

December 9, 2015

To: Board of Directors, Borrego Water District

From: Ad Hoc Water Conservation Policy Recommendations Citizen's Committee (Committee)

Subject: Draft Recommendations from the Committee

As you are aware a Committee composed of John Peterson, Harry Ehrlich, Rick Alexander, Julie Taylor, Jerry Rolwing, Dennis Bostad, Ken O'key, Emily Brooks, and Board members Ray Delahey and Joe Tatusko was formed to provide policy recommendations to your Board regarding District efforts toward water conservation. The committee completed a Mission Statement that was approved by your Board on September 23, 2015 (See Attachment #1).

Following this direction the Committee has been meeting over the last several months to draft recommendations to your Board. The Committee identified three topic areas for review: 1) recommendations for baseline water consumption usage, 2) recommendations for potential incentives and disincentives to encourage water consumption, and 3) a proposed public information plan and strategy to help reduce water consumption.

These draft recommendations are attached for your review and consideration. These include Attachment #2 regarding baseline usage, Attachment #3 addressing incentives and disincentives, and Attachment # 4 addressing public information action items.

It is noted that the committee reached consensus on all of these recommendations, however one committee member expressed opposition to the proposed water use baseline recommendations for residential users.

The Committee solicits your direction and recommendations to revise the draft report so that the final report can be presented to your Board at the January 19, 2016 hearing regarding this topic.

Thank you for your consideration.

November 25, 2015

From: Harry Ehrlich and John Peterson

To: Water Advisory Subcommittee

RE: Issues related to Baseline water use

- 1) The task was assigned to Harry and myself to make some recommendations to the committee regarding baseline water use for the five different type of water users. Baseline is defined as the amount of water that would reflect conservative and efficient water use for the use type.
- 2) It is understood that all baselines values for the different use types would be multiplied by .75 (resulting in a savings of 25%) to determine the tier 1 pricing level.
- 3) All baseline usage determination would be appealable to the Water District General Manager and his determination is appealable to the Borrego Water District Board.
- 4) All water demand is given in acre-feet per year and it is understood that this can be modified later for the summer/winter six month period of times.

The different use types include: **Residential, Multiple Units, Public Agencies, Commercial, and Irrigation.**

Baseline Determination:

Residential:

Typical Residential Use Type is considered to be equivalent to the "normal" ~6,000 sq ft residential lot. This is just a typical residential home (occupancy up to 3 persons) and water demand includes inside and landscaping around the residential unit. **.5 acre-feet per year, which is 218 units of water.**

Atypical Residential Use Type includes residential units which clearly do not meet the definitions as provided within Tier one. Examples of which include: 1) existing large lots with established landscaping, 2) parcels located in communities such as

De Anza and Rams Hill which require extensive landscaping, 3) existing “estates” which cannot be treated as a “typical” residential home.

For atypical residential units it is recommended that the baseline residential usage (for indoor uses) be assigned a use factor of .3 acre-foot and an additional .5 acre-foot for each acre of improved area as of date of implementation of the conservation water rate program. Any additional improvements or added demand of water would be considered above baseline and subject to additional water rate costs to encourage conservation and generate funds to offset the additional use in other manners and programs. This includes any landscaping expansions initiated following the adoption of these guidelines.

Multiple Units:

This class includes condo, mobile home parks and communities where individual residential units are provided with water from a common meter.

Baseline would be determined by usage consumed in 2013. However it is understood that owners have the right to ask for an allowance if occupancy has significantly change (increased by at >10%) within the community.

Public Agencies and Commercial:

This class includes churches, schools, and businesses.

Baseline would be determined by usage consumed in 2013.

Irrigation:

These users include various users which irrigate common areas and/or parks.

Baseline is calculated via an irrigation evaluation of acreage and irrigation type with known and established efficient use rates. This could be determined via application of the Irrigation Manual from the County of San Diego or other acceptable source. In place of a specific evaluation it could be possible to use an acceptable use rate of ~5.3 ac-ft/yr/ac for lawns and turf and ~2.5 ac-ft/yr/ac for ornamental plantings.

Note: All uses shall be subject to reduction from prior demands by 25 % to strive to meet the State Mandated Conservation Standard adopted by the SWRCB in May 2015 or until modified or cancelled.

Water Conservation Policy Recommendations Citizens Committee

Mission Statement

Adopted October 9, 2015

The Mission of the Committee is to develop recommendations to the Borrego Water District (District) Board of Directors for set of water conservation policies to help the District meet a State mandated 25% system wide reduction in water consumption by November 19, 2015. These policies may be applied in coordination with a new set of water rates currently under development, and should rely on a combination of incentives and disincentives, including potential penalties for excessive water use. The policies must be fair and equitable, apply appropriately to all five user group classes which the District serves, Single and multi-family residential, commercial, irrigation/HOAs, and public entities; and provide for flexibility if conditions or requirements change over the course of implementation. The policies should acknowledge conservation actions already undertaken by customers, and include recommendations to provide comprehensive public information and water conservation education programs; and for voluntary conservation actions including landscape management and modifications and actions to reduce indoor water use.

Water Conservation Policy Recommendations Citizen's Committee

Figure 1 – 12/16/2015

Potential Water Conservation Incentives and Related Actions (BWD-BOD Discussion Draft)

INCENTIVE	APPROPRIATE for BWD? Used before ++	COST TO DISTRICT ?	OUTSIDE FUNDING AVAILABLE?	WATER SAVINGS L-M-H	PAY OFF POTENTIAL L-M-H	
Irrigation Audits	++Yes	\$200/audit	USBR***	H	H	-High water conservation/low cost
Irrigation Seminars/Public Info. Materials: Eng. & Span.	++ Yes		AWWA/ACWA	H	H	-High conservation payoff -Previous Success
Complimentary Rate Structure	No	None		H	H	-Important! /no cost
Turf replacement	++Yes	\$0-2 per sq'	CA-DWR**	H	H	-High water conservation -Outside funding necessary
Coordinated Public Water Conservation Information Program	Yes	?	USBR***	H	H	-Budget for a more aggressive program -Strategy for community outreach
Conservation Kits	++Yes	Varies	SDGE	H	M	
Info Booth	++Yes	\$400 setup/supplies	Borrego Chamber of Commerce	H	M	-Builds community support
School Essay/Poster Contest	++Yes	\$300 grant	CSDA	M	M	-Builds community support
Conservation Awards	++Yes	\$200		M	M	-Builds community support
Smart Irrigation Controller	++Yes	\$50 rebate	USBR***	M	M	
Replace Irrigation Valves/System Retrofit	++ Yes	20% rebate	USBR***	M	M	
High Efficiency Toilet Rebate	++Yes	\$0-100 rebate	CA-DWR*	L	L	-Low water savings -Family size issue -Outside funding required
High Efficiency Washer Rebate	++ Yes	\$85-400 Rebate	CA-DWR	L	L	-Low water savings -Outside funding required

Actions Below This Line Are Not Recommended						
Rotating Sprinkler Nozzles	No	\$0-4 each, 30 minimum		L	L	
Home/Business Water Outlets, single service gray water system retrofit	No	\$75 rebate		L	L	
Irrigation Rain Sensor	No	\$25 rebate-device		L	L	

* Currently \$6M statewide; up to \$100 of one high efficiency toilet (1.28 gal/flush). Rebate direct to consumer from DWR. District could advertise availability to ratepayers.

** Currently \$24M Statewide; up to \$2 per sq.ft. per eligible household. Rebate directly to homeowner from DWR. District could advertise availability to ratepayers/assist with application.

*** It is suggested that BWD combine these and potentially other actions, into a grant request to the US Bureau of Reclamation for a Water Smart Program grant. The current application period closes January 20, 2016.

Water Conservation Policy Recommendations Citizen's Committee

Figure 2 -- 12/16/2015

District-wide Water Use Restrictions (BWD-BOD Discussion Draft)

(May be associated with a Level 2 Drought Alert which requires an Adopted Drought Response Plan)

- Water between 6PM and 10AM.
- Do not water for at least 48 hours after rain.
- Eliminate irrigation runoff.
- Repair leaks within 24 hours.
- Use recirculated water in fountains and water features.
- Use a hose with a positive shutoff nozzle when washing vehicles.
- Do not wash down hardscape unless required for public safety.
- Restaurants may serve water upon request only.
- Hotels should offer guests the option of not laundering towels and linens daily.

Water Conservation Policy Recommendations Citizen's Committee

Figure 3 – 12/8/2015

Violations and Penalty Structure for Water Overuse (BWD BOD Discussion Draft)

Discussion:

Once BWD determines a Water Use Baseline (see Ehrlich/Peterson memo 11/25/2015), the next step could be to use the Baseline to determine water overuse by an individual customer, as established by a Target Water Allocation (TWA) which is typically something greater than the Baseline to provide the customer some flexibility.

Customers using more than the TWA would be notified of their overage and given one (1) full billing cycle to bring their usage below the TWA. Failure to do so may result in the implementation of the following administrative fines levied as follows, and/or other measures the District may determine.

Here is an EXAMPLE of a Violations and Penalties section from Drought Response Plans currently adapted in San Diego County; it is pretty typical of the ones reviewed for this report. This could be accompanied by a set of Exemptions and Appeals.

EXAMPLE:

Violations and Penalties

Any customer who uses, causes to be used, or permits the use of water in violation of the Drought Response Plan during a Level 2 – Drought Alert condition, or Level 3 – Drought Critical condition, or Level 4 – Drought Emergency condition is guilty of an offense punishable as provided:

- A) Each day that a violation of a prohibited water conservation measure occurs is a separate offense.
- B) Progressive administrative fines may be levied for each violation as follows:
 - 1. First violation of any prohibition – written warning.
 - 2. Second violation of any prohibition within one (1) year -- \$100.
 - 3. Third violation of any prohibition within one (1) year -- \$200 + recovery of administrative and collection costs.
 - 4. Fourth violation of any prohibition within one (1) year -- \$500 + recovery of administrative and collection costs.
 - 5. Each violation thereafter of any prohibition within one (1) year -- \$500 + recovery of administrative and collection costs.
 - 6. Any violation occurring more than one (1) year from the previous will be treated as a first violation.

Should mandatory water use reductions as described be activated by resolution, any person who willfully uses, causes to be used, or permits the use of water in violation of the Drought Response Plan, adopted by Resolution _____ is guilty of an offense punishable as provided herein.

- A. Each violation of this Drought Response Plan may be prosecuted as a misdemeanor punishable by imprisonment in the county jail for not more than thirty (30) days or by a fine not exceeding one thousand dollars (\$1000-U.S.A. currency), or by both, as provided in California Water Code Section 377.
- B. Willful violations of mandatory conservation measures which may be put into place during any drought level may be enforced by discontinuing service to the property at which the violation occurs, as provided by California Water Code Section 356 et seq.
- C. All remedies provided herein, both civil and criminal, shall be cumulative, and not exclusive.

Community Action Plan for Residential and Business Water Conservation

The following ideas were developed by Julie Taylor, Emily Brooks and Ken Okey to offer a social marketing plan for the residences and businesses here in the Borrego Valley. This plan will take time and substantial effort on a continuing basis to get the message out. Additionally, by using this approach we will demonstrate to other large users (golf courses and agriculture) that we are taking the depletion of our aquifers as a major problem which requires a positive and ongoing solution.

Design a Best Practices brochure. Ken will furnish an initial draft with graphics and words which can then be reworked by Judy and Emily and then presented to the committee. This will be done after reviewing the web for similar material to avoid reinventing the wheel. Precautions will be taken to make sure all of our information is desert related.

Design logo and label for placement at homes and businesses where the owners have decided to conserve water through a series of actions spelled out in a best practices brochure.

Design a small sign (not too small) to be placed on the entrance to restaurants stating something to the effect "This Restaurant Participates in Saving Borrego's Water". Again, we will review material in the public domain first before proceeding.

Encourage desert water irrigation education through the ARTFARM and ABDNHA aimed at Borrego homeowners and given in conjunction with the development of a small teaching syllabus. This course can also discuss steps to take inside the house. It is recommended this approach be given at the field level with a possibility of using the ABDNHA garden area.

Write a monthly article in the Sun about local residence saving water and money through the use of our educational materials.

Design a "renter packet" and encourage use by businesses who are engaged in renting out homes in Borrego.