

## **REACH 2A DAILY EVALUATIONS**

### **November 2009**

(scroll through file to view daily evaluations starting with most recent)

#### **BACKGROUND:**

Condition 9 of Order Water Right 2009-0058-DWR (Order) for the Water Year 2010 Interim Flows Project issued by the State Water Resources Control Board requires Reclamation to conduct a daily evaluation of groundwater levels and flow and stage levels when flows are greater than 475 cubic feet per second (cfs) in Reaches 2A and 3 and post the results of this evaluation to a website.

Flow exceeded 475 cfs in Reach 2A as recorded at the Gravelly Ford gaging station on November 9, 2009, based on preliminary data. Early on November 13, 2009, flow dropped below 475 cfs. Daily evaluations have stopped until flow rises above 475 cfs again.

**RESULTS OF THE DAILY EVALUATION:**  
**November 12, 2009**  
**Day 4**

As of November 12, 2009, Reclamation personnel have reported the following:

1. Flows are below known conveyance thresholds (8,000 cfs in Reach 2A, 1,300 cfs in Reach 2B, and 600 cfs in Reach 3).
2. No groundwater seepage or flow problems were identified on today's daily Mendota Pool operations call.
3. No calls have been received on the seepage hotline that reported the potential for probable or imminent seepage problems.

The most recent stage and flow data for Reach 2A is provided in Table 4-1 below. The most recent groundwater data for Reach 2A is provided in Table 4-2 below.

Based on the above information, no seepage problems are anticipated and Reclamation will continue with the Interim Flow releases as scheduled. Reclamation will also continue daily updates until flow in Reach 2A no longer exceeds the threshold for evaluation.

<b>Table 4-1: Daily Average Stage &amp; Flow Measurements (Preliminary)</b>			
<b>Location</b>	<b>Flow (cubic feet per second)</b>	<b>Stage (feet)</b>	<b>Date</b>
Below Friant Dam	323	3.21	11/12/2009
Gravelly Ford	501	6.56	11/12/2009

<b>Table 4-2: Groundwater Elevation Measurements</b>						
<b>Well_ID</b>	<b>SubReach</b>	<b>RiverMile</b>	<b>Description</b>	<b>Well Depth (ft)</b>	<b>Depth to Groundwater (DTW) Measurements (feet below ground surface)</b>	
					<b>DTW</b>	<b>Date</b>
MW-36	Reach 2A	223.8	2 inch PVC well	47.5	> 47.5 (none)	9/23/2009
MW-37	Reach 2A	223.8	2 inch PVC well	87.5	76.7	9/14/2009
MW-37B	Reach 2A	223.8	2 inch PVC well	25.5	> 25.5 (none)	9/14/2009
MW-41D	Reach 2A	222	2 inch PVC casing	82.0	73.3	8/28/2009
MW-39	Reach 2A	222	2 inch PVC casing	92.0	79.0	9/11/2009
MW-39B	Reach 2A	222	2 inch PVC casing	25.0	> 25.0 (none)	9/11/2009
MW-09-44	Reach 2A	219.8	2 inch pipe	67.0	45.7	8/20/2009
MW-09-46	Reach 2A	218.2	2 inch pipe	67.0	19.3	8/16/2009
MW-09-47	Reach 2A	218.2	2 inch pipe	50.0	24.7	9/17/2009
MW-49	Reach 2A	217.2	Survey Stake	65.0	28.0	8/3/2009
MW-49B	Reach 2A	217.2	Survey Stake	22.0	> 22.0 (none)	8/3/2009
MW-54 (provisional)	Reach 2B	211.8	Vault	51.8	31.6	11/12/2009

None = No groundwater measured, well is dry.

**RESULTS OF THE DAILY EVALUATION:**  
**November 11, 2009**  
**Day 3**

As of November 11, 2009, Reclamation personnel have reported the following:

1. Flows are below known conveyance thresholds (8,000 cfs in Reach 2A, 1,300 cfs in Reach 2B, and 600 cfs in Reach 3).
2. No groundwater seepage or flow problems were identified on today's daily Mendota Pool operations call.
3. No calls have been received on the seepage hotline that reported the potential for probable or imminent seepage problems.

The most recent stage and flow data for Reach 2A is provided in Table 3-1 below. The most recent groundwater data for Reach 2A is provided in Table 3-2 below.

Based on the above information, no seepage problems are anticipated and Reclamation will continue with the Interim Flow releases as scheduled. Reclamation will also continue daily updates until flow in Reach 2A no longer exceeds the threshold for evaluation.

<b>Location</b>	<b>Flow (cubic feet per second)</b>	<b>Stage (feet)</b>	<b>Date</b>
Below Friant Dam	502	3.67	11/11/2009
Gravelly Ford	507	6.52	11/11/2009

<b>Well_ID</b>	<b>SubReach</b>	<b>RiverMile</b>	<b>Description</b>	<b>Well Depth (ft)</b>	<b>Depth to Groundwater (DTW) Measurements (feet below ground surface)</b>	
					<b>DTW</b>	<b>Date</b>
MW-36	Reach 2A	223.8	2 inch PVC well	47.5	> 47.5 (none)	9/23/2009
MW-37	Reach 2A	223.8	2 inch PVC well	87.5	76.7	9/14/2009
MW-37B	Reach 2A	223.8	2 inch PVC well	25.5	> 25.5 (none)	9/14/2009
MW-41D	Reach 2A	222	2 inch PVC casing	82.0	73.3	8/28/2009
MW-39	Reach 2A	222	2 inch PVC casing	92.0	79.0	9/11/2009
MW-39B	Reach 2A	222	2 inch PVC casing	25.0	> 25.0 (none)	9/11/2009
MW-09-44	Reach 2A	219.8	2 inch pipe	67.0	45.7	8/20/2009
MW-09-46	Reach 2A	218.2	2 inch pipe	67.0	19.3	8/16/2009
MW-09-47	Reach 2A	218.2	2 inch pipe	50.0	24.7	9/17/2009
MW-49	Reach 2A	217.2	Survey Stake	65.0	28.0	8/3/2009
MW-49B	Reach 2A	217.2	Survey Stake	22.0	> 22.0 (none)	8/3/2009
MW-54 (provisional)	Reach 2B	211.8	Vault	51.8	31.7	11/11/2009

None = No groundwater measured, well is dry.

**RESULTS OF THE DAILY EVALUATION:  
November 10, 2009  
Day 2**

As of November 10, 2009, Reclamation personnel have reported the following:

4. Flows are below known conveyance thresholds (8,000 cfs in Reach 2A, 1,300 cfs in Reach 2B, and 600 cfs in Reach 3).
5. No groundwater seepage or flow problems were identified on today's daily Mendota Pool operations call.
6. No calls have been received on the seepage hotline that reported the potential for probable or imminent seepage problems.

The most recent stage and flow data for Reach 2A is provided in Table 2-1 below. The most recent groundwater data for Reach 2A is provided in Table 2-2 below.

Based on the above information, no seepage problems are anticipated and Reclamation will continue with the Interim Flow releases as scheduled. Reclamation will also continue daily updates until flow in Reach 2A no longer exceeds the threshold for evaluation.

<b>Table 2-1: Daily Average Stage &amp; Flow Measurements (Preliminary)</b>			
<b>Location</b>	<b>Flow (cubic feet per second)</b>	<b>Stage (feet)</b>	<b>Date</b>
Below Friant Dam	706	4.18	11/10/2009 (Average up to 2:30 pm)
Gravelly Ford	493	6.48	11/10/2009 (Average up to 2:30 pm)

<b>Table 2-2: Groundwater Elevation Measurements</b>						
<b>Well_ID</b>	<b>SubReach</b>	<b>RiverMile</b>	<b>Description</b>	<b>Well Depth (ft)</b>	<b>Depth to Groundwater (DTW) Measurements (feet below ground surface)</b>	
					<b>DTW</b>	<b>Date</b>
MW-36	Reach 2A	223.8	2 inch PVC well	47.5	> 47.5 (none)	9/23/2009
MW-37	Reach 2A	223.8	2 inch PVC well	87.5	76.7	9/14/2009
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MW-49	Reach 2A	217.2	Survey Stake	65.0	28.0	8/3/2009
MW-49B	Reach 2A	217.2	Survey Stake	22.0	> 22.0 (none)	8/3/2009
MW-54 (provisional)	Reach 2B	211.8	Vault	51.8	31.78	11/10/2009
None = No groundwater measured, well is dry.						

**RESULTS OF THE DAILY EVALUATION:**  
**November 9, 2009**  
**Day 1**

As of November 9, 2009, Reclamation personnel have reported the following:

4. Flows are below known conveyance thresholds (8,000 cfs in Reach 2A, 1,300 cfs in Reach 2B, and 600 cfs in Reach 3).
5. No groundwater seepage or flow problems were identified on today's daily Mendota Pool operations call.
6. No calls have been received on the seepage hotline that reported the potential for probable or imminent seepage problems.

The most recent stage and flow data for Reach 2A is provided in Table 1-1 below. The most recent groundwater data for Reach 2A is provided in Table 1-2 below.

Based on the above information, no seepage problems are anticipated and Reclamation will continue with the Interim Flow releases as scheduled. Reclamation will also continue daily updates until flow in Reach 2A no longer exceeds the threshold for evaluation.

<b>Location</b>	<b>Flow (cubic feet per second)</b>	<b>Stage (feet)</b>	<b>Date</b>
Below Friant Dam	702	4.17	11/9/2009
Gravelly Ford	483	6.45	11/9/2009

<b>Well_ID</b>	<b>SubReach</b>	<b>RiverMile</b>	<b>Description</b>	<b>Well Depth (ft)</b>	<b>Depth to Groundwater (DTW) Measurements (feet below ground surface)</b>	
					<b>DTW</b>	<b>Date</b>
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None = No groundwater measured, well is dry.