

MEMORANDUM OF AGREEMENT
BETWEEN THE BORREGO WATER DISTRICT
AND THE COUNTY OF SAN DIEGO
REGARDING WATER CREDITS

This Memorandum of Agreement (MOA) between the Borrego Water District (BWD), a water district formed pursuant to California law, and the County of San Diego (County), a political subdivision of the State of California.

Whereas, the Borrego Aquifer is in a state of overdraft due to the extensive use of groundwater in the Borrego Valley.

Whereas, due to the overdraft condition, BWD plans to implement a program to encourage the voluntary and immediate cessation and/or reduction of measurable water uses to reduce the demand on the groundwater aquifer that is under the Borrego Valley.

Whereas, a key element in BWD's program is the issuance of water credits for the cessation and reduction in the use of groundwater in accordance with BWD's program.

Whereas, due to the overdraft condition, County wants to ensure that proposed uses in the Borrego Valley offset their demand for groundwater by a ratio of least a one-to-one, and water credits issued by BWD that also meet County's requirements are one method that project applicants can use to provide this offset.

Whereas, BWD and County wish to enter into this MOA to set forth the terms by which the County will recognize water credits issued by BWD.

NOW, THEREFORE, the parties agree as follows:

1. The County will recognize water credits issued by BWD if the water credits meet all of the criteria set forth in this MOA.

2. As used in this MOA, the term "water credit" means an entitlement created under the Water Credit and Mitigation Policy of BWD as published on BWD's website. The purpose of issuing a water credit is to recognize the fallowing of actively irrigated land located in the Borrego Valley Groundwater Basin (BVGB). As specified in this MOA, a water credit may be used in the future to offset the groundwater use of a proposed development. A water credit does not convey, and shall not be construed to convey, water rights, nor is it a guarantee by BWD of the future availability of water from the BVGB. It should be noted that a water credit is not a guarantee that a proposed development, for which a water credit will be used as an offset, can or will be approved by the County.

3. The water credits shall have been issued in exchange for an easement granted to BWD. The easement shall include the following provisions:

a. The easement shall permanently and completely eliminate the extraction, use, storage, distribution or diversion of groundwater on the land subject to the easement, except for the following uses:

- i. One-acre foot of groundwater per year to serve a single-family dwelling; or
- ii. A project that would require discretionary approval by the County if groundwater use reduction measures are implemented that fully offset the amount of groundwater that the project would use. Groundwater use reduction measures that may be used include measures listed in County Code sections 67.720.B.1 and 67.720.B.2 (County Groundwater Ordinance).

b. The easement shall designate County as a third-party beneficiary with the right, but not the obligation, to enforce the easement. The easement shall give County the same right of access for purposes of monitoring compliance with the easement and the same options for enforcing the easement as the easement gives to BWD.

4. Prior to accepting the easement, BWD shall do the following:

i. Verify that all extraction, use, storage, distribution or diversion of groundwater on the property subject to the easement has ceased, that all crops or turf have been removed and that all pumps and wells on the property, if any, have been disengaged or rendered inoperable; and

ii. Submit a copy of the draft easement to the Director of Planning and Development Services (PDS) for review and approval. The Director of PDS shall review the draft easement and shall approve it if the Director determines that the easement is adequate. If the Director determines that the draft easement is not adequate, the Director will send a letter to BWD with recommended changes. The Director will make a good-faith effort to review the draft easement and approve it or submit a comment letter to BWD within 30 days of the receipt of the draft easement. BWD shall accept all changes recommended by the Director of PDS or provide a letter to the Director of PDS with recommended changes within 30 days of the receipt of the comment letter. The parties may continue this process until both agree on the terms of the easement.

5. Each water credit shall be equal to one-acre foot of water per year. Water credit calculations that end with .50 to .99 acre-feet shall be rounded up to the next full

acre foot, and calculations that end with .01 to .49 acre-feet shall be rounded down to the previous full acre foot.

6. The number of water credits issued shall be based on the water use as determined on the chart attached to this MOA as Exhibit A. The water use shall be calculated based on the vegetation types, vegetation area being actively irrigated and corresponding annual groundwater consumptive use as specified in Exhibit A. BWD shall obtain the prior written approval of County for any vegetation not listed in Exhibit A and for the amount of water use calculated for that vegetation. The assumptions used to calculate the water offset credits are included in Exhibit B. Exhibits A and B are incorporated into this MOA.

7. The irrigation of the land for which the water credits are issued shall have begun before January 1, 2008 and shall have continued at least until the date the application was submitted to BWD for the easement. All water use must cease in accordance with the terms of the BWD easement.

8. BWD shall submit a copy of the recorded easement to the Director of Planning and Development Services within 30 days of the easement being recorded.

9. BWD shall include the following certification on each Water Credit Certificate that BWD issues for water credits granted in compliance with this MOA:

The Borrego Water District certifies that the water credits listed on this Water Credit Certificate comply with all of the requirements of the Memorandum of Agreement Between the Borrego Water District and the County of San Diego Regarding Water Credits.

Borrego Water District
General Manager

Date

10. BWD may issue water credits that do not comply with this MOA, but County will recognize only those water credits that comply with the requirements of this MOA.

11. County reserves the right to verify that water credits issued by BWD comply with this MOA. BWD shall provide information and answer questions related to water credits presented to County for offsets or related to BWD's groundwater use reduction program as requested by County. If, in spite of the certification described in paragraph 9 above, County determines that the water credits do not comply with this MOA, County will not recognize the water credits for offsets.

12. Either party may terminate this MOA on 90 days prior written notice to the other party. All notices and other written communications that shall or may be given under this MOA shall be addressed as follows:

To County:
Director of Planning and
Development Services
5510 Overland Avenue, Suite 310
San Diego, CA 92123

To BWD:
General Manager
Borrego Water District
806 Palm Canyon Drive
Borrego Springs, CA 92004

Notices and communications sent by U.S. Mail shall be deemed received three business days after mailing. Notices sent by e-mail shall be deemed received on the day of transmission if sent before 5:00 p.m. and the day after transmission if sent after 5:00 p.m.

13. This MOA may be amended or changed only by a written amendment signed by both parties.

14. This MOA is an enforceable agreement.

15. This MOA shall become effective on the date that the Ordinance Amending the San Diego County Code Relating to Groundwater in the Borrego Valley (Ordinance No. 10249 (N.S.)) becomes effective.

16. This MOA, including Exhibits A and B, constitutes the entire agreement between the parties regarding the subject matter contained herein. All other representations, oral or written, are superseded by this MOA. Neither party is relying on any representations outside of this MOA.

17. If either party believes that the other party has failed to perform its obligations under this MOA, the non-defaulting party may provide a written notice of default to the other party describing the default. The parties shall meet and confer at a mutually agreeable time and location not later than 30 days after receipt of the notice of default. At the meet and confer, the parties shall, in good faith, discuss the default and how and when it should be cured. If after the meet and confer the parties do not agree on the default or the cure, the non-defaulting party may terminate this MOA immediately by sending a notice of termination to the other party. A party may not terminate this MOA for default without first complying with this paragraph.

[Remainder of this page left blank intentionally.]

18. This MOA shall be construed according to the law of the state of California. The language of all parts of this MOA shall be construed simply according its plain meaning and shall not be construed for or against either party.

Now, therefore, the parties execute this MOA as set forth below.

COUNTY OF SAN DIEGO

BORREGO WATER DISTRICT

By: Thomas J Py -
Clerk of the Board of Supervisors

By: [Signature]
General Manager

Date: 2.4.13

Date: 12/12/12

Approved as to form and legality
County Counsel

Approved as to form and legality

By: [Signature]
Senior Deputy

By: [Signature]
[title]
GENERAL COUNSEL

Approved and/or authorized by the
Board of Supervisors of the County of San Diego.
Meeting Date: 1/30/13 Minute Order No. 3
By: [Signature] Date: 2/4/13
Deputy Clerk of the Board Supervisors

EXHIBIT A

Please fill out the appropriate unshaded areas in the table below.

Vegetation Type	Date Irrigation Commenced	Vegetated Area Under Active Irrigation ¹ (acres)	Groundwater Consumptive Use Per Acre (acre-feet/year)	Annual Groundwater Consumptive Use (acre-feet/year)
Citrus (all types)			4.9	
Nursery plants			4.5	
Palms (all types)			3.7	
Tamarisk			1.7	
Turf (warm season)			5.1	
Turf (winter cool/summer warm)			5.6	
Potatoes ²			0.8	
Total groundwater use available for credits				

¹ The irrigated acreage will almost always be less than the gross area of land containing vegetation because of ditches, farm roads, farmsteads, vacant land, etc. Discount the gross acreage to account for non-irrigated uses and non-irrigated areas within the gross area being considered.

² According to the Borrego Water District, potatoes are a winter crop and are rotated once every three years. Approximately 2.5 acre-feet per acre are applied to potato fields over a three year cycle. Therefore, the annual groundwater consumptive use would be approximately 0.8 acre-feet per acre.

EXHIBIT B

Assumptions Used to Calculate Water Offset Credits

The amount of water credit (in acre-feet/acre) to be granted for land with an actively irrigated use that will be permanently taken out of production is listed below for the most common vegetation types in Borrego Valley.

Vegetation Type	Groundwater Offset Credit (acre-feet/acre/year)
Citrus (all types)	4.9
Nursery plants	4.5
Palms (all types)	3.7
Tamarisk	1.7
Turf (warm season)	5.1
Turf (winter cool/summer warm)	5.6

These amounts were determined by using the following equation:

$$\text{Annual Groundwater Consumptive Use (acre-feet/yr)} = \frac{[\text{Reference Evapotranspiration (feet/year)} \times \text{Plant Factor} \times 1 \text{ acre}]}{\text{Irrigation Efficiency}}$$

Annual Groundwater Consumptive Use (acre-feet per year) means the amount of groundwater lost through evapotranspiration (evaporation from the soil and transpiration from the plant).

Reference Evapotranspiration (ET_o) (feet per year), means the approximate water loss from a field of 4-to-7-inch-tall cool season grass that is not water stressed. ET_o values are published by the California Irrigation Management Information System (CIMIS). Use the published annual ET_o for Zone 18 (annual ET_o of 5.97 feet).

(Source for ET_o: <http://www.cimis.water.ca.gov>).

Plant Factor (or Crop Coefficient) means the fraction of water lost from the plant relative to ET_o. The annual plant factor is listed below for the most common vegetation types in Borrego Valley.

Vegetation Type	*Plant Factor
Citrus (all types)	0.65
Nursery plants	0.6
Palms (all types)	0.5
Tamarisk	0.2
Turf (warm season)	0.6
Turf (winter cool/summer warm)	0.66

*Plant factor for other plant types shall be obtained from the most recent publications by the State of California or University of California
Sources for Plant Factor: http://www.water.ca.gov/pubs/planning/guide_to_estimating_irrigation_water_needs_of_landscape_plantings_in_ca/wucols.pdf and <http://celosangeles.ucdavis.edu/newsletterfiles/Co-Hort11051.pdf>

Irrigation Efficiency means a measure of the portion of total applied irrigation water beneficially used to satisfy the plants' needs. Losses (non-beneficial use) include runoff and evaporation from wet soil.

Irrigation Method	Irrigation Efficiency
Spray/Rotor (turf, tamarisk)	0.7
Drip (Citrus, nursery plants, palms)	0.8

Source for Irrigation Efficiency: Turf and Landscape Irrigation Best Management Practices, April 2005, Water Management Committee of the Irrigation Association