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Finding of No Significant Impact

Invasive Vegetation Monitoring and Management

SAN JOAQUIN RIVER
RESTORATION PROGRAM

June 2012

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UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
MID-PACIFIC REGION
SACRAMENTO, CALIFORNIA

FINDING OF NO SIGNIFICANT IMPACT

INVASIVE VEGETATION MONITORING AND MANAGEMENT
SAN JOAQUIN RIVER RESTORATION PROGRAM

Recommended: _____ **Date**: _____

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PROPOSED ACTION

The Proposed Action fulfills an environmental commitment made by the Bureau of Reclamation in the Water Year 2010 Interim Flows Project Environmental Assessment/ Initial Study (EA/IS). In Appendix F of the EA/IS Reclamation committed to monitor and manage invasive vegetation with potential to compromise successful implementation of the San Joaquin River Restoration Program. Areas within the San Joaquin River Restoration Area containing invasive vegetation would be mapped in the field directly or through aerial photograph interpretation followed by on-the-ground map verification surveys. Identification and removal efforts would target giant reed (*Arundo donax*), sponge plant (*Limnobium spongia*), Chinese tallow (*Sapium sebiferum*), red sesbania (*Sesbania punicea*), and salt cedar (*Tamarix sp*.). Priority sites with public or permitted access would receive invasive vegetation treatments with hand tools, herbicides, and mechanized above-ground debris removal. Minor revegetation and erosion control measures would be taken for habitat enhancement and bank stabilization. Environmental protective measures would be employed to avoid impacts to sensitive resources. Spraying would be conducted during the active vegetation growing season (April 1- October 30), and other non-spraying project activities would occur year-round through December 31, 2016. The Proposed Action is described in more detail in Table 1.

Table 1. Invasive Vegetation Monitoring and Management Project Activities

Partner name	Location of Work	Work to be Performed	Equipment	Stream Crossings	Avoidance Measures
The Nature Conservancy	San Joaquin River, entire restoration reach	Landowner outreach, assembly of experts panel, coordination of meetings and review by experts panel, no on-the-ground weed management.	N/A	N/A	N/A
San Joaquin River Parkway & Conservation Trust	San Joaquin River Reach 1a and Reach 1B to Highway 145	Invasives Removal: Giant reed (*Arundo donax*): Hand removal using loppers, weed wrenches, picks, shovels, chainsaws, bladed weed trimmers. Cut/paint and foliar spray application of glyphosate (Rodeo/Roundup/Aquamaster); possible use of imazapyr (Habitat). Dead Arundo stalks will be left in place unless it is located in the floodway; if located in floodway dead stalks will be hauled to higher ground and piled to decompose in place, will shred with bobcat-mounted masticator when requested by property owner or if the pile is deemed a fire hazard. Red Sesbania (*Sesbania punicea*), Tamarisk (*Tamarisk sp.*), Chinese Tallow (*Sapium sebiferum*): Hand removal using loppers, weed wrenches, picks, shovels, chainsaws, bladed weed trimmers. Cut/paint application of triclopyr (Garlon 4/Pathfinder II). Dead stems will be left in place. Cut biomass will be hauled out of floodway and piled to decompose in place. Biomass will be removed for disposal if required by property owner. Seeds dropped during removal process will be raked and bagged for offsite disposal. Seedlings <3' tall will be treated with foliar spray of glyphosate. Habitat enhancement: Minor revegetation using grasses and forbs when necessary and appropriate. Bank Stabilization: seeding, placement of erosion control blankets or similar when necessary and appropriate.	Pickup truck/passenger vehicle for monitoring and crew transportation – will use existing roads. Canoe or other boat will be used to transport biomass unreachable from the bank. Small tractor or bobcat with masticator will be used to shred piles of dead biomass, will use existing roads. Tractor/gator/pickup-mounted spray rigs for use in some areas	Yes, by boat, will use existing boat launch facilities	Avoidance protocols for sensitive resources including state and federal listed species (VELB, BNLL, CTS, CRLF, Vernal pool crustaceans and rare plants) and nesting birds are described below. These measures will be reviewed and approved by FWS and CDFG prior to commencing work.

Partner name	Location of Work	Work to be Performed	Equipment	Stream Crossings	Avoidance Measures
River Partners	San Joaquin River Reach 1B past Highway 145 through Reach 5, including bypasses	(Continued from previous page) Invasives Removal: Arundo donax: Hand removal using loppers, weed wrenches, picks, shovels, chainsaws, bladed weed trimmers. Cut/paint and foliar spray application of glyphosate (Rodeo/Roundup/Aquamaster); possible use of imazapyr (Habitat). Within an Environmentally Sensitive Area (ESA) designated due to being within 20 feet of active waterways: • Garlon 4 would not be used, • Roundup would not be used except for paint and spot-spray hand applications (trigger release spray wands) and would not include an additional surfactant, • Rodeo would be used, but not with an additional surfactant. Dead Arundo stalks will be left in place unless it is located in the floodway; if located in floodway dead stalks will be hauled to higher ground and piled to decompose in place, will shred with bobcat-mounted masticator when requested by property owner or if the pile is deemed a fire hazard. Trees including but not limited to Sesbania punicea, Tamarisk, Chinese Tallow: Hand removal using machetes, loppers, weed wrenches, picks, shovels, chainsaws, bladed weed trimmers. Cut/paint application of triclopyr (Garlon 4/Pathfinder II). Backpack sprayers and broadcast application of herbicides will be used where appropriate. Wicking by hand or by boom mounted wick applicator will be used in appropriate areas. Dead stems will be left in place. Cut biomass will be hauled out of floodway and piled to decompose in place. Biomass will	Pickup truck/passenger vehicle for monitoring and crew transportation – will use existing roads. Canoe or other boat will be used to transport biomass unreachable from the bank. Small tractor or bobcat with masticator will be used to shred piles of dead biomass, will use existing roads. Dump truck for hauling if needed. Chipper for processing dead plant material. Trailer for equipment transport. Tractor/gator/mule pickup-mounted spray rigs for appropriate areas. Sickle bar mower for removal of Arundo in some areas.	No equipment will enter river channel or banks. All river access will be by boat from appropriate launch sites.	Avoidance protocols for sensitive resources including state and federal listed species (VELB, BNLL, CTS, CRLF, Vernal pool crustaceans and rare plants) and nesting birds are described below. These measures will be reviewed and approved by FWS and CDFG prior to commencing work.

Partner name	Location of Work	Work to be Performed	Equipment	Stream Crossings	Avoidance Measures
		(Continued from previous page) be removed for disposal if required by property owner. To the best of our ability seeds dropped during removal process will be raked and bagged for offsite disposal. Seedlings <3' tall will be treated with foliar application of glyphosate. Perennial and annual noxious weeds including but not limited to: perennial pepperweed, yellow star thistle, poison hemlock: Foliar application of glyphosate (Rodeo/Roundup/Aquamaster or equivelant). Wicking applications by hand or mounted rig where appropriate. Dead stems will be left in place to decompose. Habitat enhancement: Minor revegetation using grasses and forbs when necessary and appropriate. Use of Aminopyralid (Milestone) for treating invasive thistles and woody plants. Surfactants would be limited to Agri-Dex, LI-700, Hasten Modified Vegetable Oil, Freeway, Dyne-Amic, Kinetic, and Pro-Spreader Activator. Bank Stabilization: seeding, placement of erosion control blankets or similar when necessary and appropriate.			

FINDINGS

In accordance with Section 102(2)(c) of the National Environmental Policy Act (NEPA) of 1969, as amended, and the Council on Environmental Quality's Regulations for Implementing the Procedural Provisions of NEPA (40 Code and Federal Regulations (CFR) Parts 1500-1508), the Mid-Pacific Region of Reclamation finds that the Proposed Action is not a major Federal action that will significantly impact the quality of the human environment. Therefore, an Environmental Impact Statement is not required for implementing the Proposed Action. This Finding of No Significant Impact (FONSI) is supported by the attached Final Environmental Assessment (EA) for the Invasive Vegetation Monitoring and Management Project, and supporting appendices and documents.

The public review and comment period for the Draft Invasive Vegetation Monitoring and Management Project EA began on June __, 2012. Comments were due on June __, 2012. As of the signing of this FONSI, Reclamation responded to all comments received in the Final EA.

The affected environment and environmental consequences analyses as described in the Draft Invasive Vegetation Monitoring and Management Project (Proposed Action) EA are summarized below.

1. The Proposed Action will not result in significant impacts to biological resources. All vehicles will utilize existing roads and parking areas and no ground disturbance will occur in conjunction with the Proposed Action. Specific measures including establishment of Environmentally Sensitive Areas have been incorporated into the Proposed Action to avoid impacts to biological resources resulting from vegetation management activities. The Proposed Action will not significantly impact fisheries resources. The activity will not result in modifications to fish habitat or water levels and will not impact fish present in the San Joaquin River. No disturbance will occur to the channel of the river associated with this project. Specific measures were designed to ensure use of herbicide mixtures do not result in impacts to fish. As a result, the Proposed Action will have no adverse impact on biological resources.

2. The Proposed Action will not significantly impact hydrology and water quality. Measures to avoid impacts to water quality related to use of herbicides, fuel, or other hazardous materials include spraying guidelines to avoid overspray into active waterways, mixture and storage of hazardous materials away from active waterways, and adoption of a Spill Prevention Plan. The Proposed Action would not result in changes to water quality in waterways within the Restoration Area.

3. The Proposed Action will not result in impacts to cultural resources eligible for listing under the National Historic Preservation Act, 36 CFR Part 800. Equipment used during vegetation management will be restricted to existing roads. The Proposed Action includes no ground-disturbing activities. Should archeological or historic resources be identified or affected, these resources will be evaluated and mitigated through consultations with the SHPO, Native American tribes, and interested parties.

4. The Proposed Action will not affect any Indian Trust Assets as it is outside of the range of Tribal lands held in trust. The nearest Indian Trust Asset is Table Mountain Rancheria, which is approximately 4 miles east of the project area.

5. The Proposed Action will increase economic opportunity in the vicinity of the Proposed Action Area by providing employment to complete vegetation management activities. The Proposed Action is anticipated to add many local seasonal jobs. The Proposed Action will have beneficial socioeconomic impacts.

6. Local agricultural unemployment rates suggest that any actions that maintain seasonal jobs would be considered beneficial and the Proposed Action would have no adverse impact on low-income or minority populations.

7. The Proposed Action will not result in impacts to air quality. Project-generated operational emissions would not conflict with or obstruct implementation of an applicable air quality plan, violate an air quality standard, contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase of any criteria pollutant for which the Proposed Action region is nonattainment under an applicable Federal or State ambient air quality standard. Therefore, there will be no significant impact to air quality as a result of the Proposed Action.

8. The Proposed Action will not significantly impact aesthetic resources. The Proposed Action could result in changes to the visual setting following removal of invasive vegetation, but changes would be temporary as native riparian vegetation would establish following invasive vegetation removal. Changes to aesthetic resources are relatively subjective, but there is potential for benefits to aesthetic resources through long-term establishment of native riparian vegetation at invasive vegetation treatment sites. Therefore, there will be no significant impact to aesthetics.

9. The Proposed Action will not result in impacts from hazardous materials or result in the creation of hazardous materials. Although the Proposed Action will involve application of herbicides to control and manage nonnative invasive plant species, the Proposed Action includes measures to avoid creating significant hazards to the public or the environment. Therefore, use of Hazards and Hazardous Materials would not result adverse impacts.

10. The Proposed Action will not result in adverse impacts from noise. Noise impacts related to implementing the Proposed Action would be from equipment and persons conducting vegetation management activities. This noise increase would occur only during daylight hours and will be short-term and temporary. The Proposed Action will not create a substantial permanent increase in ambient noise levels