

**FINDING OF NO SIGNIFICANT IMPACT**

**Seepage Management Actions**

United States Department of the Interior  
Bureau of Reclamation  
Mid-Pacific Region  
Sacramento, California

**Recommended:** Regina Story 6/28/17  
Regina Story  
Project Manager – Seepage Program Date

**Recommended:** Alicia Forsythe 6/28/2017  
for Elizabeth Vasquez  
Restoration Goal Supervisor Date

**Approved:** Alicia Forsythe 6/28/2017  
Alicia Forsythe  
Program Manager Date

FONSI Number: 17-03-SJRRP

*This Page Intentionally Left Blank*

## FINDING OF NO SIGNIFICANT IMPACT

### BACKGROUND

In 1988, a coalition of environmental groups, led by the Natural Resources Defense Council (NRDC), filed a lawsuit challenging the renewal of long-term water service contracts between the United States and Central Valley Project Friant Division. After more than 18 years of litigation in *NRDC, et al., v. Kirk Rodgers, et al.*, a settlement was reached (Settlement). On September 31, 2006, the Settling Parties, including NRDC, Friant Water Users Authority, and the U.S. Departments of the Interior and Commerce, agreed on the terms and conditions of the Settlement, which was subsequently approved by the U.S. Eastern District Court of California on October 23, 2006. The San Joaquin River Restoration Settlement Act (Settlement Act), Title X of Public Law 111-11, authorizes and directs the Secretary of the Interior to implement the Settlement. The Bureau of Reclamation (Reclamation) is implementing the Settlement on behalf of the Secretary of the Interior. The Settlement establishes two primary goals:

- Restoration Goal – To restore and maintain fish populations in “good condition” in the main stem of the San Joaquin River below Friant Dam to the confluence of the Merced River, including naturally reproducing and self-sustaining populations of salmon and other fish.
- Water Management Goal – To reduce or avoid adverse water supply impacts on all of the Friant Contractors that may result from the Interim Flows and Restoration Flows provided for in the Settlement.

To achieve the Restoration Goal, the Settlement calls for releases of water from Friant Dam to the confluence of the Merced River (referred to as Interim and Restoration Flows), a combination of channel and structural modifications along the San Joaquin River below Friant Dam, and reintroduction of Chinook salmon. Restoration Flows are specific volumes of water to be released from Friant Dam in accordance with Exhibit B of the Settlement. In 2012, Reclamation and the State of California Department of Water Resources (DWR) completed the San Joaquin River Restoration Program Environmental Impact Statement/Report (PEIS/R) which analyzed and disclosed the potential effects of implementing actions to meet the requirements of the Settlement and Settlement Act. Some components were analyzed at a project level, and others at a program level, depending on the level of planning detail available at the time. Reclamation completed the Record of Decision (ROD), and DWR completed the Notice of Determination in 2012. An October 2013 Water Rights Order by the State Water Resources Control Board modified Reclamation’s water rights to implement Restoration Flows.

As described in Chapters 12 and 16 of the PEIS/R, the release of Restoration Flows (as described in Settlement Exhibit B) has the potential to cause seepage of groundwater from the San Joaquin River channel to adjacent lands, potentially affecting groundwater levels on parcels along the river. The Seepage Management Plan (SMP) was included in the Physical Monitoring and Management Plan (Appendix D to the PEIS/R) to disclose

an approach for Reclamation to identify and address potential seepage concerns related to the release of Restoration Flows. The SMP outlines a monitoring program to identify parcels potentially affected by seepage related to release of Restoration Flows and a suite of actions that could be taken to address seepage concerns. Implementation of seepage monitoring and management actions as described in the SMP was included in the analysis of the potential effects of the ROD Selected Alternative (Alternative C1), as described in Chapter 2 of the PEIS/R, given the level of planning detail at the time. Environmental commitments (EC-7 and EC-8) included in the ROD Selected Alternative (Alternative C1) as described in the PEIS/R and ROD, and Condition 7 of the Water Rights Order referenced above require implementation of seepage monitoring and management actions as described in the SMP, including a commitment to not release Restoration Flows into a channel unless it has adequate capacity and the release would not cause seepage issues for the surrounding areas.

In 2015, the SJRRP completed the Revised Framework for Implementation (Framework) to establish a realistic schedule for implementation of the SJRRP actions in accordance with the Settlement and Settlement Act based on the best currently available information, and based on Five Year, Ten Year, Fifteen Year, and Beyond Fifteen Year visions. The Framework identified a goal of achieving the ability to release at least 1,300 cubic feet per second (cfs) by 2019 for the Five Year Vision. To be consistent with the approach for the 5-Year Vision, Reclamation is completing planning and landowner coordination efforts for seepage management actions that will allow for the release of Restoration Flows to 1,300 cfs as a first phase of seepage management actions. The Seepage Management Actions environmental assessment (EA) analyzes and discloses the potential impacts, beyond those already analyzed and disclosed in the PEIS/R, of implementing specific seepage management actions that have been further defined based on landowner coordination efforts for potentially affected parcels with Restoration Flows up to 1,300 cfs, as further described in Section 2 of the Seepage Management Actions EA. The purpose of implementing the proposed seepage management actions is to account for these potential seepage impacts as authorized by the Settlement Act, and enable the release of Restoration Flows in a manner acceptable to landowners and consistent with the Settlement, PEIS/R and Framework Five Year Vision.

A seepage easement would be a permanent easement (i.e., recorded on the deed) on the landowner's property that would allow Reclamation to increase groundwater levels on all or a portion of the property. By having an easement in place that allows an increase in groundwater levels on the property, Reclamation would be able to increase Restoration Flows in the San Joaquin River adjacent to the property. A seepage easement would include the area of land predicted to be impacted by seepage caused by full Restoration Flows in accordance with Settlement Exhibit B. The easement area would be determined by the geographic extent of damage or yield reduction predicted to the crop from the anticipated groundwater rise, as well as negotiation with the landowner. Under the seepage easement agreement, the landowner would continue to own the property.

With the fee-title land acquisition, Reclamation would have the ability to increase groundwater levels on the property, thus being able to increase Restoration Flows in the San Joaquin River adjacent to the property. An acquisition could include just the area of

land predicted to be impacted from Restoration Flows in accordance with Settlement Exhibit B, or, if the remaining parcel not impacted by seepage is so small as to be infeasible to practically farm, the acquisition could include the entire parcel as identified by Assessor Parcel Number. After acquiring the land, Reclamation could lease the land back to a grower for agricultural production or retain the property for other uses.

The SMP establishes a process to determine the portion of each parcel that may be affected by seepage impacts. That evaluation process provides an estimate of acreage that would be required for easement or acquisition to reduce the potential seepage impacts. The action may or may not include the entire parcel depending on what portion of the parcel could be affected by seepage impacts. The SMP process for assessing impacts is based on thresholds (the allowable depth to groundwater). One of the methods to calculate thresholds relies on the effective root zones for the crops that are being grown on each parcel. The Almond Root Zone Study Plan considered the root zone for almonds. Based on the results of this study, Reclamation is recommending changes to the almond root zone as specified in the SMP based on this best available science. The almond root zone depth would change from 9 feet to 6 feet, and the capillary fringe buffer would change from a range of 0.5 inches to 1 foot, to a range of 0.5 to 3 feet depending on soil type. The groundwater threshold (the root zone depth plus the capillary fringe thickness) would be revised from a range of 9.5 to 10 feet to a range of 6.5 to 9 feet.

No excavation, staging areas, or other construction would occur as part of the Proposed Action. Negotiations and realty agreements take time to implement; therefore, it is assumed the Proposed Action would be implemented over the next several years.

The following commitments are consistent with those commitments described in the SJRRP ROD, and will be implemented under the Proposed Action to avoid and minimize potential adverse environmental impacts to the extent feasible.

Reclamation will review the land use of all properties with seepage easements or acquired in fee title by Reclamation every 5 years. If land use has changed to a non-agricultural use, Reclamation will either: (1) acquire agricultural conservation easements at a 1:1 ratio (i.e., one acre on which agricultural conservation easements are acquired to one acre of Important Farmland removed from agricultural use) to be held by land trusts or public agencies who will be responsible for enforcement of the deed restrictions maintaining these lands in agricultural use, or (2) provide funds to a land trust or government program that conserves agricultural land sufficient to obtain easements on comparable land at a 1:1 ratio.

For parcels acquired in fee title by Reclamation, Reclamation will strive to maintain existing agricultural uses if potential lessees are willing to accept the risk of increased groundwater levels and would like to continue agricultural operations on the parcel and it is compatible with other SJRRP actions.

Reclamation will implement the actions described in the SMP, including continued

operation of a seepage hotline and other measures described in SMP Appendix J, Operations.

## **FINDINGS**

The Proposed Action will not result in any additional or more substantial impacts from what was analyzed and disclosed in the 2012 PEIS/R. In accordance with the National Environmental Policy Act of 1969, as amended, Reclamation has found that the Proposed Action of acquiring easements and/or fee title purchase of the lands potentially affected by higher groundwater levels from Restoration Flows of 1,300 cfs in the Eastside Bypass, and Reaches 2B, 3, 4A and 4B and updates to the SMP threshold methodology is not a major Federal action that would significantly affect the human environment. Therefore, an environmental impact statement is not required.

This finding of no significant impact is based on the following, as further described in the attached EA:

- Beyond those effects previously disclosed in the PEIS/R and ROD, the Proposed Action will not result in changes to agriculture beyond those disclosed in the PEIS/R and ROD. Groundwater seepage has the potential to cause waterlogging of crops and salt mobilization in the crop root zone, which could affect the productivity of crops. Under the Proposed Action, Reclamation would compensate landowners for the effects of increased seepage from release of Restoration Flows. Landowners or lessees that choose to continue to farm the land with a seepage easement or land acquisition would have agreed to allow seepage on the property. Also, implementation of the proposed environmental commitments, as summarized above and described in EA Section 2.2, would avoid and minimize the potential effects of the Proposed Action on agricultural land use to the extent feasible.
- The Proposed Action includes land-based realty actions that would not directly affect and would indirectly benefit aquatic resources. The Proposed Action would support release of Restoration Flows downstream of Sack Dam, which would benefit SJRRP fisheries restoration efforts for the San Joaquin River non-essential experimental population (NEP) of spring-run Chinook salmon, as well as other fish species potentially present in the Restoration Area.
- Beyond those effects previously disclosed in the PEIS/R and ROD, the Proposed Action would not affect terrestrial resources because existing facilities and land uses would remain within historical ranges of use and it is anticipated that most land in the project area would continue to be farmed with the same crop or a new crop similar to the existing conditions.
- Beyond those effects previously disclosed in the PEIS/R and ROD, the Proposed Action will result in effects similar to the No Action on biological resources,

including species listed in accordance with the Endangered Species Act or designated critical habitat; or species protected by the Migratory Bird Treaty Act; or Essential Fish Habitat within the Proposed Action area.

- Beyond those effects previously disclosed and analyzed in the PEIS/R and ROD, the Proposed Action would have effects similar to the No Action on environmental justice communities. Under the Proposed Action, it is anticipated that most land in the project area would continue to be farmed with the same crop or a new crop similar to existing conditions. Also, implementation of the proposed environmental commitments, as summarized above and described in EA Section 2.2, would avoid and minimize the potential effects of the Proposed Action on agricultural land use and farm employment to the extent feasible.
- The Proposed Action will have similar effects to greenhouse gases and climate change as the No Action because regional agricultural operations are anticipated to be similar.
- The Proposed Action will have similar effects to hydrology as the No Action because regional agricultural land use would remain within historical ranges of use and it is anticipated that most land in the project area would continue to be farmed with the same crop or a new crop similar to the existing conditions.
- Under the Proposed Action, the threshold groundwater depth for determining seepage impacts to properties growing almonds would be reduced from a range of 9.5 to 10 feet to a range of 6.5 to 9 feet. By allowing for shallower groundwater conditions, groundwater levels in the project area may be slightly higher on almond-growing properties than under the No Action. This slight increase in groundwater levels would not have an adverse impact on groundwater conditions.
- Beyond those effects previously disclosed and analyzed in the PEIS/R and ROD, the Proposed Action would have effects similar to the No Action on socioeconomics in the region. Under the Proposed Action, it is anticipated that most land in the project area would continue to be farmed with the same crop or a new crop similar to existing conditions. Also, implementation of the proposed environmental commitments, as summarized above and described in EA Section 2.2, would avoid and minimize the potential effects of the Proposed Action on agricultural land use and farm employment to the extent feasible.
- The Proposed Action only consists of the compensation to landowners through either seepage easements, fee-title land acquisitions along Reaches 2B, 3, 4A, and 4B of the San Joaquin River, or minor changes to the SMP and would not include any construction, staging, or excavation activities, or any actions that may affect historic properties if they are present. As a result, there would be no substantial impacts to historic properties from the Proposed Action.
- The project area for the Proposed Action does not include Federal land; therefore,

there is no potential for Indian Sacred Sites to be affected by the Proposed Action.

- The Proposed Action only consists of the compensation to landowners through either seepage easements, fee-title land acquisitions along Reaches 2B, 3, 4A, and 4B of the San Joaquin River, or minor changes to the SMP and would not include any construction, staging, or excavation activities, or any actions that may affect air quality.
- Beyond those effects previously disclosed and analyzed in the PEIS/R and ROD, the Proposed Action will not contribute to cumulative adverse effects to any resource category when considered with other past, present and reasonably foreseeable actions in the region.