United States Department of the Interior
BUREAU OF INDIAN AFFAIRS
WESTERN REGIONAL OFFICE
2600 North Central Avenue
Phoenix, Arizona 85004

TAKE PRIDE IN AMERICA

IN REPLY REFER TO:
Division of Natural Resources

NOV 28 2018

Honorable Keeny Escalanti, Sr.
President, Quechan Tribal Council
P.O. Box 1899
Yuma, Arizona 85366

Dear President Escalanti:

On October 23, 2018 a meeting attended by Virgil S. Smith (Vice President, Quechan Tribal Council), Jay Weiner (Rosette, LLP – Attorneys at Law), Miles Daly (Natural Resources Consulting Engineers), Ron Derma (Bard Water District General Manager), representatives of the Bureau of Indian Affairs (BIA), and representatives of the Bureau of Reclamation was held. The purpose of the meeting was to engage in a 43 CFR, Part 417 (Part 417) consultation with the Quechan Indian Tribe (Tribe) and Bard Water District in an effort to assess the 2019 Colorado River water requirements of the Tribe. Part 417 obligates the BIA to see that releases of Colorado River water to tribal entities do not exceed those reasonably required for beneficial use. During this consultation meeting the planned 2019 Colorado River water usage requirements of the Tribe and Bard Water District were discussed.

With consideration given to consultation discussions and in fulfillment of responsibilities described in Part 417, the Regional Director, Western Regional Office has formally determined the Tribe's 2019 Colorado River water order. This water order is provided in Table 1 (attached) and corresponds with the diversion schedule previously submitted by the Tribe to the BIA (except for rounding differences). This water order is being submitted to the Bureau of Reclamation for Colorado River water regulation and accounting purposes. A copy of the diversion schedule submitted by the Tribe, along with the Tribe's completed Part 417 Consultation Questionnaire, is enclosed.

Please direct any questions to Mr. Jonathan Cody, Irrigation Engineer, at (602) 379-6789.

Sincerely,

Regional Director

Enclosures

cc: ✓Regional Director, BOR LCRO
Steve Hvinden, BOR
Superintendent, Fort Yuma Agency
Ron Derma, Bard Water District

Table 1: Quechan Tribe 2019 Water Order (all quantities in acre-feet)

Month	Arizona					California				
	Ranch 5	Domestic Use	Cha Cha Farms	Yuma East Wetlands	Total AZ	Indian Unit	Domestic Use	FYIR Ranches	CA Totals	2005 Forbearance Agreement
JAN	14	3	2	46	65	1,915	11	140	2,066	1,083
FEB	25	2	4	52	83	2,775	14	175	2,964	1,083
MAR	51	2	4	102	159	5,800	19	238	6,057	1,083
APR	61	3	4	141	209	7,506	21	257	7,784	1,083
MAY	43	3	4	161	211	5,257	25	315	5,597	1,083
JUN	58	3	4	200	265	3,167	30	382	3,579	1,083
JUL	12	4	8	195	219	2,314	33	417	2,764	1,083
AUG	34	2	4	183	223	4,495	32	401	4,928	1,083
SEP	43	2	5	148	198	2,578	25	316	2,919	1,083
OCT	42	2	5	103	152	4,591	21	265	4,877	1,083
NOV	42	2	6	52	102	3,645	15	187	3,847	1,083
DEC	20	2	3	26	51	2,769	15	185	2,969	1,083
TOTAL	445	30	53	1,409	**1,937**	46,812	261	3,278	**50,351**	13,000
ENTITLEMENT	6,350					71,616[†]				

[†]The Consolidated Decree entered March 27, 2006, in Arizona v. California allocates 71,616 acre-feet for lands within the boundaries of the Fort Yuma Indian Reservation in the State of California. By settlement agreement executed March 27, 2005, by the United States, the State of California, and several Colorado River water users; including the Quechan Tribe (Tribe) and the Metropolitan Water District (MWD): (1) only 64,616 acre-feet are immediately available to the Tribe; (2) the full 71,616 acre-feet will become available to the Tribe in Year 2035; and (3) 13,000 acre-feet immediately available to the Tribe are available for diversion to the MWD through Year 2035 contingent upon conditions set forth in the 2005 settlement agreement and a forbearance agreement between the parties. Under the settlement agreement, beginning in 2035, certain other conditions may occur between MWD and the Tribe affecting the use of the Tribe's supplemental decree entitlement by MWD.

Quechan Tribe
Part 417 Consultation Questionnaire

The 43 Code of Federal Regulations, Part 417 (Part 417) obligates the Secretary of the Interior to see that releases of Colorado River water to Colorado River tribal entities will not exceed those reasonably required for beneficial use. Every year, the Bard Water District (Bard) and the Quechan Tribe (Tribe) are asked to submit an estimate of the Tribe's twelve month Colorado River diversion rate and anticipated monthly diversion schedules to the Bureau of Indian Affairs (BIA) for the following calendar year. The BIA is directed by Part 417 to consult with Colorado River tribal entities each year regarding water conservation measures, operating practices, and the beneficial use of Colorado River water.

For calendar year 2019, the Part 417 consultation is being supplemented with the collection of written information. This information, along with other relevant materials, will be examined by BIA Western Region staff. Following this examination, the Regional Director's determination of the approved diversion amount will be communicated in writing to Bard and the Tribe. Part 417 establishes procedures under which Bard or the Tribe may request modification of the determination or later appeal it to the Secretary of the Interior. Please review this Part 417 Consultation Questionnaire and reply to the listed topics.

Diversion: Provided in Table 1 is a historic review of the Tribe's demands for Colorado River water since calendar year 2013 based upon data acquired from the Bureau of Reclamation website on September 11th, 2018 (https://www.usbr.gov/lc/region/g4000/wtracct.html). Past water use is one factor that can be used in determining water requirements for the Tribe.

Table 1. Colorado River diversions for the Quechan Tribe.

	Arizona Diversions					California Diversions				
Year	YPRD[1]	Domestic Use	Cha Cha Farms	Yuma E. Wetlands	**Arizona Total**	YPRD[2]	Domestic Use	FYIR Ranches[3]	**California Total**	MWD Forbearance
2019[4]	445	30	55	1,407	**1,937**	46,811	259	3,278	**50,347**	13,000
2018[5]	NA	NA	NA	NA	**2,120**	46,397	259	3,973	**50,629**	13,000
2017	418	30	48	1,249	**1,745**	45,372	795	2,060	**48,227**	13,000
2016	400	30	55	1,250	**1,735**	45,672	795	3,569	**50,036**	13,000
2015	445	30	42	1,244	**1,761**	48,033	795	3,951	**52,779**	11,837
2014	436	30	0	1,407	**1,873**	48,165	795	3,530	**52,490**	12,126
2013	432	30	0	1,352	**1,814**	47,519	795	2,509	**50,823**	13,000

[1] Arizona YPRD lands include the portion of Ranch 5 that is in Arizona.

[2] California YPRD lands include all California lands served by the YPRD irrigation system including Ranch 5.

[3] FYIR ranches are all irrigated Tribal lands in California outside of the YPRD system that receive water from the Colorado River or from groundwater.

[4] Forecasted use for 2019.

[5] Forecasted use from USBR water accounting website accessed on 9/11/2018.

Part 417 Factors: Part 417.3 prescribes a list of factors to be examined by the BIA in approving a Tribe's annual water order. The BIA consults annually with tribes utilizing Colorado River water on the Part 417.3 factors. The BIA requests an update of this information, and any additional written information that Bard or the Tribe desires to include, in order to support requests for 2019 diversions. Please note that the implementation of water conservation measures may also affect water requirements.

Water Conservation Planning: In addition to providing a reply to each factor listed, Bard and the Tribe should also describe those activities implemented in 2018 which may influence water orders for 2019.

Please respond to each item in the Consultation Questionnaire and fill out the attached diversion estimate table with anticipated 2019 diversion quantities by month. These completed forms may be returned to the BIA, or the requested information may be provided in a format of your choice, provided that the format addresses each factor. This written consultation, along with any other material considered to be relevant, will be used to determine the approved diversion of the Tribe's water rights for calendar year 2019.

Part 417.3 Factors	2018 Reply	2019 Reply (Written)
Area to be Irrigated[1]	According to the BIA agricultural lease log, as of 9/21/2017, a total of 8,130 acres are leased, of which, 7,378 acres are within the Indian Unit. The lease for 752 acres expires 12/31/2017 and the lease for an additional 1,304 acres expires before the end of 2018.	According to the BIA agricultural lease log, as of 9/12/2018, a total of 8,144 acres are leased, of which, 7,392 acres are irrigated by Yuma Project Reservation Division infrastructure. The leases for 657 acres expire 6/30/2019 and the leases for an additional 342 acres expire 12/31/2019.
Climatic Conditions[2]	Averages from AZMET stations Yuma Valley (POR: 1987-2016) and North Gila (POR: 1988-2016). Mean annual temp = 72.3 F; mean annual max temp = 87.7 F; mean annual min temp = 56.9 F; mean annual precip = 2.7 inches; mean annual grass reference ET_o = 78.3. Arid climate with hot summers and mild winters.	Averages from AZMET stations Yuma Valley (POR: 1987-2016) and North Gila (POR: 1988-2016). Mean annual temp = 72.3 F; mean annual max temp = 87.7 F; mean annual min temp = 56.9 F; mean annual precip = 2.7 inches; mean annual grass reference ET_o = 78.3. Arid climate with hot summers and mild winters.
Location[3]	Southeast corner of California, Imperial County, Lower Colorado Region	Southeast corner of California, Imperial County, Lower Colorado Region
Land Classification[4]	No crop movement between soils classifications; no significant impact	No crop movement between soils classifications; no significant impact

[1] Has the Tribe added or reduced the number of turnouts or cultivated acres in its service area?
[2] List weather stations used, annual mean temperature and rainfall, and reference evapotranspiration (ETo).
[3] Have there been any changes in the location of Tribe's facilities (e.g. canals, laterals, gates, etc.)?
[4] Quantify crop acres moved between soil classifications and projected impact on water use.

Part 417.3 Factors	2018 Reply	2019 Reply (Written)
	on water use	on water use
Kinds of crops raised[5]	Produce, small grains, Sudan hay, melons, cotton, alfalfa. No change in crop types and no impact on water use	Produce, small grains, Sudan hay, melons, cotton, alfalfa. No change in crop types and no impact on water use
Cropping Practices[6]	No change in cropping practices, normal amount of sprinkle irrigation activity for germination, transplant or early stages of rotation crops. No expected impact on water use.	No change in cropping practices, normal amount of sprinkle irrigation activity for germination, transplant or early stages of rotation crops. No expected impact on water use.
Type of Irrigation System in Use[7]	No change in irrigation sprinkle method for germination, transplants or early stages of wheat. Between crop rotation water users Laser level their fields improving irrigation efficiency.	No change in irrigation sprinkle method for germination, transplants or early stages of wheat. Between crop rotation water users Laser level their fields improving irrigation efficiency.
Condition of Water Carriage & Distribution Facilities[8]	Approximately 15 miles of earthen ditches need to be lined with concrete and approximately 20 check and deliver structures with leak proof gates need replaced	Approximately 15 miles of earthen ditches need to be lined with concrete and approximately 20 check and deliver structures with leak proof gates need replaced. Additionally, the Five Gates diversion structure needs to be replaced as well as repairs and replacement of several other smaller structures including headwalls, culverts, access decks, division boxes and drain crossings.
Record of water orders[9]	Ditchriders may amend water orders 3 days in advance, they also update weekly	Ditchriders may amend water orders 3 days in advance, they also update weekly
Record of Rejections of Water Orders[10]	No water orders were rejected because of nonpayment	No water orders were rejected because of nonpayment
General Operating Practices/Policies[11]	No Change in Operating Practices	No Change in Operating Practices
Operating Efficiencies[12]	The district strives to maintain 80% to 85% conveyance efficiency	The district strives to maintain 80% to 85% conveyance efficiency

[5] List changes in crop types (e.g. more/less alfalfa than last year, etc…) and the projected impact on water use.
[6] Identify projected changes to cropping practices (e.g. sprinkle germination, etc..) and the expected impact on water use.
[7] Has there been a change in irrigation methods such as more/less drip acreage, level basin acreage, etc.?
[8] Amount of water delivered/sold to customers in acre feet.
[9] Does Bard amend daily water orders with the USBR more than three times a month?
[10] Have water orders from farmers been rejected by Bard (e.g. for non-payment, etc.), which would impact its water order?
[11] Have there been any changes to operating practices or policies? If so, describe the new operating practice or attach a description of the new policy.
[12] Total water consumed divided by total water diverted in percent.

Part 417.3 Factors	2018 Reply	2019 Reply (Written)
Methods of Irrigation of the water users[13]	No change in types of irrigation management practices	No change in types of irrigation management practices
Amount and rate of return flow to the CO river[14]	According to the BOR's 2016 Colorado Accounting & Water Use Report annual return flow was approximately 23,000 acre feet. Estimated constant return flow of 31.8 CFS	According to BOR's 2017 Colorado River Accounting & Water Use Report, annual return flow from Reservation agricultural lands was 611 acre feet in Arizona, 9,623 acre feet in California, and an unspecified portion of 23,296 acre feet in California which are reported as "unassigned YPRD measured returns".
Municipal Water Requirements[15]	According to B.O.R. Colorado River Accounting & Water Use Report, the amount of domestic water pumped included 795 acre feet in CA, and 30 acre feet in AZ in 2016.	According to BOR water accounting personnel, the estimated amount of domestic water pumped based on groundwater well pumping records was 259 acre feet in CA which will be applied to 2018. According to B.O.R. Colorado River Accounting & Water Use Report, the amount of domestic water pumped in AZ in 2017 was 30 acre feet.
Provisions of Users Water Delivery Contract[16]	No provisions have been made to the Water Service Contract	No provisions have been made to the Water Service Contract
Water Rates[17]	Annual estimated budget submitted for 2018 is $1,055,625 for 7,375 leased acres. Basic rate per acre up to 5.0 acre-feet was $118.50 in 2017 and is expected to increase to $147 in 2018. Excess water rate was $27.50 per acre-foot in 2017 and is expected to increase to $30 in 2018.[18]	Basic rate per acre up to 5.0 acre-feet was $147 per acre in 2018. Excess water rates were $30 per acre foot in 2018. The estimated budget and any proposed rate increases have not yet been determined for 2019.
Number of Ditch Riders[19]	Two (2) total – one (1) main ditchrider and one (1) relief ditchrider	Two (2) total – one (1) main ditchrider and one (1) relief ditchrider
Water Conservation[20]	Annual estimated budget for improvements is $10,000.00	Annual estimated budget for improvements is $10,000.00
Other Relevant Factors[21]	Concrete lining would reduce seepage, improve efficiency in	Concrete lining would reduce seepage, improve efficiency in

[13] Types of irrigation management practices employed (e.g. surge, cutback, etc.). Describe any changes to the type of management practice utilized and provide the quantity of acres affected by these changes.
[14] Amount (cfs) and average rate (ft/sec) of return flow to the river.
[15] The amount of water going to non-agricultural uses (municipal, industrial, feedlots, other, etc…) in acre feet.
[16] Have there been any changes in the water service contract?
[17] Have there been any changes in water rates? If so, submit the changed rates.
[18] Water Rates for 2018 are based on notes from 2018 Annual O&M Budget Meeting on Sept 28, 2017.
[19] Number of ditch riders and areas/divisions each ditch rider works.
[20] How much money will be spent by Bard on water conservation for the Indian Unit in 2017?
[21] Optional, please identify any other relevant factor/factors and explain why it would impact the water order.

Part 417.3 Factors	2018 Reply	2019 Reply (Written)
	deliveries therefore a reduction in diversions	deliveries therefore a reduction in diversions

WATER CONSERVATION PLAN IMPLEMENTATION[22]

2017 Activity

1.
2.
3.
4.

OTHER[23]

Assad Safadi — Sept. 13, 2018

Signature **Date**

ASSAD SAFADI
Senior Vice President
Natural Resources Consulting Engineers, Inc.

[22] Water conservation activities/measures/practices Bard implemented in 2016.
[23] Other relevant materials to submit (e.g. new water conservation plan, transfers, water price sheet, etc.).

Table 2. CY 2019 Quechan Tribe (Fort Yuma Indian Reservation) Colorado River Diversion Estimates. (All quantities in acre-feet).

	Arizona Diversions					California Diversions				
Month	YPRD	Domestic Use	Cha Cha Farms	Yuma East Wetlands	**Total AZ**	YPRD	Domestic Use	FYIR Ranches	**Total CA**	MWD Forbearance
Jan	14	3	2	46	**65**	1,915	11	140	**2,066**	1,083
Feb	25	2	4	52	**83**	2,775	14	175	**2,964**	1,083
Mar	51	2	4	102	**159**	5,800	19	238	**6,057**	1,083
Apr	61	3	4	141	**209**	7,506	21	257	**7,784**	1,083
May	43	3	4	161	**211**	5,257	25	315	**5,596**	1,083
Jun	58	3	4	200	**265**	3,167	30	382	**3,579**	1,083
Jul	12	4	8	195	**219**	2,314	33	417	**2,764**	1,083
Aug	34	2	4	183	**223**	4,495	32	401	**4,928**	1,083
Sep	43	2	5	148	**197**	2,578	25	316	**2,918**	1,083
Oct	42	2	5	103	**152**	4,591	21	265	**4,876**	1,083
Nov	42	2	6	52	**102**	3,645	15	187	**3,847**	1,083
Dec	20	2	3	26	**51**	2,769	15	185	**2,968**	1,083
Total	445	30	55	1,407	**1,937**	46,811	259	3,278	**50,347**	13,000