# Seepage Site Visit Form

**Seepage Report ID Number: 2022.01**

**Date and Time of Site Evaluation: April 4, 2022 at 9:00am**

**Names of personnel attending site evaluation, agencies belonging to, and contact info:**

| | | |
|---|---|---|
| Carson Burton | USBR | cburton@usbr.gov |

## Parcel Group Location

**Address or Parcel:** APN 015-060-42S

**How easy was access? How should it be accessed in the future?** Accessible

**River Mile (if known):** 217.5

**Approximate Distance from San Joaquin River (SJR):** MW-09-49B is immediately adjacent river.

## Meeting Summary

## Immediacy of Response Needed

Identify the timeframe for decision making.

☐ Levee Failure ☐ Imminent ■ Adjust Future Flows
☐ Impacts Occurred ■ Seepage Project

**Description:** Monitoring well responds to flows at levels that may be impactful of approximately 600 cfs. Future Restoration Flow releases will need to consider this well. Meanwhile, Reclamation should engage the property owner to discuss potential impacts and any subsequent actions or projects.

## Description of Current and Historical Seepage

☐ Boils or piping ☐ Erosion on levee ☐ Levee close to overtopping
☐ River stage ☐ Visible standing water ☐ Waterlogged field(s)
■ Monitoring Well Elevations increase

**Description (what observations occurred, distance of seepage from levee toe, GPS coordinates or a map tracing seepage boundaries if current, and what supporting data is available):**

Monitoring well MW-09-49B is outfitted with real-time equipment that indicated a response to increase in releases from Friant Dam for deliveries to the Exchange Contractors that began on April 1, 2022. A Site Visit was conducted on April 4, 2022 in response to the increasing well levels to verify conditions in the field. No visible seepage was observed at the property nor impacts to the planted winter wheat crop. A temporary soil boring in the field indicated the depth to water was approximately 6.0 ft_bgs.

## Type of Potential Future Impact

■ Crop impacts ☐ Land and Field Access ☐ Levee or Structure Integrity

**Description (extent and magnitude of anticipated impacts including supporting data such as EM probes, crop records, etc.):**

The crop has a root zone assumption of 5ft per Seepage Management Plan Appendix H. The field soil is characterized as a loamy fine sand and therefore a capillary fringe assumption of 1.0ft. The agricultural threshold therefore is 6.0ft_bgs in field. The approximate field measurement of 6.0 ft_bgs for depth to water in field means the current levels of flow in the river are within a magnitude to be potentially impactful to crops of a 6.0 ft agricultural threshold.

## Factors Influencing Groundwater Levels

Describe potential effects on seepage. (Include recent land-use practices in the area as well as any efforts to reduce or avoid adverse impacts)

■ River Stage ☐ Drainage ☐ Canals

☐ Irrigation ☐ Flood Operations ☐ Groundwater Pumping

**Description:** Water surface elevation in the river has increased with releases from Friant Dam for deliveries to the Exchange Contractors.

## Response Action

**Do you recommend a particular response action to reduce or avoid current impacts? Explain.**
Recommend a Restoration Flow ramp-down.

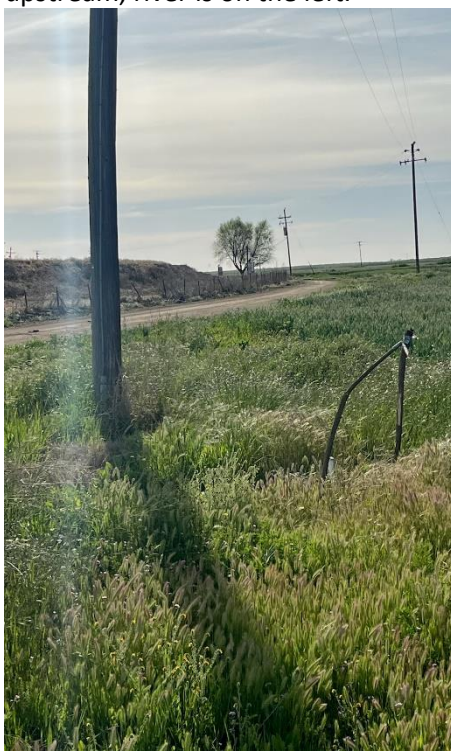
## Follow Up

**Is follow-up needed to perform a site evaluation and develop a long-term project? Explain.**
Given the potential constraint of this site, the Program anticipates evaluating a threshold associated with this well and discussing with the landowner any potential seepage project.

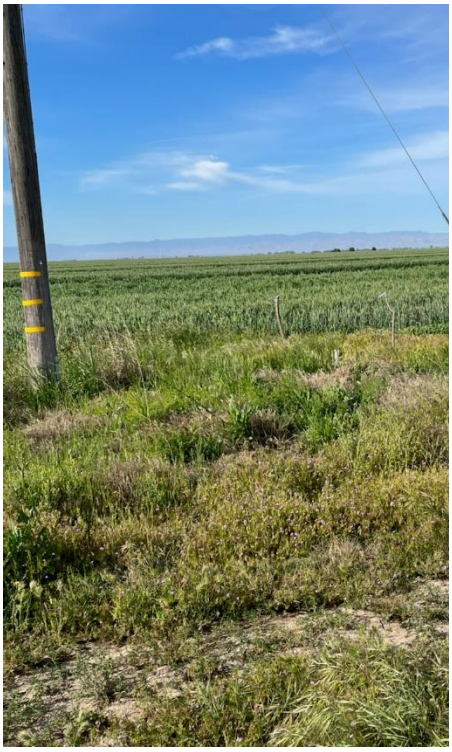
## Photo Log

Please include a Photo number or ID, the time (and date, if different from Site Evaluation date) the photo was taken, the location the photo was taken from and a description of the image subject and important points shown in it.

1) View from temporary soil boring in field at MW-09-49B. Looking upstream, river is on the left.



2) View from temporary soil boring in field at MW-09-49B. Looking away from river.



## Other

Please attach additional pages as needed to describe all photos taken, or to add additional information, comments, records or supporting data to the Site Evaluation.

1) No irrigation or ongoing pumping noted.

## Action Items

Refer to Response Action form dated April 4, 2022.

# SJRRP Seepage Response Action Form

Date and Time of Response: April 4, 2022 @ 9:00AM

Address or Parcel: APN 015-060-42S

Seepage Report ID Number:2022.01

**Relevant Data:**

Groundwater Observations: Temporary soil boring measurement of 6.0 ft_bgs near MW-09-49B

Site Evaluation: See Seepage Site Visit Form 2022.01

Landowner Input: From March 25, 2022 site visit, next irrigation event is scheduled later in April. Then switching from winter wheat to corn.

Comments: Beginning April 5 at midnight, Reclamation will reduce Restoration Flows at Gravelly Ford from 425 cfs to 375 cfs, and then incrementally drop flows in 50 cfs increments until 0 cfs is reached on approximately April 11. This change is consistent with the SJRRP Seepage Management Plan and accounts for field measurements taken on April 4. Restoration Flows will not resume until there is sufficient channel capacity to operate below seepage thresholds. Reclamation will continue groundwater monitoring throughout the Restoration Area regardless of the quantity of Restoration Flows in the system.

# SJRRP Seepage Response Action Form

**Action:**

☐ Planned Releases can occur ☐ Increased Monitoring

■ Adjust local flow/conceptual model ☐ Adjust threshold

**Flow Response Actions - Adjust Future Flows**

■ Restrictions on Maximum Release ☐ Restrictions on ramping rates and duration

■ Reduction of Restoration Flow releases at Friant Dam ☐ Set Operational Criterion

**Flow Response Actions - Immediate Action**

☐ Emergency Measures (sandbagging, riprap, etc)

■ Reduction of Restoration Flow releases at Friant Dam

☐ Redirection of flows at Chowchilla Bifurcation Structure (reduces impacts in Reach 2B on)

☐ Delivery of flows to Exchange Contractors at Mendota Pool (reduces impacts in Reach 3 on)

☐ Delivery of flows to Exchange Contractors and Refuges at Sack Dam (reduces impacts in Reach 4A and downstream)

Comments: Beginning April 5 at midnight, Reclamation will reduce Restoration Flows at Gravelly Ford from 425 cfs to 375 cfs, and then incrementally drop flows in 50 cfs increments until 0 cfs is reached on approximately April 11. This change is consistent with the SJRRP Seepage Management Plan and accounts for field measurements taken on April 4. Restoration Flows will not resume until there is sufficient channel capacity to operate below seepage thresholds. Reclamation will continue groundwater monitoring throughout the Restoration Area regardless of the quantity of Restoration Flows in the system.

**Follow-Up:**

■ Restrictions on Releases ■ Initiate Site Evaluation for Projects

Comments: