

Wells, Paul@Waterboards

From: Miller, Aaron@DWR
Sent: Friday, October 02, 2015 9:02 AM
To: Wells, Paul@Waterboards
Cc: McGinnis, Robin C.@DWR; Leahigh, John@DWR; Pettit, Tracy@DWR
Subject: RE: Byron Bethany Irrigation District - follow-up questions

Hi Paul,

Yes, the two diversion points that I mentioned in my previous email are basically across from each other in the intake channel. BBID calls the DWR Field Division and reports their total daily diversion from Clifton Court Forebay as single combined value. The diversion is reported as a volume in acre-feet and is simply converted to a daily average cfs. No other factors or adjustments are applied to the data. The BBID diversion data, however, is posted on CDEC the day after the diversions and reported as that day's diversion. For example the diversion volume for 9/30/15 is reported the night of 9/30 or the morning of 10/1 and will show up on CDEC as 10/1/15 diversions.

Let me know if you have any questions.

-Aaron

Aaron Miller, PE

Export Management Section Chief
California Department of Water Resources
Operations Control Office
(916) 574-2165

From: Wells, Paul@Waterboards
Sent: Wednesday, September 30, 2015 10:30 AM
To: Miller, Aaron@DWR
Subject: Byron Bethany Irrigation District - follow-up questions

Good Morning Aaron:

I have two additional questions I'm hoping you can help me out with:

- In your previous email you mentioned

BBID operators provide a daily volume in acre-ft to the DWR Delta Field Division operators sometime after midnight. This value is then entered into our operations database. There is an automated process that converts daily acre-ft in to a daily average flow rate and sends that data to CDEC.

When BBID reports the diversions to the DWR Delta Field Division operators on a daily basis, do they report a combined value for both diversion locations, or do they submit data for each diversion location separately?

Also, what does the automated process for converting the daily data supplied by BBID involve? Other than applying a factor to convert acre-feet to cfs, are there other factors or adjustments applied to the data?

- In your previous email you mention two points of diversion. I believe you are referring to the two diversion points which are basically located right across the intake channel from each other (see attached map). Is this correct?

Thank You, Paul

From: Miller, Aaron@DWR
Sent: Thursday, September 17, 2015 1:44 PM
To: Wells, Paul@Waterboards
Cc: Leahigh, John@DWR; Pettit, Tracy@DWR
Subject: RE: Information on Station BBI

Hi Paul,

Most of the questions are probably best answered by BBID as we do not operate, nor do we have access to read the gauge. Below I have answered your questions (in red) to the best of my knowledge.

Let me know if you have any questions.

-Aaron

Aaron Miller, PE
Export Management Section Chief
California Department of Water Resources
Operations Control Office
(916) 574-2165

From: Wells, Paul@Waterboards
Sent: Wednesday, September 16, 2015 2:27 PM
To: Miller, Aaron@DWR
Subject: Information on Station BBI

Good Afternoon Aaron,

I am writing to request additional information on the Byron Bethany Irrigation District Diversion gauge (Station ID: BBI).

I am specifically looking for answers to the following questions:

- It is my understanding the BBI gauge measures the water the Byron Bethany Irrigation District (BBID) diverts from the Banks Intake Channel. Is this correct?
Yes, BBID has two diversion points out of the intake channel between Banks Pumping Plant and Skinner Fish Facility.
- What type of device is used to measure the flow rate?
DWR doesn't have access to the meter. You will need to contact BBID for this information.
- The BBI data on CDEC is updated on a daily basis. How is this daily diversion rate calculated?
BBID operators provide a daily volume in acre-ft to the DWR Delta Field Division operators sometime after midnight. This value is then entered into our operations database. There is an automated process that converts daily acre-ft in to a daily average flow rate and sends that data to CDEC. You will need to contact BBID for any other details.
- What is the time-step for data collection at the BBI gauge?
BBID operators provide a daily volume in acre-ft to the DWR Delta Field Division operators sometime after midnight. This is typically done every night, but there have been occasions where days were missed and the aggregate was reported on the following day or two. Zero diversion is assumed in absence of a BBID reported number. You will need to contact BBID for any other details.
- How is this data averaged into a daily value (by DWR or BBID)?

BBID operators provide a daily volume in acre-ft to the DWR Delta Field Division operators. You will need to contact BBID for any other details.

- How is the data uploaded to CDEC – (telemetry, uploaded by BBID or DWR)?
BBID operators provide a daily volume in acre-ft to the DWR Delta Field Division operators sometime after midnight. This value is then entered into our operations database. There is an automated process that converts daily acre-ft in to a daily average flow rate and sends that data to CDEC.
- Have there been any performance issues with the BBI gauge in 2015?
Since DWR doesn't have access to the meter, we are unaware of any performance issues. You will need to contact BBID for any other details.

I'm not sure if you are the correct person to contact regarding this inquiry. Please let me know if I need to contact someone else.

Sincerely,

Paul Wells
Division of Water Rights
(916) 323-5195