RECLAMATION
Managing Water in the West

Environmental Assessment

Time Extension to Use Central Valley Project Water and Base Supply by Sacramento River Settlement Contractors in Contract Year 2015

EA-15-05-NCAO

U.S. Department of the Interior
Bureau of Reclamation
Mid Pacific Region

WSID CDO/BBID ACL
WSID0046

October 2015

Mission Statements

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitment to island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

Table of Contents

Attachments

List of Tables and Figures

Section 1 Introduction

1.1 Background

On February 17, 2015, Reclamation provided written notification to the Sacramento River Settlement Contractors (SRSC) of a Critical Year, and the fourth consecutive year of drought conditions. The February 17, 2015 letter stated, pursuant to Article 5 of the Sacramento River Settlement Contract (Settlement Contract), during a Critical Year, the monthly quantity of Base Supply and Project Water to be diverted during the period of April through October 2015 shall be reduced by 25 percent. Recognizing the irrigation demands of the SRSC, and with consideration to environmental resources in the mainstem Sacramento River system, Reclamation collaborated with the SRSC, the State Water Resources Control Board (SWRCB), California Department of Fish and Wildlife, National Oceanographic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS), and the U. S. Fish and Wildlife Service to devise a mutually-agreeable diversion schedule to address the needs.

An update to the February 17, 2015 notification was sent on April 21, 2015. The update included further justification for maintaining the 75 percent allocation Reclamation identified on February 17, but also included qualifying language that this allocation could occur "contingent upon the SRS Contractors voluntarily agreeing, for this water year only," to a variety of measures (See Attachment A).

For the purposes of this review, the first identified measure of this update that relates to deferment of typical diversions of Base Supply in April and May 2015 to the period of June through October is most relevant. The premise of deferring these flows to later in the contract period was to add more operational flexibility in Shasta and Keswick Reservoirs that results in improved temperature control during this critical part of the year for protected species in the Sacramento River. In addition, extension of water use to later in the Year would aid in providing important habitat for migratory birds along the Pacific Flyway.

In late September, 2015 a number of SRSC requested an extension to the time period for use of their remaining Base Supply and Project Water. Specifically, the SRSC requested, for this Year only, Reclamation's authorization to divert from a portion of the water remaining under their Settlement Contracts rather than increase river diversions in October to take delivery within the current contract year. This Environmental Assessment examines the environmental effects of approval of this action.

1.2 Purpose and Need for the Proposal

The purpose of this action is to temporarily extend the time period for use of a portion of the Base Supply and Project Water remaining under the Settlement

Contracts, hereinafter Diverted Water, to allow operational flexibility for Central Valley Project (CVP) operations, which includes more stable river flows and the timely delivery of contract supplies north and south of the Sacramento-San Joaquin Delta.

1.3 Scope

This Environmental Assessment (EA) has been prepared to examine the potential effects of approving the temporary extension of time to use the remaining, or a portion thereof, Base Supply and Project Water from October 31 to December 10, 2015. Figure 1 depicts the districts of the SRSCs requesting the extension of use, which include portions of Glenn, Colusa, Sutter, Yolo and Sacramento counties, from north to south.

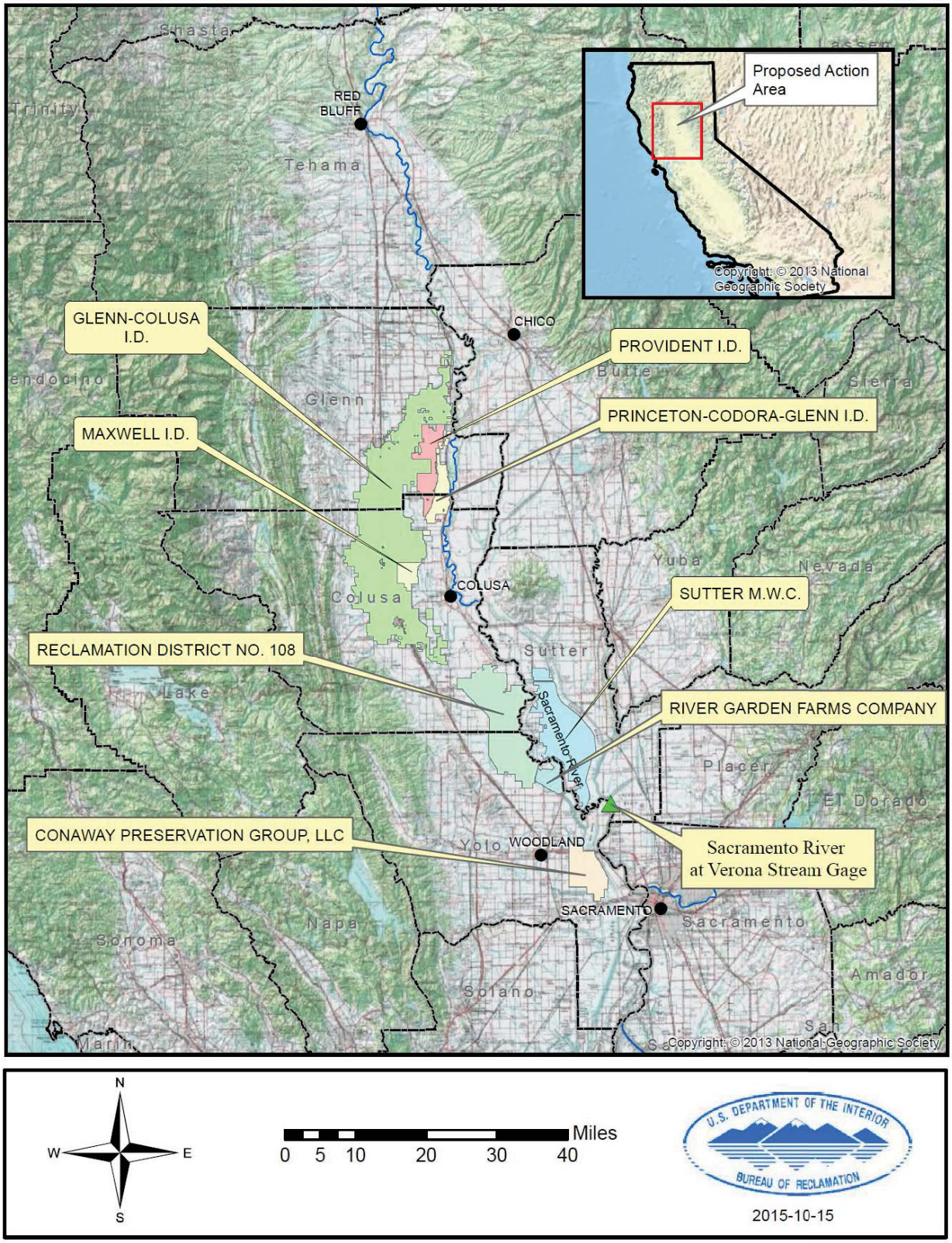

Figure 1. Project site location

Section 2 Alternatives Including Proposed Action

2.1 No Action Alternative

The No Action Alternative would consist of Reclamation not approving the time extension for use of Diverted Water from October 31 to December 10, 2015. Up to 49,999 acre-feet (af) of Diverted Water would be diverted in the later part of October.

2.2 Proposed Action

The Proposed Action is approval of extending the use of up to 49,999 acre-feet (af) of Diverted Water from October 31 to December 10, 2015. The maximum quantities of Diverted Water contemplated by each SRSC during this period are provided in Table 1. All diversion locations are pre-existing and have approved fish screens to avoid impacting listed and threatened species in the Sacramento River system. The diverted quantities will occur at a steady rate during this extension period. Flow from Project Reservoirs would remain the same as in the No Action Alternative (e.g. Keswick Dam releases would not change), which maintains previously-approved conditions of operation of the Central Valley Project for 2015 to meet endangered and threatened species requirements.

Table 1. Estimated Sacramento River Settlement Contractor Diversions[a] in November and early December 2015.

Contractor	Maximum Quantity (AF) (Nov 1- Dec 10, 2015)
Glenn-Colusa ID	24,370
Princeton-Codora-Glenn ID	3,249
Provident ID	5,280
Maxwell ID	2,843
Sutter MWC	7,108
Reclamation District No. 108	2,843
Conaway Preservation Group, LLC	4,062
River Garden Farms Company	244
Total (AF)	***49,999***

a – if curtailments by the SWRCB are lifted, this water may be diverted under appropriative water rights and would not be contract water and considered part of the No Action Alternative.

Section 3 Affected Environment and Environmental Consequences

This EA analyzes the Affected Environment of the Proposed Action and No Action Alternative in order to determine the potential impacts and cumulative effects to environmental resources:

3.1 Resources Analyzed

Reclamation's review focused on impacts and cumulative effects to water and biological resources.

Impacts to the following resources were considered and found to be minor or absent. Brief explanations for their elimination from further consideration are provided below:

- Power and Energy Resources: No significant changes in power and energy resources would result from the Proposed Action or No Action Alternative. The timing and magnitude of flow from CVP reservoirs remain the same in the No Action and Proposed Action alternatives.

- Land Use and Agriculture: Neither the Proposed Action nor the No Action Alternative would produce ground disturbances or result in construction of new facilities. Rice fields will still be flooded with the same total amount of water; the only change would be the timing of distribution. Rice farmers would neither plow nor disc their fields when October flood-up water is delayed. The Proposed Action does not change the intended goal for decomposition of harvested rice field as a means of preparation of farming land for the following year, and only changes the timing of flooding.

- Indian Sacred Sites: Reclamation has determined that there would be no impacts to Indian sacred sites from either the Proposed Action or No Action Alternative because the project would not limit access to, or ceremonial use of, Indian sacred sites.

- Cultural Resources: The Proposed Action will not produce any ground disturbance, or result in the construction of new facilities, modification of existing facilities, or changes in land use. Reclamation has determined that neither the Proposed Action nor the No Action Alternative have the potential to cause effects to historic properties, assuming such historic properties were present, pursuant to 36 CFR § 800.3(a)(1) (See Attachment B).

- Indian Trust Assets: The nearest Indian Trust Asset (ITA) to the subject irrigation districts is the community of the Cachil DeHe Band of Wintun

Indians of the Colusa Indian Community, greater than one mile from the Glenn-Colusa Irrigation District (GCID) in the central portion of the action area. Because both the Proposed Action and the No Action Alternative utilize existing facilities and do not involve excavation, construction or demolition activities that could impact ITAs or associated resources, there is no anticipated effect to ITAs located in the vicinity of the Project Area. (See Attachment C)

- Socio-Economic Resources: Neither the Proposed Action nor the No Action Alternative would adversely affect the quality of human environment or public health or safety, or involve unresolved conflicts concerning alternative uses of available resources, because they essentially maintain present conditions. Water diverted as part of this action does not affect irrigation services because irrigation season is over during the period considered. The Proposed Action does however help to facilitate efficient use of the contemplated water resources. Minor shifts in the location of water use would occur, but would be too small to noticeably affect regional economics.

- Environmental Justice: No significant changes in agricultural communities or practices would result from the Proposed Action, other than the timing of when the total amount of water is diverted for rice decomposition purposes. These changes are not likely to have affects to any individuals or populations within the action area. Accordingly, neither the Proposed Action nor the No Action Alternative would not have disproportionately negative impacts to low-income or minority individuals or populations.

3.2 Water Resources

3.2.1 Affected Environment

The potential Affected Environment is the Sacramento River generally downstream of Red Bluff. The Proposed Action would change the timing of river diversions along the Sacramento River downstream of RM 154. Under either alternative, there would be no change to the volume of release from any reservoir.

The Upper Sacramento, McCloud, and Pit Rivers make up the Sacramento River Basin's source waters as they converge in Shasta Reservoir behind Shasta Dam. From Shasta Dam the Sacramento River winds approximately 30 miles south through the foothills between Redding and Red Bluff. Many small and moderate-sized tributaries between Keswick and the Bend Bridge gage join the river from both east and west, including Clear, Cottonwood, Cow, and Battle Creeks (see Figure 1). The Sacramento River continues to meander south, where it is joined by Antelope, Mill, Deer, Stony, and Big Chico Creeks. Butte Creek merges with the Sacramento River near Colusa and the Sutter Buttes, a group of isolated

volcanic hills in the middle of the Sacramento Valley. The Sacramento River is joined by its largest tributary, the Feather River, at Verona. About 10 miles downstream, the Sacramento River flows through the City of Sacramento and receives the American River, its second largest tributary. From here, the river meanders southwest until it reaches the estuary of the Delta near Rio Vista (Sacramento River Basin 2013). As this water flows through the Delta, some of it may be diverted at the Jones Pump Station or be discharged to the San Francisco Bay, dependent upon the status of the salinity balance of the Delta. Salinity standards in the Delta would continue to be met through a balance of Delta outflow and Delta diversions by the CVP and State Water Project.

The extent of potential flow changes of the Project on the Sacramento River extend from GCID's first point of diversion at RM 154.7 downstream to the last point of diversion of the Conaway Preservation Group, LLC at RM 12.0. All diversion intakes of the eight participating SRSCs are appropriately screened so as to avoid unauthorized "take" of species listed under the Federal Endangered Species Act (ESA).

3.2.2 Environmental Consequences

No Action

Under the No Action Alternative, the water would be diverted entirely within the month of October. The effect of diverting up to 49,999 af of water over a short period could result in a short-term decrease in flow in the lower Sacramento River within a 142.7 mile reach.

Under the No Action Alternative, and baring any significant rainfall in October, there would likely be a significant reduction in CVP diversions from the Delta through the Jones Pump Station to maintain salinity objectives in the Delta. As a consequence, a reduction from Jones Pump Station could limit Reclamation's ability to deliver water to the South of Delta Wildlife Refuges and potentially lead to an interruption of delivery.

Proposed Action

Under the Proposed Action, extending the diversion period would redistribute this water volume over a 40-day period. In extending the use period, the effect is a more spread out diversion of water that would equate to less of a change in flow of the lower Sacramento River as compared to the No Action Alternative. The anticipated flow reduction could be up to 630 cfs.

Because this water will be diverted as late as December 10th, as opposed to the No Action Alternative in which water would be diverted in October, there remains a higher probability that natural accretion of flow from natural precipitation would further reduce any flow-related effects to this reach of the river. In the Proposed Action, net Delta CVP diversion would remain unchanged through December 10.

As in the No Action Alternative, no adverse impacts to physical resources are anticipated with the Proposed Action. The water that would be diverted later would continue to originate at Shasta Lake and flow through existing features including the Shasta Powerplant, Keswick Reservoir, and Keswick Powerplant where it would be incorporated into normal operations and flow to the Sacramento River. In addition, all Diverted Water would be applied to existing agricultural land through existing M&I facilities for existing M&I purposes, and Refuges (south of the Delta). By doing so, the Proposed Action would avoid any adverse effects on unique geological features such as wetlands, Wild and Scenic rivers, refuges, floodplains, rivers placed on the nationwide river inventory, or prime or unique farmlands.

Although anticipated to be minor, the rate of rice decomposition could be reduced in the Proposed Action (in comparison to the No Action Alternative) due to decreased microbial activity associated with the cooler temperatures during the period in which the water would be diverted.

3.3 Biological Resources

3.3.1 Affected Environment

Wildlife Habitat
The Sacramento River and associated wetlands and wildlife refuges function as habitat for a multitude of waterfowl, shorebirds, waterbirds, songbirds, raptors, fish, reptiles and mammals. Rice farmers also flood their fields in fall for rice straw decomposition, which prepares fields for future plantings.

Flooded rice fields and surrounding refuge wetlands in the Sacramento-San Joaquin Valley, in particular, function as the most important waterfowl wintering habitat on the Pacific Flyway, supporting the majority of Flyway population in some years, as well as substantial proportions of migrating and wintering shorebirds and waterbirds (herons, egrets, white-faced ibis, rails, etc.). From December through February, populations of duck and geese, including snow and Ross's geese, mallard, widgeon, teal, bufflehead, ruddy duck, northern shoveler and ring-necked ducks peak in the flooded marsh of the Sacramento National Wildlife Refuges. Habitat conditions on the wintering grounds influence food source availability and reproductive success.

Federally-listed Species
Reclamation researched online databases to determine the presence of species Federally-listed as Rare, Threatened or Endangered (RTE) or species of concern, as well as habitat designated as critical to these species' survival, within the Project Area. The databases queried were:

- The US Fish and Wildlife (USFWS) Environmental Conservation Online System (ECOS) database via the Information for Planning and Conservation (IPaC) application, which reports RTE species

occurrences, as well as the presence of formally-designated Critical Habitat for these species within the identified project area, and;

- California Natural Diversity Database (CNDDB), a natural heritage program which relays occurrences of RTE species and species of concern, as reported by users.

Due to the irregular boundaries of the SRSCs affected by the Proposed Action, both the ECOS and CNDDB databases were queried by county for all counties in which a portion of the Project Area lies: Glenn, Colusa, Sutter, Yolo and Sacramento Counties. It should be noted that this constitutes a very conservative outline of the Project Area; some of the reported species that are present and/or have suitable habitat present in areas of the researched counties outside the Project Area may not have populations or suitable habitat within the Project Area.

Reclamation's queries identified 48 species Federally-listed as RTE or species of concern within the counties affected by the Project, including: one reptile species - the giant garter snake; two insect species – the Valley elderberry longhorn beetle and the San Bruno elfin butterfly; two mammal species - the West Coast fisher and riparian brush rabbit; two amphibian species – the California tiger salamander and California red-legged frog; six bird species – the Western snowy plover, Western yellow-billed cuckoo, least Bell's vireo, Northern spotted owl, cackling goose and bald eagle; four crustacean species – Conservancy fairy shrimp, vernal pool fairy shrimp, vernal pool tadpole shrimp, and California freshwater shrimp; seven fish species – Delta smelt, Central Valley steelhead trout, Central Valley spring run chinook Salmon, Sacramento River winter run chinook salmon, green sturgeon, longfin smelt and eulachon, and; 24 species of plants. Seventeen of the 48 reported species have Final or Proposed Critical Habitat in the counties designated as the Project Area for ESA research purposes, according to the IPaC Trust Resource Report.

The USFWS IPaC Trust Resource Reports identified 38 species of birds protected by the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act with the potential to inhabit the counties within the Project Area. Project activities are not anticipated to result in an incidental take of any of these protected species.

Due to the water-based nature of the Project, Reclamation determined the species with the greatest potential to be affected by the Proposed Action were identified as aquatic and amphibious species, over-wintering birds and waterfowl and their habitats, and fish species, in particular.

Winter-Run Chinook Salmon

Winter-run salmon adults enter the Sacramento River basin between December and July. By mid-summer, they are typically distributed in the upper Sacramento River and tributaries, north of the action area, where cold waters facilitate spawning, egg incubation, and rearing. In recent years, the majority of winter-run

have been observed to spawn in the approximate five-mile area between the Keswick and Anderson-Cottonwood Irrigation District dams. Fry begin to emerge from the gravel from late June through October (Poytress et al. 2014). Fry rearing continues along the margins of the entire Sacramento River where they grow and begin to use deeper and faster water and eventually migrate to saltwater to mature. It is during this migration as fry and juveniles that they are likely to be present in the area of influence considered in this review.

Spring and Fall-Run Chinook Salmon

Adult spring-run enter freshwater in the spring, hold over the summer in mid- to high-elevation streams that provide appropriate water temperatures, and sufficient flow, cover, and pool depth to allow conservation of energy for reproduction in fall. Reclamation reports that spring-run holding in upper watershed locations prefer water temperatures below 60ºF to reduce the potential for stress that increases susceptibility to disease. In light of these habits, the spring-run spawning occurs between September and October in the upper reaches of the Sacramento River generally above RM 257 (USFWS 1995). Depending on water temperatures, spring-run fry emerge from the gravel from December through January (Poytress et al. 2014). This information suggests this life stage, or the advanced life stage (i.e. juveniles) of this species are likely present in the area of influence considered in this review.

The fall-run salmon spawn after the spring run generally peaking in November (USFWS 1995). This run has been reported to spawn as low as RM 164 of the mainstem Sacramento River in large part due to their arrival coinciding with more suitable water temperatures and the presence of available substrate that exist this low in the river system (USFWS 1995). Below this location, the lack of suitable habitat and mainly sand substrates generally prohibits them from using these areas (M. Gard, pers communication). As with the other chinook races considered in this review, there are likely to be some fry of this species present in the area of influence considered in this review.

CV Steelhead

CV steelhead generally spawn from December through April in small streams and tributaries where cool, well-oxygenated water is available. The length of time it takes for eggs to hatch depends mostly on water temperature. Fry emergence time is variable and dependent on factors such as redd depth, gravel size, siltation, and temperature. Newly emerged fry move to the shallow, protected areas associated with the stream margin and move to other areas of the stream and establish feeding locations. Juvenile steelhead emigrate episodically from natal streams during fall, winter, and spring high flows placing them potentially in the area of influence considered in this review.

Green Sturgeon

Adult green sturgeon spawn in the Sacramento River from April to August (Poytress et al. 2013). Juvenile green sturgeon are encountered in the rotary screw trap catches at the Red Bluff Diversion Dam from May to August (Poytress et al. 2014). Egg and larval Green Sturgeon have been detected with egg mats and larval nets May to June, and May to August, respectively (Poytress et al. 2009-2013). Based upon this information, there may be juvenile green sturgeon that would occur in the area of influence considered in this review.

3.3.2 Environmental Consequences

No Action

Wildlife

The No Action Alternative would allow water to be distributed in a narrow time period in late October that would not coincide with the typical arrival time of migratory waterfowl from the Pacific Flyway whose peak migration occurs later in the year. However, water that would be distributed amongst the SRSCs would provide some habitat for non-migratory avian species utilizing wetlands in both the Sacramento and San Joaquin Valleys. During the diversion period, however, there would likely be times of limited pumping at the Jones Pump Station that would limit water deliveries to south of Delta refuges.

Fish Species

The No Action Alternative would result in a reduction of flow in the 142.7-mile reach of the lower Sacramento River. This reduction in flow is not anticipated to have a significant effect on fish species in this section of the Sacramento River or its tributaries in the Delta. This is because there are no spawning adult species present in this region, and any other life stages of protected species that could be present (e.g. juveniles) could be temporarily affected by a change to available habitat that could lead to increased predation risk.

Proposed Action

Wildlife

The Proposed Action provides a timelier and more even distribution of water for rice and habitat lands within the contractual service area of the SRSC to the benefit of overwintering waterfowl that typically arrive later in the year. Providing a continuous supply of water for habitat and forage would alleviate stress that would exist in the No Action Alternative. The action also helps maintain October delivery schedules to wildlife refuges south of the Delta since the likelihood of diversion curtailments in the Delta due to salinity standards are lessened. The Nature Conservancy, Ducks Unlimited, the California Waterfowl Association and the California chapter of the Audubon Society collectively issued correspondence to Reclamation supporting the Proposed Action on October 16, 2015 (Attachment D.). The correspondence recognizes that the availability of some portion of the

projected 100,000 acres of 2015 rice habitat is dependent upon Diverted Water being used during the period November 1 through December 10. The correspondence further identifies the habitat loss associated with the No Action Alternative as having a larger than typical bearing on the availability of food and habitat for Flyway species in this Critical Year wherein natural wetland acreage is already directly reduced by drought and total wetland acreage is further impacted from associated reductions in supplied water.

Fish Species

The Proposed Action would not affect the coldwater resources at Shasta Lake and is not anticipated to create an appreciable impact on Delta salinity that could impact migratory fish species. The location of diversions would not affect spawning salmonids, which do not utilize this reach of the river. Fry and juveniles salmonids, including federally- listed species, are likely to be present during the period when diversions would occur under either the Proposed Action or No Action Alternative. However, in the Proposed Action, there is a smaller reduction in flow over a longer period of time than the No Action Alternative. This more stable flow, in combination with the anticipated increase in precipitation and natural accretion during the time period of the Proposed Action, would function to further ameliorate the potential for habitat deficiencies that could lead to increased predation. As such, any effects to species are expected to be lower in the Proposed Action than the No Action Alternative.

3.4 Cumulative Impacts

There are no known past, present, or reasonably foreseeable actions that would cumulatively result in significant impacts to the human environment when taking into consideration the actions analyzed in this EA.

Section 4 Consultation and Coordination

4.1 Endangered Species Act (16 U.S.C. 1521 et seq.)

Overall project operations with the Proposed Action are consistent with the Biological Opinions issued by USFWS and NMFS in 2008 and 2009, respectively, and the approved TUCP. Any overall CVP effects are within the range of effects previously analyzed. For these reasons, no additional consultation is necessary. In addition, on October 19, 2015, Reclamation received email confirmation that there are no concerns for fish species listed by the USFWS and there are no other natural resources that would occur from implementing the Proposed Action. Letters of support for implementing the Proposed Action were also received from several conservation organizations (see Section 3.3.2)

Section 5 References Cites

Poytress, W.R., J.J. Gruber, D.A. Trachtenbarg, and J.P. Van Eenennaam. 2009. 2008 Upper Sacramento River Green Sturgeon Spawning Habitat and Larval Migration Surveys. Annual Report of U.S. Fish and Wildlife Service to US Bureau of Reclamation, Red Bluff, CA.

Poytress, W.R., J.J. Gruber, and J.P. Van Eenennaam. 2010. 2009 Upper Sacramento River Green Sturgeon Spawning Habitat and Larval Migration Surveys. Annual Report of U.S. Fish and Wildlife Service to U.S. Bureau of Reclamation, Red Bluff, CA.

Poytress, W.R., J.J. Gruber, and J.P. Van Eenennaam. 2011. 2010 Upper Sacramento River Green Sturgeon Spawning Habitat and Larval Migration Surveys. Annual Report of U.S. Fish and Wildlife Service to U.S. Bureau of Reclamation, Red Bluff, CA.

Poytress, W.R., J.J. Gruber, and J.P. Van Eenennaam. 2012. 2011 Upper Sacramento River Green Sturgeon Spawning Habitat and Larval Migration Surveys. Annual Report of U.S. Fish and Wildlife Service to U.S. Bureau of Reclamation, Red Bluff, CA.

Poytress, W.R., J.J. Gruber, C.E. Praetorius, and J.P. Van Eenennaam. 2013. 2012 Upper Sacramento River Green Sturgeon Spawning Habitat and Young-of-the-Year Migration Surveys. Annual Report of U.S. Fish and Wildlife Service to U.S. Bureau of Reclamation, Red Bluff, CA.

Poytress, W. R., J. J. Gruber, F. D. Carrillo and S. D. Voss. 2014. Compendium Report of Red Bluff Diversion Dam Rotary Trap Juvenile Anadromous Fish Production Indices for Years 2002-2012. Report of U.S. Fish and Wildlife Service to California Department of Fish and Wildlife and US Bureau of Reclamation.

U.S. Fish and Wildlife Service, 1995. Identification of the Instream Flow Requirements for Anadromous Fish in the Streams within the Central Valley of California. Annual Progress Report Fiscal Year 1995. Sacramento Field Office, 2800 Cottage Way, Room E-1803, Sacramento CA, 95825.

Section 6 Personal Communications

Gard, Mark. U.S. Fish and Wildlife Service, Sacramento Field Office, CA. October 15, 2015.

Attachment A. April 21, 2015 Letter to the Sacramento River Settlement Contracts pertaining to the 2015 allocation.

United States Department of the Interior

BUREAU OF RECLAMATION
Northern California Area Office
16349 Shasta Dam Boulevard
Shasta Lake, California 96019-8400

IN REPLY REFER TO:

APR 21 2015

NC-100
WTR-4.03

Sacramento River Settlement Contractors

Subject: Update to 2015 Notification of Critical Year for Sacramento River Settlement (SRS) Contractors, Central Valley Project (CVP), California

Dear Sacramento River Settlement Contractor:

This letter updates the 2015 Critical Year Notification letter dated February 17, 2015. Reclamation has been diligently working with the SRS Contractors, the State Water Resources Control Board, the California Department of Fish and Wildlife, National Oceanic Atmospheric Administration Fisheries, and U.S. Fish and Wildlife Service to coordinate 2015 Project operations and develop, with more certainty, an assessment of water conditions and available supplies.

The continued drought and unique hydrology have required Reclamation and the SRS Contractors to explore creative solutions. In this regard, Reclamation's latest modeling, based on more recent run-off forecasts, supports provision of a 75% Contract Total contingent on the SRS Contractors voluntarily agreeing, for this Water Year only, to the following measures:

- Scheduling Settlement Contract diversions in coordination with fishery releases from Keswick Reservoir to provide more precise and reliable temperature management for spawning winter-run Chinook salmon upstream of Clear Creek. This involves the SRS Contractors deferring a significant portion of diversions of base supply in April and May 2015 to the period of June through October. The objective is to work with Reclamation to assure more operational flexibility in Lake Shasta and Keswick Reservoirs during the late summer and fall, which will allow the optimal operation of the temperature control device and available storage at Shasta.

- Making available appropriate resources and expertise to coordinate with Reclamation and the fishery agencies, including real time monitoring and evaluation of the redds and emerging fry to assist in refining operations decisions, not just from a temperature control point, but based on the actual spawning and emergence which are the key indicators for the proper temperature regime.

- Pursuing water transfers to neighboring water districts with no surface supplies this year, as well as water suppliers in other parts of the state with important needs for water. There are

scheduling benefits associated with transfers that can help with temperature management during April and May, while also helping with water demands later in the summer.

- Using groundwater wells during the April-May period to supplement diversions from the Sacramento River.

- Reclamation and Glenn-Colusa Irrigation District will work closely with refuge managers at the three National Wildlife Refuges (Colusa, Delevan, and Sacramento) to re-time deliveries from April-May into the summer. The refuges serve in concert with the ricelands and managed wetlands within the SRS Contractors' service areas as the habitat and feeding grounds for the Pacific Flyway.

If you agree to take these actions, Reclamation will, for this Water Year and this Water Year only, administer your contract as follows: (1) allow rescheduling of that amount of Base Supply not diverted in April, May and June 2015 later in the schedule, month by month, as needed to accommodate the demand shift pattern; (2) implement an accounting methodology for diversion schedules for each month that accounts for diversions in the following order: regular monthly Base Supply, then unused Base Supply from any previous month, and then Project Water; (3) waive any charges for rescheduling of Base Supply from April, May, and June, 2015 into the critical months; and (4) waive the requirements of Article 8(a)(1) of the SRS Contracts, and SRS Contractors will only be charged for the quantity of Project Water actually diverted this Water Year.

In support of this agreement, please submit an updated diversion schedule to the Willow's Water and Lands Division that is consistent with the SRS Contract and the terms of this letter. Please be aware that any rescheduling must be consistent with Reclamation's modeling and forecasts that support the rescheduled diversions. We will review your schedule and advise you of any need to adjust it. Absent this rescheduling of your Base Supply, due to the continued drought and hydrologic conditions this Water Year, Reclamation cannot guarantee that conditions will allow for the diversion of 75% of Contract Total.

Please continue to implement all required contingency plans and water conservation measures and we look forward to working with you over the next few weeks to finalize modified scheduling and water accounting methodology for the 2015 Water Year.

Please work with Mr. Rich Robertson, Chief, Water and Lands Division, Northern California Area Office, at 530-934-1383 or rrobertson@usbr.gov.

Sincerely,

Federico Barajas
Area Manager

Attachment B. Cultural Resource determination.

CULTURAL RESOURCES COMPLIANCE
Division of Environmental Affairs
Cultural Resources Branch (MP-153)

MP-153 Tracking Number: 16-NCAO-006

Project Name: Time Extension to Divert CVP Water and Base Supply by Sacramento River Settlement Contractors in Contract Year 2015NEPA

Document: EA-15-05-NCAO

NEPA Contact: Megan Simon, Natural Resource Specialist

MP 153 Cultural Resources Reviewer: Scott Williams, Archaeologist

Date: October 14, 2015

Reclamation proposes to approve extension to the timeframe for a previously approved water diversion from the Central Valley Project and Base Supply by Sacramento River Settlement Contractors. This is the type of undertaking that does not have the potential to cause effects to historic properties, should such properties be present, pursuant to the NHPA Section 106 regulations codified at 36 CFR § 800.3(a)(1). Reclamation has no further obligations under NHPA Section 106, pursuant to 36 CFR § 800.3(a)(1).

Under the proposed action, deferred water would be redistributed from the month of October to a longer period decreasing the likelihood of a period of high use. Additionally, allowing this water to be diverted later in the season provides a better opportunity for precipitation and any associated increased flow accretions from such storms to lessen any impacts to water resources and therefore any imbalance to flow in the lower Sacramento River and the Delta Region. Deferring the water use to up to 40 days later may also help conserve the coldwater pool in Shasta Reservoir. The Proposed Action will not produce any ground disturbance, or result in the construction of new facilities, modification of existing facilities, or changes in land use

This document is intended to convey the completion of the NHPA Section 106 process for this undertaking. Please retain a copy in the administrative record for this action. Should changes be made to this project, additional NHPA Section 106 review, possibly including consultation with the State Historic Preservation Officer, may be necessary. Thank you for providing the opportunity to comment.

Attachment C. Indian Trust Asset determination.

Simon, Megan <msimon@usbr.gov>

ITA Review - EA-15-05-NCAO - Time Extension for SRSC Use of Base Supply and CVP Water

Simon, Megan <msimon@usbr.gov> Wed, Oct 21, 2015 at 1:46 PM
To: Paul Zedonis <pzedonis@usbr.gov>

I have examined the proposal for the referenced project and have determined that this facility is at least 1.2 miles from the closest Indian Trust Asset. I have determined that there is no likelihood that this facility will adversely impact Indian Trust Assets.

–

Megan K. Simon
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(530) 276-2045
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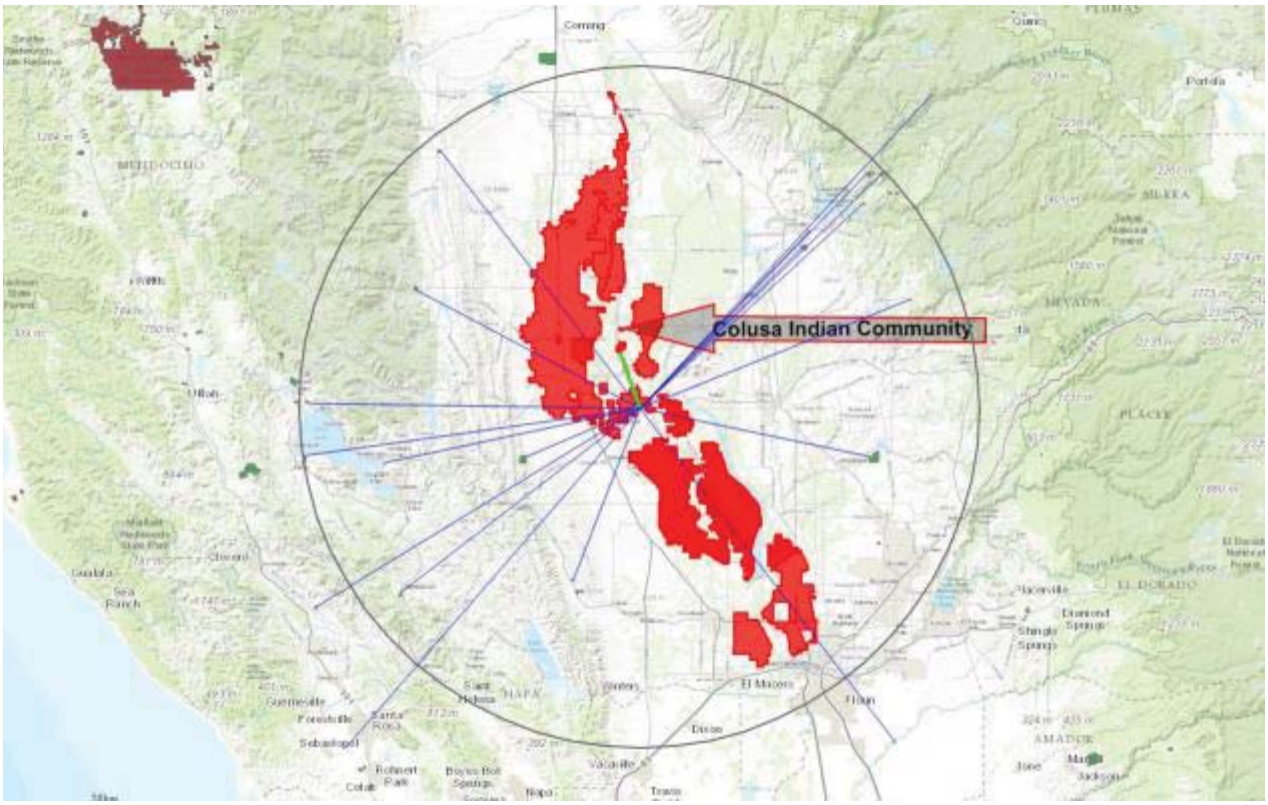

Attachment D. Conservation Organizations' Letter of Support

October 16, 2015

David Murillo, Regional Director
Mid Pacific Regional Office, Bureau of Reclamation
Federal Office Building
2800 Cottage Way
Sacramento CA 95825-1898

RE: Support for the Sacramento River Settlement Contractors' Deferral of Fall Diversions

Dear Director Murillo:

Audubon California, California Waterfowl Association, Ducks Unlimited and The Nature Conservancy appreciate the efforts to defer the planned October diversions by the Sacramento River Settlement Contractors until later in the fall. These delayed water diversions will provide much-needed food and habitat during this drought for waterfowl, shorebirds and other species dependent upon the Pacific Flyway in the Sacramento Valley and will help augment habitat already provided by the National Wildlife Refuges and State Wildlife Management Areas in the region.

Unfortunately, migratory bird habitat is doubly impacted by drought with natural wetland habitat reduced and surrogate compatible agriculture habitat, such as winter flooded rice, also significantly cut back. Refuges are receiving 75 percent or less of their level 2 water supplies, significantly reducing habitat quantity and quality while rice acreage was reduced by 20 percent or more with a small fraction of that being flooded in winter for decomposition and bird habitat. In a normal year, rice provides roughly 300,000 acres of winter habitat for birds; however, this year we are expecting less than 100,000 acres and a portion of that is dependent upon the deferring of diversions until after November 1st. In addition, incremental level 4 refuge deliveries were significantly reduced, preventing many wetlands from providing their full potential food resources, even if flooded this fall.

Our organizations recognize the importance of integration of public and private efforts to provide seasonal wetland habitat in the Pacific Flyway. To this end, our organizations are participating in the Central Valley Project Improvement Act strategic plan discussions. As part of that process, we hope to better clarify public and private efforts to enhance Pacific Flyway habitat values and achieve full Level 4 deliveries on a multi-year basis. We believe that an active dialogue that helps provide for more predictable planning for wetland habitat for waterfowl and shorebirds would be invaluable to the health of the Flyway. We are also working to bring additional public and private funding to support drought response and migratory bird habitat through The Nature

Conservancy's BirdReturns program, the Natural Resources Conservation Service programs, our advocacy and work with the Department of Fish and Wildlife to deploy Duck Stamp funds to support emergency drought response, and our engagement on federal drought legislation. All of these efforts combined with the Bureau of Reclamation's flexibility in water management will help lessen the potential severe impacts of drought on wildlife.

Thank you for facilitating this important deferral of diversions to provide important Pacific Flyway habitat this winter.

Sincerely yours,

Jay Ziegler
Director of External Affairs
and Policy
The Nature Conservancy

Mark Biddlecomb
Director of Operations
Western Region
Ducks Unlimited, Inc.

Jeffrey A. Volberg
Director of Water Law
and Policy
California Waterfowl
Association

Meghan Hertel
Working Lands Program Director
Audubon California

cc: Ron Milligan, U.S. Bureau of Reclamation
Ren Lohoefener, U.S. Fish and Wildlife Service
Chuck Bonham, Department of Fish and Wildlife
Felicia Marcus, State Water Resources Control Board
Mark Cowin, Department of Water Resources
Carlos Suarez, Natural Resources Conservation Service