

### **11.3 Iowa Hill Noxious Weeds Study Plan**

#### **11.3.1 Pertinent Issue Questions**

This study addresses the following terrestrial resource question for the proposed Iowa Hill Pumped Storage Development Project, as identified by the Upper American River Project (UARP) Relicensing Terrestrial Resources Technical Working Group (TWG) and as adapted from previously approved UARP studies:

- What is the distribution of noxious weeds in the proposed project area and to what extent would construction, operation, and maintenance of the Project affect their establishment or expansion?

#### **11.3.2 Background**

Noxious weed invasions pose a threat to beneficial resources and uses of the Iowa Hill Project area. Vehicles and public access can contribute to the spread of noxious weeds. In addition, construction and maintenance activities can disturb native vegetation and increase the potential for colonization by such weeds. Maintenance activities under power lines where vegetation is cleared can also open up areas for colonization by noxious weeds. Of note, the Licensee is currently an active participant in the El Dorado County Weed Management Group.

#### **11.3.3 Study Objectives**

The objectives of the Noxious Weeds Study are to: 1) determine the current distribution of noxious weeds in the Iowa Hill Project area; and 2) describe how identified project-related impacts can be mitigated within environmental, economic, and engineering constraints.

#### **11.3.4 Study Area and Sampling Locations**

The study area will include the preliminary project boundary as described in Figures 2 and 14 of the Iowa Hill IIP (SMUD 2003), including the area surrounding the proposed reservoir (Figure 2 in IIP), intake structure, and the preferred alternative transmission line route proposed by the Licensee (Figure 14 in IIP).

#### **11.3.5 Information Needed From Other Studies**

This study will be supported by Information derived from the Iowa Hill Vegetation Mapping Study and Special Status Plants Study to be conducted in 2004 and by the results of surveys conducted for the general UARP relicensing effort.

#### **11.3.6 Study Methods And Schedule**

The weeds targeted by this study will be drawn from the ENF's noxious weed list, and will include all "A" listed taxa, as well as those not currently known from the ENF. Populations of noxious weeds will be mapped concurrently with field surveys to be conducted for the Vegetation Mapping and Special Status Plant Species studies during the spring and early summer of 2004. Survey protocol will follow California Native Plant Society (CNPS) "Guidelines for Assessing Effects of Proposed Developments on Rare Plants and Plant Communities." Identified populations will be recorded with Global Positioning System (GPS) instruments as practicable. These data will be used to construct Geographic Information System (GIS) maps of observed invasive/non-native plant infestations.

#### **11.3.7 Analysis**

Identified populations of noxious weeds will be evaluated with respect to likely sources of introductions (e.g., vehicles) and opportunities for control or eradication. Management and mitigation strategies proposed in the study report will follow the Noxious Weeds Management Strategy implemented for the *Sierra Nevada Forest Plan Amendment, Final Environmental Impact Statement* (USDA 2001, or as amended), which requires that a project-level noxious weed risk assessment be conducted. The weed risk assessment serves as the primary mechanism for prescribing weed prevention measures. There are 3 priorities for weed management: Priority 1 is to prevent the

introduction of new invaders; Priority 2 is to conduct early treatment of new infestations; and Priority 3 is to contain and control established infestations. The invasive/noxious weed study will use the management strategies and weed control guidelines developed by the Forest Service for the Sierra Nevada region. The invasive/noxious weed study will determine the extent of present infestations and provide the basis for development of control mechanisms.

#### 11.3.8 Study Output

Study results will be presented to the Terrestrial Resources Technical Working Group (TWG) in early summer 2004. Ultimately, the results of the study will be incorporated into Exhibit E of the Licensee's application to FERC for a new license for the UARP. The output will likely include the issues addressed, objectives, study area, methods, results, analysis, discussion, and conclusions. Where appropriate, the report will explore a range of options available for the control or eradication of these infestations, including the feasibility of each option. The report will also include GIS-generated maps that identify the location of noxious weed infestations within the study area.

#### 11.3.9 TWG and Plenary Group Endorsement

This study plan was approved at the TWG on January 21, 2004 by SMUD and the USFS. There was no one in attendance of the meeting who said they could not "live with" the study plan as written. The Plenary Group approved this plan on February 4, 2004. The participants at the meeting who said they could "live with" the plan were Taxpayers Association of El Dorado County, Friends of El Dorado County, USFS, American River Recreation Association & Camp Lotus, El Dorado County Water Agency, Pacific Gas & Electric Company, SMUD, El Dorado County, El Dorado Irrigation District, NPS, SWRCB, USBLM, City of Sacramento, CDFG, and FOR. None of the participants at the meeting said they could not "live with" this study plan.

#### 11.3.10 Literature Cited

SMUD (Sacramento Municipal Utility District). 2003. Iowa Hill Pumped Storage Development Project Initial Information Package, revision 1. Sacramento, CA.

USDA (U.S. Department of Agriculture, Forest Service). 2001. Sierra Nevada forest plan amendment, final environmental impact statement, record of decision. USDA Forest Service, Pacific Southwest Region.