



# BARD WATER DISTRICT



1473 Ross Road — Winterhaven, California 92283  
Phone 572-0704

September 10, 2013



UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF INDIAN AFFAIRS - FORT YUMA AGENCY  
256 S. Second Avenue, Suite D  
Yuma, AZ 85364  
Attn: **IRENE HERDER, SUPERINTENDENT**

Reference: **ESTIMATES OF DIVERSIONS - COLORADO RIVER 2014**  
**PART 417 CONSULTATION QUESTIONNAIRE FOR QUECHAN TRIBE**

Dear Ms. Herder:

Per your request letter August 20, 2013, enclosed are the completed Estimates of Diversion Requirements for the Calendar Year 2014. Any questions or concerns please feel free to call.

Thank you for your attention.

Respectfully,

Ron Derma, General Manager  
**BARD WATER DISTRICT**

RD/th

Copy/file/P.Matsuka, Manager WA&VG BOR, Boulder City, NV  
Enclosures

**Yuma Project Reservation Division - Indian Unit  
Consultation Questionnaire for the Quechan Tribe**

<b>Part 417.3 Factors</b>	<b>2013 Reply</b>	<b>2014 Reply (Written)</b>
1 Area to be Irrigated	7,662 Acres for the Indian Unit	7,662 Acres for the Bard Unit
2 Climatic Conditions	Yuma Weather Sation Average Annual Temperature is 77 Degrees. The Average Annual Precipitation is 2.3 Inches. Arid Climate with Hot Summers and Mild Winters	Yuma Weather Sation Average Annual Temperature is 77 Degrees. The Average Annual Precipitation is 2.3 Inches. Arid Climate with Hot Summers and Mild Winters
3 Location	Southeast Corner of California, Imperial County, Lower Colorado Region	Southeast Corner of California, Imperial County, Lower Colorado Region
4 Land Classification	No Crop Movement between Soils Classifications, No Significant Impact on Water Use	No Crop Movement between Soils Classifications, No Significant Impact on Water Use
5 Kinds of Corps Raised	Produce, Sudan Hay, Citrus, Melsons, Cotton, Alfalfa	Produce, Sudan Hay, Citrus, Melsons, Cotton, Alfalfa
6 Cropping Practices	Normal Amunt lof Sprinkle Germination and Transplant Activity for Rotation Crops is Anticipated, No Projected Impact on Water Use	Normal Amunt lof Sprinkle Germination and Transplant Activity for Rotation Crops is Anticipated, No Projected Impact on Water Use
7 Types of Irrigation System in Use	The Irrigation System was built during the Construction of the Laguna Damn with Earthen Laterals, Currently Approximately Half of the System is Concrete Lining, 40,000 Acre Feet is Delivered Annually	The Irrigation System was built during the Construction of the Laguna Damn with Earthen Laterals, Currently Approximately Half of the System is Concrete Lining, 40,000 Acre Feet is Delivered Annually
8 Condition of Water Carriage & Distribution Facilities	Approximately Half of the System is Cocrete Lined	Approximately Half of the System is Cocrete Lined
9 Record of Water Orders	Ditch Riders amend Water Orders 3 Days in Advance and Weekly Water Orders every Wednesday	Ditch Riders amend Water Orders 3 Days in Advance and Weekly Water Orders every Wednesday
10 Record of Rejections of Water Orders	Water Orders Not Rejected for Non-payment or any other reason that would Impact the Water Order	Water Orders Not Rejected for Non-payment or any other reason that would Impact the Water Order
11 General Operating Practice/Polices	No Changes in Operating or Policy Practices	No Changes in Operating or Policy Practices
12 Operating Efficiencies	The District Strives to Maintain 85% to 95% Efficiency	The District Strives to Maintain 85% to 95% Efficiency
13 Methods of Irrigation of the Water Users	Not Aware of any changes in the types of irrigation management practices	Not Aware of any changes in the types of irrigation management practices

**Yuma Project Reservation Division - Indian Unit  
Consultation Questionnaire for the Quechan Tribe**

Cont'd

<b>Part 417.3 Factors</b>	<b>2013 Reply</b>	<b>2014 Reply (Written)</b>
<b>14</b> Amount and Rate of Return Flow to the CO River	Approximately 7,000 Acre Feet is returned to the river annually, equivalent to approximately a constant flow of 10 CFS	Approximately 7,000 Acre Feet is returned to the river annually, equivalent to approximately a constant flow of 10 CFS
<b>15</b> Municipal Water Requirements	All Water Deliveries are for Agricultural Purposes	All Water Deliveries are for Agricultural Purposes
<b>16</b> Provisions of Users Water Delivery Contract	No Provisions have been made to the Water Service Contract	No Provisions have been made to the Water Service Contract
<b>17</b> Water Rates	Annual Estimated Budget is \$605,110.00 for Water Delivery to 7,662 Acres. The Excess Water Rate is \$17.00 Per Acre Foot.	Annual Estimated Budget is \$605,110.00 for Water Delivery to 7,662 Acres. The Excess Water Rate is \$17.00 Per Acre Foot.
<b>18</b> Number of Ditch Riders	Two (2) Total, One (1) Main Ditch Rider and One (1) Relief Ditch Rider	Two (2) Total, One (1) Main Ditch Rider and One (1) Relief Ditch Rider
<b>19</b> Water Conservation	Annual Estimated Budget is \$15,000.00	Annual Estimated Budget is \$15,000.00
<b>20</b> Other Relevant Factors	N/A	N/A

WATER CONSRVATION PLAN IMPLEMENTATION

2014 Activity

1. The District Continues to seek grants to concrete
2. Line Canals, Lining of the Upper Section of the
3. Reservation Main and Mohave Canals would impact
4. Future Diversions and Improve Delivery Efficiently
5. The District Continues to Install Leak-Proof Metal Gates

Other

The District Encourages an improved measuring mechanism to Calculate the Return Flows between the Indian and Bard Units

Ron Derma  
Ron Derma, General Manager  
BARD WATER DISTRICT

9/9/13  
Date

**Yuma Project Reservation Division - Indian Unit and Ranch 5  
Diversion Estimates by Month**

	2013 Diversion Estimates (Acre Feet)		2014 Diversion Estimates (Acre Feet)	
Month	Indian Unit	Ranch 5	Indian Unit	Ranch 5
JAN	2,700	200	2,300	200
FEB	3,600	300	3,400	150
MAR	6,800	300	6,500	150
APR	7,500	300	7,300	150
MAY	6,100	300	5,700	150
JUN	2,500	200	3,100	0
JUL	3,500	100	3,300	0
AUG	3,500	100	3,900	100
SEP	2,400	100	2,400	100
OCT	4,700	300	4,700	150
NOV	3,300	200	3,300	150
DEC	2,000	200	3,200	470
<b>TOTAL</b>	<b>48,600</b>	<b>2,600</b>	<b>49,100</b>	<b>1,770</b>