on the highest annual production for the five-year period from 2010 through 2014.***

ITEM EXPLANATION: Dudek provided a Technical Presentation on the issue of Benchmarking (Baseline Pumping Allocation) at the July 27, 2017 AC meeting. The PowerPoint presentation is available from the County's website. In summary, the Baseline Pumping Allocation establishes historical rates of groundwater extraction (pumping) over a given period of time. SGMA allows for local development of the Baseline Pumping Allocation period. The 10-year period from January 1, 2005 to January 1, 2015 was presented by the Core Team at the September 28, 2017 and October 26, 2017 AC meetings as the proposed baseline period to analyze historical rates of pumping in the Borrego Springs Subbasin.

The Core Team has revised the baseline pumping allocation to be based on the highest annual production for the five-year period from 2010 through 2014. Rationale regarding this revised approach is provided in a memo by DUDEK in the November 27, 2017 AC Agenda Packet. Additionally, previous water credits created by the Borrego Water District and County of San Diego that represent actual reductions in water use are being considered by the Core Team to be counted as part of the baseline pumping allocation under SGMA. This will be further discussed at the January 25, 2018 AC meeting under Item III.B: Water Credits Program.

The AC will be polled for a consensus recommendation on the following question at the January meeting:

AC QUESTION

- **AC Question:** The baseline pumping allocation will be developed based upon the highest annual water consumption during the 5-year period from January 1, 2010 through December 31, 2014. The pumping allocation will take into account water use by all pumpers within Borrego Springs Subbasin.
- *Do you recommend a Baseline Pumping Allocation (prior to any SGMA required reductions) using the highest annual water consumption based upon the five-year period from Jan. 2010 thru Dec. 2014?*

- **YES OR NO**

January 22, 2018

TO: Advisory Committee

FROM: Core Team

SUBJECT: Item III.A: Sustainability Indicators

Sustainability indicators were conceptually presented at the November 27, 2017 AC meeting. Sustainability indicators are the effects caused by groundwater conditions occurring throughout the basin that, when significant and unreasonable, become undesirable results. The applicable sustainability indicators for the Subbasin include:

- 1) Chronic lowering of groundwater levels
- 2) Reduction in groundwater storage
- 3) Degraded water quality

Groundwater Sustainability Plan (GSP) regulations require establishment of “minimum thresholds” and “measurable objectives” for each applicable sustainability indicator to develop and achieve the sustainability goal.

The three applicable sustainability indicators are strongly correlated and attributable to over-pumping, and can generally be assessed and monitored by measurements of groundwater levels and water quality sampling.

The general approach to defining the required minimum thresholds will be to first evaluate available groundwater level and water quality data to determine appropriate representative monitoring sites, which will include multiple groundwater wells per Subbasin management area. Subsequently, for each representative monitoring site or combination of monitoring sites specific groundwater elevation(s) will be defined, which would be the groundwater elevation below which there would be potential to have undesirable results such as degraded groundwater quality. Likewise, a separate higher groundwater level would be defined for each representative monitoring site as the measurable objective that would represent sustainable conditions without undesirable results. Additionally, intermediate groundwater elevations will be defined for each of the five-year milestones to be used track progress throughout GSP implementation.

Results of the groundwater monitoring of groundwater levels and water quality from the fall 2017, and previously collected historical data, will be used to evaluate the sustainability indicators. Additional information regarding the approach to sustainability indicators will be discussed at the January 25, 2018 AC meeting.

January 22, 2018

TO: Advisory Committee

FROM: Core Team

SUBJECT: Item III.B: Water Credits Program

A discussion of how the Water Credits Program might evolve under SGMA was briefly introduced at the May 15, 2017 Advisory Committee Meeting. In order to address the overdraft condition of the Borrego Springs Subbasin, the Borrego Water District (BWD), in cooperation with the County of San Diego (County), developed and implemented a Demand Offset Mitigation Water Credit Policy (WCP). The WCP establishes credit procedures for fallowing of agricultural land based on crop type and a defined watering intensity. The current WCP for new development consists of two policies: one to satisfy the County *Groundwater Ordinance and Policy Regarding Cumulative Impact Analyses for Borrego Valley Groundwater Use*, and one to satisfy the District's *Policy for Water And Sewer Service to New Developments*, as amended. One water credit is defined as a one acre-foot per year reduction in pumping and converts to the approximate water demand of a single equivalent dwelling unit (EDU) or single-family residence (current BWD residential EDU demand = 0.55 acre-feet per EDU).

An audit of the Water Credits Program was performed to assist with determining whether previously issued water credits should be counted as part of the baseline production allocation water use under SGMA. Preliminary results of the audit and discussion of inclusion of water credits into the baseline production allocation will be discussed at the January 25, 2018 AC meeting.

January 22, 2018

TO: Advisory Committee

FROM: Core Team

SUBJECT: Item III.C: Projects and Management Actions to be Considered

The Core Team has identified six projects and management action categories to be evaluated as part of the Groundwater Sustainability Plan. The six projects and management action categories include:

1. Project 1 - Water Trading Program
2. Project 2 - Water Conservation and Efficiency Programs
3. Project 3 - Modification of Land Use Designations
4. Project 4 - Agricultural Land Fallowing Program
5. Project 5 - Groundwater Quality Mitigation Program
6. Project 6 - Intrabasin Water Transfer

Project 1 - Water Trading Program

A basin-specific Water Trading Program will be developed to facilitate transfer of baseline pumping allocation among groundwater users in the Borrego Springs Subbasin (subbasin). The program is anticipated to include the following general components:

- Collaboration of stakeholders and GSA to define the water trading approach.
- Identification of goals, guidelines, and administrative tools for implementation.
- Consolidation and reissue of existing groundwater restrictive easements in a consistent way.
- Development of a governing document to outline guidelines and regulatory procedures to transfer water credits.
- Development of an accounting system to track baseline pumping allocation and water transfers

Project 2 - Water Conservation and Efficiency Programs

Evaluation will be performed to assess prospective opportunities for water conservation and efficiency for each of the three primary water use sectors in the subbasin, including agriculture, municipal, and recreation. Considerations for each prospective opportunity would include ability to implement and cost/benefit relationship. The purpose of the potential programs would be to increase the water use efficiency of groundwater users in the Subbasin. Preliminary prospective opportunities to be evaluated are summarized below, by sector:

Agriculture:

- Evaluation of the potential effects to water demand from changes in crop types, irrigation practices, etc.

- Evaluation of existing agricultural facilities to identify those where changes in irrigation efficiency practices could be most cost effective.
- Preparation of agriculture-specific water conservation and efficiency plan and irrigation best management practices.

Recreation:

- Evaluation of each golf course's irrigation practices to identify opportunities for optimization, associated costs, and anticipated benefit.
- Preparation of recreation-specific water conservation and efficiency plan and irrigation best management practices.

Municipal:

- Conservation and efficiency analysis to identify best management practices for water conservation.
- Development of potential landscape restrictive requirements for existing and new development.
- Preparation of municipal-specific water conservation and efficiency plan.

Project 3 - Modification of Land Use Designations

An initial evaluation will be performed to assess the potential opportunities for water use reductions by changes in land use designations in the Subbasin. The scope of the evaluation will include the following general components:

- Identification of existing unbuilt residential-designated lots.
- Estimate the appropriate scale of potential land use designation changes.
- Evaluate the potential relationship between a prospective Water Trading Program and changes in land use designations in the subbasin.

Project 4 - Agricultural Land Fallowing Program

An Agricultural Land Fallowing Program will be evaluated to address the unsustainable water demand associated with the existing scale of irrigation in the Subbasin. A comprehensive regulatory document will be developed with stakeholder input to outline regulations for land fallowing, which could be incorporated into the GSP or adopted as an independent ordinance by the GSA. Key components of the document to be determined include the following:

- Identification and relationship of existing jurisdictional regulations in place for vacant land.
- Stakeholder buy-in.
- Potential land inspection procedures.
- Future land use alternatives determination process.
- Identification and establishment of easements.
- Land restoration requirements.
-

- Technical considerations for long-term fallowed land management to avoid adverse environmental and public health impacts.

Project 5 - Groundwater Quality Mitigation Program

A Groundwater Quality Mitigation Program will be developed for the subbasin. The scope of the evaluation will include the following components:

- Identification of existing and anticipated future water quality impairment sources.
- Preparation of water quality degradation mitigation alternatives for each potential impairment source.
- Scoping of a regulatory document outlining the procedures for characterizing and mitigating degraded groundwater quality.

Project 6 - Intrabasin Water Transfer

Potential mitigation of limited localized groundwater using intrabasin water transfer between Basin Management Areas will be evaluated. The evaluation will include assessment of a transfer program's effectiveness for addressing both groundwater quality impacts and reductions in groundwater storage. The study will involve Borrego Water District (BWD) to assist with evaluating the feasibility and costs of transferring groundwater resources to different areas of the Subbasin.