From: Kelley Geyer k.geyer@bbid.org &

Subject: RE: Response letter
Date: May 29, 2015 at 3:40 PM

0ate: May 29, 2015 at 3:40 PM - **To**: k.geyer@bbid.org, **Rick Gilmore** r.gilmore@bbid.org, **Moon, Laura K.@**DWR Laura.K.Mcon@water.ca.gov, Dan Kelly

dkelly@somachlaw.com

Cc: Croyle, William@DWR William.Croyle@water.ca.gov, Johns, Jerry@DWR jjohnswater@gmail.com

This email includes all attachments for your use.

----Original Message-----

From: Kelley Geyer [mailto:k.geyer@bbid.org]

Sent: Friday, May 29, 2015 3:36 PM

To: 'Rick Gilmore'; 'Moon, Laura K.@DWR'; 'Dan Kelly'; 'k.geyer@bbid.org'

Cc: 'Croyle, William@DWR'; 'Johns, Jerry@DWR'

Subject: RE: Response letter

Importance: High

Dear Ms. King Moon,

Please find attached an updated proposal letter from Byron-Bethany Irrigation District (BBID) outlining a proposal between BBID and Department of Water Resources (DWR) for your consideration.

Enjoy the weekend.

Kind regards,

Kelley

----Original Message----

From: Rick Gilmore [mailto:r.gilmore@bbid.org]

Sent: Friday, May 29, 2015 9:46 AM

To: Moon, Laura K.@DWR

Cc: Croyle, William@DWR; Johns, Jerry@DWR; Kelley Geyer

Subject: Re: Response letter

Today, we are finalizing the numbers requested per Jerry's request.

Rick Gilmore

On May 29, 2015, at 9:36 AM, Moon, Laura K.@DWR <Laura.K.Moon@water.ca.gov> wrote:

Rick,

I know discussions are still going on between you and Jerry on a new proposal for dealing with your water needs, but I wanted to make sure we at least gave you a response acknowledging your previous proposal and indicating our intent to keep working with you. Do you have an idea when you will be ready to share your new proposal?

Best,

Laura

<Rick Gilmore BBID May 29 2015.pdf>



May 29 2015 BBID DWR Proposal.pdf Dear Ms. King Moon:

2003 Agreement.



Laura King Moon, Chief Deputy Director California Department of Water Resources P.O. Box 942836, Room 1115-2 Sacramento, CA 94236-0001 Email: <u>Laura.k.moon@water.ca.gov</u>

SUBJECT: Byron-Bethany Irrigation District

RUSSELL KAGEHIRO President Division V

TIM MAGGIORE Vice President Division III

LARRY ENOS, JR. Director Division I

MARK MAGGIORE Director Division II

> FELIX MUSCO Director Division IV

CHARLES TUSO Director Division VI

JEFF BROWN Director Division VII

RICK GILMORE General Manager Secretary

7995 Brons Road Byron, CA 94514-1625

Phone: 209-835-6375 Facsimile: 209-835-2869 This letter follows my May 23, 2015 letter regarding an exchange of water between the Byron-Bethany Irrigation District (BBID or District) and the Department of Water Resources (Department). The purpose of this letter is to inquire as to whether the Department is willing to extend the exchange contemplated by my May 23, 2015 letter through the remainder of the irrigation season this year. The District believes the extension of this exchange of water is contemplated by and consistent with our

First, BBID appreciates your time and efforts and that of your staff in assisting BBID in trying to find creative solutions to mitigate damages to lands within BBID through the current drought. BBID's Board of Directors very much appreciates those efforts and willingness to continue to work with us to provide some level of back up water supply. BBID values its relationship with DWR and desires to continue to cultivate our recent cooperative efforts into a more productive long-term relationship.

BBID is seeking an exchange of water through the 2015 irrigation season to mitigate for significant damages to lands and for uses within the District. As you are aware, BBID is the sole source of water for the community of Mountain House, a community with over 12,000 residents. The fire protection system in Mountain House is also available to and used by Cal Fire to fight wildfires in the Altamont Pass area. The District also provides water for the Mariposa Energy Project, a 200-megawatt natural-gas-fired power plant, for use to control emissions and fire suppression, and to the County Airport at Byron for fire suppression.

BBID's needs through the 2015 irrigation season are set forth below. BBID proposes to continue the diversion of water following curtailments of BBID's pre-1914 appropriative water rights through an exchange with the Department. BBID proposes to "repay" DWR by providing the Department with a like supply of water through fallowing or other water savings measures in 2016 or through entering the water transfer market and purchasing a like quantity of water to provide to the Department to replace water used by BBID in 2015.

Laura King Moon May 29, 2015 Page 2

The District estimates that the water supply needs for the remainder of the 2015 irrigation season, assuming the curtailment of BBID's pre-1914 appropriative water right on June 30, 2015, to total approximately 8,400 acre-feet. Factoring in an overall system loss of 12%, the estimated total amount of water diverted from the Intake Channel is approximately 9,400 acre-feet.

That total number of 8,400 acre feet is based upon the following:

Water supply for Mountain House: 2,800 acre-feet. Water supplies for Mountain House are difficult to quantify with certainty. While Mountain House has implemented a Stage 3 Water Shortage Emergency, BBID needs to provide sufficient wholesale water supplies in order to maintain minimum pressure in the fire protection/suppression system within the Mountain House community, both for fire-fighting purposes within Mountain House and for Cal Fire's use in fighting wildfires. (See attached letter from the Mountain House Community Services District.)

Mariposa Energy Project: 60 acre-feet. (See attached information)

Contra Costa Airport – Byron: 6 acre-feet.

G3 Enterprises (Gallo silica mining operation for bottling): 240 acre-feet

Byron-Bethany Irrigation District Metered Agricultural Customers: (Irrigated acreage July-October)

Row Crops. Some growers have annual crops currently planted and being irrigated. If curtailments issue and growers are prohibited from irrigated crops already planted, losses will be in the millions of dollars. Below is a breakdown of crops by type and acreage, along with the quantity of water required to allow harvest of crops already planted. All row crops are irrigated via drip irrigation.

Estimated water delivery to reach harvest: Strawberries – 5 acres – 6 acre-feet Corn, Sweet - 414 acres – 363 acre-feet Tomatoes - 275 acres – 556 acre-feet Bell Peppers - 326 acres – 338 acre-feet Mixed Vegetables - 100 acres – 60 acre-feet

Permanent Crops. There are approximately 3,535 acres of permanent crops within BBID. The cherry crop has already been harvested, and the remaining permanent crops are still being irrigated to reach harvest. All permanent crops are irrigated via micro-sprinklers. The breakdown of permanent crops and water needed for each is as follows.

Almonds (1-2 years old) – 789 acres –632 acre-feet Cherries – 463 acres – 807 acre-feet Figs – 10 acres – 16 acre-feet Fruit Trees – 387 acres – 453 acre-feet Grapes, Wine – 1200 acres – 719 acre-feet Laura King Moon May 29, 2015 Page 3

Nursery – 38 acres – 22 acre-feet Olives – 11 acres – 8 acre-feet Walnuts – 636 acres – 845 acre-feet

The remaining crops within the District are as follows:

Sudan – 837 acres – 1,508 acre-feet Alfalfa – 703 acres – 1,680 acre-feet Clover - 39 acres – 36 acre-feet Pasture – 86 acres – 100 acre-feet

As the Department is aware, BBID's diversions are reported daily to the Department. As such, the Department would have daily accurate measurements of water provided to BBID as part of the exchange and the parties will be able to accurately track and record the quantity of water to be repaid by the District in 2016.

If necessary, the District is prepared to implement mandatory rationing to reduce the District's diversion from the Intake Channel thus reducing the amount of metered deliveries through October 31, 2015.

Please let me know if the Department would agree to proceed with the proposed extension of our prior exchange under our existing Agreement. If the Department has any questions regarding the information provided above, or any other aspect of the proposed exchange, BBID would prefer to answer those questions or resolve any issues in a face-to-face meeting in an effort to reach principles of an agreement prior to June 3, 2015.

BBID very much appreciates the Department's time and efforts and looks forward to maintaining a positive working relationship with the Department.

Very Truly Yours,

BYROM-BETHANY IRRIGATION DISTRICT

Rick Gilmore

General Manager

cc: Daniel Kelly, General Counsel

## Byron-Bethany Irrigation District July - October 2015 Water Needs

4)	Crop	Total Acres	luty	Aug	Son	Oct	Total	Per A/F
Sandhu Bros	Almonds	710.33	142	142	<b>Sep</b> 142	142	568	Per A/F
R & T Farms	Almonds	75	15	15	15	15	60	
Johnson Farms	Almonds	4	1	1	1	1	4	
		789.33	158	158	158	158	632	0.800679
Bloomfield	Cherries	19	13	13	13	13	52	=
FA Maggiore	Cherries	100	84	76	54	16	230	
Vaquero Farms	Cherries	161	90	76	90	80	336	
Salvador	Cherries	11	5	3	2	2	12	
Freitas Orchard	Cherries	4	3	3	3	2	11	
McKinney Farms	Cherries	35	7	5	4	4	20	
McLean Farms	Cherries	11	2	2	2	2	8	
Barragon Farms	Cherries	11	2	2	2	2	8	
Severs Farms	Cherries	11	2	2	2	2	8	
Nunn	Cherries	99.57	35	35	35	17	122	
		462.57	243	217	207	140	807	1.744601
VII F	· ·							
Knoll Farms	Figs	9.77	4	4	4	4	16	1.637666
Mark Gambardella	Grapes	10.5	5	5	4	4	18	
Tamayo Wineries	Grapes	42	3	3	0	2	8	
Bloomfield	Grapes	282	28	28	28	28	112	
Five Star	Grapes	522.26	82	72	92	96	342	
Vaquero Farms	Grapes	300	45	60	45	40	190	
Leer Vineyards	Grapes	44	13	17	11	8	49	_
		1200.76	176	185	180	178	719	0.598787
Mike Arata	Mixed Fruit	30	30	8	15	48	101	-
Frog Hollow	Mixed Fruit	251.11	80	60	40	60	240	
Kelsey Organic Fan		60	18	18	18	18	72	
Nunn Chavez	Mixed Fruit	46	10	10	10	10	40	
		387.11	138	96	83	136	453	1.17021
Bello O'Livio	Olives	10.61	2	2	2	2	8	0.754006
	-							:
Byron Nursery	Nursery	14	2	2	2	2	8	
Barragon Nursery	Nursery	24.18	3.5	3.5	3.5	3.5	14	
	2	38.18	5.5	5.5	5.5	5.5	22	0.576218
G3 Enterprises	Silica	160	85	70	55	30	240	1.5
FA Maggiore	Walnuts	128	50	70	70	0	190	
Aramass	Wainuts	43.39	20	13	22	Ō	55	
Lawrence Cattle	Walnuts	80	27	20	18	5	70	
Houston Orchard	Walnuts	357	160	160	160	Ō	480	
Martinez Farms	Walnuts	10	7	7	6	0	20	
Paris Farms	Walnuts	4	1	1	1	1	4	
Pacific Rim Orchard		14	10	12	4	0	26	
	_	636.39	275	283	281	6	845	1.327802
	=							

# Byron-Bethany Irrigation District July - October 2015 Water Needs

	Crop	<b>Total Acres</b>	July	Aug	Sep	Oct	Total	Per A/F
Tern Farms	Strawberries	4.98	1.5	1.5	1.5	1.5	6	1.204819
Simoni Massoni	Corn, Sweet	105	0	115	0	0	115	
Barzor/Uesugi	Corn, Sweet	68	72	0	0	0	72	1.058824
FA Maggiore	Corn, Sweet	48	0	0	0	0	0	
G & S Farms	Corn, Sweet	48	56	0	0	0	56	1.166667
RRS	Corn, Sweet	130	100	0	0	0	100	
Mark Dwelley	Corn, Sweet	15	20	0	0	0	20	
FA Maggiore	Corn, Sweet	0	0	0	0	0	0	_
		414	248	115	0	0	363	0.876812
Simoni Massoni	Tomatoes, Pi	163.9	350	0	0	0	350	-
FA Maggiore	Tomatoes, Pi	46.5	130	20	0	0	150	
G&S Farms	Tomatoes, Pi	65	56	0	0	0	56	
		275.4	536	20	0	0	556	2.018882
Barzor/Uesugi	Bell Peppers	325.96	98	98	98	44	338	1.036937
10 Farms	Mixed Vegeta	98.83	15	15	15	15	60	0.607103
Sudan Growers	Sudan	837.65	377	377	377	377	1508	- 1.800275
Alfalfa Growers	Alfalfa	703.2	420	420	420	420	1680	2.389078
Oat Growers	Oats	0	0	0	0	0	0	
Clover	Clover	38.75	9	9	9	9	36	0.929032
Pasture Growers	Pasture	85.94	25	25	25	25	100	1.163603
		1665.54	831	831	831	831	3324	1.995749
	:							_
	•	6441.25	2816	2101	1921	1551	8389	1.302387



### Mountain House Community Services District 230 S. Sterling Drive, Suite 100, Mountain House, CA 95391 Tel (209) 831-2300 • Pax (209) 831-5610

www.mbcsd.com

May 27, 2015

Rick Gilmore, General Manager Byron Bethany Irrigation District 7995 Bruns Road Byron, California 94514

RE: Water Use Reductions in Mountain House

Dear Mr. Gilmore:

I want to take a brief moment to highlight water use reductions the community of Mountain House has made over the years to assist you with ongoing discussions to protect available water supplies to Byron Bethany Irrigation District (BBID) and the community of Mountain House. Mountain House Community Services District is experiencing success in reduction of water consumption based on the low water use design of the master planned Mountain House community and the careful management of municipal irrigation. The 2014 estimated water use reduction is 21.3% as compared to the base year of 2013. These significant reductions in water use came from municipal landscape irrigation improvements and management that averaged a 36% reduction (for the last 12 months) and School District reductions of 34% reduction.

From its inception in the early 2000s, the design and construction of the master planned Mountain House community is and has been combining the functional intersection between efficiency and attractive designs that serve as a model for good planning being used elsewhere throughout northern San Joaquin Valley. The 12-month average residential water consumption is 96 gallons per person – R-GPCD (96 R-GPCD), which according to a recent table published by the State entitled "Urban Water Suppliers and Proposed Regulatory Framework Tiers to Achieve 25% Use Reduction" MHCSD ranks competitively with low water use coastal communities in using less water despite being geographically located in the Altamont proximity of northern San Joaquin Valley with temperatures frequently exceeding 100-degrees and winds above 30-MPH. The annual average reduction R-GPCD is 19% as compared to the baseline year of 2013, which indicates the emergence of demand hardening as a result of efficient designs and conservation

practices. Despite this demand hardening, the MHCSD is initiating several actions that will further reduce water use to comply with the State mandated reduction target of 25%. Among these measures include the following:

- Updating water shortage emergency ordinance declared by the MHCSD Board in June 2014 to support recent mandates, including the mandate of no more than 2-day per week landscape irrigation between the hours of 9 PM and 7 AM.
- Expansion of public outreach and education campaign to encourage and incentivize increased water conservation.
- Expansion of code enforcement to discourage violations of the emergency drought ordinance up to and including fines.
- Removal of 160,000 square feet of (turf) landscape.
- Elimination and/or significant reduction in water use through redesigning median landscaping.
- Installation of ET Smart irrigation controllers
- Implementation of the most advanced designs in efficient landscape irrigation for all new construction [e.g., use of subsurface irrigation in the root zone using EcoMat Technology].
- Planning stages for water recycling using tertiary water in development.

Further reductions in R-GPCD is difficult because of past significant and successful efforts to conserve on the part of efficient designs, low water use landscaping, and efforts by the community to reduce water waste. This is resulting in demand hardening and staff is looking at creative measures to make further gains in the R-GPCD. This demand hardening is a function of the design characteristics of homes built in Mountain House. Each home is designed and built with water efficient toilets, plumbing, showers, low water use landscapes, and water wise irrigation. Lot sizes are small size in comparison to older, more traditional communities, which contributes to efficiency and community well-being and safety. Continuing efforts to reduce will focus on community education and implementing standards to allow for water efficient landscape designs and synthetic turf options as well.

The majority of our savings will be based on advancing our transformation of the municipal landscape from an inefficient (overhead spray) to a more efficient low flow drip and sub-surface design. Areas where municipal landscape was removed will be replanted upon the end of the drought, with drought tolerant plants watered by the most efficient means possible.

Two other important water demands factor into the Mountain House water use equation. Mountain House is blessed with four K-8 schools based on the village concept, along with a high school that serves the entire community. Student population exceeds currently 3,500 students.

The schools also serve many community activities within the region, all of which contributes to the overall health and safety water demand of the community.

The geographic proximity of Mountain House to the Altamont, the rural to suburban demographics, combined with high winds and high temperatures contribute to high risk of fire as identified in the region's Natural Hazard Mitigation Plan (2012). The fire protection system within Mountain House is therefore the first line of defense for life and property within Mountain House and within the South County Fire Authority region. We look forward to working with BBID and the State in looking for ways to contribute to water use reductions through efficiency improvements and water recycling projects. We hope we can partner with your organization and the State to further discuss projects and financial assistance in making these plans a reality. Please call or e-mail me at the following contact information if you have any questions, comments, or suggestions at (209) 831-5656 or epattison@sigov.org. Thank you for your time.

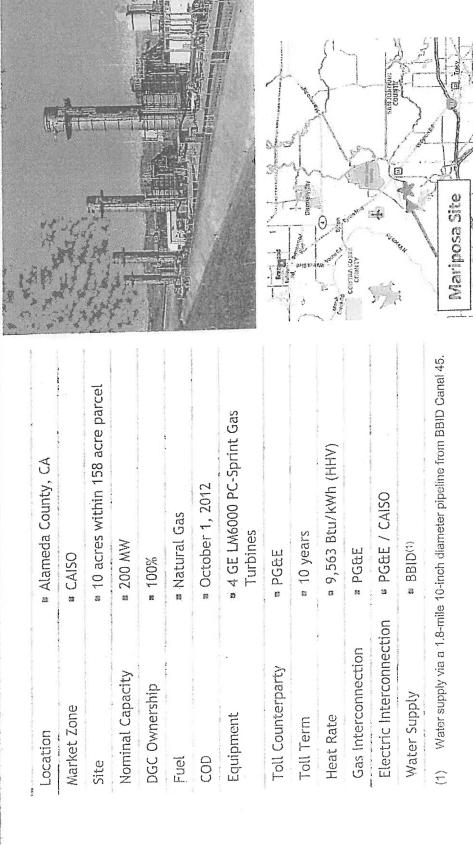
Sincerely

Edwin Pattison, General Manager

Mountain House Community Services District

# Mariposa Energy, LLC

# Facility Snapshot



# Critical to basic grid reliability

Dispatchable by PGRE and CAISO

regional power supplies, including areas affected Helps maintain continuous and stand local Tarsmission Capacity

Helps stabilize the bower grid

Has been dispatched an average of 208 start/stop cycles over last couple of years

Faster start-up and ability to run at less than ful capacity makes plant more flexible than other 

# Water Utilization

Mariposa Energy Project is incredibly water efficient compared to other plants that would be dispatched should no water be available Designed to utilize a minimum amount of water for power generation

Replaced typical evaporative inlet air coolers with chillers utilizing air-cooled

Reduced water consumption to essentially emissions control (water is used to mitigate NOx formation during the combustion process)

\*As part of Mariposa Energy's impact mitigation program, Mariposa worked with BBID to pay for and implement the concrete lining of a portion of Canal 45 to eliminate seepage and conserve, on an annual bases, the maximum anticipated Mariposa usage of 187 ac-ft of water. \*Over the past 2.5 years Mariposa has been operating about 785 hours / 200

- Mariposa has utilized only 45.1 ac-ft of water;

while the mitigation that Mariposa implemented with BBID has conserved 467.5 ac-ft of water.