



Planning and Resource Management for Our Communities and the Environment

2 April 2002

Scott E. Shewbridge
Senior Engineer - Hydroelectric
El Dorado Irrigation District
2890 Mosquito Road
Placerville, California 95667

Subject: Technical Memorandum Number 2 – Noxious Weed Surveys

Dear Mr. Shewbridge:

Attached please find the status for the above-referenced report prepared by EIP Associates as requested by the Forest Service for the El Dorado Irrigation District project license application, FERC 184. This is a final draft for distribution. The primary preparers of this report are listed below:

EIP Associates

Roy Leidy
Soraya Romero
Russell Kobayashi, RPF No. 2725

Should you have any questions or wish to discuss this report please contact me.

Sincerely,

A handwritten signature in cursive script that reads "Roy Leidy".

Roy Leidy
Director, Fisheries and Aquatic Resources

Attachment

EL DORADO IRRIGATION DISTRICT FEDERAL ENERGY REGULATORY COMMISSION PROJECT NUMBER 184

SUMMARY OF NOXIOUS WEED SURVEYS

In response to the Initial Stage Consultation Package (22 September 1998), the U.S. Forest Service (USFS) requested surveys to be conducted for the El Dorado project license application, FERC No. 184 for the present locations of noxious weeds. A completed botanical survey is presented in the February 2000 Application for License (Volume 4, Exhibit E, Appendix N). The USFS, in a letter to EID on 20 November 2000, stated that the noxious weed surveys relevant to the relicensing of the El Dorado Hydroelectric Project have been completed.

Additional surveys were requested for the license amendment. On 19 July 1999, EID formally submitted its Application for License Amendment to allow for the repair of the damaged section of the existing El Dorado Diversion Dam and to replace the damaged section of the El Dorado Canal with a 9,400-foot long bypass tunnel between Mill Creek and Bull Creek. On 15 August 2000, FERC issued an order stating a noxious weed control plan shall be filed with the Commission, for approval, prior to the start of the reconstruction of the diversion dam. On 23 August 2000, EID filed a noxious weed control plan to FERC and on 31 August 2000, FERC approved the noxious weed control plan. On 8 February 2001, the amendment to license was granted to the applicant. The following is a summary of the status of the noxious weed surveys.

Floral Survey

In keeping with the guidelines of the US Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG), the plant list (Volume 4, Exhibit E, Appendix N of the Application for License) is based on the field investigations conducted at the project facilities in 1998 and 1999. These facilities include the Silver Lake Reservoir and campgrounds in Amador County; the Caples Lake Reservoir in Alpine County; and Lake Aloha, Echo Lake, Echo Lake Conduit, El Dorado Canal, El Dorado Forebay, and El Dorado Powerhouse in El Dorado County. As requested by the El Dorado National Forest (ENF), the purpose of this survey was to determine the presence or absence of plant species considered special status by the ENF or listed under the State or Federal Endangered Species Acts. In addition, populations of noxious weeds were identified and mapped during these surveys. Attached is a list of ENF noxious weed species.

Amended license

On 8 February 2001 FERC agreed to amend the El Dorado Hydroelectric Project No. 184 license in order to reconstruct a severely damaged diversion dam and to construct a bypass tunnel to replace a damaged portion of the canal that carried diverted water to the project powerhouse. Pursuant to Section 4(e) of the FPA (Federal Power Act), FERC ordered the applicant to address the Forest Service conditions concerning adequate protection and utilization of the Forest. The plan would meet the objectives described in this condition and would also include a monitoring plan that detailed corrective measures that would be taken if noxious or exotic weeds were found. The plan also included a requirement for an annual written report documenting the results of the monitoring.

Attached is a noxious weed control program developed in accordance with construction related amendments of license Project No. 184. The plan is called "*Noxious Weed Control Program El Dorado Irrigation District Construction Related to Amendment of License Project No. 184.*" EID proposes to reconstruct the El Dorado Diversion Dam on the South Fork of the American River, near the community of Kyburz. EID proposed to implement the noxious weed control program to control the introduction and spread of noxious weeds associated with the reconstruction of the El Dorado Diversion Dam.

**Eldorado National Forest
Noxious weed species**

List A. A list of highly invasive weed species

<i>Aegilops triuncialis</i>	goat grass
<i>Bromus tectorum</i>	cheat grass
<i>Carduus pycnocephalus</i>	Italian thistle
<i>Centaurea maculata</i>	spotted knapweed
<i>Centaurea solstitialis</i>	yellow starthistle
<i>Cirsium arvense</i>	canada thistle
<i>Chondrilla juncea</i>	rush skeletonweed
<i>Cytisus scoparius</i>	Scotch broom
<i>Genistia monspeliensis</i>	French broom
<i>Lepidium latifolium</i>	tall whitetop
<i>Talienatherum caput-medusae</i>	medusahead grass

List B. A list of other exotic or noxious weeds that may occur on the Eldorado National Forest that currently are not believed to be as aggressive as those in list A

<i>Ailanthus altissima</i>	chinese tree of heaven
<i>Bromus diandrus</i>	ripgut brome
<i>Cardaria chalapense</i>	whitetop
<i>Cardaria draba</i>	heart podded white top
<i>Centaurea melitonensis</i>	tocalote
<i>Centaurea repens</i>	Russian knapweed
<i>Conium maculatum</i>	hemlock (not known on forest)
<i>Euphorbia oblongata</i>	oblong spurge (near forest boundary)
<i>Festuca arundinaceae</i>	tall fescue
<i>Foeniculum vulgare</i>	fennel
<i>Hypericum perforatum</i>	Klamathweed
<i>Leucanthemum vulgare</i>	ox-eye daisy
<i>Meliolotus alba</i>	white sweet clover
<i>Meliolotus officianalis</i>	yellow sweet clover
<i>Rubus discolor</i>	Himalayan blackberry
<i>Salsola tragus</i>	Russian thistle
<i>Verbascum thapsus</i>	mullein

A complete list of known exotic plants on the Eldorado National Forest is available from the Forest Botanist.

Noxious Weed Control Program
El Dorado Irrigation District
Construction Related to Amendment of License
Project No. 184

El Dorado Diversion Dam

August 15, 2000

Introduction

The El Dorado Irrigation District (EID) proposes to reconstruct the El Dorado Diversion Dam on the South Fork of the American River, near the community of Kyburz, in El Dorado County, California. The proposed project would replace the diversion facilities that were damaged in the 1997 January storms. The proposed project has been reviewed by the Federal Energy Regulatory Commission (FERC) and the Eldorado National Forest (ENF). During agency consultations, EID has proposed to implement the following measures to control the introduction and spread of noxious weeds associated with the reconstruction of the El Dorado Diversion Dam.

Construction Measures

Equipment Handling. EID or designated construction contractor will thoroughly clean heavy equipment before entering and leaving the project area to ensure that seed of noxious weeds are not introduced in or out of this area. EID will notify the ENF at least 10 working days prior to moving each piece of equipment on to the National Forest Land. Notification will identify the location of the equipment's most recent operations. If prior location of the equipment cannot be identified, ENF may assume that it was infested with noxious weeds. Upon request of the ENF, arrangements will be made of the ENF to inspect each piece of equipment.

Use of Straw. During construction or post construction restoration, EID or designated contractor will use rice straw or certified weed free straw.

Native Seed Mixes. Only native seed mixes approved by the ENF Botanist will be used for erosion control.

Post Construction Measures

Following construction, EID will implement the following measures:

Scotch Broom: Populations of Scotch broom have been located near the diversion dam construction site. As discussed in the FEA, Scotch broom populations at the diversion dam will be removed.

Annual Monitoring: In the summer following the diversion dam construction, the site will be monitored for potential introduction of noxious weeds. Monitoring will include a detailed survey of the construction area for noxious weeds. If noxious weeds are identified, EID will notify the ENF Forest Botanist. The notification will include a description of the infestation (species, location, and estimated population size), and recommended corrective actions. Corrective actions may include mechanical removal, hand pulling, herbicide application, and/or continued monitoring. Following corrective action, these sites will be seeded with a native seed mix approved by the ENF. The annual monitoring report will be prepared and filed with FERC on or before November 15.