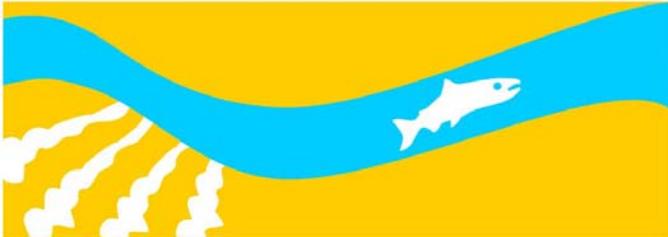


Appendix F

Invasive Species Monitoring and Management Plan for Water Year 2010 Interim Flows

Water Year 2010 Interim Flows Project
Draft Environmental Assessment/Initial Study

SAN JOAQUIN RIVER
RESTORATION PROGRAM



1 **Table of Contents**

2

3 **1.0 Invasive Species Monitoring and Management Plan 1-1**

4 **2.0 Bibliography 2-1**

5

1 **List of Abbreviations and Acronyms**

2
3
4
5
6
7

EA/IS	Environmental Assessment/Initial Study
SJRRP	San Joaquin River Restoration Program
SJVAPCD	San Joaquin Valley Air Pollution Control District
VDE	Visible Dust Emissions
WY	Water Year

1.0 Invasive Species Monitoring and Management Plan

Within accessibility constraints associated with privately owned lands, comprehensive surveys for invasive nonnative plants will be conducted before and following the Water Year (WY) 2010 Interim Flow period during 2009, and 2010 or 2011. At sites where removal are implemented (if any), additional monitoring will be conducted for 2 years following removal. Survey results and removal will be documented in an Annual Invasive Species Monitoring and Management Report prepared no later than December 31 of each monitoring year.

These surveys will be conducted along the route of the WY 2010 Interim Flows down the mainstem San Joaquin River, between Friant Dam and the Merced River, and the bypass system. Surveys of all publicly accessible lands, Federal, or State properties, and properties accessible by collaborating local agencies will be conducted. Instead of additional 2010 surveys, existing survey data may be used for areas previously surveyed during 2008 or 2009.

Surveys will record the distribution of the five invasive species that have been identified as the primary invasive species with potential to compromise the successful implementation of the San Joaquin River Restoration Program (SJRRP) and that could increase their distribution substantially because of SJRRP operations: giant reed (*Arundo donax*), sponge plant (*Limnobium spongia*), Chinese tallow (*Sapium sebiferum*), red sesbania (*Sesbania punicea*), and salt cedar (*Tamarix* species). Section 3, "Affected Environment," of the Draft Environmental Assessment/Initial Study (EA/IS) describes the extent of known infestations of these species.

Any new infestations of these species downstream from the extent of the previously known infestations will be controlled and managed. Removal will be species-specific and will also depend on the size of the plants and of the infestation, and may include mechanical removal and limited chemical treatment by hand application. Potential treatments could include the following:

- Red sesbania infestations of a small number of plants (e.g., up to 20 plants) could be removed by mechanical means (hand-pulling). Larger infestations of red sesbania could be hand-sprayed with a glyphosate formulation approved for aquatic applications.
- Infestations of giant reed could be controlled by cutting and removing stems, and by hand-treating the plants, or cut or frilled stems, with glyphosate applications.
- Infestations of salt cedar could be hand-treated using chemical control (e.g., imazapyr).

1 • Treatment of Chinese tallow would depend on plant size. Poles and mature plants
2 could be cut and removed, and stumps could be hand-treated with glyphosate.
3 Seedlings and saplings could be hand-treated directly with glyphosate.

4 • Infestations of sponge plant could be controlled by mechanical means.

5 No more than 10 separate vegetation removal crews would operate on any given day for a
6 period of no more than 3 months. Crews may be outfitted with hand tools, chainsaws, and
7 weed whackers. No more than one heavy piece of equipment (e.g., bobcat or backhoe)
8 and no more than one haul truck would be employed by each individual crew.

9 The Proposed Action (including implementation of environmental commitments), would
10 not exceed USEPA's general conformity *de minimis* thresholds or hinder the attainment
11 of air quality objectives in the local air basin. Prior to and during vegetation removal
12 activities that utilize large equipment, fugitive dust emissions would be monitored to
13 determine the need to implement fugitive dust control measures required under San
14 Joaquin Valley Air Pollution Control District (SJVAPCD) Regulation VIII: Fugitive
15 PM₁₀ Prohibitions.

16 All treated sites will be visited 1 year after initial treatment, and treated again, if
17 necessary. If treated again, the site will be revisited one additional time the following
18 year and treated a third time, if necessary.

19 Any herbicide applications will comply with all requirements specified on the product
20 label, and use will also be limited, as recommended in the applicable Environmental
21 Protection Agency interim measures bulletin for protection of endangered species.

1 **2.0 Bibliography**

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