



DRAFT WORK PRODUCT



Borrego Valley Groundwater Basin Borrego Springs Subbasin Municipal Allocations

Policy for Human Right to Water

Considerations Regarding Potentially Reserving
a Portion of Historical Domestic Use Pumping
as Not Being Subject to Reduction Under an
Allocation Plan

SGMA Allocation Plan

- Under the Sustainable Groundwater Management Act (SGMA), a Groundwater Sustainability Agency (GSA) has the authority to adopt an allocation plan, but no authority to determine water rights (Water Code Sections 10726.4 and 10726.8).
- An allocation plan is a proposal to reduce groundwater production to sustainable levels over time. In composing a draft allocation plan, the GSA is attempting to respect water rights priorities to the greatest extent feasible, but with the understanding that the GSA is afforded discretion in proposing allocations and the GSA has the duty to follow established State policy.
- In Borrego, discussions have occurred to set base production rights as the highest year of pumping between 2010 and 2015. In turn, it is expected that an approximate 70% reduction would be needed to return pumping levels to the basin safe yield of approximately 5,700 acre feet per year.

Domestic Use

- **The Basin provides water for domestic, irrigation and other uses.**
- **The California Legislature has set several relevant priorities that overlay the GSA's preparation of an allocation plan. These priorities include:**
 - **(1) Domestic use is the highest use of water, followed by irrigation use. (Water Code, section 106)**
 - **(2) “It is hereby declared to be the established policy of this State that the right of a municipality to acquire and hold rights to the use of water should be protected to the fullest extent necessary for existing and future uses.” (Water Code, section 106.5)**
 - **(3) Most recently, the Legislature has formally established a human right to water. (Water Code, section 106.3)**

Human Right to Water

Assembly Bill (AB) 685 (2012)

- California became the first state in the nation to legally recognize the human right to water with the adoption of AB 685 that was signed into law by Governor Jerry Brown on September 25, 2012.
- AB 685 creates an ongoing obligation for state agencies to explicitly consider the human right to water in every relevant agency decision and activity.
- The California Water Code requires all relevant state agencies, specifically Department of Water Resources, the State Water Resources Control Board, and California Department of Public Health, to “consider” how state actions impact the human right to water.

Human Right to Water

California Water Code

California Water Code 106.3 (a)

- “It is hereby declared to be the established policy of the state that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.”
- Domestic Use
 - **Quantity**
 - **Quality**
 - **Affordability**
 - **Accessibility**

Domestic Use Allocations

- With the previously discussed declarations of State policy in mind, and with the discretion provided to the GSA under SGMA, the GSA is exploring various options regarding the protection of existing domestic water use within the Borrego Springs Subbasin.
- One option under consideration in the draft allocation plan is whether a portion of **historical** domestic pumping, **both that conducted by the Borrego Water District and by other pumpers** (e.g. Small Water Systems), should be exempted from any reductions over time.

Quantity

- To determine a potential quantity of protected domestic water use for human consumption, cooking and sanitary purposes for the Subbasin, the influent flows to the Rams Hill Wastewater Treatment Facility were analyzed in order to estimate indoor water use per equivalent dwelling unit (EDU).
- Using complete data from 2015 and 2016, the annual average sewage generation is 126 gallons per day per equivalent dwelling unit (gpd/EDU).
- There are 2,730 existing eligible EDUs within BWD's boundary that would be eligible to a human right to water (residential, commercial, public agency and multiple units user types)

Equivalent Dwelling Use Information

Equivalent Dwelling Unit (EDU) Information ^a

User Type	Average Monthly Water Use (gallons)	Annual Water Usage Per Account (acre-feet)	Number of Users (connections)	Average Monthly Use per Connection (gallons)	Number of EDUs
Residential	27,226,209	0.55	1,823	14,935	1,823
Commercial	5,801,234	1.96	109		388 ^b
Public Agency	2,917,724	3.07	35		195
Irrigation	5,565,535	3.66	56		373
Multiple Units	4,828,026	5.08	35		323
Golf Course	0	0	1		0
Total EDUs					3,103^c

Notes:

^a Based on customer use by code for fiscal year 2015. BWD did not supply groundwater to Rams Hill Golf Course in fiscal year 2015.

^b To calculate EDU by user type divide user type average monthly water use by average monthly water use per residential connection.

^c Total EDUs rounded to nearest whole number.

Source: BWD 2016

Quantity

- Multiplying the existing eligible EDUs types by the average annual sewage generation per EDU results in a estimated BWD-wide human right to water of 385 AFY ($2,730 \text{ EDU} * 126 \text{ gpd/EDU} = 343,980 \text{ gpd} = 385 \text{ AFY}$).
- **385 acre-feet is the volume of water that would not require any pumping curtailment were this proposal to move forward.** This represents about 2% of the estimated current annual groundwater withdrawals in the Subbasin, which are about 19,600 acre-feet; about 7% of the estimated sustainable yield of 5,700 acre-feet; and about 25% of the current annual BWD pumping.

Quality

- BWD well water currently meets all state and federal drinking water standards without treatment.
- The District continuously monitors groundwater quality to ensure access to safe and clean water.
- Implementation of the Groundwater Sustainability Plan (GSP) explicitly requires ongoing evaluation of water quality and avoidance of undesirable water quality conditions.
- Further evaluation is ongoing to determine the probability of the need for future water treatment due to both natural and anthropogenic sources of contaminants of concern (e.g. arsenic and nitrate).

Affordability

- The BWD has adopted a 2-tiered rate for residential customers

Customer Class	Tier width	FY 2018 (per unit)
Residential (Commodity Charges)		
Tier 1	1 – 7 Units	\$3.35
Tier 2	> 7 Units	\$3.69
Fixed Charges $\frac{3}{4}$ -inch meter		\$35.81

Monthly Water Bill for 7 Units of Water is currently \$59.26.

Works out to approximately \$0.01 per gallon of water.

One unit = hundred cubic feet of water = 748 gallons

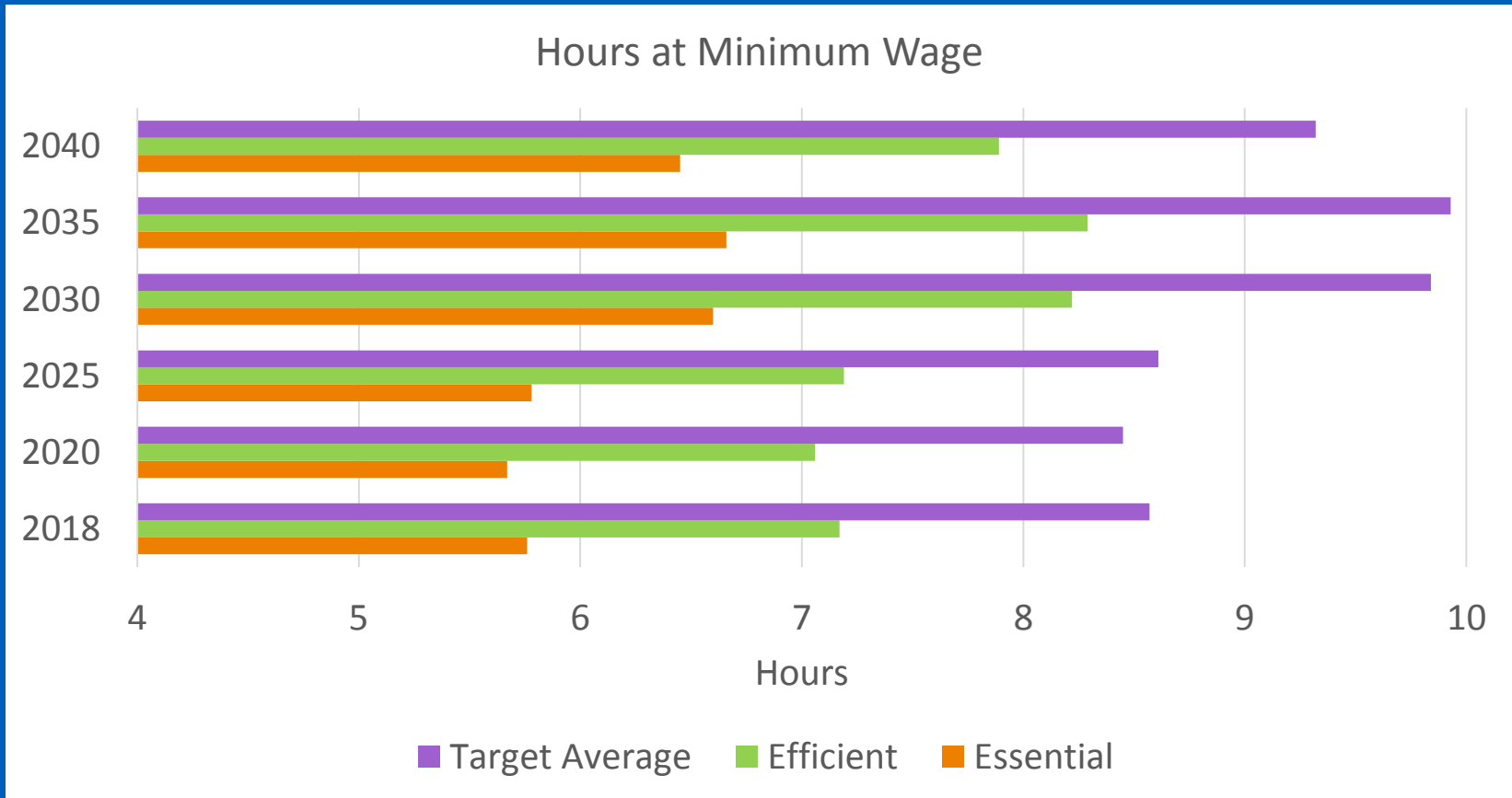
Affordability

BWD Annual Water Bill as Percent of Household Income (FY 2018)

Income Range	Essential 7 units	Efficient 11 units	Target Average 15 units
Less than \$10,000	6.5%	8.0%	9.6%
\$10,000 to \$14,999	5.2%	6.4%	7.7%
\$15,000 to \$24,999	3.2%	4.0%	4.8%
\$25,000 to \$34,999	2.2%	2.7%	3.2%
\$35,000 to \$49,999	1.5%	1.9%	2.3%
\$50,000 to \$74,999	1.0%	1.3%	1.5%
\$75,000 to \$99,999	0.7%	0.9%	1.1%
\$100,000 to \$149,999	0.5%	0.6%	0.8%
\$150,000 to \$199,999	0.4%	0.5%	0.5%
\$200,000 or more	0.3%	0.4%	0.5%
Median income (dollars)	2.0%	2.5%	3.0%
20th Percentile	3.8%	4.7%	5.6%
Poverty Level (3 person household)	3.2%	3.9%	4.7%

Affordability

Monthly Hours Required at Minimum Wage for BWD Water Service



Notes: Assumes proportional reductions and BWD purchase of water to illustrate conservative scenario.

Accessibility

- **Proposition 1 SDAC Grant to evaluate accessibility to human right to water**
 - Identify any homes not connected to BWD that may have water accessibility issues.
 - Identify public access to water via water fountains and filling water bottle stations.
 - Educate public on cost/ benefit of bottled water vs. public water (i.e. 100x the cost [\$1+ per gallon of bottled water vs. \$0.01 for District water] with no additional public health benefit).

Water Sector Reductions

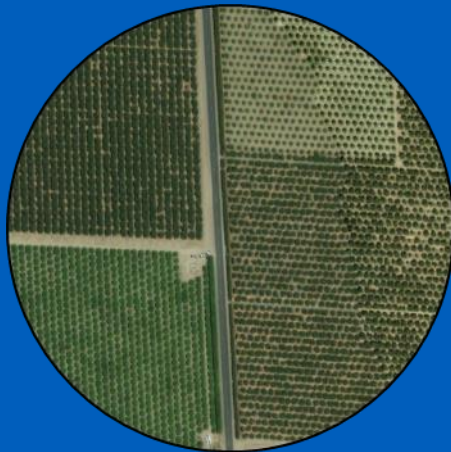
Domestic
Use



(Tier 1)



Irrigation
Use



Agriculture



Municipal
(Tier 2)

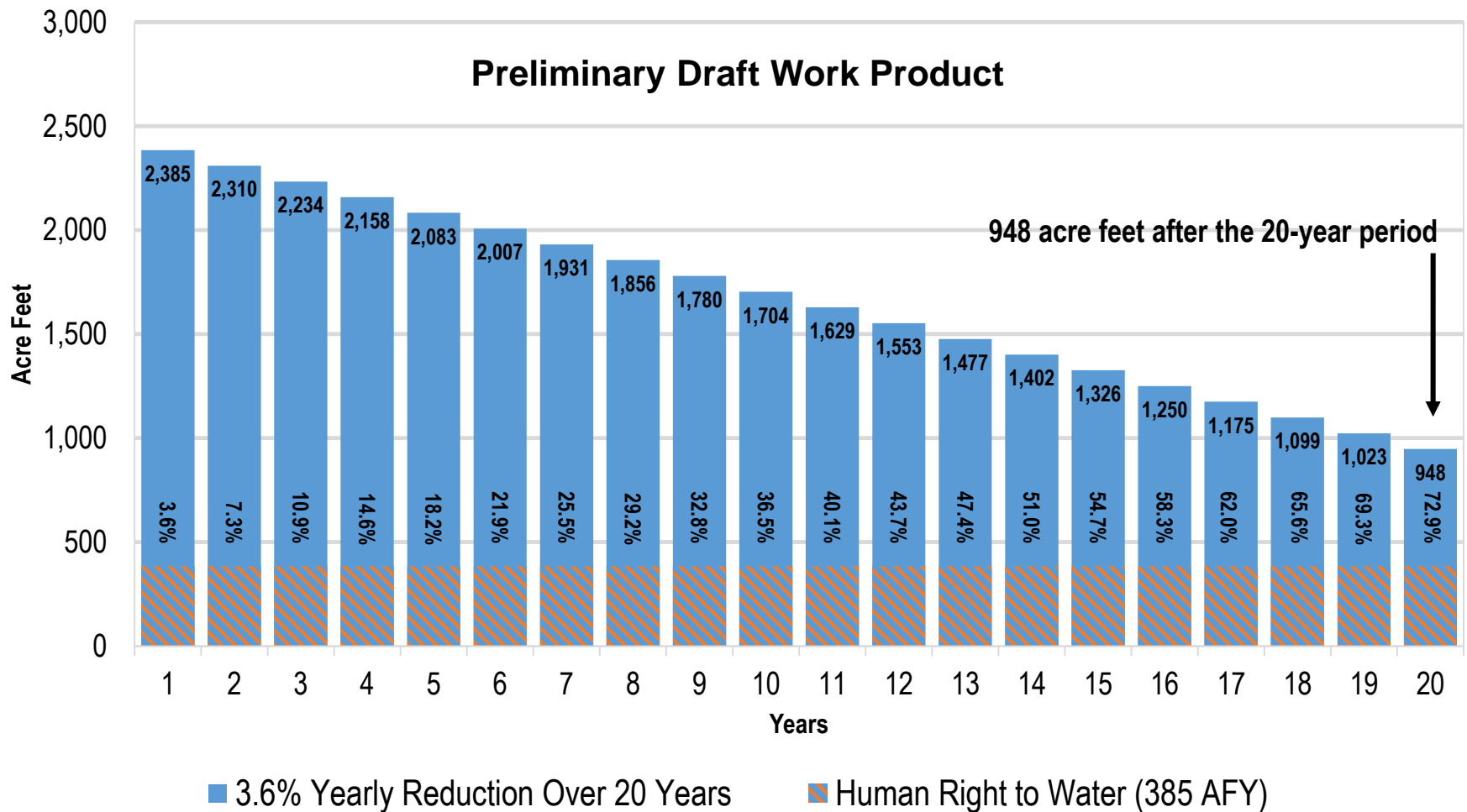


Recreation

- All irrigators (agriculture, municipal, and recreation) treated equally under water sector reduction

Municipal Baseline Pumping Allocation Including Proposed Domestic Use Reservation

BWDs 2,461 acre-feet Baseline Pumping Allocation with approximate 73% Reduction Over 20 Years and Reserved Human Right to Water



Human Right to Water Comparison to Draft Baseline Pumping Allocation

Water usage by sector

