Placer County Water Agency Middle Fork American River Project (FERC No. 2079)

FINAL

TERR 3 – Noxious Weed Technical Study Report – 2008



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1.0 INTRODUCTION

This report describes surveys conducted by the Placer County Water Agency (PCWA) for the Middle Fork American River Project (MFP or Project) in accordance with the TERR 3 – Noxious Weeds Technical Study Plan (TERR 3 – TSP). The TERR 3 – TSP was included in Supporting Document (SD) H of the Pre-Application Document (PAD) (PCWA 2007). Specifically, this report provides a detailed description of the methods and results of noxious weed studies completed in 2006–2008.

For the purposes of this report, the term "noxious weed" refers to both noxious weeds and non-native invasive species. Noxious weed is a term used by government agencies for non-native invasive plants that have been defined as pests by law or regulation (California Department of Food and Agriculture (CDFA 2007)). The California Invasive Plant Council (Cal-IPC) defines non-native plants as those species introduced to California after European contact and as a direct or indirect result of human activity. Invasive non-native plants are plants that: (1) are not native to, yet can spread into, wildland ecosystems; and (2) displace native species, hybridize with native species, alter biological communities, or alter ecosystem processes (Cal-IPC 2006).

2.0 STUDY OBJECTIVES

The objectives of the noxious weed studies described in the TERR 3 – TSP are:

- Document noxious weed populations at existing Project facilities and features, recreation facilities, and dispersed concentrated use areas.
- Document noxious weed populations at potential Project betterments, including new facilities, roads, and trails; staging areas and disposal sites; as well as, new inundation areas.

Figure TERR 3-1 shows the TERR 3-TSP study objectives and the study elements associated with each objective. It also shows where information developed is documented.

3.0 STUDY IMPLEMENTATION

Study elements described in the TERR 3 – TSP were initiated in 2006 and were completed in 2008. In 2006, existing data on noxious weeds in the study area were compiled and field surveys were completed at the quantitative geomorphic and riparian studies sites in the bypass and peaking reaches. In 2008, field surveys for noxious weeds were conducted at Project facilities and features, recreational facilities, dispersed concentrated use areas and potential Project betterments. Study elements that have been completed are discussed further below.

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3.1 STUDY ELEMENTS COMPLETED

3.1.1 Developed Preliminary Information on Noxious Weeds in the Study Area

- Identified and mapped known occurrences of noxious weeds in the watershed based on agency consultation and a review of existing information.
- Developed a list of target noxious weed species in the Eldorado and Tahoe National Forests (ENF and TNF) to be included in the TERR 3 noxious weed surveys.
- Finalized the list of target noxious weeds species based on agency consultation.

3.1.2 Conducted Noxious Weed Surveys

- Conducted field surveys for noxious weeds in the study area at existing Project facilities and features, Project recreation facilities, and dispersed concentrated use areas.
- Conducted field surveys for noxious weeds in the study area around potential Project betterments.

3.1.3 Developed Final Information on Noxious Weeds in the Study Area

- Developed tables and Geographic Information System (GIS) maps documenting the location and extent of noxious weeds at existing Project facilities and features, Project recreation facilities, and dispersed concentrated use areas.
- Developed tables and GIS maps documenting the location and extent of noxious weeds at potential Project betterments.

3.2 VARIANCES FROM THE TERR 3 – TSP

All studies were conducted in accordance with the TERR 3 – TSP with the following voluntary enhancement completed by PCWA. The study area required in the TERR 3 – TSP included only existing Project facilities and features, Project recreation facilities, dispersed concentrated use areas, and potential Project betterments. However, noxious weed surveys were also conducted at quantitative geomorphic and riparian sampling sites (Table TERR 3-1) in conjunction with field surveys conducted for the TERR 2 – Special-Status Plants TSP.

3.3 OUTSTANDING STUDY ELEMENTS

There are no outstanding study elements. However, pursuant to the TERR 3 – TSP, if additional Project facilities and features, recreation facilities, or dispersed concentrated use areas are identified in the future, then these areas will be surveyed consistent with the TERR 3 – TSP.

3.4 Proposed Modifications to the TERR 3 – TSP

There are no proposed modifications to the TERR 3 – TSP.

4.0 EXTENT OF STUDY AREA

As outlined in the TERR 3 – TSP, the study area for the documentation of noxious weeds included the following buffer areas around Project facilities and features, recreational facilities, dispersed concentrated use areas and potential Project betterments:

Study Area	Existing Project Facilities and Features, Project Recreation Facilities, and Dispersed Concentrated Use Areas Identified by Stakeholders
10 feet	on either side of trails
20 feet	 around the perimeter of the large reservoirs, medium reservoirs, and diversion pools outside the perimeter fence of powerbouses, switchwards, and
	 outside the perimeter fence of powerhouses, switchyards, and substations
	 around ancillary support facilities and Project fences
30 feet	 on either side of penstocks, valve houses, and removable sections around gaging stations and weirs
	 on either side of communication lines, powerlines, photovoltaic poles and lines, and roads and access points
60 feet	 around intakes, gatehouses, surge tanks, adits, portals, microwave reflectors, radio towers, sediment disposal areas, and drop inlets
100 feet	 around Project recreation facilities and dispersed concentrated use areas
Study Area	Potential Project Betterments
100 feet	 around new facilities, roads, and trails; staging areas, disposal sites; and new inundation areas

Refer to Tables TERR 3-2 through TERR 3-5 for a list of Project facilities and features, Project recreation facilities, dispersed concentrated use areas, and potential Project betterments included in the study area for documentation of noxious weeds. Map TERR 3-1 graphically displays the extent of the study area. However, if a noxious weed population was identified on the perimeter of the study area, then the study area will be expanded to document the full extent of the population.

The study area was expanded by PCWA to include noxious weed surveys at the quantative geomorphic and riparian studies sties in the bypass and peaking reaches. The noxious weed surveys were completed in conjunction with special status plants surveys conducted at these study sites as required by the TERR 2 - TSP. Refer to Table TERR 3-1 and Map TERR 3-1 for the location of geomorphic and riparian sampling sites in bypass and peaking reaches.

5.0 STUDY APPROACH

This section describes the study approach used to document noxious weeds in the study area.

5.1 DEVELOP PRELIMINARY INFORMATION ON NOXIOUS WEEDS IN THE STUDY AREA

Existing information on noxious weeds in the Middle Fork American River (MFAR) watershed was obtained and reviewed for the development of the PAD. Data for the PAD was obtained from the Placer County Agricultural Commission and U.S. Department of Agriculture – Forest Service (USDA-FS) – ENF and TNF. Other sources reviewed included Cal-IPC's California Invasive Plant Inventory (Cal-IPC 2006) and CDFA's Noxious Weed Pest Ratings (California Department of Food and Agriculture (CDFA 2007). These sources were reviewed to create a list of noxious weeds of concern in the MFAR watershed, the location of any previously documented noxious weed populations, and the Cal-IPC and CDFA priority ratings. Cal-IPC rates noxious weed species according to the severity of their impact on ecosystems:

- High: These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.
- Moderate: These species have substantial and apparent—but generally not severe—ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.
- Limited: These species are invasive but their ecological impacts are minor on a statewide level, or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic.

CDFA rates noxious weeds species as A-, B-, or C-rated, depending on the State's eradication or treatment priority:

- A-rated pests: Weeds of known economic significance, subject to action by CDFA including eradication, quarantine, containment, rejection of shipments, or other holding action at the state-county level. Quarantine interceptions are to be rejected or treated at any point in the state.
- B-rated pests: Weeds subject to action by CDFA only when found in a nursery, and otherwise subject to eradication, containment, control, or other holding action at the discretion of the local county agricultural commissioner.

 C-rated pests: Not subject to State action except to provide for general pest cleanliness in nurseries; reject by CDFA only when found in a cropseed for planting or at the discretion of the commissioner, action to retard spread outside of nurseries at the discretion of the county agricultural commissioner.

Tables and maps providing information on noxious weeds in the MFAR were provided in SD F of the PAD (PCWA 2007). PAD Table 7-2, Noxious Weeds Known or Potentially Occurring in the Middle Fork American River Watershed, was reviewed, refined, and approved by the Terrestrial Technical Working Group (TWG) on March 3, 2008 for inclusion in this report. The approved table represents the list of target noxious weed species for the TERR 3 surveys.

Since the issuance of the PAD, the ENF developed a priority rating system for noxious weeds known to occur or potentially occurring on their forest lands. Under the ENF system, noxious weeds are assigned a priority (low, moderate, or high) based on each species' potential ecological impact (Durham, pers. comm., 2009). No noxious weed priority ratings specific to the TNF were available at the time this report was published.

5.2 CONDUCT NOXIOUS WEEDS SURVEYS

Noxious weed surveys were conducted at existing Project facilities and features, Project recreation facilities, dispersed concentrated use areas, and potential Project betterments from June 20–27 and July 23–August 1, 2008. Additional noxious weed data were collected at quantitative geomorphic and riparian sampling sites at the bypass and peaking reaches between August 9 and October 17, 2006.

This section provides a description of the survey methods implemented and data analysis conducted for the TERR 3 noxious weed surveys, including a description of additional data analyses implemented for the Hell Hole Reservoir Seasonal Storage Increase Betterment.

5.2.1 Existing Project Facilities and Features, Project Recreation Facilities, and Dispersed Concentrated Use Areas

Noxious weed surveys were conducted consistent with Section 2083 of the *Forest Service Manual, Information and Reporting Guidelines for Noxious Weeds* (USDA-FS 1995). Two teams of two botanists searched for and recorded the occurrence of target noxious weed species in the study area using various systematic field techniques (e.g., zig-zag patterns, random meandering, and linear transects) as appropriate. Surveys were conducted only in accessible areas.

For each noxious weed population identified, the following data were recorded on datasheets developed for the TERR 3 surveys:

- Species;
- Date;
- General location;

- Geographic Positioning System (GPS) location coordinates;
- Population size (i.e., area in square feet and acres); and
- Infestation level: low (<5% cover); moderate (6–25% cover); and high (>25% cover).

Data obtained from field surveys on the location and extent of noxious weed populations were processed and developed into maps. GIS layers showing the location of noxious weeds, existing Project facilities and features, Project recreation facilities, and dispersed concentrated use areas were overlaid on full color orthophotographs of the study area. Because the study area often contained more than one (and as many as 16) noxious weed species in a single location, overlapping noxious weed populations were grouped together into inclusive polygons for mapping purposes. Data tables were developed providing the following information for the individual noxious weed species in each polygon: map identification number; noxious weed species; GPS coordinates; population size (i.e., square feet and acres); and infestation level (i.e., low, moderate, or high). Additional maps were also developed showing the location of ENF-rated moderate and high priority noxious weed species in the study area within the ENF.

Tables and graphics were developed to provide information on the location of noxious weeds and to illustrate general patterns of noxious weed distribution in the study area. This includes tables relating noxious weed occurrence (polygons) to specific Project facilities and features, Project recreation facilities, and dispersed concentrated use areas and a summary table showing each noxious weed species and its distribution and level of infestation within six major geographical areas within the study area (i.e., Ralston-Oxbow Area, Middle Fork Interbay Area, Duncan Creek Area, Hell Hole Area, French Meadows Area, and snow course facilities). Line graphs were developed showing the distribution of each noxious weed species across the elevation range of the study area from approximately 1,000 feet to 6,000 feet mean sea level (msl).

Finally, additional analyses were conducted to provide information on the location of noxious weeds occurring at various elevations along the shoreline of Hell Hole Reservoir. First, GIS shapefiles of each noxious weed polygon were overlain on contour maps of the bed and shoreline of Hell Hole Reservoir. Contour maps of the lower (westernmost) portion of the reservoir were created using an interpolation of USGS 7.5 minute quadrangle contours. Contour maps of the upper (easternmost) portion of the reservoir were developed from topographic measurements collected by Air Maps USA in fall 2007 using aerial photogrammetric mapping techniques supported by ground control surveys. The size (i.e., area in square feet and acres) of each noxious weed polygon (or portion thereof) was then calculated in relation to contour lines representing various reservoir elevations associated with the existing Project. A schematic showing elevations around Hell Hole Reservoir associated within study area for the existing Project is provided below as Figure TERR 3-2.

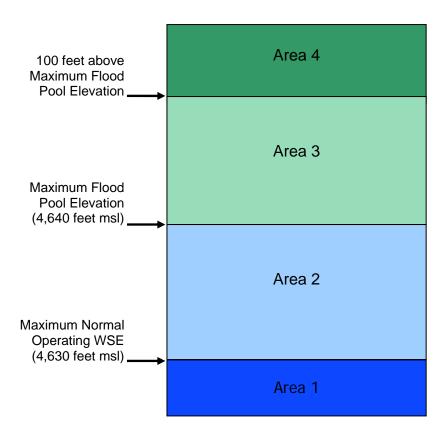


Figure TERR 3-2. Study Area around Hell Hole Reservoir for the Existing Project.

Under the existing Project, the Hell Hole Dam Spillway is an uncontrolled channel. The elevation of the spillway crest and the maximum normal operating water surface elevation (WSE) of Hell Hole Reservoir is 4,630 feet mean sea level (msl) and the maximum flood pool elevation is 4,640 feet msl. Calculations of the size of each noxious weed polygon located at different reservoir elevations under the existing Project are grouped as follows:

- **Area 1** includes noxious weed polygons (or portions of polygons) occurring at or below the current maximum normal operating WSE (4,630 feet msl).
- Area 2 includes noxious weed polygons (or portions of polygons) occurring from the current maximum normal operating WSE (4,630 feet msl) to the maximum flood pool elevation (4,640 feet msl).
- Area 3 includes noxious weed polygons (or portions of polygons) occurring from the maximum flood pool elevation (4,640 feet msl) to the upper limit of the study area (i.e., 100 feet above the maximum flood pool elevation).
- **Area 4** includes those portions of the noxious weed polygons intersecting Areas 1, 2, and/or 3 that extend beyond Area 3.

5.2.2 Potential Project Betterments

PCWA is evaluating three potential Project betterments including:

- Hell Hole Reservoir Seasonal Storage Increase,
- French Meadows Powerhouse Capacity Upgrade, and
- Ralston Powerhouse Capacity Upgrade.

Refer to Appendix A for a brief description of these potential Project betterments. A detailed description of each potential Project betterment is provided in SD C of the PAD.

Noxious weed survey methods for the potential Project betterments were the same as those described for surveys at existing Project facilities and features, Project recreation facilities, and dispersed concentrated used areas (Section 5.2.1). Provided below is a description of additional analyses conducted specifically for the Hell Hole Reservoir Seasonal Storage Increase Betterment.

Hell Hole Reservoir Seasonal Storage Increase Betterment

Additional analyses were conducted to provide information on the location and number of noxious weed polygons within the study area for the Hell Hole Reservoir Seasonal Storage Increase Betterment. Under the proposed betterment, PCWA would install 6-to 10-foot inflatable gates at the Hell Hole Dam Spillway to increase the seasonal storage capacity of the reservoir. The area (in square feet and acres) of each noxious weed polygon was calculated in relation to contour lines representing various reservoir elevations that could be affected (i.e., seasonally inundated) by installation of 6- or 10-foot spillway gates. A schematic showing reservoir elevations associated with installation of 6- or 10-foot spillway gates at Hell Hole Dam is provided below as Figure TERR 3-3.

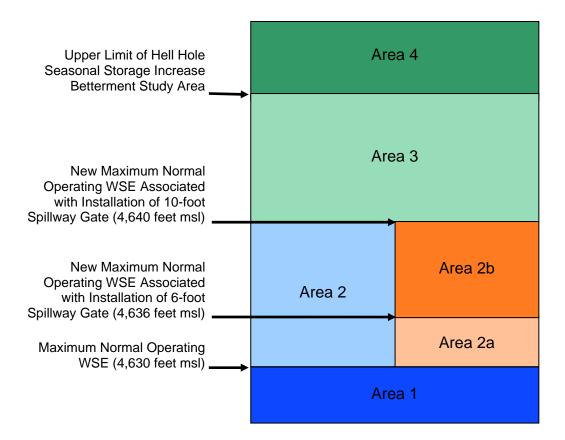


Figure TERR 3-3. Study Area for Hell Hole Reservoir Associated with the Hell Hole Reservoir Seasonal Storage Increase Betterment.

Calculations of the area of each polygon associated with the Hell Hole Reservoir Seasonal Storage Increase Betterment are grouped as follows:

- Area 2a includes noxious weed polygons (or portions of polygons) occurring from the current maximum normal operating WSE of 4,630 feet to the potential new maximum normal operating WSE of 4,636 associated with the installation of a 6foot spillway gate.
- Area 2b includes noxious weed polygons (or portions of polygons) occurring from 4,636 feet msl to the potential new maximum normal operating WSE of 4,640 associated with the installation of a 10-foot spillway gate. The total reservoir area affected by installation of a 10-foot spillway gate includes both Areas 2a and 2b.

5.2.3 Quantitative Geomorphic and Riparian Sampling Sites

A team of botanists also conducted noxious weed surveys at 25 quantitative geomorphic and riparian sampling sites in conjunction with TERR 2 special-status plant surveys. Noxious weed survey methods for the quantitative geomorphic and riparian sampling sites were the same as those described for surveys at existing Project

facilities and features, Project recreation facilities, and dispersed concentrated used areas (Section 5.2.1).

6.0 STUDY RESULTS

The following presents results of the noxious weeds studies conducted in 2006–2008 in accordance with the TERR 3 – TSP.

6.1 DEVELOP PRELIMINARY INFORMATION ON NOXIOUS WEEDS IN THE STUDY AREA

Fifty-seven noxious weed species were identified as known or potentially occurring in the vicinity of the MFP based on a literature review and consultation with the Terrestrial TWG. Of these 57 species, 24 noxious weed species were previously recorded in the vicinity of the MFP, and 33 noxious weed species were identified as potentially occurring in the vicinity of the MFP. These 57 noxious weed species were determined by the TWG to be the target species for the TERR 3 noxious weed surveys. The list of target noxious weed species is provided in Appendix B. Known occurrence of noxious weeds in the vicinity of the MFP based on a review of existing information was presented in Table 7-2 of the PAD.

6.2 CONDUCT NOXIOUS WEED SURVEYS

A total of 27 noxious weed species were detected in the study area during the TERR 3 noxious weed surveys (Table TERR 3-6). This includes five noxious weed species that had not previously been recorded in the vicinity of the MFP:

- Italian thistle (Carduus pycnocephalus);
- Malta starthistle (tocalote) (Centaurea melitensis);
- Canada thistle (Cirsium arvense);
- White sweet clover (*Melilotus albus*); and
- Spreading hedgeparsley (Torilis arvensis).

Appendix C provides representative photographs of noxious weed species in the study area. Table TERR 3-7 provides a list of each noxious weed species identified at existing Project facilities and features, Project recreation facilities, dispersed concentrated use areas, and potential Project betterments during the TERR 3 surveys and their distribution across six major geographic areas (Ralston-Oxbow Area, Middle Fork Interbay Area, Long Canyon Area, Duncan Creek Area, Hell Hole Area, and French Meadows Area, and snow courses). In general, noxious weeds were common throughout the study area, particularly at facilities and features associated with the MFP's four largest impoundments, Ralston Afterbay, Middle Fork Interbay, Hell Hole Reservoir, and French Meadows Reservoir. The most abundant noxious weed species observed in the study area were:

- Woolly mullein (Verbascum thapsus) 72 populations occupying approximately 319 acres;
- Cheatgrass (*Bromus tectorum*) 101 populations occupying approximately 280 acres; and
- Rat-tail fescue (*Vulpia myuros*) 77 populations occupying approximately 225 acres.

Other noxious weed species occurred as smaller populations or single individuals intermixed with the more widespread species.

Figure TERR 3-4 illustrates the distribution of each noxious weed species across the elevation range of the study area, including quantitative geomorphic and riparian study sites. Most of the noxious weed species are shown as occurring from about 1,000 feet to 5,000 feet msl. However, several species were more limited in their distribution. These include creeping bent grass (*Agrostis stolonifera*), which was only identified in the study area above 3,000 feet msl; and Italian thistle (*Carduus pycnocephalus*) and Malta starthistle (tocalote) (*Centauria melitensis*), which were only identified below 3,000 feet msl. Two species were identified at only a single location in the study area. These are tree-of-heaven (*Ailanthus altissima*) at approximately 2,500 feet msl and black locust (*Robinia pseudoacacia*) at approximately 1,000 feet msl. Sheep sorrel (*Rumex acetosella*) had the broadest distribution, occurring from approximately 1,000 feet msl to above 6,000 feet msl.

Specific results of the TERR 3 noxious weed surveys at existing Project facilities and features, Project recreation facilities, and dispersed concentrated use areas; potential Project betterments; and quantitative geomorphic and riparian sampling sites are provided below.

6.2.1 Existing Project Facilities and Features, Project Recreation Facilities, and Dispersed Concentrated Use Areas

A total of 25 noxious weed species were detected during noxious weed surveys conducted at existing Project facilities and features, Project recreation facilities, dispersed concentrated use areas. Specifically, 24 species were identified at existing Project facilities and features; 18 species were identified at Project recreation facilities; and 23 species were identified at dispersed concentrated use areas. Maps TERR 3-2a through TERR 3-2e provide the location of each noxious weed polygon and map identification numbers. Maps TERR 3-3 and TERR 3-4 provide additional information on the location of ENF-rated moderate and high priority noxious weeds species within the ENF. Only one map is included for the moderate priority species (Map TERR 3-3), which occur only in the vicinity of Ralston Afterbay. Tables TERR 3-8a, 3-8b, and 3-8c provide a list of noxious weed species in the study area at existing Project facilities and features, Project recreation facilities, and dispersed concentrated use areas. Refer to Appendix D for complete data on each noxious weed polygon depicted on the maps, and associated noxious weed populations.

Table TERR 3-9 provides an analysis of noxious weed polygons that are located at different reservoir elevations around Hell Hole Reservoir under the existing Project:

- Area 1 (which includes noxious weed polygons occurring at or below the current maximum normal operating WSE of 4,630 feet msl) includes portions of 19 noxious weed polygons occupying approximately 53 acres.
- Area 2 (which includes noxious weed polygons occurring from the maximum normal operating WSE to the maximum flood pool elevation at 4,640 feet msl) includes portions of 35 noxious weed polygons occupying approximately 21 acres.
- Area 3 (which includes noxious weed polygons occurring from the maximum flood pool elevation to the upper limit of the study area) includes portions of 38 noxious weed polygons occupying approximately 77 acres.
- Area 4 (which includes those portions of the noxious weed polygons intersecting Areas 1, 2, and/or 3 that extend beyond Area 3) includes portions of 27 polygons occupying approximately 25 acres.

6.2.2 Potential Project Betterments

Nineteen noxious weed species were detected during noxious weed surveys conducted at potential Project betterments. Maps TERR 3-5a through TERR 3-5e provide the location of each noxious weed polygon and polygon identification numbers. Maps TERR 3-6 and TERR 3-7 provide additional information on the location of ENF-rated moderate and high priority noxious weeds species within the ENF. Only one map is included for the moderate priority species (Map TERR 3-6), which occur only in the vicinity of Ralston Afterbay. ENF high-priority noxious weed species associated with potential project betterments were also consolidated into a single map (Map TERR 3-7). Tables TERR 3-10a, 3-10b, and 3-10c provide a list of all noxious weed populations in the study area for potential Project betterments. Refer to Appendix E for detailed information on each noxious weed polygon depicted on the maps, and associated noxious weed populations.

Table TERR 3-11 provides an analysis of noxious weed polygons at different reservoir elevations associated with the installation of a 6-foot or 10-foot spillway gate as part of the Hell Hole Reservoir Seasonal Storage Increase Betterment:

- Area 2a (which includes noxious weed polygons from the current maximum normal operating WSE of 4,630 feet msl up to the new potential maximum normal operating WSE of 4,636 feet msl resulting from installation of a 6-foot spillway gate) includes portions of 33 noxious weed polygons occupying approximately 10 acres.
- Area 2b (which includes noxious weed polygons between 4,636 feet msl and the new potential maximum normal operating WSE of 4,640 feet msl resulting from the installation of a 10-foot spillway gate in Hell Hole Dam) includes portions of 34 noxious weed polygons occupying approximately 11 acres. Therefore, the

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total area affected by installation of a 10-foot spillway gate (i.e., areas 2a and 2b) includes portions of 34 noxious weed polygons occupying approximately 21 acres.

6.2.3 Quantitative Geomorphic and Riparian Sampling Sites

Twenty noxious weed species were detected during noxious weed surveys conducted at quantitative geomorphic and riparian sampling sites. These sampling sites support a diverse assemblage of noxious weed species similar to the existing Project facilities and features, Project recreation facilities, and dispersed concentrated use areas, despite the fact that there is limited access to these sampling sites. In many cases, the quantitative geomorphic and riparian sampling sites are only accessible by helicopter or by foot through areas without established trails. Maps TERR 3-2a through TERR 3-2e provide the location of each noxious weed polygon and map identification numbers. Maps TERR 3-3 and TERR 3-4 provide additional information on the location of ENF-rated moderate and high priority noxious weeds species at quantitative geomorphic and riparian sampling sites within the ENF. Only one map is included for the moderate priority species (Map TERR 3-3), which occur only in the vicinity of Ralston Afterbay. Table TERR 3-12 provides a list of all noxious weed populations at these study sites. Refer to Appendix F for detailed information on each noxious weed polygon depicted on the maps, and associated noxious weed populations.

7.0 LITERATURE CITED

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- U.S. Department of Agriculture Forest Service (USDA-FS). 1995. Section 2083, Information and Reporting Guidelines for Noxious Weeds. In: Forest Service Manual, Section 2080.

Personal Communications

Durham, Susan. 2009. Eldorado National Forest botanist. Placerville, CA. February 20, 2009—e-mail to Janelle Nolan of RBI regarding priority ratings for noxious weeds in the ENF.

TABLES

Table TERR 3-1. Quantitative Geomorphic and Riparian Sampling Sites.

2006 Geomorphology and Riparian Quantitative Study Site Names	Reach Location (river mile)
Middle Fork American River	
MF-10	44.7
MF-9	36.2
MF-7	29.4
MF-6	28.6
MF-4	26.2
MF-3	16.95
MF-2	10.4
MF-1	4.8
Rubicon River	
R-16	28.1
R-15	25.7
R-13	20.9
R-12	19.5
R-10	14.3
R-5	3.8
R-4	3.5
R-3	2.6
R-2	1.2
R-1	0.7
Duncan Creek	
D-3	8.3
D-2	6.3
D-1	4.6
Long Canyon Creek	
LC-2	9
LC-1	0
SFLC-1	2.3
NFLC-1	1.9

Dams, Reservoirs, and Diversion Pools

Large Dams

French Meadows Dam and Outlet Works

Hell Hole Dam and Outlet Works

Medium Dams

Middle Fork Interbay Dam

Ralston Afterbay Dam

Small Dams

Duncan Creek Diversion Dam

North Fork Long Canyon Diversion Dam

South Fork Long Canyon Diversion Dam

Large Reservoirs

French Meadows Reservoir

Hell Hole Reservoir

Medium Reservoirs

Middle Fork Interbay

Ralston Afterbay

Small Diversion Pools

Duncan Creek Diversion Pool

North Fork Long Canyon Diversion Pool

South Fork Long Canyon Diversion Pool

Water Conveyance Systems

Tunnels

Duncan Creek-Middle Fork Tunnel

French Meadows-Hell Hole Tunnel

Hell Hole - Middle Fork Tunnel

Middle Fork - Ralston Tunnel

Ralston - Oxbow Tunnel

Diversion Pipes and Drop Inlets

North Fork Long Canyon Diversion Pipe and Drop Inlet

South Fork Long Canyon Diversion Pipe and Drop Inlet

Surge Shafts and Adits

Brushy Canyon Adit

Hell Hole - Middle Fork Tunnel Surge Shaft and Tank

Middle Fork - Ralston Tunnel Surge Shaft and Tank

Removable Sections and Portals

Duncan Creek - Middle Fork Tunnel Portal

French Meadows - Hell Hole Tunnel Removable Section

Hell Hole - Middle Fork Tunnel Removable Section

Middle Fork - Ralston Tunnel Removable Section

North Fork Long Canyon Crossing Removable Section

Intakes and Gatehouses

Duncan Creek - Middle Fork Tunnel Intake

French Meadows - Hell Hole Tunnel Gatehouse

French Meadows - Hell Hole Tunnel Intake

Hell Hole - Middle Fork Tunnel Gatehouse

Hell Hole - Middle Fork Tunnel Intake

Middle Fork - Ralston Tunnel Intake and Gatehouse

Ralston - Oxbow Tunnel Intake

Water Conveyance Systems (continued)

Penstocks and Valve Houses

French Meadows Powerhouse Penstock and Butterfly Valve House

Middle Fork Powerhouse Penstock and Butterfly Valve House

Ralston Powerhouse Penstock and Butterfly Valve House

Powerhouses, Switchyards, and Substations

French Meadows Powerhouse and Switchyard

Hell Hole Powerhouse

Middle Fork Powerhouse and Upper and Lower Switchyards

Ralston Powerhouse and Switchyard

Oxbow Powerhouse and Switchyard

Hell Hole Substation

Gaging Stations and Weirs

Stream Gages and Weirs

Duncan Creek Gage and Weir above Diversion Dam (USGS Gage and Weir No. 11427700)

Duncan Creek Gage and Weir below Diversion Dam (USGS Gage and Weir No. 11427750)

Middle Fork American River Gage and Weir below French Meadows Dam (USGS Gage and Weir No. 11427500)

Middle Fork American River Gage at Interbay Dam (USGS Gage No. 11427770)

Middle Fork American River Gage above Middle Fork Powerhouse (USGS Gage No. 11427760)

Middle Fork American River Gage below Oxbow Powerhouse (USGS Gage No. 11433300)

North Fork Long Canyon Gage and Weir at Diversion Dam (USGS Gage and Weir No. 11433085)

South Fork Long Canyon Gage and Weir at Diversion Dam (USGS Gage and Weir No. 11433065)

Rubicon River Gage and Weir below Hell Hole Dam (USGS Gage and Weir No. 11428800)

Diversion Gages

North Fork Long Canyon Gage at Diversion Dam (USGS Gage No. 11433080)

South Fork Long Canyon Gage at Diversion Dam (USGS Gage No. 11433060)

Reservoir Gages

French Meadows Reservoir Gage (USGS Gage No. 11427400)

French Meadows Reservoir Staff Gage

Hell Hole Reservoir Gage (USGS Gage No. 11428700)

Hell Hole Reservoir Staff Gage

Middle Fork Interbay Reservoir Gage

Ralston Afterbay Reservoir Gage

Powerhouse Gages

French Meadows Powerhouse Gage (USGS Gage No. 11427200)

Middle Fork Powerhouse Gage (USGS Gage No. 11428600)

Oxbow Powerhouse Gage (USGS Gage No. 11433212)

Ralston Powerhouse Gage (USGS Gage No. 11427765)

Leakage Weirs

French Meadows Dam Leakage Weirs Nos. 1-6

Hell Hole Dam Leakage Weir

Project Communication Lines and Powerlines

French Meadows Area

French Meadows Dam Generator Building to French Meadows Dam Outlet Works Powerline

French Meadows Dam Generator Building to French Meadows Dam Spillway Gates Powerline

Project Communication Lines and Powerlines (continued)

Hell Hole Area

French Meadows Powerhouse to French Meadows Powerhouse Penstock and Butterfly Valve House Communication Line/Powerline

French Meadows Powerhouse and Switchyard to Hell Hole - Middle Fork Tunnel Gatehouse, Dormitory Facility, Operator's Cottages, and Hell Hole Powerhouse Communication Line/Powerline

Dormitory and Cottages Water Supply Tank Powerline

Hell Hole Powerhouse to Rubicon River Gage and Weir below Hell Hole Dam Communication Line/Powerline

Middle Fork Interbay Area

Middle Fork Powerhouse to Middle Fork Powerhouse Butterfly Valve House Communication Line/Powerline

Middle Fork Powerhouse Butterfly Valve House to Radio Repeater near Hell Hole - Middle Fork Tunnel Surge Tank (underground) Communication Line/Powerline

Middle Fork Powerhouse to Middle Fork - Ralston Tunnel Intake and Gatehouse Communication Line/Powerline

Middle Fork Powerhouse to Middle Fork American River Gage above Middle Fork Powerhouse Communication Line/Powerline

Ralston - Oxbow Area

Ralston - Oxbow Tunnel Intake to Ralston Powerhouse Communication Line

Ralston Powerhouse to Ralston Powerhouse Butterfly Valve House Communication Line/Powerline

Ralston Afterbay Dam Generator Building to Ralston - Oxbow Tunnel Intake Communication Line/Powerline

Oxbow Powerhouse to Ralston Afterbay Dam Generator Building Communication Line/Powerline

Photovoltaic Poles and Powerlines

Photovoltaic Poles and Powerline to Duncan Creek Gage above Diversion Dam

Photovoltaic Pole and Powerline at Duncan Creek Gage below Diversion Dam

Photovoltaic Pole and Powerline at Middle Fork American River Gage below French Meadows Dam

Photovoltaic Pole and Powerline at Middle Fork American River Gage above Middle Fork Powerhouse

Photovoltaic Pole and Powerline at North Fork Long Canyon Gage at Diversion Dam

Photovoltaic Pole and Powerline at South Fork Long Canyon Gage at Diversion Dam

Photovoltaic Pole at Middle Fork American River Gage below Oxbow Powerhouse

Microwave Reflectors and Radio Towers

Passive Microwave Reflector Station above Middle Fork Interbay

Radio Communications Tower near French Meadows - Hell Hole Tunnel Gatehouse

Radio Communications Tower and Repeater near Hell Hole - Middle Fork Tunnel Surge Shaft and Tank

Passive Microwave Reflector Station above Ralston Afterbay

Disposal Sites

Duncan Diversion Dam Sediment Disposal Area

North Fork Long Canyon Crossing Sediment Disposal Area

Middle Fork Interbay Sediment Disposal Area

Ralston Ridge Sediment Disposal Area

Indian Bar Sediment Disposal Area

Ancillary Facilities

French Meadows Dam Generator Building

French Meadows Dam Staging Area

Dormitory Facility

Dormitory and Cottages Water Supply Tank

Ancillary Facilities (continued)

Hell Hole Staging Areas

Operator Cottages and Shop

Ralston Afterbay Dam Generator Building

Storage Building at Middle Fork - Ralston Tunnel Surge Shaft and Tank

Wabena Meadows Snow Course

Miranda Cabin Snow Course

Diamond Crossing Snow Course

Talbot Camp Snow Course

Project Fences

Slope Fences

French Meadows Powerhouse Penstock Rock Fence

French Meadows Powerhouse Slope Fence

Long Canyon Crossing Slope Fence

Middle Fork Powerhouse Upper Switchyard Slope Fence

Middle Fork Interbay Dam Slope Fence

Oxbow Powerhouse Slope Fence

Ralston Powerhouse Penstock and Butterfly Valve House Slope Fences

Ralston Powerhouse Slope Fence

Public Safety Fences

Dormitory Facility Barrier Fence

Hell Hole Dam General Parking Area Barrier Fence

North Fork Long Canyon Crossing Removable Section Barrier Fence

Project Roads and Access Points

Duncan Creek Area

Duncan Creek Diversion Intake Road and Diversion Pool Access Point

Duncan Creek Diversion Dam Road

Duncan Creek Diversion Pool Road and Access Point

French Meadows Area

Duncan Creek - Middle Fork Tunnel Portal Road and Spillway Access Point

French Meadows - Hell Hole Tunnel Gatehouse Road

French Meadows Dam Outlet Works and Leakage Weirs Road

French Meadows Dam Staging Area Road

Middle Fork American River Gage and Weir below French Meadows Dam Road

Hell Hole Area

Hell Hole Dam and Powerhouse Road and Spillway Southern Access Point

Rubicon River Gage and Weir below Hell Hole Dam Road

Hell Hole Dam Leakage Weir Road

Hell Hole Dam Spillway Northern Access Point

French Meadows - Hell Hole Tunnel Portal Road

French Meadows Powerhouse Road

Hell Hole - Middle Fork Tunnel Gatehouse Road

Dormitory Facility Road

Hell Hole Dam Spillway Discharge Channel Road

Long Canyon Area

North Fork Long Canyon Diversion North Road

North Fork Long Canyon Diversion South Road

North Fork Long Canyon Diversion Drop Inlet Road

Project Roads and Access Points (continued)

Long Canyon Area (continued)

South Fork Long Canyon Diversion and Drop Inlet Road

North Fork Long Canyon Crossing Removable Section North Road and Parking Area

North Fork Long Canyon Crossing Removable Section South Road

Middle Fork Interbay Area

Middle Fork Powerhouse Butterfly Valve House Road

Middle Fork Powerhouse Penstock and Butterfly Valve House Road

Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points

Middle Fork Powerhouse Upper Switchyard Road

Ralston-Oxbow Area

Brushy Canyon Adit Road

Oxbow Powerhouse Road

Ralston Powerhouse Butterfly Valve House Road

Ralston - Oxbow Tunnel Intake Road

Ralston Afterbay Road and Boat Ramp

Ralston Afterbay Dam Road and Afterbay Access Point

Ralston Afterbay Sediment Removal Access Point

Project Trails

Duncan Creek Area

Duncan Creek Diversion Dam North Trail

Duncan Creek Diversion Dam South Trail

Photovoltaic Poles and Powerline to Duncan Creek Gage above Diversion Dam Trail

Duncan Creek Gage and Weir above Diversion Trail

Duncan Creek Gage and Weir below Diversion Trail

French Meadows Area

Middle Fork American River Gage and Weir below French Meadows Dam Trail

Middle Fork Interbay Area

Middle Fork American River Gage above Middle Fork Powerhouse Trail

Passive Microwave Reflector Station above Middle Fork Interbay Trail

Ralston Afterbay Area

Passive Microwave Reflector Station above Ralston Afterbay Trail

Middle Fork American River Gage below Oxbow Powerhouse Trail

Table TERR 3-3. Project Recreation Facilities.

French Meadows Area
Ahart Campground
Coyote Group Campground
Poppy Campground
French Meadows Campground
Gates Group Campground
Lewis Campground
French Meadows Picnic Area
McGuire Picnic Area
French Meadows Boat Ramp
McGuire Boat Ramp
Dolly Creek Water Supply
French Meadows Campground Water Supply
Hell Hole Area
Big Meadows Campground
Hell Hole Campground
Upper Hell Hole Campground
Hell Hole Vista
Hell Hole General Parking Area
Hell Hole Boat Ramp Parking Area
Hell Hole Boat Ramp
Big Meadows Campground Water Supply
Ralston Afterbay Area
Ralston Picnic Area
Ralston Picnic Area Cartop Boat Ramp
Indian Bar Rafting Access and General Parking
Long Canyon Area
Middle Meadows Group Campground
Middle Meadows Group Campground Water Supply

Table TERR 3-4. Dispersed Concentrated Use Areas.

Dispersed Concentrated Use Areas

French Meadows Reservoir Area

Area near French Meadows-Hell Hole Tunnel Gatehouse

Area immediately downstream of French Meadows Dam (both sides of river)

Area located immediately northwest of French Meadows Dam

Area near bridge over the Middle Fork American River, upstream French Meadows Reservoir

Duncan Creek Diversion Dam Area

Area on north side of Duncan Creek Diversion Dam

Area near Duncan Creek Gage and Weir, upstream of Duncan Creek Diversion Dam

Area near new bridge crossing Duncan Canyon on the road to the Grizzly, etc.

Hell Hole Reservoir Area

Area on west side of Hell Hole Reservoir, between dam and Hell Hole Boat Ramp

Grey Horse Area

Long Canyon Area

Area surrounding South Fork Long Canyon Diversion Dam

Areas along South Fork Long Canyon Creek, downstream of South Fork Long Canyon Diversion Dam

Middle Fork Interbay Area

Shoreline area surrounding Middle Fork Interbay

Ralston Afterbay Area

Ralston Afterbay Sediment Disposal Area

Shoreline area surrounding Ralston Afterbay

Area along Middle Fork American River, between Ralston Picnic Area and the new gage

Area at confluence of North Fork of the Middle Fork American River and Middle Fork American River

Indian Bar, Willow Bar, and Junction Bar Areas

Table TERR 3-5. Potential Project Betterments.

Hell Hole Reservoir Seasonal Storage Increase

Hell Hole Dam

Modified Facilities

Hell Hole Dam Spillway Crest Gates

Hell Hole Dam Parapet Walls

New Facilities

Hell Hole Dam Spillway Crest Gates Control Building

Hell Hole Dam Spillway Crest Gates Control Building Powerline

Temporary Construction and Staging Areas

Hell Hole Dam Spillway Crest Gates Construction Road

Hell Hole Dam Spillway Crest Gates Construction Work Area

Hell Hole Dam Spillway Crest Gates and Control Building Construction Staging Area

Hell Hole Dam Parapet Wall Construction Staging and Work Area

Hell Hole Dam Spillway Crest Gates Control Building Construction Work Area

Hell Hole Dam Spillway Crest Gates Control Building Powerline Construction Work Area

Hell Hole Dam Spillway Crest Gates Control Building Powerline Construction Staging Area

Hell Hole-Middle Fork Tunnel Gatehouse

Modified Facilities

Hell Hole - Middle Fork Tunnel Gatehouse Parapet Wall

Temporary Construction and Staging Areas

Hell Hole-Middle Fork Tunnel Gatehouse Parapet Wall Construction Staging and Work Area

French Meadows Powerhouse

Modified Facilities

French Meadows Powerhouse Parapet Wall

Temporary Construction and Staging Areas

French Meadows Powerhouse Parapet Wall Construction Staging and Work Area

South Fork Long Canyon Diversion

Modified Facilities

South Fork Long Canyon Diversion Dam Crest Gates

New Facilities

South Fork Long Canyon Diversion Dam Crest Gates Generator Building

Temporary Construction and Staging Areas

South Fork Long Canyon Diversion Dam Crest Gates and Generator Building Construction Staging and Work Area

French Meadows Powerhouse Capacity Upgrade

1

French Meadows Reservoir

Modified Facilities

French Meadows - Hell Hole Tunnel Intake Trash Rack

Temporary Construction and Staging Areas

French Meadows - Hell Hole Tunnel Intake Trash Rack Construction Staging Area

French Meadows - Hell Hole Tunnel Intake Trash Rack Construction Work Area

French Meadows - Hell Hole Tunnel Intake Trash Rack Construction Road

French Meadows Powerhouse

Modified Facilities

French Meadows Powerhouse Switchyard

New Facilities

French Meadows Powerhouse

Table TERR 3-5. Potential Project Betterments (continued).

French Meadows Powerhouse Capacity Upgrade (continued)

French Meadows Powerhouse (continued)

French Meadows Powerhouse Penstock

French Meadows - Hell Hole Tunnel Surge Shaft/Tank

French Meadows - Hell Hole Tunnel Surge Pipeline

French Meadows - Hell Hole Tunnel Surge Shaft or Pipeline Road

Temporary Construction and Staging Areas

French Meadows Powerhouse/Switchyard Construction Work Area

French Meadows Powerhouse/Switchyard Construction Staging Area

French Meadows Powerhouse Penstock Construction Work Area

French Meadows Powerhouse Penstock Construction Staging Areas

French Meadows - Hell Hole Tunnel Surge Shaft/Tank or Pipeline Construction Staging Areas

French Meadows - Hell Hole Tunnel Surge Shaft/Tank Construction Work Area

French Meadows - Hell Hole Tunnel Surge Pipeline Construction Work Area

French Meadows - Hell Hole Tunnel Surge Shaft or Pipeline Road Construction Staging and Work Area

Non-Project Facilities Modified During Construction

Forest Road 14N09A

Forest Road 14N09A Construction Staging and Work Area

Middle Fork Powerhouse

Modified Facilities

Middle Fork Powerhouse Upper and Lower Switchyard

Ralston Powerhouse Capacity Upgrade

Ralston Powerhouse

Modified Facilities

Ralston Powerhouse

Temporary Construction and Staging Areas

Ralston Powerhouse Construction Staging Area

Table TERR 3-6. Noxious Weed Species Identified During TERR 3 Noxious Weed Surveys.

Scientific Name	Common Name	Cal-IPC Rating ¹	CDFA Rating ²	Existing Project Facilities and Features	Project Recreation Facilities	Dispersed Concentrated Use Areas	Potential Project Betterments	Quantitative Geomorphic and Riparian Sampling Sites
Agrostis stolonifera	creeping bent grass	Limited	_	Х		X		Х
Ailanthus altissima	tree-of-heaven	Moderate	С	Χ				
Bromus diandrus	ripgut brome	Moderate	_	Χ	Х	Х	Х	X
Bromus tectorum	cheatgrass	High		Χ	Х	X	Х	X
Carduus pycnocephalus	Italian thistle	Moderate	С	Χ	Χ	X	X	
Centaurea melitensis	Malta starthistle (tocalote)	Moderate	С	Х		Х	Х	
Centaurea solstitialis	yellow starthistle	High	С	Χ	Х	X		X
Chondrilla juncea	rush skeletonweed	Moderate	Α	Χ	Х	X	Х	X
Cirsium arvense	Canada thistle	Moderate	В	Х			Х	
Cirsium vulgare	bull thistle	Moderate	С	Х	Х	Х	Х	Х
Cynodon dactylon	Bermuda grass	Moderate	С					Х
Cynosurus echinatus	hedgehog dogtailgrass	Moderate	_	Х	Х	Х	Х	Х
Cytisus scoparius	Scotch broom	High	С					X
Dactylis glomerata	orchardgrass	Limited	_	Χ	Х	X	X	Х
Hirschfeldia incana	shortpod mustard	Moderate	_	Χ	Х	X	Х	X
Hypericum perforatum	klamathweed	Moderate	С	Χ	Χ	X	X	X
Lepidium latifolium	perennial pepperweed	High	В	Χ		X		
Melilotus albus	white sweet clover	_	_	Χ		X		
Melilotus officinalis	yellow sweetclover			Χ	Х	X	X	X
Plantago lanceolata	English plantain	Limited	_	Χ	Х	X	X	X
Robinia pseudoacacia	black locust	Limited	_			X		X
Rubus discolor	Himalayan blackberry	High	_	Χ	Х	Х	Х	X
Rumex acetosella	sheep sorrel	Moderate	_	Χ	Х	Х	Х	X
Taeniatherum caput-medusae	medusahead	High	С	Χ	Х	X	Х	
Torilis arvensis	spreading hedgeparsley	Moderate		Х	Х	X	Х	Х
Verbascum thapsus	woolly mullein	Limited	_	Х	Х	Х	Х	Х
Vulpia myuros	rat-tail fescue	Moderate	_	Х	Х	X	Х	Х
	To	otal Number o	of Species:	24	18	23	19	20

California Invasive Plant Council (Cal-IPC) Rating:

High: These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.

<u>Moderate</u>: These species have substantial and apparent—but generally not severe—ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.

<u>Limited:</u> These species are invasive but their ecological impacts are minor on a statewide level, or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic.

California Department of Food and Agriculture (CDFA) Rating:

A-rated pests: Weeds of known economic significance, subject to action by CDFA including eradication, quarantine, containment, rejection of shipments, or other holding action at the state-county level. Quarantine interceptions are to be rejected or treated at any point in the state.

B-rated pests: Weeds subject to action by CDFA only when found in a nursery, and otherwise subject to eradication, containment, control, or other holding action at the discretion of the local county agricultural commissioner.

<u>C-rated pests:</u> Not subject to state action except to provide for general pest cleanliness in nurseries; reject by CDFA only when found in a cropseed for planting or at the discretion of the commissioner, action to retard spread outside of nurseries at the discretion of the county agricultural commissioner.

¹Source: California Invasive Plant Inventory (Cal-IPC 2006).

²Source: Noxious Weed Pest Ratings (CDFA 2007).

Table TERR 3-7. Distribution of Noxious Weed Species in the Vicinity of the Middle Fork American River Project.

Species	Rals	ton-Oxbow	Area		Middle Fork		Lor	ng Canyon	Area	Dun	can Creek	Area	ŀ	Hell Hole Ar	ea	Fren	ch Meadow	s Area	Sno	ow Cours	es²		MFP Totals	
Scientific Name/ Common Name ¹	No. of Pops.	Square Feet	Acres	No. of Pops.	Square Feet	Acres	No. of Pops.	Square Feet	Acres	No. of Pops.	Square Feet	Acres												
Verbascum thapsus woolly mullein	10	1,175,252	26.98	8	589,496	13.53	8	129,810	2.98	1	100	0.00	18	3,757,150	86.25	27	8,229,673	188.93	_	_	_	72	13,881,480	318.68
Bromus tectorum cheatgrass	16	2,375,126	54.53	15	1,628,967	37.40	12	817,359	18.76	1	11,326	0.26	44	5,671,725	130.20	13	1,684,320	38.67	_	_	_	101	12,188,823	279.82
Vulpia myuros rat-tail fescue	17	2,112,375	48.49	12	1,890,704	43.40	4	566,380	13.00	_	_	_	41	5,184,628	119.02	3	58,128	1.33	_	_	_	77	9,812,215	225.26
Rumex acetosella sheep sorrel	9	441,857	10.14	6	1,048,422	24.07	15	439,180	10.08	_	_	_	6	1,672,929	38.41	48	4,648,752	106.72	2	2,400	0.06	86	8,253,539	189.48
Hypericum perforatum klamathweed	15	1,838,668	42.21	13	1,505,577	34.56	7	274,130	6.29	_	_	_	22	860,160	19.75	21	1,200,907	27.57	_	_	_	78	5,679,441	130.38
Cirsium vulgare bull thistle	2	500,940	11.50	10	370,080	8.50	9	135,510	3.11	2	600	0.01	12	872,444	20.03	28	2,641,274	60.63	_	_	_	63	4,520,847	103.78
Bromus diandrus ripgut brome	28	2,739,453	62.89	8	806,731	18.52	_	_	_	_	_	_	5	688,248	15.80	_	_	_	_	_	_	41	4,234,432	97.21
Plantago lanceolata English plantain	15	1,373,827	31.54	6	467,599	10.73	4	3,350	0.08	_	_	_	7	507,276	11.65	16	1,371,678	31.49	1	17,860	0.41	49	3,741,590	85.90
Torilis arvensis spreading hedgeparsley	24	2,264,030	51.97	9	1,338,699	30.73	_	_	_	_	_	_	1	74,052	1.70	_	_	_	_	_	_	34	3,676,781	84.41
Chondrilla juncea rush skeletonweed	16	2,102,781	48.27	9	1,295,321	29.74	2	219,300	5.03	_	_	_	1	8,712	0.20	_	_	_	_	_	_	28	3,626,115	83.24
Cynosurus echinatus hedgehog dogtailgrass	16	1,087,902	24.97	11	1,172,793	26.92	4	307,098	7.05	_	_	_	10	706,344	16.22	2	273,072	6.27	_	_	_	43	3,547,209	81.43
Dactylis glomerata orchardgrass	2	100,228	2.30	5	34,261	0.79	2	7,870	0.18	_	_	_	9	766,349	17.59	16	2,159,643	49.58	_	_	_	34	3,068,351	70.44
Melilotus officinalis yellow sweetclover	8	1,309,954	30.07	8	450,439	10.34	_	_	_	_	_	_	5	326,369	7.49	4	73,461	1.69	_	_	_	25	2,160,223	49.59
Hirschfeldia incana shortpod mustard	14	1,262,016	28.97	6	38,491	0.88	_	_	_	_	_	_	8	608,558	13.97	_	_	_	_	_	_	28	1,909,065	43.83
Agrostis stolonifera creeping bent grass	1	40	0.0	2	516,662	11.86	1	1,250	0.03	_		_	6	244,760	5.62	2	988,812	22.70	_	_	_	12	1,751,524	40.21
Rubus discolor Himalayan blackberry	19	1,366,918	31.38	6	28,465	0.65	1	130,680	3.00	_		_	1	375	0.01	1	56,628	1.30	_	_		28	1,583,066	36.34
Centaurea melitensis Malta starthistle (tocalote)	6	1,141,416	26.20					_	_	_		_		_	_		_		_	_		6	1,141,416	26.20
Taeniatherum caput- medusae medusahead	4	533,061	12.24				1	261,360	6.00	_		_	2	161,364	3.70		_		_	_		7	955,785	21.94
Melilotus albus white sweet clover	1	_	_	3	10,098	0.23	10	618,960	14.21	_	_	_	_	_	_	3	178,596	6.85	_	_	_	17	807,654	21.29
Carduus pycnocephalus Italian thistle	10	799,512	18.35	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	10	799,512	18.35
Lepidium latifolium perennial pepperweed	1	392,040	9.00	_	_	_	1	100	0.00	_		_	_	_	_	_	_	_	_	_	_	2	392,140	9.00
Centaurea solstitialis yellow starthistle	5	18,323	0.42	_	_	_	2	272,686	6.26	_		_	_	_	_	_	_	_	_	_	_	7	291,009	6.68
Ailanthus altissima tree-of-heaven	2	228,690	5.25	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	2	228,690	5.25
Cirsium arvense Canada thistle	1	_	_	2	1,800	0.04	2	300	0.01	_	_	_	_	_	_	_	_	_	_	_	_	5	2,100	0.05
Robinia pseudoacacia black locust	1	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	1	_	_

¹Species are arranged in order of abundance (where abundance is defined as total acreage in the study area). ²Snow courses located east of Hell Hole Reservoir and southeast of French Meadows Reservoir.

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Table TERR 3-8a. Noxious Weed Species at Existing Project Facilities and Features.

Facility	Map ID ¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³
DAMS, RESERVOIRS, AND DIVERSION POOLS					
Large Dams					
			Bromus tectorum	cheatgrass	moderate
			Dactylis glomerata	orchardgrass	low
French Meadows Dam and Outlet Works	FM02	18.6 acres	Hypericum perforatum	klamathweed	low
Trench Meadows Dam and Odder Works	1 10102	10.0 acres	Plantago lanceolata	English plantain	low
			Rumex acetosella	sheep sorrel	low
			Verbascum thapsus	woolly mullein	low
			Bromus tectorum	cheatgrass	low
		3.5 acres	Hypericum perforatum	klamathweed	low
Hell Hole Dam and Outlet Works	H03		Plantago lanceolata	English plantain	moderate
			Verbascum thapsus	woolly mullein	low
			Vulpia myuros	rat-tail fescue	moderate
Medium Dams					
Middle Fork Interbay Dam	_	_	_	_	_
Ralston Afterbay Dam	_	_	_	_	_
Small Dams	T				
Duncan Creek Diversion Dam	_	_	<u> </u>	_	_
			Cirsium vulgare	bull thistle	low
North Fork Long Canyon Diversion Dam	LC07	1.3 acres	Melilotus albus	white sweet clover	low
Notary on Englanding Dam	2007	1.0 00103	Rumex acetosella	sheep sorrel	low
			Verbascum thapsus	woolly mullein	low
			Agrostis stolonifera	creeping bent grass	low
	LC11	2 acres	Cirsium vulgare	bull thistle	low
	2011	2 40103	Melilotus albus	white sweet clover	moderate
South Fork Long Canyon Diversion Dam			Verbascum thapsus	woolly mullein	low
			Bromus tectorum	cheatgrass	low
	LC12	0.68 acres	Rumex acetosella	sheep sorrel	low
			Verbascum thapsus	woolly mullein	low

Table TERR 3-8a. Noxious Weed Species at Existing Project Facilities and Features (continued).

Facility	Map ID ¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³
DAMS, RESERVOIRS, AND DIVERSION POOLS CON	TINUED				
Large Reservoirs					
			Cirsium vulgare	bull thistle	low
	FM05	110 acres	Rumex acetosella	sheep sorrel	low
			Verbascum thapsus	woolly mullein	low
			Cirsium vulgare	bull thistle	low
			Hypericum perforatum	klamathweed	moderate
	FM08	5.2 acres	Plantago lanceolata	English plantain	low
			Rumex acetosella	sheep sorrel	low
			Verbascum thapsus	woolly mullein	high
			Cirsium vulgare	bull thistle	low
	FM13	3.8 acres	Rumex acetosella	sheep sorrel	low
			Verbascum thapsus	woolly mullein	low
			Cirsium vulgare	bull thistle	low
		4 acres	Hypericum perforatum	klamathweed	low
French Meadows Reservoir	FM14		Plantago lanceolata	English plantain	low
			Rumex acetosella	sheep sorrel	low
			Vulpia myuros	rat-tail fescue	high
			Agrostis stolonifera	creeping bent grass	low
	FM19	0.7.00	Cirsium vulgare	bull thistle	low
	FMT9	2.7 acres	Rumex acetosella	sheep sorrel	low
			Verbascum thapsus	wooly mullein	low
			Agrostis stolonifera	creeping bent grass	low
	FM20	00	Cirsium vulgare	bull thistle	low
	FIVI20	20 acres	Rumex acetosella	sheep sorrel	low
			Verbascum thapsus	wooly mullein	low
			Cirsium vulgare	bull thistle	low
	FM28	3.9 acres	Rumex acetosella	sheep sorrel	high
			Verbascum thapsus	woolly mullein	high

Table TERR 3-8a. Noxious Weed Species at Existing Project Facilities and Features (continued).

Facility	Map ID ¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³
DAMS, RESERVOIRS, AND DIVERSION POOLS CONTIL	NUED				
Large Reservoirs continued					
	H35	4 acres	Bromus tectorum	cheatgrass	moderate
	Пээ	4 acres	Vulpia myuros	rat-tail fescue	low
	H27	10.4 acres	Bromus tectorum	cheatgrass	moderate
	1127	10.4 acres	Rumex acetosella	sheep sorrel	low
	H28	8.9 acres	Bromus tectorum	cheatgrass	low
	1120	0.9 acres	Verbascum thapsus	woolly mullein	low
	H29	2.6 acres	Bromus tectorum	cheatgrass	low
	1123	2.0 acres	Vulpia myuros	rat-tail fescue	low
			Cirsium vulgare	bull thistle	moderate
	H30	5.1 acres	Hypericum perforatum	klamathweed	high
			Verbascum thapsus	woolly mullein	high
	H31	4.1 acres 5.3 acres	Bromus tectorum	cheatgrass	low
Hell Hole Reservoir			Vulpia myuros	rat-tail fescue	low
			Bromus tectorum	cheatgrass	low
	1102	0.0 40103	Vulpia myuros	rat-tail fescue	high
		3.4 acres	Hypericum perforatum	klamathweed	low
	H33		Verbascum thapsus	woolly mullein	moderate
			Vulpia myuros	rat-tail fescue	moderate
	H34	2.4 acres	Bromus tectorum	cheatgrass	low
	1104	2.4 00103	Vulpia myuros	rat-tail fescue	low
	H35	4 acres	Agrostis stolonifera	creeping bent grass	moderate
	1100	4 40103	Verbascum thapsus	woolly mullein	low
	H36	2.4 acres	Bromus tectorum	cheatgrass	low
	1100	2.7 40163	Vulpia myuros	rat-tail fescue	low
			Bromus tectorum	cheatgrass	low
	H37	4 acres	Verbascum thapsus	woolly mullein	moderate
			Vulpia myuros	rat-tail fescue	moderate

Table TERR 3-8a. Noxious Weed Species at Existing Project Facilities and Features (continued).

Facility	Map ID ¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³
DAMS, RESERVOIRS, AND DIVERSION POOLS	CONTINUED				
Large Reservoirs continued					
			Agrostis stolonifera	creeping bent grass	low
	H38	1.7 acres	Bromus tectorum	cheatgrass	low
			Vulpia myuros	rat-tail fescue	low
	H39	1.4 acres	Bromus tectorum	cheatgrass	low
	1139	1.4 acres	Vulpia myuros	rat-tail fescue	low
	H40	2.7 acres	Bromus tectorum	cheatgrass	low
	1140	2.7 acres	Vulpia myuros	rat-tail fescue	moderate
	H41	3.9 acres	Bromus tectorum	cheatgrass	low
	1171	3.5 acres	Vulpia myuros	rat-tail fescue	low
	H42	3.4 acres	Vulpia myuros	rat-tail fescue	low
		2.8 acres	Agrostis stolonifera	creeping bent grass	low
	H43		Cirsium vulgare	bull thistle	low
			Verbascum thapsus	woolly mullein	low
	H44	7.6 acres	Bromus tectorum	cheatgrass	moderate
Hell Hole Reservoir	1144		Vulpia myuros	rat-tail fescue	moderate
	H45	1 acre	Vulpia myuros	rat-tail fescue	low
			Bromus tectorum	cheatgrass	low
	H46	12.1 acres	Verbascum thapsus	woolly mullein	moderate
			Vulpia myuros	rat-tail fescue	moderate
	H48	2.3 acres	Vulpia myuros	rat-tail fescue	low
	H49	8.1 acres	Vulpia myuros	rat-tail fescue	low
	H50	1.7 acres	Vulpia myuros	rat-tail fescue	low
	H51	6.8 acres	Verbascum thapsus	woolly mullein	low
	1101	0.0 a0163	Vulpia myuros	rat-tail fescue	moderate
	H52	17.8 acres	Agrostis stolonifera	creeping bent grass	moderate
	1102	17.0 acres	Verbascum thapsus	woolly mullein	high
	H53	2.9 acres	Bromus tectorum	cheatgrass	low
	1100	2.0 80163	Vulpia myuros	rat-tail fescue	moderate

Table TERR 3-8a. Noxious Weed Species at Existing Project Facilities and Features (continued).

Facility	Map ID ¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³
DAMS, RESERVOIRS, AND DIVERSION POOLS	CONTINUED				
Large Reservoirs continued					
			Agrostis stolonifera	creeping bent grass	High
			Bromus tectorum	cheatgrass	low
Hell Hole Reservoir	H54	2.7 acres	Plantago lanceolata	English plantain	moderate
			Rumex acetosella	sheep sorrel	low
			Vulpia myuros	rat-tail fescue	moderate
	H55	3.8 acres	Verbascum thapsus	woolly mullein	low
Medium Reservoirs		<u> </u>	<u>, </u>		
Middle Fork Interbay	_	_	_	_	_
			Bromus diandrus	ripgut brome	low
		3 acres	Carduus pycnocephalus	Italian thistle	low
			Centaurea solstitialis	yellow starthistle	high
			Cynosurus echinatus	hedgehog dogtailgrass	low
	R06		Hypericum perforatum	klamathweed	moderate
			Plantago lanceolata	English plantain	low
			Rubus discolor	Himalayan blackberry	moderate
Ralston Afterbay			Torilis arvensis	spreading hedgeparsley	moderate
			Verbascum thapsus	woolly mullein	moderate
			Hypericum perforatum	klamathweed	low
	R07	2 acres	Rubus discolor	Himalayan blackberry	low
			Torilis arvensis	spreading hedgeparsley	low
			Bromus diandrus	ripgut brome	moderate
	R08	2.3 acres	Hypericum perforatum	klamathweed	low
			Plantago lanceolata	English plantain	moderate
Small Diversion Pools					
Duncan Creek Diversion Pool	DC03	0.19 acres	Cirsium vulgare	bull thistle	low
			Cirsium vulgare	bull thistle	low
North Fork Long Canyon Diversion Pool	LC07	1 acre	Melilotus albus	white sweet clover	low
1401th Fork Long Canyon Diversion Foot	LOU	i acie	Rumex acetosella	sheep sorrel	low
			Verbascum thapsus	woolly mullein	low

Table TERR 3-8a. Noxious Weed Species at Existing Project Facilities and Features (continued).

Facility	Map ID ¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³					
WATER CONVEYANCE SYSTEMS										
Tunnels										
Duncan Creek - Middle Fork Tunnel	_	_	_	_	_					
French Meadows - Hell Hole Tunnel	_	_	_	_	_					
Hell Hole - Middle Fork Tunnel	_	_	_	_	_					
Middle Fork - Ralston Tunnel	_	_	_	_	_					
Ralston - Oxbow Tunnel	_	_	_	_	_					
Diversion Pipes and Drop Inlets										
North Fork Long Canyon Diversion Pipe and Drop Inlet	_	_	_	_	_					
South Fork Long Canyon Diversion Pipe and Drop Inlet	_	_	_	_	_					
Surge Shafts and Adits										
Brushy Canyon Adit	_	_	_	_	_					
Hell Hole - Middle Fork Tunnel Surge Shaft and Tank	_	_	_	_	_					
Middle Fork - Ralston Tunnel Surge Shaft and Tank	_	_	_	_	_					
Removable Sections and Portals										
Duncan Creek - Middle Fork Tunnel Portal	_	_	_	_	_					
French Meadows - Hell Hole Tunnel Removable Section	_	_	_	_	_					
Hell Hole - Middle Fork Tunnel Removable Section	_	_	_	_	_					
Middle Fork - Ralston Tunnel Removable Section	_	_	_	_	_					
			Bromus tectorum	cheatgrass	high					
			Centaurea solstitialis	yellow starthistle	low					
			Cirsium vulgare	bull thistle	low					
North Fork Long Canyon Crossing Removable Section	LC02	0.26 acres	Hypericum perforatum	klamathweed	moderate					
			Melilotus albus	white sweet clover	low					
			Plantago lanceolata	English plantain	low					
			Rumex acetosella	sheep sorrel	low					

Table TERR 3-8a. Noxious Weed Species at Existing Project Facilities and Features (continued).

Facility	Map ID ¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³
WATER CONVEYANCE SYSTEMS CONTINUED					
Intakes and Gatehouses					
Duncan Creek - Middle Fork Tunnel Intake	_	_	_	_	_
French Meadows - Hell Hole Tunnel Gatehouse	_	_	_	_	_
French Meadows - Hell Hole Tunnel Intake	_	_	_	_	_
Hell Hole - Middle Fork Tunnel Gatehouse	_	_	_	_	_
Hell Hole - Middle Fork Tunnel Intake	_	_	_	_	_
			Chondrilla juncea	rush skeletonweed	low
			Cynosurus echinatus	hedgehog dogtailgrass	low
		0.19 acres	Dactylis glomerata	orchardgrass	low
	121		Hirschfeldia incana	shortpod mustard	low
Middle Fork-Ralston Tunnel Intake and Gatehouse			Hypericum perforatum	klamathweed	low
			Melilotus officinalis	yellow sweetclover	high
			Plantago lanceolata	English plantain	low
			Rumex acetosella	sheep sorrel	low
			Verbascum thapsus	woolly mullein	low
Ralston - Oxbow Tunnel Intake	_	_	_	_	_
French Meadows Powerhouse Penstock and Butterfly	H21	4.7 acres	Bromus tectorum	cheatgrass	low
Valve House	1121	4.7 acres	Cynosurus echinatus	hedgehog dogtailgrass	low
			Cirsium arvense	Canada thistle	low
Middle Fork Powerhouse Penstock and Butterfly Valve	l13	11 acres	Hypericum perforatum	klamathweed	low
House	110	11 doics	Melilotus officinalis	yellow sweetclover	low
			Verbascum thapsus	woolly mullein	low
Penstocks and Valve Houses		-			
			Ailanthus altissima	tree-of-heaven	moderate
Ralston Powerhouse Penstock and Butterfly Valve House	R13	2.4 acres	Carduus pycnocephalus	Italian thistle	low
			Verbascum thapsus	woolly mullein	moderate

Table TERR 3-8a. Noxious Weed Species at Existing Project Facilities and Features (continued).

Facility	Map ID¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³				
Powerhouses, Switchyards, and Substations									
			Bromus tectorum	cheatgrass	moderate				
			Cirsium vulgare	bull thistle	moderate				
French Meadows Powerhouse and Switchyard	H20	2 acres	Hirschfeldia incana	shortpod mustard	low				
Trendrivicadows r owerhouse and ownonyard	1120	2 40163	Hypericum perforatum	klamathweed	high				
			Melilotus officinalis	yellow sweetclover	low				
			Vulpia myuros	rat-tail fescue	low				
			Bromus diandrus	ripgut brome	low				
		0.73 acres	Bromus tectorum	cheatgrass	low				
	l10		Cirsium vulgare	bull thistle	low				
			Hypericum perforatum	klamathweed	low				
			Melilotus officinalis	yellow sweetclover	low				
			Rubus discolor	Himalayan blackberry	high				
			Torilis arvensis	spreading hedgeparsley	low				
			Verbascum thapsus	woolly mullein	low				
Middle Fork Powerhouse and Upper and Lower Switchyard			Vulpia myuros	rat-tail fescue	low				
			Bromus diandrus	ripgut brome	Low				
	l11	0.17 acres	Bromus tectorum	cheatgrass	low				
	111	0.17 acres	Dactylis glomerata	orchardgrass	low				
			Hypericum perforatum	klamathweed	low				
			Melilotus officinalis	yellow sweetclover	Low				
	l11	0.17 acres	Torilis arvensis	spreading hedgeparsley	low				
	111	U. IT acres	Verbascum thapsus	woolly mullein	low				
			Vulpia myuros	rat-tail fescue	low				

Table TERR 3-8a. Noxious Weed Species at Existing Project Facilities and Features (continued).

Facility	Map ID ¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³				
POWERHOUSES, SWITCHYARDS, AND SUBSTATIONS CONTINUED									
			Bromus diandrus	ripgut brome	low				
			Cirsium arvense	Canada thistle	low				
			Chondrilla juncea	rush skeletonweed	low				
	R09	0.84 acres	Hirschfeldia incana	shortpod mustard	low				
	K09	0.04 acres	Melilotus officinalis	yellow sweetclover	low				
			Rubus discolor	Himalayan blackberry	low				
			Torilis arvensis	spreading hedgeparsley	low				
			Vulpia myuros	rat-tail fescue	low				
			Bromus diandrus	ripgut brome	high				
Ralston Powerhouse and Switchyard			Carduus pycnocephalus	Italian thistle	high				
Traision i owemouse and Switchyard		0.88 acres	Centaurea melitensis	Malta starthistle (tocalote)	low				
	R10		Chondrilla juncea	rush skeletonweed	low				
			Melilotus officinalis	yellow sweetclover	high				
			Plantago lanceolata	English plantain	moderate				
			Taeniatherum caput-medusae	medusahead	moderate				
			Verbascum thapsus	woolly mullein	low				
			Bromus diandrus	ripgut brome	high				
	R11	1 acre	Bromus tectorum	cheatgrass	moderate				
		1 doic	Centaurea melitensis	Malta starthistle (tocalote)	moderate				
			Hirschfeldia incana	shortpod mustard	moderate				
Oxbow Powerhouse and Switchyard	_	_	<u> </u>	<u> </u>	_				
Hell Hole Substation	_	_	<u> </u>	_	_				
GAGING STATIONS AND WEIRS									
Stream Gages and Weirs									
Duncan Creek Gage and Weir above Diversion Dam (USGS Gage and Weir No. 11427700)	_	_		_	_				
Duncan Creek Gage and Weir below Diversion Dam (USGS Gage and Weir No. 11427750)	_	_	_	_	_				
Middle Fork American River Gage and Weir below French Meadows Dam (USGS Gage and Weir No. 11427500)	_	_	_	_	_				

Table TERR 3-8a. Noxious Weed Species at Existing Project Facilities and Features (continued).

Facility	Map ID ¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³
GAGING STATIONS AND WEIRS CONTINUED					
Stream Gages and Weirs continued					
Middle Fork American River Gage at Interbay Dam (USGS Gage No. 11427770)	_	_	_	_	_
Middle Fork American River Gage above Middle Fork Powerhouse (USGS Gage No. 11427760)	_	_	_	_	_
			Bromus tectorum	cheatgrass	moderate
			Bromus diandrus	ripgut brome	moderate
Middle Fork American River Gage below Oxbow	R01	0.15 acres	Cynosurus echinatus	hedgehog dogtailgrass	moderate
Powerhouse (USGS Gage No. 11433300)	IXO I	0.13 acres	Hypericum perforatum	klamathweed	moderate
			Torilis arvensis	spreading hedgeparsley	moderate
			Vulpia myuros	rat-tail fescue	moderate
North Fork Long Canyon Gage and Weir at Diversion Dam (USGS Gage and Weir No. 11433085)	_	_	_	_	_
South Fork Long Canyon Gage and Weir at Diversion Dam (USGS Gage and Weir No. 11433065)	_	_	_	_	_
Rubicon River Gage and Weir below Hell Hole Dam (USGS Gage and Weir No. 11428800)	_	_	_	_	_
Diversion Gages		1			1
North Fork Long Canyon Gage at Diversion Dam (USGS Gage No. 11433080)	_	_	_	_	_
South Fork Long Canyon Gage at Diversion Dam (USGS Gage No. 11433060)	_	_	_	_	_
Reservoir Gages		4	1		.
French Meadows Reservoir Gage (USGS Gage No. 11427400)	_	_	_	_	_
French Meadows Reservoir Staff Gage	_		_	_	_
Hell Hole Reservoir Gage (USGS Gage No. 11428700)	_	_	_	_	_
Hell Hole Reservoir Staff Gage	_	_	_	_	_
Middle Fork Interbay Reservoir Gage	_	_	_	_	_
Ralston Afterbay Reservoir Gage	_	_	_	_	_

Table TERR 3-8a. Noxious Weed Species at Existing Project Facilities and Features (continued).

Facility	Map ID ¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³				
GAGING STATIONS AND WEIRS CONTINUED									
Powerhouse Gages									
French Meadows Powerhouse Gage (USGS Gage No. 11427200)	_	_	_	_	_				
Middle Fork Powerhouse Gage (USGS Gage No. 11428600)	_	_	_	_	_				
Oxbow Powerhouse Gage (USGS Gage No. 11433212)	_	_	_	_	_				
Ralston Powerhouse Gage (USGS Gage No. 11427765)	_	_	_	_	_				
Leakage Weirs		_		_	_				
French Meadows Dam Leakage Weirs Nos. 1-6	_	_	_	_	_				
Hell Hole Dam Leakage Weir	_	_	_	_	_				
PROJECT COMMUNICATION LINES AND POWERLINES									
French Meadows Area									
			Bromus tectorum	cheatgrass	moderate				
French Meadows Dam Generator Building to French	FM21	1.3 acres	Hypericum perforatum	klamathweed	moderate				
Meadows Dam Outlet Works Powerline	1 1012 1		Rubus discolor	Himalayan blackberry	low				
			Vulpia myuros	rat-tail fescue	low				
French Meadows Dam Generator Building to French Meadows Dam Spillway Gates Powerline	_	_	_	_	_				
Hell Hole Area		1			-1				
French Meadows Powerhouse to French Meadows Powerhouse Penstock and Butterfly Valve House Communication Line/Powerline	_	_	_	_	_				
French Meadows Powerhouse and Switchyard to Hell Hole-			Bromus tectorum	cheatgrass	moderate				
Middle Fork Tunnel Gatehouse, Dormitory Facility, Operator Cottages, and Hell Hole Powerhouse	H18	3.4 acres	Hypericum perforatum	klamathweed	high				
Communication Line / Powerline			Vulpia myuros	rat-tail fescue	moderate				
Dormitory and Cottages Water Supply Tank Powerline	_	_	_	_	_				
Hell Hole Powerhouse to Rubicon River Gage and Weir below Hell Hole Dam Communication Line/Powerline	_	_	_	_	_				

Table TERR 3-8a. Noxious Weed Species at Existing Project Facilities and Features (continued).

Facility	Map ID ¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³				
PROJECT COMMUNICATION LINES AND POWERLINES CONTINUED									
Middle Fork Interbay Area									
			Bromus tectorum	cheatgrass	moderate				
Middle Fork Powerhouse to Middle Fork Powerhouse			Chondrilla juncea	rush skeletonweed	moderate				
Butterfly Valve House Communication Line/Powerline	l14	5.2 acres	Hypericum perforatum	klamathweed	low				
Butterny various communication Emby, enormic			Melilotus officinalis	yellow sweetclover	low				
			Vulpia myuros	rat-tail fescue	low				
Middle Fork Powerhouse Butterfly Valve House to Radio Repeater near Hell Hole - Middle Fork Tunnel Surge Tank (underground) Communication Line/Powerline	_	_	_	_	_				
		3.4 acres	Bromus diandrus	ripgut brome	moderate				
			Bromus tectorum	cheatgrass	low				
Middle Fork Powerhouse to Middle Fork- Ralston Tunnel	108		Cynosurus echinatus	hedgehog dogtailgrass	low				
Intake and Gatehouse Communication Line/Powerline	100	3.4 acres	Hypericum perforatum	klamathweed	moderate				
			Melilotus officinalis	yellow sweetclover	low				
			Plantago lanceolata	cheatgrass rush skeletonweed klamathweed yellow sweetclover rat-tail fescue ripgut brome cheatgrass hedgehog dogtailgrass klamathweed	low				
Middle Fork Powerhouse to Middle Fork American River Gage above Middle Fork Powerhouse Communication Line/Powerline	_	_	_	_	_				
Ralston - Oxbow Area					•				
Ralston-Oxbow Tunnel Intake to Ralston Powerhouse Communication Line	R17	0.23 acres	Rubus discolor	Himalayan blackberry	moderate				

Table TERR 3-8a. Noxious Weed Species at Existing Project Facilities and Features (continued).

Facility	Map ID ¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³				
PROJECT COMMUNICATION LINES AND POWERLINES CONTINUED									
Ralston - Oxbow Area continued									
			Bromus diandrus	ripgut brome	moderate				
			Bromus tectorum	cheatgrass	low				
			Carduus pycnocephalus	Italian thistle	low				
			Centaurea melitensis	Malta starthistle (tocalote)	low				
			Chondrilla juncea	rush skeletonweed	low				
Ralston-Oxbow Tunnel Intake to Ralston Powerhouse			Hirschfeldia incana	shortpod mustard	low				
Communication Line	R21	13 acres	Hypericum perforatum	klamathweed	low				
			Melilotus officinalis	yellow sweetclover	low				
			Plantago lanceolata	English plantain	low				
			Rubus discolor	Himalayan blackberry	low				
			Torilis arvensis	spreading hedgeparsley	low				
			Verbascum thapsus	woolly mullein	low				
			Vulpia myuros	rat-tail fescue	low				
Middle Fork Interbay Area		1	,	1	1				
Ralston Powerhouse to Ralston Powerhouse Butterfly Valve House Communication Line/Powerline	_	_	_	_	_				
Ralston Afterbay Dam Generator Building to Ralston - Oxbow Tunnel Intake Communication Line/Powerline	_	_	_	_	_				
Oxbow Powerhouse to Ralston Afterbay Dam Generator Building Communication Line/Powerline	_	_	_	_	_				
PHOTOVOLTAIC POLES AND POWERLINES									
Photovoltaic Poles and Powerline to Duncan Creek Gage above Diversion Dam	_	_	_	_	_				
Photovoltaic Pole and Powerline at Duncan Creek Gage below Diversion Dam	_	_	_	_					
Photovoltaic Pole and Powerline at Middle Fork American River Gage below French Meadows Dam	_	_	_	_	_				

Table TERR 3-8a. Noxious Weed Species at Existing Project Facilities and Features (continued).

Facility	Map ID¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³				
PHOTOVOLTAIC POLES AND POWERLINES CONTINUED									
Photovoltaic Pole and Powerline at Middle Fork American River Gage above Middle Fork Powerhouse	_	_	_	_	_				
Photovoltaic Pole and Powerline at North Fork Long Canyon Gage at Diversion Dam	_	_	_	_	_				
Photovoltaic Pole and Powerline at South Fork Long Canyon Gage at Diversion Dam	_	_	_	_	_				
Photovoltaic Pole at Middle Fork American River Gage below Oxbow Powerhouse	_	_	_	_	_				
MICROWAVE REFLECTORS AND RADIO TOWERS									
Passive Microwave Reflector Station above Middle Fork Interbay	_	_	_	_	_				
Radio Communications Tower near French Meadows - Hell Hole Tunnel Gatehouse	_	_	_	_	_				
Radio Communications Tower and Repeater near Hell	120	0.38 acres	Cirsium vulgare	bull thistle	moderate				
Hole-Middle Fork Tunnel Surge Shaft and Tank		0.00 00.00	Bromus tectorum	cheatgrass	low				
			Bromus diandrus	ripgut brome	low				
Passive Microwave Reflector Station above Ralston	R12	0.33 acres	Chondrilla juncea	rush skeletonweed	low				
Afterbay	IXIZ	0.55 acres	Cynosurus echinatus	hedgehog dogtailgrass	low				
			Torilis arvensis	spreading hedgeparsley	low				
DISPOSAL SITES									
Duncan Diversion Dam Sediment Disposal Area	_	_	_	_	_				

Table TERR 3-8a. Noxious Weed Species at Existing Project Facilities and Features (continued).

Facility	Map ID ¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³					
DISPOSAL SITES CONTINUED										
			Bromus tectorum	cheatgrass	high					
			Chondrilla juncea	rush skeletonweed	low					
			Cynosurus echinatus	hedgehog dogtailgrass	low					
			Dactylis glomerata	orchardgrass	low					
	LC04	5 acres	Hypericum perforatum	klamathweed	low					
			Melilotus albus	white sweet clover	high					
			Plantago lanceolata	English plantain	low					
			Verbascum thapsus	woolly mullein	low					
			Vulpia myuros	rat-tail fescue	moderate					
North Fork Long Canyon Crossing Sediment Disposal Area		3 acres	Cynosurus echinatus	hedgehog dogtailgrass	low					
	LC05		Melilotus albus	white sweet clover	high					
			Verbascum thapsus	woolly mullein	low					
			Cirsium vulgare	bull thistle	low					
			Bromus tectorum	cheatgrass	high					
			Centaurea solstitialis	yellow starthistle	low					
			Hypericum perforatum	klamathweed	low					
	LC06	6 acres	Melilotus albus	white sweet clover	high					
			Rumex acetosella	sheep sorrel	low					
			Taeniatherum caput-medusae	medusahead	low					
			Verbascum thapsus	woolly mullein	low					
			Vulpia myuros	rat-tail fescue	low					
			Bromus diandrus	ripgut brome	high					
			Bromus tectorum	cheatgrass	high					
Middle Fork Interbay Sediment Disposal Area	103	2 acres	Chondrilla juncea	rush skeletonweed	low					
		_ 5.5.55	Hirschfeldia incana	shortpod mustard	low					
			Melilotus albus	white sweet clover	low					
			Vulpia myuros	rat-tail fescue	high					

Table TERR 3-8a. Noxious Weed Species at Existing Project Facilities and Features (continued).

Facility	Map ID ¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³
DISPOSAL SITES CONTINUED					
			Bromus diandrus	ripgut brome	moderate
			Bromus tectorum	cheatgrass	moderate
			Carduus pycnocephalus	Italian thistle	high
			Centaurea melitensis	Malta starthistle (tocalote)	low
			Chondrilla juncea	rush skeletonweed	moderate
I			Cynosurus echinatus	hedgehog dogtailgrass	low
Ralston Ridge Sediment Disposal Area	R14	2.3 acres	Dactylis glomerata	orchardgrass	low
Naiston Nage Geament Disposal Area	1714	2.0 00103	Hirschfeldia incana	shortpod mustard	low
			Melilotus officinalis	yellow sweetclover	moderate
			Rubus discolor	Himalayan blackberry	moderate
			Taeniatherum caput-medusae	medusahead	low
			Torilis arvensis	spreading hedgeparsley	low
			Verbascum thapsus	woolly mullein	low
			Vulpia myuros	rat-tail fescue	low
			Bromus diandrus	ripgut brome	low
			Bromus tectorum	cheatgrass	low
	R23	1.5 acres	Hirschfeldia incana	shortpod mustard	low
Indian Bar Sediment Disposal Area			Hirschfeldia incana	shortpod mustard	low
maian bar dealment bisposai Area			Rumex acetosella	sheep sorrel	low
			Torilis arvensis	spreading hedgeparsley	low
	R23	1.5 acres	Verbascum thapsus	woolly mullein	low
			Vulpia myuros	rat-tail fescue	low
ANCILLARY FACILITIES					
French Meadows Dam Generator Building			Bromus tectorum	cheatgrass	high
-			Dactylis glomerata	orchardgrass	low
French Meadows Dam Generator Building		_	_	_	_
French Meadows Dam Staging Area	_	_	_		_

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Table TERR 3-8a. Noxious Weed Species at Existing Project Facilities and Features (continued).

Facility	Map ID ¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³
ANCILLARY FACILITIES CONTINUED					
			Bromus tectorum	cheatgrass	moderate
Dormitory Facility	H10	0.82 acres	Hypericum perforatum	klamathweed	low
			Vulpia myuros	rat-tail fescue	moderate
			Bromus tectorum	cheatgrass	low
			Cirsium vulgare	bull thistle	low
Dormitory and Cottages Water Supply Tank	H16	0.95 acres	Cynosurus echinatus	hedgehog dogtailgrass	high
			Dactylis glomerata	orchardgrass	low
			Hypericum perforatum	klamathweed	moderate
		2 acres	Bromus tectorum	cheatgrass	low
Hell Hole Staging Areas	H13		Hypericum perforatum	klamathweed	low
Heil Hole Stagling Areas	піз		Plantago lanceolata	English plantain	low
			Verbascum thapsus	woolly mullein	low
			Agrostis stolonifera	creeping bent grass	low
			Bromus diandrus	ripgut brome	low
Operator Cottages and Shop	H15	1 acre	Bromus tectorum	cheatgrass	moderate
Operator Cottages and Shop	1113	1 acre	Chondrilla juncea	rush skeletonweed	low
			Cynosurus echinatus	hedgehog dogtailgrass	low
			Dactylis glomerata	orchardgrass	low
			Plantago lanceolata	English plantain	Low
Operator Cottages and Shop (continued)	H15	1 acre	Rubus discolor	Himalayan blackberry	high
Operator Cottages and Only (Continued)	1113	i acre	Rumex acetosella	sheep sorrel	low
			Verbascum thapsus	woolly mullein	low
Ralston Afterbay Dam Generator Building	_	_	_	_	_

Table TERR 3-8a. Noxious Weed Species at Existing Project Facilities and Features (continued).

Facility	Map ID ¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³
ANCILLARY FACILITIES CONTINUED					
			Bromus diandrus	ripgut brome	low
			Carduus pycnocephalus	Italian thistle	low
			Centaurea melitensis	Malta starthistle (tocalote)	low
Storage Building at Middle-Fork Ralston Tunnel Surge	R15	0.92 acres	Chondrilla juncea	rush skeletonweed	low
Shaft and Tank	KIS	0.92 acres	Cynosurus echinatus	hedgehog dogtailgrass	moderate
			Hypericum perforatum	klamathweed	moderate
			Torilis arvensis	spreading hedgeparsley	low
			Verbascum thapsus	woolly mullein	moderate
Wabena Meadows Snow Course	SC03	0.79 acres	Dactylis glomerata	orchardgrass	low
Wabella Meadows Show Course	3003	0.79 acres	Rumex acetosella	sheep sorrel	low
Miranda Cabin Snow Course	SC01	0.73 acres	Dactylis glomerata	orchardgrass	high
Willianda Cabin Show Course		0.73 acres	Rumex acetosella	sheep sorrel	high
Diamond Crossing Snow Course	SC02	0.72 acres	Plantago lanceolata	English plantain	high
Talbot Camp Snow Course	_	_	_	_	_
PROJECT FENCES					
Slope Fences					
French Meadows Powerhouse Penstock Rock Fence	_	_	_	_	_
French Meadows Powerhouse Slope Fence	_	_	_	_	_
Long Canyon Crossing Slope Fence	_	_	_	_	_
Middle Fork Powerhouse Upper Switchyard Slope Fence	_	_	_	_	_
Middle Fork Interbay Dam Slope Fence	_	_	_	_	_
Oxbow Powerhouse Slope Fence	_	_	_	-	_
Ralston Powerhouse Penstock and Butterfly Valve House Slope Fences	_	_	_	_	-
Ralston Powerhouse Slope Fence	_	_	_	_	_
Public Safety Fences					
			Bromus tectorum	cheatgrass	moderate
Dormitory Facility Barrier Fence	H11	3.4 acres	Dactylis glomerata	orchardgrass	low
Dominiory Lability Damer Lence	HIII	J.4 acies	Plantago lanceolata	English plantain	high
			Vulpia myuros	rat-tail fescue	low

Table TERR 3-8a. Noxious Weed Species at Existing Project Facilities and Features (continued).

Facility	Map ID ¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³
PROJECT FENCES continued					
Public Safety Fences continued					
Hell Hole Dam General Parking Area Barrier Fence	_	_	_	_	_
North Fork Long Canyon Crossing Removable Section Barrier Fence	_	_	_	_	_
PROJECT ROADS AND ACCESS POINTS					
Duncan Creek Area					
Duncan Creek Diversion Intake Road and Diversion Pool	DC02	3.09 acres	Cirsium vulgare	bull thistle	moderate
Access Point	DC02	3.09 acres	Verbascum thapsus	woolly mullein	moderate
Duncan Creek Diversion Dam Road	DC01	1.94 acres	Bromus tectorum	cheatgrass	high
Duncan Creek Diversion Pool Road and Access Point	_	_	_	_	_
French Meadows Area					
			Bromus tectorum	cheatgrass	moderate
			Cirsium vulgare	bull thistle	low
Duncan Creek-Middle Fork Tunnel Portal Road and			Dactylis glomerata	orchardgrass	low
Spillway Access Point	FM06	5.4 acres	Melilotus albus	white sweet clover	low
Granital Annual Control			Plantago lanceolata	English plantain	low
			Rumex acetosella	sheep sorrel	low
			Verbascum thapsus	woolly mullein	low
			Cirsium vulgare	bull thistle	low
French Meadows-Hell Hole Tunnel Gatehouse Road	FM 30	1.9 acres	Plantago lanceolata	English plantain	low
Trendi Meddows-Hell Flore Turiner Odleriouse Nodu	FIVI 30	1.3 40163	Rumex acetosella	sheep sorrel	low
			Verbascum thapsus	woolly mullein	low

Table TERR 3-8a. Noxious Weed Species at Existing Project Facilities and Features (continued).

Facility	Map ID ¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³
PROJECT ROADS AND ACCESS POINTS CONTINUED					
			Bromus tectorum	cheatgrass	low
			Cirsium vulgare	bull thistle	low
			Cirsium vulgare	bull thistle	low
Franch Mandawa Dam Outlet Warks and Lackage Weire			Cirsium vulgare	bull thistle	low
French Meadows Dam Outlet Works and Leakage Weirs Road	FM01	4.1 acres	Hypericum perforatum	klamathweed	low
			Melilotus albus	white sweet clover	low
			Plantago lanceolata	English plantain	low
			Rumex acetosella	sheep sorrel	low
			Verbascum thapsus	woolly mullein	low
French Meadows Dam Staging Area Road	_	_	_	_	_
Middle Fork American River Gage and Weir below French	FM22	0.31 acres	Rumex acetosella	sheep sorrel	low
Meadows Dam Road	FM23	0.28 acres	Hypericum perforatum	klamathweed	low
Hell Hole Area	•		,		•
			Bromus tectorum	cheatgrass	high
			Cynosurus echinatus	hedgehog dogtailgrass	low
	H01	0.55 acres	Dactylis glomerata	orchardgrass	high
	1101	0.55 acres	Hirschfeldia incana	shortpod mustard	low
Hell Hole Dam and Powerhouse Road and Spillway			Hypericum perforatum	klamathweed	moderate
Southern Access Point			Verbascum thapsus	woolly mullein	low
			Bromus tectorum	cheatgrass	moderate
	H02	1.5 acres	Dactylis glomerata	orchardgrass	low
	ПО∠	1.5 acres	Hypericum perforatum	klamathweed	low
			Vulpia myuros	rat-tail fescue	moderate

Table TERR 3-8a. Noxious Weed Species at Existing Project Facilities and Features (continued).

Facility	Map ID ¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³
PROJECT ROADS AND ACCESS POINTS CONTINUED					
Hell Hole Area continued					
			Bromus tectorum	cheatgrass	moderate
			Cirsium vulgare	bull thistle	low
	H04	1 acre	Hirschfeldia incana	shortpod mustard	low
			Hypericum perforatum	klamathweed	low
Hall Hala Davis and Davis draws a David and On illustration			Vulpia myuros	rat-tail fescue	moderate
Hell Hole Dam and Powerhouse Road and Spillway Southern Access Point			Bromus tectorum	cheatgrass	moderate
Country toocoo i onk			Cirsium vulgare	bull thistle	low
	H05	4.9 acres	Hirschfeldia incana	shortpod mustard	low
	1105	4.9 acres	Hypericum perforatum	klamathweed	low
			Melilotus officinalis	yellow sweetclover	moderate
			Vulpia myuros	rat-tail fescue	moderate
	H07	0.66 acres	Bromus tectorum	cheatgrass	low
Rubicon River Gage and Weir below Hell Hole Dam Road			Vulpia myuros	rat-tail fescue	low
	H09	3.55 acres	Taeniatherum caput-medusae	medusahead	low
			Bromus tectorum	cheatgrass	high
			Cirsium vulgare	bull thistle	low
			Hirschfeldia incana	shortpod mustard	moderate
Hell Hole Dam Leakage Weir Road	H06	1.7 acres	Melilotus officinalis	yellow sweetclover	moderate
			Torilis arvensis	spreading hedgeparsley	low
			Verbascum thapsus	woolly mullein	moderate
			Vulpia myuros	rat-tail fescue	moderate
Hell Hole Dam Spillway Northern Access Point	_	_	_	_	_
			Bromus tectorum	cheatgrass	low
French Meadows-Hell Hole Tunnel Portal Road	H21	4.7 acres	Cynosurus echinatus	hedgehog dogtailgrass	low
			Vulpia myuros	rat-tail fescue	low
			Bromus tectorum	cheatgrass	low
			Cirsium vulgare	bull thistle	low
French Meadows Powerhouse Road	H19	9.5 acres	Cynosurus echinatus	hedgehog dogtailgrass	low
			Hypericum perforatum	klamathweed	moderate
			Vulpia myuros	rat-tail fescue	moderate

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Table TERR 3-8a. Noxious Weed Species at Existing Project Facilities and Features (continued).

Facility	Map ID ¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³
PROJECT ROADS AND ACCESS POINTS CONTINUE	ĒD				
Hell Hole Area continued					
			Bromus tectorum	cheatgrass	low
	H17	0.32 acres	Dactylis glomerata	orchardgrass	low
	n1/	0.32 acres	Hirschfeldia incana	shortpod mustard	low
Hell Hole-Middle Fork Tunnel Gatehouse Road			Hypericum perforatum	klamathweed	low
			Bromus tectorum	cheatgrass	moderate
	H18	3.4 acres	Hypericum perforatum	klamathweed	high
			Vulpia myuros	rat-tail fescue	moderate
			Bromus tectorum	cheatgrass	moderate
Dormitory Facility Road	H12	0.93 acres	Hypericum perforatum	klamathweed	low
			Vulpia myuros	rat-tail fescue	low
			Bromus diandrus	ripgut brome	low
			Bromus tectorum	cheatgrass	moderate
			Cynosurus echinatus	hedgehog dogtailgrass	low
Hell Hole Dam Spillway Discharge Channel Road	H14	3.6 acres	Dactylis glomerata	orchardgrass	low
Hell Hole Dath Spillway Discharge Charliner Road	П14	3.6 acres	Hypericum perforatum	klamathweed	low
			Plantago lanceolata	English plantain	low
			Verbascum thapsus	woolly mullein	low
			Vulpia myuros	rat-tail fescue	low
Long Canyon Area					
			Bromus tectorum	cheatgrass	moderate
North Fork Long Canyon Diversion North Road	LC08	1 acre	Cirsium vulgare	bull thistle	low
Notiff of Long Carryon Diversion Notiff Road	2000	1 acre	Rumex acetosella	sheep sorrel	moderate
			Verbascum thapsus	woolly mullein	low
North Fork Long Canyon Diversion South Road	LC09	6.25 acres	Hypericum perforatum	klamathweed	low
Horar Fork Long Carryon Diversion Codan Nodu	2009	0.20 80163	Rumex acetosella	sheep sorrel	high
			Bromus tectorum	cheatgrass	moderate
North Fork Long Canyon Diversion Drop Inlet Road	LC10	0.86 acres	Cirsium vulgare	bull thistle	moderate
			Rumex acetosella	sheep sorrel	moderate

Table TERR 3-8a. Noxious Weed Species at Existing Project Facilities and Features (continued).

Facility	Map ID ¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³
PROJECT ROADS AND ACCESS POINTS CONTINUED					
Long Canyon Area continued					
			Bromus tectorum	cheatgrass	low
South Fork Long Canyon Diversion and Drop Inlet Road	LC11	2 acres	Rumex acetosella	sheep sorrel	low
			Vulpia myuros	cheatgrass sheep sorrel rat-tail fescue cheatgrass hedgehog dogtailgrass orchardgrass klamathweed white sweet clover English plantain sheep sorrel woolly mullein cheatgrass rush skeletonweed hedgehog dogtailgrass klamathweed perennial pepperweed (tall whitetop) white sweet clover English plantain Himalayan blackberry	low
			Bromus tectorum	cheatgrass	moderate
			Cynosurus echinatus	hedgehog dogtailgrass	moderate
			Dactylis glomerata	orchardgrass	moderate
North Fork Long Canyon Crossing Removable Section	LC03	0.89 acres	Hypericum perforatum	klamathweed	low
North Road and Parking Area			Melilotus albus	white sweet clover	low
			Plantago lanceolata	English plantain	moderate
			Rumex acetosella	sheep sorrel	moderate
			Verbascum thapsus	woolly mullein	low
			Bromus tectorum	cheatgrass	moderate
			Chondrilla juncea	rush skeletonweed	high
			Cynosurus echinatus	hedgehog dogtailgrass	moderate
			Hypericum perforatum	***************************************	low
North Fork Long Canyon Crossing Removable Section South Road	LC01	3 acres	Lepidium latifolium		low
			Melilotus albus	white sweet clover	high
			Plantago lanceolata	English plantain	low
			Rubus discolor	Himalayan blackberry	low
			Rumex acetosella	sheep sorrel	low

Table TERR 3-8a. Noxious Weed Species at Existing Project Facilities and Features (continued).

Facility	Map ID ¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³
PROJECT ROADS AND ACCESS POINTS CONTINUED					
Middle Fork Interbay Area					
			Agrostis stolonifera	creeping bent grass	moderate
			Bromus tectorum	cheatgrass	low
	I15	0.16 acres	Chondrilla juncea	rush skeletonweed	low
Middle Fork Powerhouse Butterfly Valve House Road			Cynosurus echinatus	hedgehog dogtailgrass	low
wildlie Fork Fowerhouse Butterny valve Flouse Road			Vulpia myuros	rat-tail fescue	moderate
			Bromus tectorum	cheatgrass	low
	I16	2.7 acres	Cynosurus echinatus	hedgehog dogtailgrass	low
			Torilis arvensis	spreading hedgeparsley	low
Middle Fork Powerhouse Butterfly Valve House Road	l17	2.6 acres	Bromus tectorum	cheatgrass	low
			Agrostis stolonifera	creeping bent grass	low
			Bromus tectorum	cheatgrass	low
			Chondrilla juncea	rush skeletonweed	low
			Cirsium arvense	Canada thistle	low
			Hirschfeldia incana	shortpod mustard	moderate
Middle Fork Powerhouse Penstock and Butterfly Valve House Road	I13	11.7 acres	Hypericum perforatum	klamathweed	moderate
11000 11000			Rubus discolor	Himalayan blackberry	moderate
			Rumex acetosella	sheep sorrel	low
			Torilis arvensis	spreading hedgeparsley	moderate
			Verbascum thapsus	woolly mullein	low
			Vulpia myuros	rat-tail fescue	moderate

Table TERR 3-8a. Noxious Weed Species at Existing Project Facilities and Features (continued).

Facility	Map ID ¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³
PROJECT ROADS AND ACCESS POINTS CONTINUED					
Middle Fork Interbay Area continued					
_			Bromus tectorum	cheatgrass	moderate
			Chondrilla juncea	rush skeletonweed	moderate
			Cirsium vulgare	bull thistle	low
	I01	5 acres	Cynosurus echinatus	hedgehog dogtailgrass	low
			Plantago lanceolata	English plantain	low
			Rumex acetosella	sheep sorrel	moderate
			Vulpia myuros	rat-tail fescue	moderate
			Chondrilla juncea	rush skeletonweed	Moderate
			Cirsium vulgare	bull thistle	low
			Cynosurus echinatus	hedgehog dogtailgrass	moderate
			Cynosurus echinatus	hedgehog dogtailgrass	high
Middle Fork Interbay Dam and Powerhouse Road and			Hypericum perforatum	klamathweed	low
Interbay Access Points	102	7 acres	Hypericum perforatum	klamathweed	low
			Plantago lanceolata	English plantain	moderate
			Plantago lanceolata	English plantain	moderate
			Rumex acetosella	sheep sorrel	low
			Torilis arvensis	spreading hedgeparsley	low
			Vulpia myuros	rat-tail fescue	moderate
			Cirsium vulgare	bull thistle	low
			Cynosurus echinatus	hedgehog dogtailgrass	moderate
			Hypericum perforatum	klamathweed	low
	104	6.1 acres	Plantago lanceolata	English plantain	moderate
			Rumex acetosella	sheep sorrel	low
			Torilis arvensis	spreading hedgeparsley	moderate
			Vulpia myuros	rat-tail fescue	moderate

Table TERR 3-8a. Noxious Weed Species at Existing Project Facilities and Features (continued).

Facility	Map ID ¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³
PROJECT ROADS AND ACCESS POINTS CONTINUED				_	
Middle Fork Interbay Area continued					
			Bromus diandrus	ripgut brome	low
			Chondrilla juncea	rush skeletonweed	low
	105	6 acres	Cynosurus echinatus	hedgehog dogtailgrass	low
	103	0 acres	Dactylis glomerata	orchardgrass	low
			Hypericum perforatum	klamathweed	low
			Torilis arvensis	spreading hedgeparsley	moderate
			Bromus diandrus	ripgut brome	moderate
Middle Fork Interbay Dam and Powerhouse Road and	106	5.6 acres	Chondrilla juncea	rush skeletonweed	Low
Interbay Access Points			Cynosurus echinatus	hedgehog dogtailgrass	low
			Hirschfeldia incana	shortpod mustard	low
	100		Hypericum perforatum	klamathweed	low
			Melilotus albus	white sweet clover	moderate
			Torilis arvensis	spreading hedgeparsley	low
			Vulpia myuros	rat-tail fescue	high
	108	3.4 acres	Cirsium vulgare	bull thistle	low
	100	3.4 acres	Melilotus officinalis	yellow sweetclover	moderate
			Cirsium vulgare	bull thistle	low
			Dactylis glomerata	orchardgrass	low
Middle Fork Powerhouse Upper Switchyard Road	109	0.58 acres	Hirschfeldia incana	shortpod mustard	low
initidate i ork i owernouse opper switchyard Koad	109	0.56 acres	Melilotus officinalis	yellow sweetclover	moderate
			Rubus discolor	Himalayan blackberry	low
			Verbascum thapsus	woolly mullein	low

Table TERR 3-8a. Noxious Weed Species at Existing Project Facilities and Features (continued).

Facility	Map ID ¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³
PROJECT ROADS AND ACCESS POINTS CONTINUE	D				
Ralston-Oxbow Area					
			Agrostis stolonifera	creeping bent grass	low
			Bromus diandrus	ripgut brome	low
			Bromus tectorum	cheatgrass	low
	BC01	6.7 acres	Cirsium vulgare	bull thistle	low
	BCOT	0.7 acres	Dactylis glomerata	orchardgrass	low
			Rumex acetosella	sheep sorrel	moderate
			Torilis arvensis	spreading hedgeparsley	low
			Vulpia myuros	rat-tail fescue	low
Brushy Canyon Adit Road			Bromus diandrus	ripgut brome	low
		4.8 acres	Bromus tectorum	cheatgrass	low
			Chondrilla juncea	rush skeletonweed	moderate
	BC02		Cirsium vulgare	bull thistle	low
	BC02		Cynosurus echinatus	hedgehog dogtailgrass	low
			Hypericum perforatum	klamathweed	moderate
			Plantago lanceolata	English plantain	low
			Torilis arvensis	spreading hedgeparsley	low
	BC02	4.8 acres	Verbascum thapsus	woolly mullein	low
	BC02	4.0 acres	Vulpia myuros	rat-tail fescue	high
			Bromus diandrus	ripgut brome	moderate
			Bromus tectorum	cheatgrass	low
			Chondrilla juncea	rush skeletonweed	low
			Cynosurus echinatus	hedgehog dogtailgrass	low
Oxbow Powerhouse Road	R27	1.2 acres	Hirschfeldia incana	shortpod mustard	low
			Hypericum perforatum	klamathweed	low
			Plantago lanceolata	English plantain	low
			Torilis arvensis	spreading hedgeparsley	moderate
			Vulpia myuros	rat-tail fescue	moderate

Table TERR 3-8a. Noxious Weed Species at Existing Project Facilities and Features (continued).

Facility	Map ID ¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³
PROJECT ROADS AND ACCESS POINTS CONTINUED					
Ralston-Oxbow Area continued					
			Ailanthus altissima	tree-of-heaven	low
			Bromus tectorum	cheatgrass	low
			Chondrilla juncea	rush skeletonweed	moderate
			Cynosurus echinatus	hedgehog dogtailgrass	low
Ralston Powerhouse Butterfly Valve House Road	R13	2.4 acres	Hypericum perforatum	klamathweed	low
			Melilotus officinalis	yellow sweetclover	moderate
			Rubus discolor	Himalayan blackberry	low
			Torilis arvensis	spreading hedgeparsley	low
			Vulpia myuros	rat-tail fescue	moderate
Ralston-Oxbow Tunnel Intake Road	R04	0.57 acres	Bromus diandrus	ripgut brome	low
Naiston-Oxbow Turiner Intake Noau			Vulpia myuros	rat-tail fescue	low
			Bromus diandrus	ripgut brome	moderate
			Cynosurus echinatus	hedgehog dogtailgrass	low
Ralston Afterbay Road and Boat Ramp	R03	0.35 acres	Hypericum perforatum	klamathweed	low
			Plantago lanceolata	English plantain	moderate
			Torilis arvensis	cheatgrass rush skeletonweed hedgehog dogtailgrass klamathweed yellow sweetclover Himalayan blackberry spreading hedgeparsley rat-tail fescue ripgut brome rat-tail fescue ripgut brome hedgehog dogtailgrass klamathweed	low
			Bromus diandrus	ripgut brome	moderate
			Bromus tectorum	cheatgrass	moderate
			Chondrilla juncea	rush skeletonweed	low
Ralston Afterbay Dam Road and Afterbay Access Point	R02	0.55 acres	Hypericum perforatum	klamathweed	moderate
			Plantago lanceolata	English plantain	moderate
			Rubus discolor	Himalayan blackberry	moderate
			Vulpia myuros	rat-tail fescue	high

Table TERR 3-8a. Noxious Weed Species at Existing Project Facilities and Features (continued).

Facility	Map ID ¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³
PROJECT ROADS AND ACCESS POINTS CONTINUED					
Ralston-Oxbow Area continued					
			Bromus diandrus	ripgut brome	high
			Bromus tectorum	cheatgrass	low
			Carduus pycnocephalus	Italian thistle	moderate
Ralston Afterbay Sediment Removal Access Point	R16	0.32 acres	Cynosurus echinatus	hedgehog dogtailgrass	low
			Hirschfeldia incana	shortpod mustard	moderate
			Plantago lanceolata	English plantain	low
			Rubus discolor	Himalayan blackberry	moderate
PROJECT TRAILS					
Duncan Creek Area					
Duncan Creek Diversion Dam North Trail	_	_	_	_	_
Duncan Creek Diversion Dam South Trail	_	_	_	_	_
Photovoltaic Poles and Powerline to Duncan Creek Gage above Diversion Dam Trail	_	_	_	_	_
Duncan Creek Gage and Weir above Diversion Trail	_	_	_	_	_
Duncan Creek Gage and Weir below Diversion Trail	_	_	_	_	_
French Meadows Area	1	1	1		-
			Bromus tectorum	cheatgrass	low
Middle Fork American River Gage and Weir below French Meadows Dam Trail	FM24	0.49 acres	Cirsium vulgare	bull thistle	low
Weadows Daill ITall			Hypericum perforatum	klamathweed	moderate
Middle Fork Interbay Area	•		,		-
			Bromus diandrus	ripgut brome	low
			Bromus tectorum	cheatgrass	low
			Cirsium vulgare	bull thistle	low
Middle Fork American River Gage above Middle Fork Powerhouse Trail	l12	0.43 acres	Cynosurus echinatus	hedgehog dogtailgrass	moderate
1 Owernouse Itali			Rubus discolor	Himalayan blackberry	high
			Torilis arvensis	spreading hedgeparsley	low
			Verbascum thapsus	woolly mullein	low
Passive Microwave Reflector Station above Middle Fork Interbay Trail	l18	0.13 acres	Cirsium vulgare	bull thistle	low

Table TERR 3-8a. Noxious Weed Species at Existing Project Facilities and Features (continued).

Facility	Map ID ¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³
PROJECT TRAILS CONTINUED					
Middle Fork Interbay Area continued					
Passive Microwave Reflector Station above Middle Fork Interbay Trail	I19	0.77 acres	Vulpia myuros	rat-tail fescue	low
Ralston Afterbay Area			Vulpia myuros	rat-tail fescue	low
Passive Microwave Reflector Station above Ralston Afterbay Trail	_	_	_	_	_
Middle Fork American River Gage below Oxbow Powerhouse Trail	_	_	_	_	_

¹Map identification number corresponds to map identification numbers shown on Maps TERR 3-2a through 3-2e.
²Acreage represents the area of the total polygon. Refer to Appendix E for detailed information on the size of each noxious weed population contained within the polygon.
³Infestation levels include: low (<5% cover); moderate (6–25% cover), and high (>25% cover).

Table TERR 3-8b. Noxious Weed Species at Existing Project Recreation Facilities.

Facility	Map ID¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³
French Meadows Area	.	•	·		· ·
Ahart Campground	FM15	7.6 acres	Rumex acetosella	sheep sorrel	moderate
Coyote Group Campground	FM26	0.08 acres	Cirsium vulgare	bull thistle	low
Danny Carangua and Araille and	FM09	5.8 acres	Bromus tectorum	cheatgrass	moderate
Poppy Campground (trailhead)	FIVIU9	5.6 acres	Rumex acetosella	sheep sorrel	low
	FM18	7.5 acres	Dactylis glomerata	orchardgrass	low
French Meadows Campground	FM27	E E coros	Hypericum perforatum	klamathweed	moderate
	FIVIZ1	7.5 acres	Rumex acetosella	sheep sorrel	moderate
Gates Group Campground	FM16	8 acres	Rumex acetosella	sheep sorrel	low
			Cirsium vulgare	bull thistle	low
			Dactylis glomerata	orchardgrass	low
Lewis Campground	FM11	18.1 acres	Plantago lanceolata	English plantain	low
Lewis Campground			Rumex acetosella	sheep sorrel	low
			Verbascum thapsus	woolly mullein	low
	FM12	6 acres	Verbascum thapsus	woolly mullein	low
		2 6 acres Ve	Cirsium vulgare	bull thistle	low
	FM28		Melilotus officinalis	yellow sweetclover	low
	FIVIZO	1.0 acres	Rumex acetosella	sheep sorrel	low
French Meadows Picnic Area			Verbascum thapsus	woolly mullein	high
French Meadows Pichic Area			Dactylis glomerata	orchardgrass	low
	FM31	1.9 acres	Hypericum perforatum	klamathweed	low
	LINIST	1.9 acres	Melilotus officinalis	yellow sweetclover	low
			Rumex acetosella	sheep sorrel	low
			Bromus tectorum	cheatgrass	moderate
			Cirsium vulgare	bull thistle	low
			Dactylis glomerata	orchardgrass	low
McGuire Picnic Area	FM07	9.2 acres	Hypericum perforatum	klamathweed	moderate
NICGUITE FICTIC ATEA	FIVIU/	9.2 acres	Plantago lanceolata	English plantain	low
			Rumex acetosella	sheep sorrel	low
			Verbascum thapsus	woolly mullein	low
			Vulpia myuros	rat-tail fescue	high

Table TERR 3-8b. Noxious Weed Species at Existing Project Recreation Facilities (continued).

Facility	Map ID ¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³
French Meadows Area (continued)		•			
French Meadows Boat Ramp	_	_	_	_	_
			Bromus tectorum	cheatgrass	moderate
			Cirsium vulgare	bull thistle	low
			Cynosurus echinatus	hedgehog dogtailgrass	low
		5.9 acres	Dactylis glomerata	orchardgrass	low
McGuire Boat Ramp	FM09	5.9 acres	Hypericum perforatum	klamathweed	low
			Plantago lanceolata	English plantain	low
			Rumex acetosella	sheep sorrel	low
			Rumex acetosella	sheep sorrel	moderate
			Verbascum thapsus	woolly mullein	high
			Rumex acetosella	sheep sorrel	low
	FM10	10 acres	Hypericum perforatum	klamathweed	moderate
Dolly Creek Water Supply	1 10110	10 46163	Rumex acetosella	sheep sorrel	low
			Verbascum thapsus	woolly mullein	low
	FM11	18 acres	Hypericum perforatum	klamathweed	low
		6.2 acres	Cirsium vulgare	bull thistle	low
			Cynosurus echinatus	hedgehog dogtailgrass	low
	FM12		Hypericum perforatum	klamathweed	low
Dolly Creek Water Supply (continued)	1 10112		Plantago lanceolata	English plantain	high
			Rumex acetosella	sheep sorrel	moderate
			Verbascum thapsus	woolly mullein	low
	FM25	1.1 acres	Dactylis glomerata	orchardgrass	low
French Meadows Campground Water Supply and	FM17	6 acres	Cirsium vulgare	bull thistle	low
Trail	1 10117	0 40103	Rumex acetosella	sheep sorrel	low
Hell Hole Area		•			
			Cirsium vulgare	bull thistle	low
Big Meadows Campground	H26	23.5 acres	Melilotus officinalis	yellow sweetclover	low
			Rumex acetosella	sheep sorrel	low
			Bromus tectorum	cheatgrass	low
Hell Hole Campground	H23	3.3 acres	Cynosurus echinatus	hedgehog dogtailgrass	low
			Vulpia myuros	rat-tail fescue	low

Table TERR 3-8b. Noxious Weed Species at Existing Project Recreation Facilities (continued).

Facility	Map ID¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³
Hell Hole Area			!		.
Upper Hell Hole Campground	Upper Hell Hole Campground H47 5.9 acres	5.9 acres	Bromus tectorum	cheatgrass	low
opper heir hole campground	11-77	3.5 acres	Vulpia myuros	rat-tail fescue	low
Hell Hole Vista	H22	3.3 acres	Bromus tectorum	cheatgrass	high
Tiell Floie Vista	1122	3.5 acres	Vulpia myuros	rat-tail fescue	moderate
			Bromus diandrus	ripgut brome	low
			Bromus tectorum	cheatgrass	moderate
Hell Hole General Parking Area	H08	3.7 acres	Cynosurus echinatus	hedgehog dogtailgrass	low
Their Hole General Falking Area	1100	3.7 acres	Dactylis glomerata	orchardgrass	low
			Hypericum perforatum	klamathweed	high
			Melilotus officinalis	yellow sweetclover	low
			Rumex acetosella	sheep sorrel	high
Hell Hole General Parking Area (continued)	H08	3.7 acres	Taeniatherum caput-medusae	medusahead	moderate
Their Hole General Falking Alea (continued)	1100	0.7 doics	Verbascum thapsus	woolly mullein	low
			Vulpia myuros	rat-tail fescue	low
			Bromus diandrus	ripgut brome	low
			Bromus tectorum	cheatgrass	moderate
			Cirsium vulgare	bull thistle	low
Hall Hala Daat Dawn Davisian Araasi lall Hala Daat			Dactylis glomerata	orchardgrass	low
Hell Hole Boat Ramp Parking Area;Hell Hole Boat Ramp	H09	3.5 acres	Hirschfeldia incana	shortpod mustard	low
·			Hypericum perforatum	klamathweed	low
			Plantago lanceolata	English plantain	low
			Rumex acetosella	sheep sorrel	low
			Verbascum thapsus	woolly mullein	low
Big Meadows Campground Water Supply		_	_	_	_

Table TERR 3-8b. Noxious Weed Species at Existing Project Recreation Facilities (continued).

Facility	Map ID¹	Area Covered ²	Scientific Name	Common Name	Infestation Level ³
Ralston Afterbay Area					
			Bromus diandrus	ripgut brome	low
			Carduus pycnocephalus	Italian thistle	low
		Centaurea solstitialis	yellow starthistle	low	
			Chondrilla juncea	rush skeletonweed	low
	R18	1.2 acres	Cynosurus echinatus	hedgehog dogtailgrass	moderate
	R18	1.2 acres	Hirschfeldia incana	shortpod mustard	moderate
	Kio	1.2 acres	Plantago lanceolata	English plantain	high
			Rubus discolor	Himalayan blackberry	moderate
			Torilis arvensis	spreading hedgeparsley	moderate
Ralston Picnic Area			Vulpia myuros	rat-tail fescue	moderate
Raistoff Fighte Area			Cynosurus echinatus	hedgehog dogtailgrass	moderate
		2.4 acres	Hypericum perforatum	klamathweed	low
	R19		Melilotus officinalis	yellow sweetclover	moderate
	1010		Torilis arvensis	spreading hedgeparsley	low
			Verbascum thapsus	woolly mullein	low
			Vulpia myuros	rat-tail fescue	low
			Bromus tectorum	cheatgrass	low
	R20	0.45 acres	Melilotus officinalis	yellow sweetclover	moderate
	1120	0.40 40103	Plantago lanceolata	English plantain	low
			Rubus discolor	Himalayan blackberry	low
Ralston Picnic Area Cartop Boat Ramp	_	_	_	_	_
			Bromus diandrus	ripgut brome	high
			Bromus tectorum	cheatgrass	low
Indian Par Potting Access Baint and Consert			Carduus pycnocephalus	Italian thistle	low
Indian Bar Rafting Access Point and General Parking	R22	0.77 acres	Chondrilla juncea	rush skeletonweed	low
•			Cynosurus echinatus	hedgehog dogtailgrass	low
			Hirschfeldia incana	shortpod mustard	low
			Plantago lanceolata	English plantain	low

Table TERR 3-8b. Noxious Weed Species at Existing Project Recreation Facilities (continued).

Facility	Map ID¹	Area Scientific Covered ² Name		Common Name	Infestation Level ³
Ralston Afterbay Area (continued)					
			Rubus discolor	Himalayan blackberry	moderate
Jadies Ben Bettien Assess Beigt and Consent			Rumex acetosella	sheep sorrel	low
Indian Bar Rafting Access Point and General Parking (continued)	R22	0.77 acres	Taeniatherum caput-medusae	medusahead	high
			Torilis arvensis	spreading hedgeparsley	low
			Vulpia myuros	rat-tail fescue	low
Long Canyon Area					
	LC13 2	2 acres	Bromus tectorum	cheatgrass	high
		2 acres	Rumex acetosella	sheep sorrel	low
Middle Meadows Group Campground	1.014	0.37 acres	Cirsium arvense	Canada thistle	low
Middle Meadows Group Campground	LC 14	0.57 acres	Rumex acetosella	sheep sorrel	high
	LC15	0.26 acres	Cirsium arvense	Canada thistle	moderate
	LOTO	0.20 acres	Rumex acetosella	sheep sorrel	moderate
Middle Meadows Group Campground Water Supply	_	_	_	_	_

¹Map identification number corresponds to map identification numbers shown on Maps TERR 3-2a through 3-2e. ²Acreage represents the area of the total polygon. Refer to Appendix D for detailed information on the size of each noxious weed population contained within the polygon.

³Infestation levels include: low (<5% cover); moderate (6–25% cover), and high (>25% cover).

Table TERR 3-8c. Noxious Weed Species at Dispersed Concentrated Use Areas.

Facility	Map ID	Area Covered	Latin Name	Common Name	Infestation Level ³
French Meadows Reservoir Area					
			Cirsium vulgare	bull thistle	low
Area near French Meadows-Hell Hole Tunnel Gatehouse			Verbascum thapsus	woolly mullein	high
[French Meadows-Hell Hole Tunnel Intake Trash Rack	FM29	3.7 acres	Cirsium vulgare	bull thistle	low
construction and staging Area; French Meadows-Hell Hole Tunnel	171129	3.7 acres	Plantago lanceolata	English plantain	low
Gatehouse Road]			Rumex acetosella	sheep sorrel	moderate
			Verbascum thapsus	woolly mullein	low
Area immediately downstream of French Meadows Dam (both			Bromus tectorum	cheatgrass	moderate
sides of river)	FM21	1.3 acres	Hypericum perforatum	klamathweed	moderate
[French Meadows Dam Generator Building to French Meadows	FIVI∠ I	1.3 acres	Rubus discolor	Himalayan blackberry	low
Dam Outlet Works Powerline]			Vulpia myuros	rat-tail fescue	low
			Bromus tectorum	cheatgrass	high
		2.6 acres	Cirsium vulgare	bull thistle	low
	FM03		Dactylis glomerata	orchardgrass	low
Area located immediately northwest of French Meadows Dam			Hypericum perforatum	klamathweed	high
[French Meadows Dam Staging Area and Road]			Melilotus albus	white sweet clover	moderate
			Plantago lanceolata	English plantain	low
			Rumex acetosella	sheep sorrel	moderate
			Verbascum thapsus	woolly mullein	low
Duncan Creek Diversion Dam Area					
Area near bridge over the Middle Fork American River, upstream of French Meadows Reservoir	_	_	_	_	_
Area on north side of Duncan Creek Diversion Dam	_	_	_	_	_
Area on north side of Duncan Creek Diversion Dam [Duncan Creek Diversion Dam Road]	DC01	0.26 acres	Bromus tectorum	cheatgrass	high
Area near new bridge crossing Duncan Canyon on the road to the					
Grizzly	DC02	3.09 acres	Cirsium vulgare	bull thistle	moderate
[Duncan Creek Diversion Intake Road and Diversion Pool Access Point]	5002	0.00 00100	Verbascum thapsus	woolly mullein	moderate
Area near Duncan Creek Gage and Weir, upstream of Duncan Creek Diversion Dam	DC02	3.09 acres	Cirsium vulgare	bull thistle	moderate
[Duncan Creek Diversion Intake Road and Diversion Pool Access Point]	D002	0.00 00103	Verbascum thapsus	woolly mullein	moderate

Table TERR 3-8c. Noxious Weed Species at Dispersed Concentrated Use Areas (continued).

Hell Hole Reservoir Area					
			Bromus tectorum	cheatgrass	high
		0.55 acres	Cynosurus echinatus	hedgehog dogtailgrass	low
	H01		Dactylis glomerata	orchardgrass	high
	ПОТ	0.55 acres	Hirschfeldia incana	shortpod mustard	low
			Hypericum perforatum	klamathweed	moderate
			Verbascum thapsus	woolly mullein	low
			Bromus tectorum	cheatgrass	moderate
	H02	1.5 acres	Dactylis glomerata	orchardgrass	low
	H02	1.5 acres	Hypericum perforatum	klamathweed	low
			Vulpia myuros	rat-tail fescue	moderate
			Bromus diandrus	ripgut brome	low
			Bromus tectorum	cheatgrass	moderate
Area on west side of Hell Hele December between dome and Hell			Cynosurus echinatus	hedgehog dogtailgrass	low
Area on west side of Hell Hole Reservoir, between dam and Hell			Dactylis glomerata	orchardgrass	low
Hole Boat Ramp		3.7 acres	Hypericum perforatum	klamathweed	high
[Hell Hole Dam and Powerhouse Road; Hell Hole Dam Spillway	H08		Melilotus officinalis	yellow sweetclover	low
Southern Access Point; Hell Hole General Parking Area; Hell Hole			Rumex acetosella	sheep sorrel	high
Boat Ramp / Hell Hole Boat Ramp Parking Area; Rubicon River Gage and Weir below Hell Hole Dam Road/Betterment Area]			Taeniatherum caput- medusae	medusahead	low
Gage and Well below Hell Hole Dani Road/Betterment Alea]			Verbascum thapsus	woolly mullein	low
			Vulpia myuros	rat-tail fescue	low
			Bromus diandrus	ripgut brome	low
			Bromus tectorum	cheatgrass	moderate
			Cirsium vulgare	bull thistle	low
			Dactylis glomerata	orchardgrass	low
			Hirschfeldia incana	shortpod mustard	low
	H09	3.5 acres	Hypericum perforatum	klamathweed	low
			Plantago lanceolata	English plantain	low
			Rumex acetosella	sheep sorrel	low
			Taeniatherum caput- medusae	medusahead	moderate
			Verbascum thapsus	woolly mullein	low
			Agrostis stolonifera	creeping bent grass	moderate
			Bromus diandrus	ripgut brome	low
			Bromus tectorum	cheatgrass	moderate
Grey Horse Area/Hell Hole Reservoir	H35	4 acres	Cirsium vulgare	bull thistle	low
			Cynosurus echinatus	hedgehog dogtailgrass	moderate
			Verbascum thapsus	woolly mullein	low
			Vulpia myuros	rat-tail fescue	low

Table TERR 3-8c. Noxious Weed Species at Dispersed Concentrated Use Areas (continued).

Long Canyon Area					
			Agrostis stolonifera	creeping bent grass	low
			Bromus tectorum	cheatgrass	low
			Cirsium vulgare	bull thistle	low
Area aurrounding South Fork Long Convon Diversion Dom	LC11	2 acres	Melilotus albus	white sweet clover	moderate
Area surrounding South Fork Long Canyon Diversion Dam [South Fork Long Canyon Diversion Dam and Pool, and Inlet			Rumex acetosella	sheep sorrel	low
Road			Verbascum thapsus	woolly mullein	low
Roddj			Vulpia myuros	rat-tail fescue	low
			Bromus tectorum	cheatgrass	low
	LC12	0.68 acres	Rumex acetosella	sheep sorrel	low
			Verbascum thapsus	woolly mullein	low
Middle Fork Interbay Area					
		0.14 acres	Plantago lanceolata	English plantain	low
	107		Hypericum perforatum	klamathweed	low
			Dactylis glomerata	orchardgrass	high
			Rumex acetosella	sheep sorrel	low
			Melilotus albus	white sweet clover	moderate
			Verbascum thapsus	woolly mullein	low
			Cirsium vulgare	bull thistle	low
Shoreline area surrounding Middle Fork Interbay			Bromus tectorum	cheatgrass	low
[Middle Fork Interbay Dam and Powerhouse Road and Interbay			Plantago lanceolata	English plantain	low
Access Points; Middle Fork Powerhouse to Middle Fork- Ralston	108	3.4 acres	Cynosurus echinatus	hedgehog dogtailgrass	low
Tunnel Intake and Gatehouse Communication Line/Powerline;			Hypericum perforatum	klamathweed	moderate
Middle Fork Powerhouse Upper Switchyard Road]			Bromus diandrus	ripgut brome	moderate
			Melilotus officinalis	yellow sweetclover	low
			Cirsium vulgare	bull thistle	Low
			Dactylis glomerata	orchardgrass	low
	109	0.58 acres	Hirschfeldia incana	shortpod mustard	low
	109	0.56 acres	Melilotus officinalis	yellow sweetclover	moderate
			Rubus discolor	Himalayan blackberry	low
			Verbascum thapsus	woolly mullein	low

Table TERR 3-8c. Noxious Weed Species at Dispersed Concentrated Use Areas (continued).

Ralston Afterbay Area					
			Bromus diandrus	ripgut brome	moderate
			Bromus tectorum	cheatgrass	moderate
			Carduus pycnocephalus	Italian thistle	high
			Centaurea melitensis	Malta starthistle (tocalote)	low
			Chondrilla juncea	rush skeletonweed	moderate
			Cynosurus echinatus	hedgehog dogtailgrass	low
			Dactylis glomerata	orchardgrass	low
Ralston Ridge Sediment Disposal Area	R14	2.3 acres	Hirschfeldia incana	shortpod mustard	low
			Melilotus officinalis	yellow sweetclover	moderate
			Rubus discolor	Himalayan blackberry	moderate
			Taeniatherum caput-		
			medusae	medusahead	low
			Torilis arvensis	spreading hedgeparsley	low
			Verbascum thapsus	woolly mullein	low
			Vulpia myuros	rat-tail fescue	low
	R18	1.1 acres	Bromus diandrus	ripgut brome	low
			Carduus pycnocephalus	Italian thistle	low
			Centaurea solstitialis	yellow starthistle	low
			Chondrilla juncea	rush skeletonweed	low
			Cynosurus echinatus	hedgehog dogtailgrass	low
	1110		Hirschfeldia incana	shortpod mustard	moderate
			Plantago lanceolata	English plantain	high
			Rubus discolor	Himalayan blackberry	moderate
rea along Middle Fork American River, between Ralston Picnic rea and the new gage Ralston Picnic Area]			Torilis arvensis	spreading hedgeparsley	moderate
Area along Middle Fork American River, between Ralston Picnic			Vulpia myuros	rat-tail fescue	moderate
			Bromus diandrus	ripgut brome	low
[Ralston Picnic Area]			Cynosurus echinatus	hedgehog dogtailgrass	moderate
			Hypericum perforatum	klamathweed	low
	R19	2.4 acres	Melilotus officinalis	yellow sweetclover	moderate
			Torilis arvensis	spreading hedgeparsley	low
			Verbascum thapsus	woolly mullein	low
			Vulpia myuros	rat-tail fescue	low
			Bromus tectorum	cheatgrass	low
	R20	0.45 acres	Melilotus officinalis	yellow sweetclover	moderate
	1120	J.40 doic3	Plantago lanceolata	English plantain	low
			Rubus discolor	Himalayan blackberry	low

 Table TERR 3-8c.
 Noxious Weed Species at Dispersed Concentrated Use Areas (continued).

Ralston Afterbay Area (continued)					
			Bromus diandrus	ripgut brome	moderate
			Bromus tectorum	cheatgrass	low
			Carduus pycnocephalus	Italian thistle	low
			Centaurea melitensis	Malta starthistle (tocalote)	low
			Chondrilla juncea	rush skeletonweed	low
S			Hirschfeldia incana	shortpod mustard	low
Shoreline area surrounding Ralston Afterbay [Ralston-Oxbow Tunnel Intake to Ralston Powerhouse	R21	13 acres	Hypericum perforatum	klamathweed	low
Communication Line]	RZ1	13 acres	Melilotus officinalis	yellow sweetclover	low
			Plantago lanceolata	English plantain	low
			Rubus discolor	Himalayan blackberry	low
			Rubus discolor	Himalayan blackberry	moderate
			Torilis arvensis	spreading hedgeparsley	low
			Verbascum thapsus	woolly mullein	low
			Vulpia myuros	rat-tail fescue	low
			Bromus diandrus	ripgut brome	moderate
		9 acres	Bromus tectorum	cheatgrass	low
			Carduus pycnocephalus	Italian thistle	low
	R05		Centaurea melitensis	Malta starthistle (tocalote)	low
			Chondrilla juncea	rush skeletonweed	low
			Cynosurus echinatus	hedgehog dogtailgrass	low
			Hirschfeldia incana	shortpod mustard	low
			Hypericum perforatum	klamathweed	low
			Lepidium latifolium	perennial pepperweed (tall whitetop)	low
			Melilotus officinalis	yellow sweetclover	low
			Plantago lanceolata	English plantain	low
			Rubus discolor	Himalayan blackberry	low
Indian Bar, Willow Bar, and Junction Bar areas			Rumex acetosella	sheep sorrel	low
[Indian Bar]			Taeniatherum caput-		low
			medusae	medusahead	
			Torilis arvensis	spreading hedgeparsley	medium
			Vulpia myuros	rat-tail fescue	low
			Bromus tectorum	cheatgrass	moderate
			Bromus diandrus	ripgut brome	low
			Chondrilla juncea	rush skeletonweed	low
			Hirschfeldia incana	shortpod mustard	moderate
	R24	2.9 acres	Hypericum perforatum	klamathweed	low
	1,24	2.0 40100	Melilotus albus	white sweet clover	low
			Rumex acetosella	sheep sorrel	low
			Torilis arvensis	spreading hedgeparsley	low
			Verbascum thapsus	woolly mullein	low
			Vulpia myuros	rat-tail fescue	low

Table TERR 3-8c. Noxious Weed Species at Dispersed Concentrated Use Areas (continued).

Ralston Afterbay Area (continued)					
			Rubus discolor	Himalayan blackberry	low
			Cynosurus echinatus	hedgehog dogtailgrass	low
	R25	1.1 acres	Hypericum perforatum	klamathweed	low
			Rumex acetosella	sheep sorrel	low
			Torilis arvensis	spreading hedgeparsley	low
			Robinia pseudoacacia	black locust	1 tree
			Bromus diandrus	ripgut brome	moderate
Indian Bar, Willow Bar, and Junction Bar areas			Bromus tectorum	cheatgrass	low
[Indian Bar] (continued)			Centaurea solstitialis	yellow starthistle	moderate
			Chondrilla juncea	rush skeletonweed	low
	R26	9 acres	Hirschfeldia incana	shortpod mustard	low
			Plantago lanceolata	English plantain	moderate
			Rubus discolor	Himalayan blackberry	high
			Rumex acetosella	sheep sorrel	low
			Torilis arvensis	spreading hedgeparsley	low
			Vulpia myuros	rat-tail fescue	low

¹Map identification number corresponds to map identification numbers shown on Maps TERR 3-2a through 3-2e.
²Acreage represents the area of the total polygon. Refer to Appendix D for detailed information on the size of each noxious weed population contained within the polygon.
³Infestation levels include: low (<5% cover); moderate (6–25% cover), and high (>25% cover).

Table TERR 3-9. Noxious Weed Polygons in the Study Area for Hell Hole Reservoir for the Existing Project.

									Below	the c	urrent	maxim		Area 1 ormal o	perati	ng WS	SE (4,6	30 fee	t msl)										
												Noxi	ous We	ed Spe	ecies P	resent													
	Area	a^2	onifer nt grass	issima en	drus	orum	nocephalus	Centaurea melitensis Malta starthistle (tocalote)	<i>olstitialis</i> istle	<i>ncea</i> nweed	nse le	are	<i>rtylon</i> Iss	<i>chinatus</i> ogtailgrass	<i>arius</i> n	nerata s	<i>incana</i> stard	erforatum J	<i>folium</i> pperweed	us clover	<i>cinalis</i> clover	<i>ceolata</i> :ain	ıdoacacia	lor lackberry	sella Sella	Taeniatherum caput-medusae medusahead	s <i>is</i> dgeparsley	<i>hapsus</i> n	SC e
Map ID ¹	Sq Ft	Acres	Agrostis stolonifer creeping bent grass	Ailanthus altissima tree-of-heaven	Bromus diandrus ripgut brome	Bromus tectorum cheatgrass	Carduus pycnocephalus Italian thistle	<i>Centaurea n</i> Malta starthi	Centaurea solstitialis yellow starthistle	<i>Chondrilla juncea</i> rush skeletonweed	Cirsium arvense Canada thistle	Cirsium vulgare bull thistle	<i>Cynodon dactylon</i> Bermuda grass	<i>Cynosurus echinatus</i> hedgehog dogtailgrass	Cytisus scoparius Scotch broom	Dactylis glomerata orchardgrass	Hirschfeldia incana shortpod mustard	Hypericum perforatum klamathweed	Lepidium latifolium perennial pepperweed	Melilotus albus white sweet clover	Melilotus officinalis yellow sweetclover	<i>Plantago lanceolata</i> English plantain	Robinia pseudoacacia black locust	<i>Rubus discolor</i> Himalayan blackberry	Rumex acetosella sheep sorrel	<i>Taeniatheru</i> medusaheac	Torilis arvensis spreading hedgeparsley	Verbascum thapsus woolly mullein	Vulpia myuros rat-tail fescue
H01	2,257	0.05				Х								Χ		Χ	Х	Х										Х	
H02	3,923	0.09				X										Χ		Χ											X
H03	11,637	0.27				X												Х				Χ						Х	Х
H09	22,413	0.51			X	X						X				X	X	Х				X			X	X		X	_
H18	3,559	0.08				X												X										 	X
H20	4,479	0.10				X						Χ					Х	X			Χ							 	Χ
H28	304,396	6.99				X																						Χ	
H30	183,210	4.21										Χ						X										Х	
H33	116,116	2.67																X										X	X
H35	54,743	1.26	Х		Х	X						Х		Х														X	X
H37	9,293	0.21				X																						Х	X
H38	59,707	1.37	Χ			X																						<u> </u>	X
H40	13,795	0.32	Х			X						Х																X	X
H43	96,689	2.22	Α																									X	Х
H46 H47	475,844 16,085	10.92 0.37				X																							X
H47	661,909	15.20	Х			^																						X	^
H54	117,135	2.69	X			X																							X
H55	132,988	3.05	^																									X	^
Total:	2,290,176	52.58		<u> </u>				<u> </u>										1		<u> </u>									

¹Refer to Map TERR 3-2a through 3-2e for the location of each polygon within the study area. ²Includes only the portion of the polygon that falls between the specified elevations.

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Table TERR 3-9. Noxious Weed Polygons in the Study Area for Hell Hole Reservoir for the Existing Project (continued).

				F	From th	he cur	rent m	aximu	m norn	nal op	erating	y WSE		Area 2 feet m	nsl) to	the ma	aximur	n flood	d pool	elevati	ion (4,0	640 fee	et msl)	1					
		_										Noxi	ous We	ed Spe	ecies P	resent													
_	Area	1 ²	Agrostis stolonifer creeping bent grass	Ailanthus altissima tree-of-heaven	<i>liandrus</i> me	ectorum ss	Carduus pycnocephalus Italian thistle	Centaurea melitensis Malta starthistle (tocalote)	Centaurea solstitialis yellow starthistle	<i>Chondrilla juncea</i> rush skeletonweed	rvense nistle	ulgare	<i>dactylon</i> grass	<i>Cynosurus echinatus</i> hedgehog dogtailgrass	coparius oom	Dactylis glomerata orchardgrass	Hirschfeldia incana shortpod mustard	Hypericum perforatum klamathweed	<i>Lepidium latifolium</i> perennial pepperweed	<i>albus</i> eet clover	Melilotus officinalis yellow sweetclover	<i>Plantago lanceolata</i> English plantain	<i>Robinia pseudoacacia</i> black locust	Rubus discolor Himalayan blackberry	<i>cetosella</i> rrel	Taeniatherum caput-medusae medusahead	Torilis arvensis spreading hedgeparsley	Verbascum thapsus woolly mullein	ruros scue
Map ID ¹	Sq Ft	Acres	Agrostis s creeping	Ailanthus tree-of-he	Bromus diandrus ripgut brome	Bromus tectorum cheatgrass	Carduus Italian this	Centaure Malta star	Centaure	<i>Chondrill</i> e rush skele	Cirsium arvense Canada thistle	Cirsium vulgare bull thistle	<i>Cynodon dactylon</i> Bermuda grass	<i>Cynosuru</i> hedgehog	Cytisus scoparius Scotch broom	Dactylis g orchardgr	Hirschfeld shortpod	<i>Hypericur</i> klamathw	<i>Lepidium</i> perennial	<i>Melilotus albus</i> white sweet clover	<i>Melilotus</i> yellow sw	<i>Plantago</i> English pl	Robinia p black locu	<i>Rubus dis</i> Himalaya	Rumex acetosella sheep sorrel	<i>Taeniathe</i> medusahe	<i>Torilis ar</i> v spreading	Verbascu woolly mu	Vulpia myuros rat-tail fescue
H01	1,238		X																Х										
H02	3,417		1.03 X X X X X X X X X X X X X X X X X X X															X											
H03	33,867		0.03 X X X X X X X X X X 0.08 X X X X X X X X X X X X X X X X X X X														Х	X											
H09	5,562	0.13			Х	Х						Х				Х	Х	Х				Х			Х	Χ		Х	
H18	6,368	0.15				Х												Х											Х
H20	8,467	0.19				Х						Х					Х	Х			Χ								Х
H27	40,515	0.93				Х																			Χ				
H28	75,908	1.74				Х																						Х	
H29	12,972	0.30				Х																							Х
H30	38,536	0.88										Х						Х										Х	Х
H31	45,966	1.06				Х																							
H32	20,819	0.48				Х																							X
H33	26,136	0.60												<u> </u>				Х										Х	X
H34	10,884	0.25				Х								<u> </u>															X
H35	8,342	0.19	Χ		X	Х						X		Х														Х	X
H36	5,169	0.12				Х								<u> </u>															X
H37	17,135	0.39				Х								ļ														Х	X
H38	10,863	0.25	Χ			X								ļ															Χ
H39	679	0.02				X								ļ															Χ
H40	6,832	0.16				Х								ļ															X
H41	19,837	0.46				Х								 															Х
H42	2,734	0.06												 															Х
H43	13,654	0.31	Х									Х		 														Х	
H44	14,259	0.33				Х								 															Х
H45	5	0.00												 															X
H46	45,122	1.04				Х								 														Х	Х
H47	30,162	0.69				Х								 															X
H48	35,851	0.82												 															Х
H49	144,459	3.32												ļ 1															Χ

Table TERR 3-9. Noxious Weed Polygons in the Study Area for Hell Hole Reservoir for the Existing Project (continued).

					From t	he cur	rent m	naximu	ım norı	mal op	eratin	g WSE	Area 2 (4,630	feet n	nsl) to	the ma	aximur	m flood	d pool	elevati	ion (4,	640 fee	et msl)						
												ITOXIC	743 WE	Ju Oper								l							
Мар	Sebendary Secretarian Agrostis stolonifer creeping bent grass Alianthus altissima tree-of-heaven cheatgrass Alianthus altistle Contaurea melitensis Malta starthistle (tocalote) Contaurea melitensis Malta starthistle (tocalote) Contaurea melitensis Malta starthistle (tocalote) Contaurea solstitialis yellow starthistle ocitain attistle cheque diacetolorer Contaurea solstitialis yellow starthistle ocitain attistle contaurea solstitialis yellow sweetclover Melilotus albus white sweetclover Melilotus officinalis yellow sweetclover Plantago lanceolata Lepidum attistle checana abhotomogo lanceolata Lepidum satotos olarceolata Rubus discolor Himalayan blackberry Rumex acetosella Sheep sorrel Taeniatherum caput-medusae medusahead Torilis arvensis spreading hedgeparsley Verbascum thapsus Wondpia myuros Vulpia myuros Vulpia myuros															<i>Vulpia myuros</i> rat-tail fescue													
	_	-		`+	l r	7	0 =	02	0 5	0.		0 11	ОП	<u> </u>	0 0,	7	7 0	~ 4	d 7	_ >	` `	, H	h b	, 	<i>H</i> 8	, ,	17 0)	_ >	
H50	33,842	0.78																										ļ	X
H51	67,958	1.56																											X
H52	98,385	2.26	Χ																									X	
H53	681	0.02				Х																							Х
H54	1,351	0.03	Х			Х																							Х
H55	15,484	0.36																										Х	
Total:	903,461	20.74												•								•							

¹Refer to Map TERR 3-2a through 3-2e for the location of each polygon within the study area. ²Includes only the portion of the polygon that falls between the specified elevations.

Table TERR 3-9. Noxious Weed Polygons in the Study Area for Hell Hole Reservoir for the Existing Project (continued).

							From	the n	naximı	ım floc	noo	l eleva		Area 3) to the	e uppe	r limit	of the	study	area								
							о арро		01 1110	otady	urou																		
				1	1			1		1		Noxio	us We	ed Spe	cies Pr	esent	1	T		1				1					
	Area	a ²	fer Irass	ima	Sr	u.	cephalus	tensis (tocalote)	titialis e	ea eed	Φ		lon	<i>inatus</i> ailgrass	sn	ata	ana Ird	oratum	<i>ium</i> erweed	ver	<i>alis</i> ver	olata 1	acacia	kberry	ella	caput-medusae	leparsley	snsd	
Map ID ¹	Sq Ft	Acres	Agrostis stolonifer creeping bent grass	Ailanthus altissima tree-of-heaven	Bromus diandrus ripgut brome	Bromus tectorum cheatgrass	Carduus pycnocephalus Italian thistle	Centaurea melitensis Malta starthistle (tocalote)	Centaurea solstitialis yellow starthistle	Chondrilla juncea rush skeletonweed	Cirsium arvense Canada thistle	Cirsium vulgare bull thistle	Cynodon dactylon Bermuda grass	Cynosurus echinatus hedgehog dogtailgrass	Cytisus scoparius Scotch broom	Dactylis glomerata orchardgrass	Hirschfeldia incana shortpod mustard	Hypericum perforatum klamathweed	Lepidium latifolium perennial pepperweed	Melilotus albus white sweet clover	Melilotus officinalis yellow sweetclover	<i>Plantago lanceolata</i> English plantain	Robinia pseudoacacia black locust	Rubus discolor Himalayan blackberry	Rumex acetosella sheep sorrel	Taeniatherum caput-medusae medusahead	Torilis arvensis spreading hedgeparsley	Verbascum thapsus woolly mullein	Vulpia myuros rat-tail fescue
H01	20,482	0.47																										ļ	
H02	58,385	1.34																											
H03	97,256	2.23 0.15				X						Χ					X	Х											X
H04 H05	6,388 79	0.15				X						X					X	X			Χ								X
H08	2,738	0.06			X	X								Х		Χ	^	X			X				Х	Х		Х	X
H09	64,374	1.48			X	X						Х				X	X	X				Х			X	X		X	
H18	106,587	2.45				X												X											X
H19	12,532	0.29				X						Х		Χ				X											
H20	62,881	1.44				X						X					Χ	X			Х								X
H27	411,760	9.45				X																			Х				7
H28	8,920	0.20				X																			7.			Х	
H29	99,297	2.28				X																							Х
H30	7	0.00										Х						Χ										Х	
H31	132,148	3.03				Х																							
H32	210,846	4.84				Х																							Х
H33	3,685	0.08																Х										Х	Х
H34	92,132	2.12				Х																							Х
H35	111,703	2.56	Х		Х	Х						Х		Х														Х	X
H36	100,833	2.31				X																							X
H37	149,088	3.42				X																						Χ	X
H38	3,797	0.09	Χ			X																							X
H39	61,046	1.40				X																							Х
H40	94,891	2.18				X																							X
H41	149,640	3.44				X																							Х
H42	143,438	3.29																											X
H43	9,670	0.22	Х									Х																Х	
H44	316,308	7.26				X																							X
H45	45,689	1.05																											X
H46	7,189	0.17				X																						Х	X
H47	84,465	1.94				X																							X

Noxious Weed Polygons in the Study Area for Hell Hole Reservoir for the Existing Project (continued). Table TERR 3-9.

Area 3 (continued) From the maximum flood pool elevation (4,640 feet msl) to the upper limit of the study area **Noxious Weed Species Present** Centaurea melitensis Malta starthistle (tocalote) *Taeniatherum caput-medu* medusahead Area² Carduus pycnocephalus Italian thistle Torilis arvensis spreading hedgeparsley *Cynosurus echinatus* hedgehog dogtailgrass *Rubus discolor* Himalayan blackberry *Lepidium latifolium* perennial pepperweed *Hypericum perforatum* klamathweed Centaurea solstitialis yellow starthistle Verbascum thapsus woolly mullein Ailanthus altissima tree-of-heaven Melilotus officinalis yellow sweetclover *Plantago lanceolata* English plantain Melilotus albus white sweet clover Agrostis stolonifer creeping bent grass Dactylis glomerata orchardgrass Hirschfeldia incana shortpod mustard Cynodon dactylon Bermuda grass *Chondrilla juncea* rush skeletonweed Cytisus scoparius Scotch broom Rumex acetosella sheep sorrel Bromus tectorum cheatgrass Bromus diandrus ripgut brome Cirsium arvense Canada thistle *Cirsium vulgare* bull thistle Robinia pseudoac black locust Vulpia myuros rat-tail fescue Map ID^1 Sq Ft Acres H48 62,631 1.44 Χ H49 207,966 4.77 Χ H50 39,566 0.91 Χ H51 224,503 5.15 H52 13,210 0.30 Χ Χ H53 113,045 Χ Χ 2.60 Χ Χ Χ H55 14,839 0.34 Total: 3,344,013 76.77

¹Refer to Map TERR 3-2a through 3-2e for the location of each polygon within the study area. ²Includes only the portion of the polygon that falls between the specified elevations.

Noxious Weed Polygons in the Study Area for Hell Hole Reservoir for the Existing Project (continued). Table TERR 3-9.

Area 4 Portions of those polygons intersecting Areas 1, 2, and/or 3 that extend beyond Area 3

Noxious Weed Species Present

												INOXIO	us vice	a Spec	103110	,3CIII		-											4
	Area	1 ²					sn	lote)						v				۲	7				E			nedusae	ey		
Map ID ¹	Sq Ft	Acres	Agrostis stolonifer creeping bent grass	Ailanthus altissima tree-of-heaven	Bromus diandrus ripgut brome	Bromus tectorum cheatgrass	Carduus pycnocephalus Italian thistle	Centaurea melitensis Malta starthistle (tocalote)	Centaurea solstitialis yellow starthistle	Chondrilla juncea rush skeletonweed	Cirsium arvense Canada thistle	Cirsium vulgare bull thistle	Cynodon dactylon Bermuda grass	Cynosurus echinatus hedgehog dogtailgrass	Cytisus scoparius Scotch broom	Dactylis glomerata orchardgrass	Hirschfeldia incana shortpod mustard	Hypericum perforatum klamathweed	Lepidium latifolium perennial pepperweed	Melilotus albus white sweet clover	Melilotus officinalis yellow sweetclover	<i>Plantago lanceolata</i> English plantain	Robinia pseudoacacia black locust	Rubus discolor Himalayan blackberry	Rumex acetosella sheep sorrel	Taeniatherum caput-medusae medusahead	Torilis arvensis spreading hedgeparsley	Verbascum thapsus woolly mullein	Vulpia myuros rat-tail fescue
H03	11,362	0.26																\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \										 -	
H04	37,701	0.87				X						X					X	X			V								X
H05	213,899	4.91			V	X						Х		V		V	X	X			X				V	V			X
H08	160,333	3.68			X	X						V		X		X	V	X			Χ	V			X	X		X	X
H09	62,228	1.43 0.72			Х	X						Х				Х	Х	X				Х			Х	X		├~	Х
H18	31,432	9.20				X						X		X				X										$\vdash \vdash \vdash$	^
H19 H20	400,559 11,207	0.26				X						X					Χ	X			Χ							\vdash	Х
H27	144	0.20				X																			Χ				
H29	2	0.00				X																			Λ				Х
H31	62	0.00				X																							
H32	59	0.00				X																							Х
H34	32	0.00				Χ																							Х
H35	12	0.00	Х		Х	Χ						Х		Х														Х	Х
H36	13	0.00				Х																							Х
H37	155	0.00				Х																						Х	Х
H39	12	0.00				Χ																							Х
H40	49	0.00				Χ																							Х
H41	36	0.00				Χ																							Х
H42	35	0.00																										<u> </u>	Χ
H44	88	0.00				Х																							Χ
H45	19	0.00																										<u> </u>	X
H47	128,039	2.94				Х																					<u> </u>	<u> </u>	X
H48	14	0.00																										<u> </u> '	Χ
H49	108	0.00																										<u> </u>	Χ
H51	332	0.01																										<u> </u>	Χ
H53	9,758	0.22				Χ																						'	Χ
Total:	1,067,689	24.51																											

¹Refer to Map TERR 3-2a through 3-2e for the location of each polygon within the study area. ²Includes only the portion of the polygon that falls between the specified elevations.

Table TERR 3-10a. Noxious Weed Species at Facilities Associated with the Hell Hole Seasonal Storage Increase Betterment.

Facility ¹	Map ID ²	Area Covered ³	Scientific Name	Common Name	Infestation Level ⁴
Hell Hole Dam					
Modified Facilities					
Hell Hole Dam Spillway Crest Gates	_	_	_	_	_
Hell Hole Dam Parapet Walls	_	_	_	_	_
New Facilities					
Hell Hole Dam Spillway Crest Gates Control Building	_	_	_	_	_
Hell Hole Dam Spillway Crest Gates Control Building Powerline	_	_	_	_	_
Temporary Construction and Staging Areas					
Hell Hole Dam Spillway Crest Gates Construction Road	_	_	_	_	_
Hell Hole Dam Spillway Crest Gates Construction Work Area	_	_	_	_	_
Hell Hole Dam Spillway Crest Gates and Control Building Construction Staging Area	_	_	_	_	_
			Bromus tectorum	cheatgrass	low
Hall Hala Dava Davan et Wall Construction Stanian and Warls			Hypericum perforatum	klamathweed	low
Hell Hole Dam Parapet Wall Construction Staging and Work Area	H03	3.5 acres	Plantago lanceolata	English plantain	moderate
7.33			Verbascum thapsus	woolly mullein	low
			Vulpia myuros	rat-tail fescue	moderate
Hell Hole Dam Spillway Crest Gates Control Building Construction Work Area	_	_	_	_	_
Hell Hole Dam Spillway Crest Gates Control Building Powerline Construction Work Area	_	_	_	_	_
			Bromus tectorum	cheatgrass	high
Hell Hole Dam Spillway Crest Gates Control Building Powerline Construction Staging Area	H13	2 acres	Hypericum perforatum	klamathweed	low
Towerline Construction Staging Area	1113	2 acres	Plantago lanceolata	English plantain	low
			Verbascum thapsus	woolly mullein	high
Hell Hole-Middle Fork Tunnel Gatehouse					
Modified Facilities					
Hell Hole - Middle Fork Tunnel Gatehouse Parapet Wall		_	_	_	_

Table TERR 3-10a. Noxious Weed Species at Facilities Associated with the Hell Hole Seasonal Storage Increase Betterment (continued).

Hell Hole-Middle Fork Tunnel Gatehouse (continu	ıed)				
Temporary Construction and Staging Areas					
Hell Hole-Middle Fork Tunnel Gatehouse Parapet Wall Construction Staging and Work Area	_	_	_	_	_
French Meadows Powerhouse					
Modified Facilities					
French Meadows Powerhouse Parapet Wall	_	_	_	_	_
Temporary Construction and Staging Areas		•			
French Meadows Powerhouse Parapet Wall Construction Staging and Work Area	_	_	_	_	_
South Fork Long Canyon Diversion					
Modified Facilities					
			Bromus tectorum	cheatgrass	low
South Fork Long Canyon Diversion Dam Crest Gates	LC12	0.68 acres	Rumex acetosella	sheep sorrel	low
			Verbascum thapsus	woolly mullein	low
New Facilities					
South Fork Long Canyon Diversion Dam Crest Gates Generator Building	_	_	_	_	_
Temporary Construction and Staging Areas					
			Agrostis stolonifera	creeping bent grass	low
Courth Foods Lang Court Dispussion Dags Court Co.			Cirsium vulgare	bull thistle	low
South Fork Long Canyon Diversion Dam Crest Gates and Generator Building Construction Staging and Work Area	LC11	2 acres	Cirsium vulgare	bull thistle	low
Constate. Daniang Continuous of Claying and Work Allou			Melilotus albus	white sweet clover	moderate
			Verbascum thapsus	woolly mullein	low

¹This table includes only noxious weed polygons occurring at facilities listed on Table TERR 3-5. Noxious weed polygons within the potential inundation area around Hell Hole Reservoir are addressed in Tables TERR 3-9 and 3-11.

²Map identification number corresponds to map identification numbers shown on Maps TERR 3-3a through 3-3d.

³Acreage represents the area of the total polygon. Refer to Appendix E for detailed information on the size of each noxious weed population contained within the polygon.

⁴Infestation levels include: low (<5% cover); moderate (6–25% cover), and high (>25% cover).

Table TERR 3-10b. Noxious Weed Species at Facilities Associated with the French Meadows Powerhouse Capacity Upgrade Betterment.

Facility ¹	Map ID²	Area Covered ³	Scientific Name	Common Name	Infestation Level ⁴
French Meadows Reservoir	•				
Modified Facilities		I			
French Meadows - Hell Hole Tunnel Intake Trash Rack	_	_	_	_	_
Temporary Construction and Staging Areas					
French Meadows-Hell Hole Tunnel Intake Trash Rack Construction Staging Area	FM30	1.9 acres	Cirsium vulgare	bull thistle	low
French Meadows-Hell Hole Tunnel Intake Trash Rack Construction Work Area	FM29	3.7 acres	Cirsium vulgare Rumex acetosella Verbascum thapsus	bull thistle sheep sorrel woolly mullein	low moderate high
French Meadows - Hell Hole Tunnel Intake Trash Rack Construction Road	_	_	_	_	_
French Meadows Powerhouse					
Modified Facilities					
French Meadows Powerhouse Switchyard	_	_	_	_	_
New Facilities					
French Meadows Powerhouse	H20	2 acres	Bromus tectorum Cirsium vulgare Hirschfeldia incana Hypericum perforatum Melilotus officinalis Vulpia myuros	cheatgrass bull thistle shortpod mustard klamathweed yellow sweetclover rat-tail fescue	moderate moderate low high low low
French Meadows Powerhouse/Switchyard Construction Work Area	_	_		_	_
French Meadows Powerhouse/Switchyard Construction Staging Area	H28	8.9 acres	Bromus tectorum Verbascum thapsus	cheatgrass woolly mullein	low low
French Meadows Powerhouse Penstock Construction Work Area	_	_	_	_	_
French Meadows Powerhouse Penstock Construction Staging Areas	H21	4.7 acres	Bromus tectorum Cynosurus echinatus Vulpia myuros	cheatgrass hedgehog dogtailgrass rat-tail fescue	low low low
French Meadows - Hell Hole Tunnel Surge Shaft/Tank or Pipeline Construction Staging Areas	_	_	_	_	
French Meadows - Hell Hole Tunnel Surge Shaft/Tank Construction Work Area		_	_	_	_

Table TERR 3-10b. Noxious Weed Species at Facilities Associated with the French Meadows Powerhouse **Capacity Upgrade Betterment.**

Facility ¹	Map ID²	Area Covered ³	Scientific Name	Common Name	Infestation Level ⁴
French Meadows Powerhouse (continued)					
French Meadows - Hell Hole Tunnel Surge Pipeline Construction Work Area	_	_	_	_	_
French Meadows - Hell Hole Tunnel Surge Shaft or Pipeline Road Construction Staging and Work Area	_	_	_	_	_
Non-Project Facilities Modified During Construction					
Forest Road 14N09A	H24	5.4 acres	Bromus tectorum	cheatgrass	moderate
	H25	1.7 acres	Bromus tectorum	cheatgrass	moderate
Forest Road 14N09A Construction Staging and Work Area	_	_	_	-	_
Middle Fork Powerhouse					
Modified Facilities					
			Bromus diandrus	ripgut brome	low
			Bromus tectorum	cheatgrass	low
			Cirsium vulgare	bull thistle	low
			Hypericum perforatum	klamathweed	low
	I10	0.73 acres	Melilotus officinalis	yellow sweetclover	low
			Rubus discolor	Himalayan blackberry	high
			Torilis arvensis	spreading hedgeparsley	low
			Verbascum thapsus	woolly mullein	low
Middle Fork Powerhouse and Upper and Lower Switchyard			Vulpia myuros	rat-tail fescue	low
			Bromus diandrus	ripgut brome	low
			Bromus tectorum	cheatgrass	low
			Dactylis glomerata	orchardgrass	low
	I11	0.17 acres	Hypericum perforatum	klamathweed	low
		3.17 40100	Melilotus officinalis	yellow sweetclover	low
			Torilis arvensis	spreading hedgeparsley	low
			Verbascum thapsus	woolly mullein	low
			Vulpia myuros	rat-tail fescue	low

¹This table includes only noxious weed polygons occurring at facilities listed on Table TERR 3-5. Noxious weed polygons within the potential inundation area around Hell Hole Reservoir are addressed in Tables TERR 3-9 and 3-11.

²Map identification number corresponds to map identification numbers shown on Maps TERR 3-3a through 3-3d.

³Acreage represents the area of the total polygon. Refer to Appendix E for detailed information on the size of each noxious weed population contained within the polygon.

⁴Infestation levels include: low (<5% cover); moderate (6–25% cover), and high (>25% cover).

Table TERR 3-10c. Noxious Weed Species at Facilities Associated with the Ralston Powerhouse Capacity Upgrade Betterment.

		Area			Infestation
Facility ¹	Map ID ²	Covered ³	Scientific Name	Common Name	Level ⁴
RALSTON POWERHOUSE					
Modified Facilities					
			Cirsium arvense	Canada thistle	low
			Bromus diandrus	ripgut brome	low
			Chondrilla juncea	rush skeletonweed	low
	R09	0.84 acres	Hirschfeldia incana	shortpod mustard	low
			Melilotus officinalis	yellow sweetclover	low
			Rubus discolor	Himalayan blackberry	low
			Torilis arvensis	spreading hedgeparsley	low
			Vulpia myuros	rat-tail fescue	low
Ralston Powerhouse			Bromus diandrus	ripgut brome	high
			Carduus pycnocephalus	Italian thistle	high
			Centaurea melitensis	Malta starthistle (tocalote)	low
			Chondrilla juncea	rush skeletonweed	low
	R10	0.88 acres	Melilotus officinalis	yellow sweetclover	high
			Plantago lanceolata	English plantain	moderate
			Taeniatherum caput-		
			medusae	medusahead	moderate
			Verbascum thapsus	woolly mullein	low
Temporary Construction and Staging Areas					
			Bromus diandrus	ripgut brome	high
Paleton Powerhouse Construction Staging Area	R11	1 acre	Bromus tectorum	cheatgrass	moderate
Ralston Powerhouse Construction Staging Area	KII	i acie	Centaurea melitensis	Malta starthistle (tocalote)	moderate
			Hirschfeldia incana	shortpod mustard	moderate

¹This table includes only noxious weed polygons occurring at facilities listed on Table TERR 3-5. Noxious weed polygons within the potential inundation area around Hell Hole Reservoir are addressed in Tables TERR 3-9 and 3-11.

²Map identification number corresponds to map identification numbers shown on Maps TERR 3-3a through 3-3d.

³Acreage represents the area of the total polygon. Refer to Appendix E for detailed information on the size of each noxious weed population contained within the polygon.

⁴Infestation levels include: low (<5% cover); moderate (6–25% cover), and high (>25% cover).

Table TERR 3-11. Noxious Weed Polygons in the Study Area for Hell Hole Reservoir Associated with the Hell Hole Reservoir Seasonal Storage Increase Betterment.

Map Sq Ft Acres Specification Signification Signification Sq Ft Sq Ft			e.	f 6' gat	lation o	n instal	sl) with	feet m	E (4,636	ng WSE	peratin	ormal c	mum no		Area 2a Itial ne		l) to the	eet ms	(4,630 f	y WSE	erating	rmal op	um no	maxim	current	n the c	Fror		
H01 608 0.01					<u> </u>				•				esent	cies Pre	d Spec	us Wee	Noxio					•							
H01 608 0.01	ley	ley	medusae			ë				ਰ	a a				SS						ilote)	ılus					1 ²	Area	
H02		Torilis arvensis spreading hedgeparsley	Taeniatherum caput- medusahead	Rumex acetosella sheep sorrel	Rubus discolor Himalayan blackberr	Robinia pseudoacac black locust	<i>Plantago lanceolata</i> English plantain	Melilotus officinalis yellow sweetclover	Melilotus albus white sweet clover	Lepidium latifolium perennial pepperwee				Cytisus scoparius Scotch broom	Cynosurus echinatus hedgehog dogtailgra	<i>Cynodon dactylon</i> Bermuda grass	Cirsium vulgare bull thistle	Cirsium arvense Canada thistle	Chondrilla juncea rush skeletonweed	Centaurea solstitialis yellow starthistle	Centaurea melitensis Malta starthistle (toca	Carduus pycnocephe Italian thistle		Bromus diandrus ripgut brome	Ailanthus altissima tree-of-heaven	Agrostis stolonifer creeping bent grass	Acres		Map ID ¹
H03	X											Χ			Х														
H09													Х																
H18	X																												
H20	X		X	X	,——		Χ					Х	Χ				X							Х					
H27					,——																								
H28 53,232 1.22 X Image: square squar					,——			Χ			Х	Х					X												
H29				X																								•	
H30 36,510 0.84	X																												
H31 12,968 0.30)																												
H32	X >										Х						X												
H33 19,534 0.45 X X X H34 4,111 0.09 X																												·	
H34 4,111 0.09 X																							X						
H35 4,460 0.10 X	X										Х																	·	
H36 626 0.01 X Image: Control of the control of th)																											·	
H37 6,202 0.14 X X H38 8,136 0.19 X X H40 4,072 0.09 X X H41 1,699 0.04 X X	X														X		X							Х		Х			
H38 8,136 0.19 X X H40 4,072 0.09 X H41 1,699 0.04 X)																												
H40 4,072 0.09 X H41 1,699 0.04 X	X																												
H41 1,699 0.04 X	,																									Х			
																							X						
H42 160 0.00)																V									V			
H43 8,027 0.18 X X	X																<u>^</u>						- V		-	Χ			
H44 812 0.02 X																													
H45 5 0.00 V))																												
H46 29,697 0.68 X	X																												
H47 15,210 0.35 X																	-						X		-				
H48 16,211 0.37 H49 63,291 1.45																	-								-			·	

Table TERR 3-11. Noxious Weed Polygons in the Study Area for Hell Hole Reservoir Associated with the Hell Hole Reservoir Seasonal Storage Increase Betterment.

		Fror	n the c	urrent	maxim	um noi	rmal op	eratinç	y WSE ((4,630 f	eet ms	l) to the	e poten	a (conti tial nev	v maxii		ormal o	peratir	ng WSE	E (4,636	feet m	ısl) with	n instal	lation (of 6' ga	te.			
Map ID ¹	Area Sq Ft	Acres	Agrostis stolonifer creeping bent grass	Ailanthus altissima tree-of-heaven	Bromus diandrus ripgut brome	Bromus tectorum cheatgrass	Carduus pycnocephalus Italian thistle	Centaurea melitensis Malta starthistle (tocalote)	Centaurea solstitialis yellow starthistle	Chondrilla juncea rush skeletonweed	Cirsium arvense Canada thistle	<i>Cirsium vulgare</i> bull thistle	<i>Cynodon dactylon</i> Bermuda grass	Cynosurus echinatus hedgehog dogtailgrass	Cytisus scoparius Scotch broom	Dactylis glomerata orchardgrass	Hirschfeldia incana shortpod mustard	Hypericum perforatum klamathweed	<i>Lepidium latifolium</i> perennial pepperweed	Melilotus albus white sweet clover	Melilotus officinalis yellow sweetclover	Plantago lanceolata English plantain	Robinia pseudoacacia black locust	Rubus discolor Himalayan blackberry	Rumex acetosella sheep sorrel	Taeniatherum caput-medusae medusahead	Torilis arvensis spreading hedgeparsley	Verbascum thapsus woolly mullein	Vulpia myuros rat-tail fescue
H50	14,970	0.34																											
H51	23,775	0.55																										<u> </u>	X
H52	73,247	1.68	Х																									Х	
H54	1,351	0.03	X			X																						<u> </u>	X
H55	9,224	0.21																										Χ	
Total:	443,963	10.19		•															•	•			•						

¹Refer to Map TERR 3-3a through 3-3c for the location of each polygon within the study area. ²Includes only the portion of the polygon that falls between the specified elevations.

H49

81,169

1.86

Table TERR 3-11. Noxious Weed Polygons in the Study Area for Hell Hole Reservoir Associated with the Hell Hole Reservoir Seasonal Storage Increase Betterment.

Area 2b From the new potential maximum normal operating WSE (4,636 feet msl) with installation of 6' gate to the new potential maximum normal operating WSE (4,640 feet msl) with installation of 10' gate. **Noxious Weed Species Present** *Centaurea melitensis* Malta starthistle (tocalote) *Torilis arvensis* spreading hedgeparsley Area 2 *Carduus pycnocephalus* Italian thistle *Cynosurus echinatus* hedgehog dogtailgrass *Lepidium latifolium* perennial pepperweed *Rubus discolor* Himalayan blackberry *Hypericum perforatum* klamathweed Verbascum thapsus woolly mullein *Plantago lanceolata* English plantain Ailanthus altissima tree-of-heaven Dactylis glomerata orchardgrass Melilotus officinalis yellow sweetclover Agrostis stolonifer creeping bent grass *Cynodon dactylon* Bermuda grass Rumex acetosella sheep sorrel *Chondrilla juncea* rush skeletonweed *Hirschfeldia incana* shortpod mustard Bromus tectorum cheatgrass *Melilotus albus* white sweet clover Bromus diandrus ripgut brome Cirsium arvense Canada thistle Cirsium vulgare bull thistle Vulpia myuros rat-tail fescue Taeniatherum or medusahead Map Sq Ft **Acres** H01 630 0.01 H02 1,725 Χ Χ Χ Χ 0.04 Χ Χ H03 17,911 0.41 Χ Χ Χ H09 2,514 Χ Χ Χ Χ Χ Χ Χ Χ Χ Χ 0.06 Χ Χ H18 4,458 0.10 Χ H20 4,748 Χ Χ Χ Χ Χ Χ 0.11 H27 34,267 0.79 Χ Χ H28 22,676 Χ Χ 0.52 H29 11,833 Χ Χ 0.27 H30 Χ Χ Χ Χ 2,026 0.05 H31 32,998 Χ 0.76 H32 Χ Χ 18,705 0.43 H33 6,602 Χ 0.15 Χ Χ H34 6,773 Χ Χ 0.16 Χ Χ H35 3,882 Χ Χ Χ Χ Χ 0.09 H36 4,543 Χ Х 0.10 Χ Χ H37 10,933 0.25 Χ H38 2,726 Χ Χ Χ 0.06 Χ H39 679 0.02 Χ H40 Χ Χ 2,760 0.06 H41 Χ Χ 18,139 0.42 H42 2,575 Χ 0.06 H43 5,626 Χ Χ Χ 0.13 H44 13,447 Χ Χ 0.31 Χ H46 15,424 Χ Χ 0.35 H47 14,952 Χ Χ 0.34 Χ H48 19,640 0.45

Table TERR 3-11. Noxious Weed Polygons in the Study Area for Hell Hole Reservoir Associated with the Hell Hole Reservoir Seasonal Storage Increase Betterment.

Fr	Area 2b (continued) From the new potential maximum normal operating WSE (4,636 feet msl) with installation of 6' gate to the new potential maximum normal operating WSE (4,640 feet msl) with installation of 10' gate.																												
	Noxious Weed Species Present																												
Map ID ¹	Area Sq Ft	1 ² Acres	Agrostis stolonifer creeping bent grass	Ailanthus altissima tree-of-heaven	<i>Bromus diandrus</i> ripgut brome	Bromus tectorum cheatgrass	Carduus pycnocephalus Italian thistle	<i>Centaurea melitensis</i> Malta starthistle (tocalote)	Centaurea solstitialis yellow starthistle	<i>Chondrilla juncea</i> rush skeletonweed	Cirsium arvense Canada thistle	Cirsium vulgare bull thistle	<i>Cynodon dactylon</i> Bermuda grass	Cynosurus echinatus hedgehog dogtailgrass	Cytisus scoparius Scotch broom	Dactylis glomerata orchardgrass	Hirschfeldia incana shortpod mustard	<i>Hypericum perforatum</i> klamathweed	Lepidium latifolium perennial pepperweed	<i>Melilotus albus</i> white sweet clover	Melilotus officinalis yellow sweetclover	Plantago lanceolata English plantain	Robinia pseudoacacia black locust	<i>Rubus discolor</i> Himalayan blackberry	Rumex acetosella sheep sorrel	<i>Taeniatherum caput-medusae</i> medusahead	Torilis arvensis spreading hedgeparsley	Verbascum thapsus woolly mullein	Vulpia myuros rat-tail fescue
H50	18,872	0.43																											
H51	44,183	1.01																											X
H52	25,138	0.58	Χ																									X	
H53	681	0.02				Х																							X
H54	1	0.00	Х			Х																							X
H55	6,260	0.14																										X	
Total:	459,498	10.55																											

¹Refer to Map TERR 3-3a through 3-3c for the location of each polygon within the study area. ²Includes only the portion of the polygon that falls between the specified elevations.

Table TERR 3-12. Location of Noxious Weed Species at Quantitative Geomorphic and Riparian Sampling Sites.

Map ID ¹	Reach Location (river mile)	Transect Number	Area Covered ²	Scientific Name	Common Name	Infestation Level
Middle Fork American Riv	er					
				Agrostis stolonifera	creeping bent grass	low
		1	0.06 acres	Cirsium vulgare	bull thistle	low
MF-10	44.7			Cirsium vulgare	bull thistle	low
		2	0.02 acres	Agrostis stolonifera	creeping bent grass	low
		2	0.02 acres	Rumex acetosella	sheep sorrel	low
MF-9	36.2	_	_	_	_	_
		1	0.06 acres	Bromus diandrus	ripgut brome	low
MF-7	29.4	2	0.10 acres	Chondrilla juncea	rush skeletonweed	medium
IVIT-7	29.4	2	0.10 acres	Cynosurus echinatus	hedgehog dogtailgras	low
		3	0.05 acres	Bromus diandrus	ripgut brome	low
		1	0.07 acres	Bromus diandrus	ripgut brome	low
MF-6	28.6	2	0.09 acres	Bromus diandrus	ripgut brome	low
		3	0.05 acres	Bromus diandrus	ripgut brome	low
MF-4	26.2	2	0.04 acres	Rumex acetosella	sheep sorrel	low
			0.07 acres	Bromus diandrus	ripgut brome	low
		1		Chondrilla juncea	rush skeletonweed	low
		'	0.07 acres	Plantago lanceolata	English plantain	low
				Rubus discolor	Himalayan blackberry	high
				Chondrilla juncea	rush skeletonweed	low
		2	0.10 acres	Cynodon dactylodon	bull thistle	low
MF-3	16.95	2	0.10 acres	Rubus discolor	Himalayan blackberry	medium
				Verbascum thapsus	woolly mullein	low
				Bromus diandrus	ripgut brome	low
				Chondrilla juncea	rush skeletonweed	low
		3	0.18 acres	Cynosurus echinatus	hedgehog dogtailgras	low
				Plantago lanceolata	English plantain	low
				Rubus discolor	Himalayan blackberry	low

Table TERR 3-12. Location of Noxious Weed Species at Quantitative Geomorphic and Riparian Sampling Sites (continued).

Map ID ¹	Reach Location (river mile)	Transect Number	Area Covered ²	Scientific Name	Common Name	Infestation Level
Middle Fork American Riv	ver (continued)	'				•
		1	0.15 acres	Rubus discolor	Himalayan blackberry	low
				Chondrilla juncea	rush skeletonweed	low
MF-2	10.4	2	0.02 acres	Cytisus scoparius	Scotch broom	low
				Melilotus officinalis	yellow sweetclover	low
		3	0.03 acres	Rubus discolor	Himalayan blackberry	low
				Bromus diandrus	ripgut brome	low
				Chondrilla juncea	rush skeletonweed	low
		1	0.18 acres	Cytisus scoparius	Scotch broom	low
				Hirschfeldia incana	shortpod mustard	low
				Rubus discolor	Himalayan blackberry	low
			2 0.24 acres Bromus diandrus Centaurea solstitialisa. Chondrilla juncea Cynodon dactylodon Hirschfeldia incana Rubus discolor	Bromus diandrus	ripgut brome	low
				Centaurea solstitialisalis	yellow starthistle	low
		2		Chondrilla juncea	rush skeletonweed	low
MF-1	4.8			Cynodon dactylodon	bull thistle	low
1011 - 1	4.0			Hirschfeldia incana	shortpod mustard	low
				Rubus discolor	Himalayan blackberry	low
				Centaurea solstitialis	ripgut brome	low
				Centaurea solstitialis	yellow starthistle	low
				Chondrilla juncea	rush skeletonweed	low
		3	0.48 acres	Cytisus scoparius	Scotch broom	low
				Dactylus glomerata	orchardgrass	low
				Hirschfeldia incana	shortpod mustard	low
				Rubus discolor	Himalayan blackberry	low
Rubicon River						
R-16	28.1	_	_	_	_	_
R-15	25.7	2	0.07 acres	Chondrilla juncea	rush skeletonweed	low
11-13	23.1	_	0.07 acies	Rubus discolor	Himalayan blackberry	low

Table TERR 3-12. Location of Noxious Weed Species at Quantitative Geomorphic and Riparian Sampling Sites (continued).

Map ID¹	Reach Location (river mile)	Transect Number	Area Covered ²	Scientific Name	Common Name	Infestation Level
Rubicon River (continued)				1	
R-13	20.9	2	0.06 acres	Hirschfeldia incana	shortpod mustard	low
		1	0.02 acres	Hirschfeldia incana	shortpod mustard	low
R-12	19.5	'	0.02 acres	Rubus discolor	Himalayan blackberry	low
		2	0.06 acres	Hirschfeldia incana	shortpod mustard	low
				Bromus diandrus	ripgut brome	low
		2	0.12 acres	Chondrilla juncea	rush skeletonweed	low
R-10	44.0		0.12 acres	Rumex acetosella	sheep sorrel	low
R-10	14.3			Vulpia myuros	rat-tail fescue	low
		3	0.06 acres	Chondrilla juncea	rush skeletonweed	low
		3	0.06 acres	Verbascum thapsus	woolly mullein	low
				Cynodon dactylodon	bull thistle	low
R-5	3.8	2	0.08 acres	Cynosurus echinatus	hedgehog dogtailgras	low
				Melilotus officinalis	yellow sweetclover	low
		2	0.07 acres	Rubus discolor	Himalayan blackberry	low
R-4	3.5		0.07 acres	Verbascum thapsus	woolly mullein	low
		3	0.08 acres	Rubus discolor	Himalayan blackberry	low
		1	0.07.0000	Chondrilla juncea	rush skeletonweed	low
R-3	2.6	1	0.07 acres	Verbascum thapsus	woolly mullein	low
		2	0.07 acres	Rubus discolor	Himalayan blackberry	low
D 0	4.0	0	0.00	Bromus diandrus	ripgut brome	low
R-2	1.2	2	0.08 acres	Hirschfeldia incana	shortpod mustard	low
R-1	0.7	1	0.12 acres	Rubus discolor	Himalayan blackberry	low
Duncan Creek						
D-3	8.3	_	_	_	_	_
D-2	6.3	_	_	_	_	_
D-1	4.6	_	_	_	_	_

Table TERR 3-12. Location of Noxious Weed Species at Quantitative Geomorphic and Riparian Sampling Sites (continued).

Map ID ¹	Reach Location (river mile)	Transect Number	Area Covered ²	Scientific Name	Common Name	Infestation Level
Long Creek Canyon						
LC-2	9	_	_	_	_	_
LC-1	0	_	_	_	_	_
		1	0.03 acres	Rumex acetosella	sheep sorrel	low
		2	0.02 acres	Rumex acetosella	sheep sorrel	low
SFLC-1	2.3			Cirsium vulgare	bull thistle	low
		3	0.03 acres	Rubus discolor	Himalayan blackberry	low
				Rumex acetosella	sheep sorrel	low
NFLC-1	1.9	1	0.03 acres	Cirsium vulgare	bull thistle	low

¹Map identification number corresponds to map identification numbers shown on Maps TERR 3-2a through 3-2e. ²Acerage represents the area of the total polygon. Refer to Appendix F for detailed information on the size of each noxious weed population contained within the polygon.

FIGURES

Figure TERR 3-1. Study Objectives and Related Study Elements and Reports.

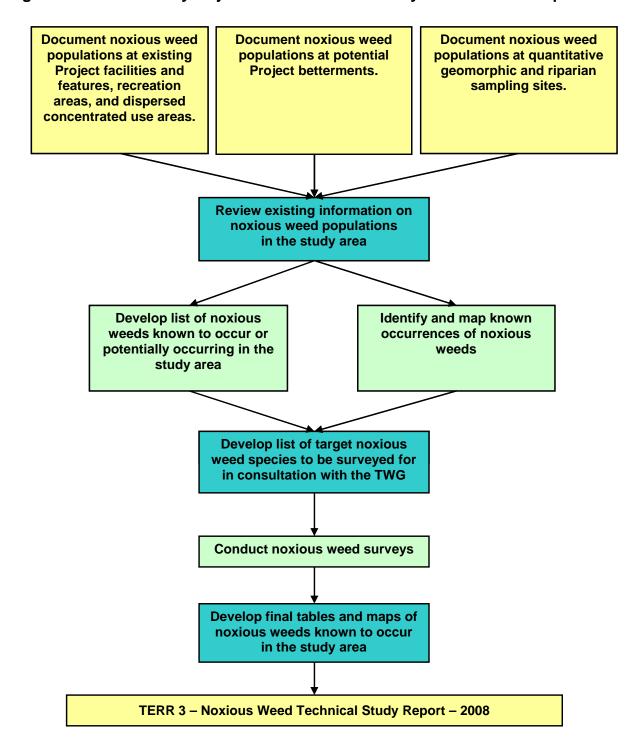
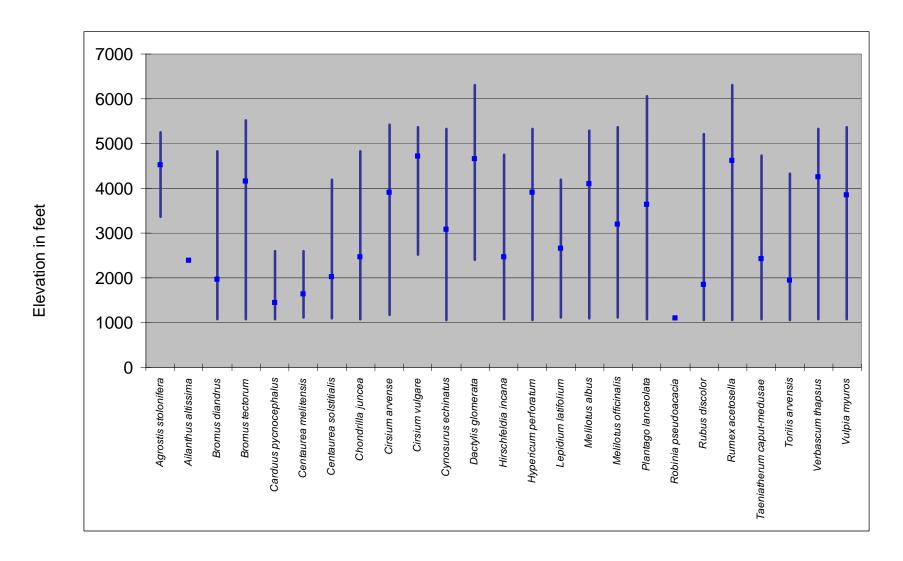
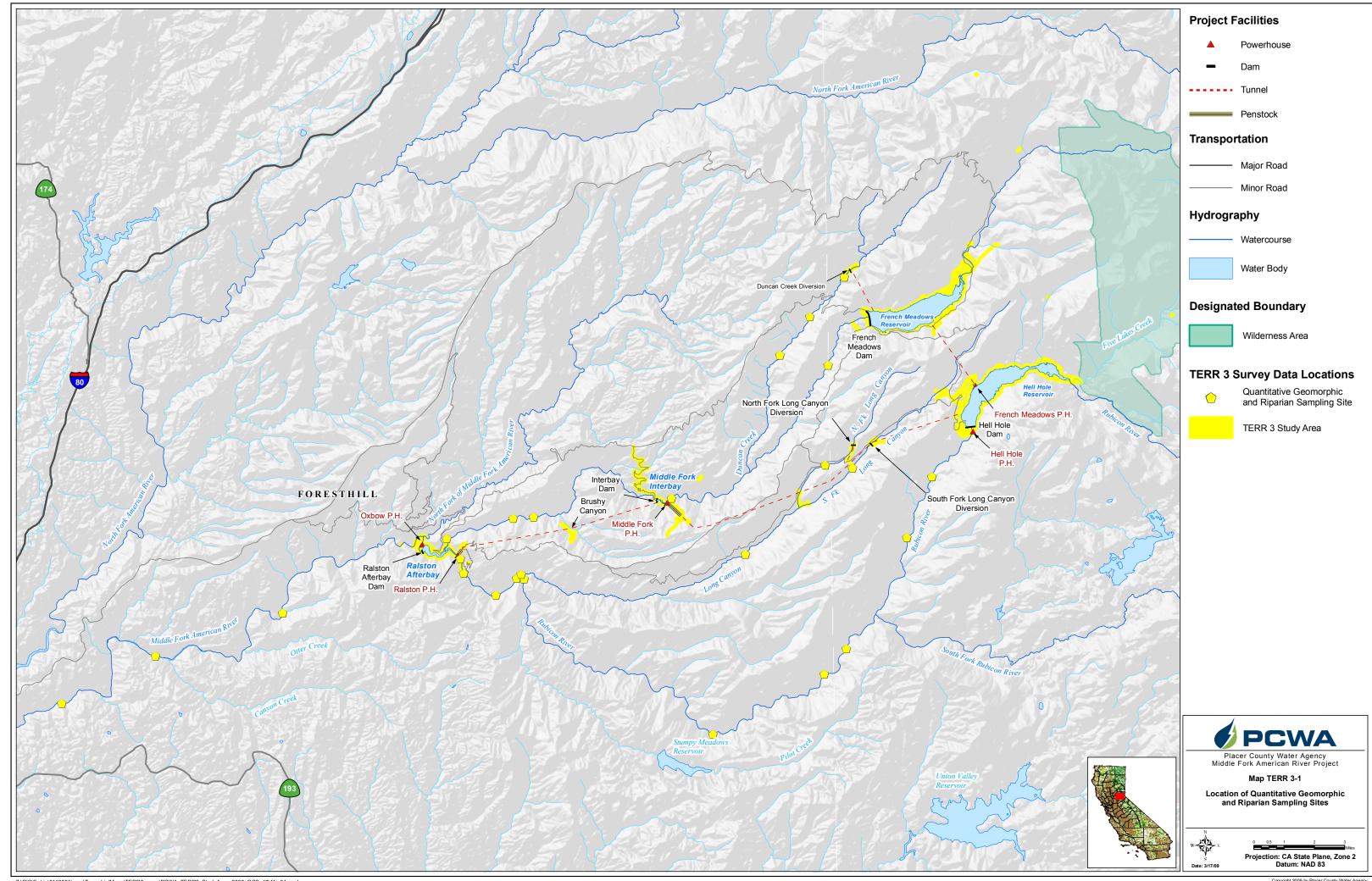
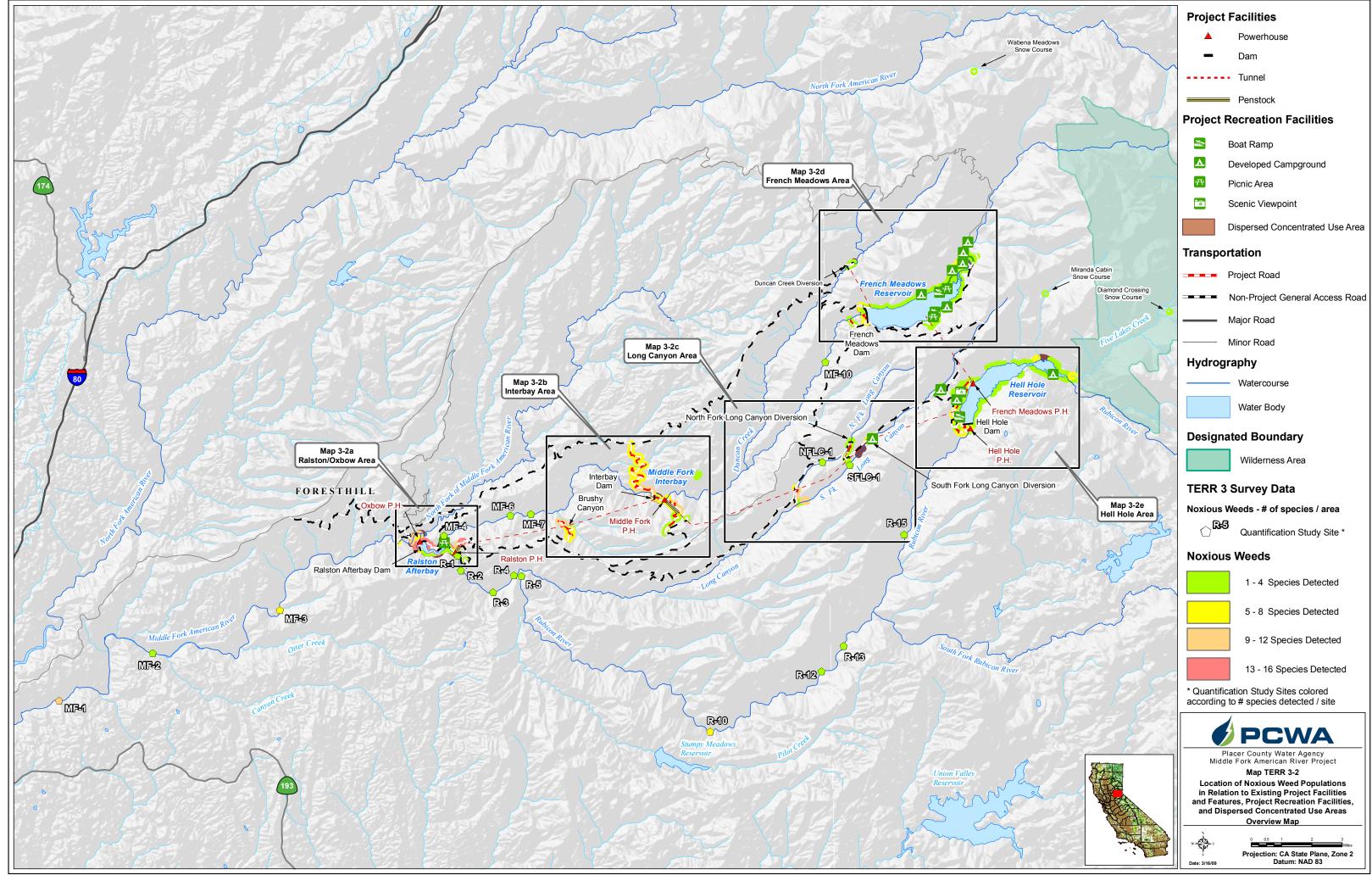


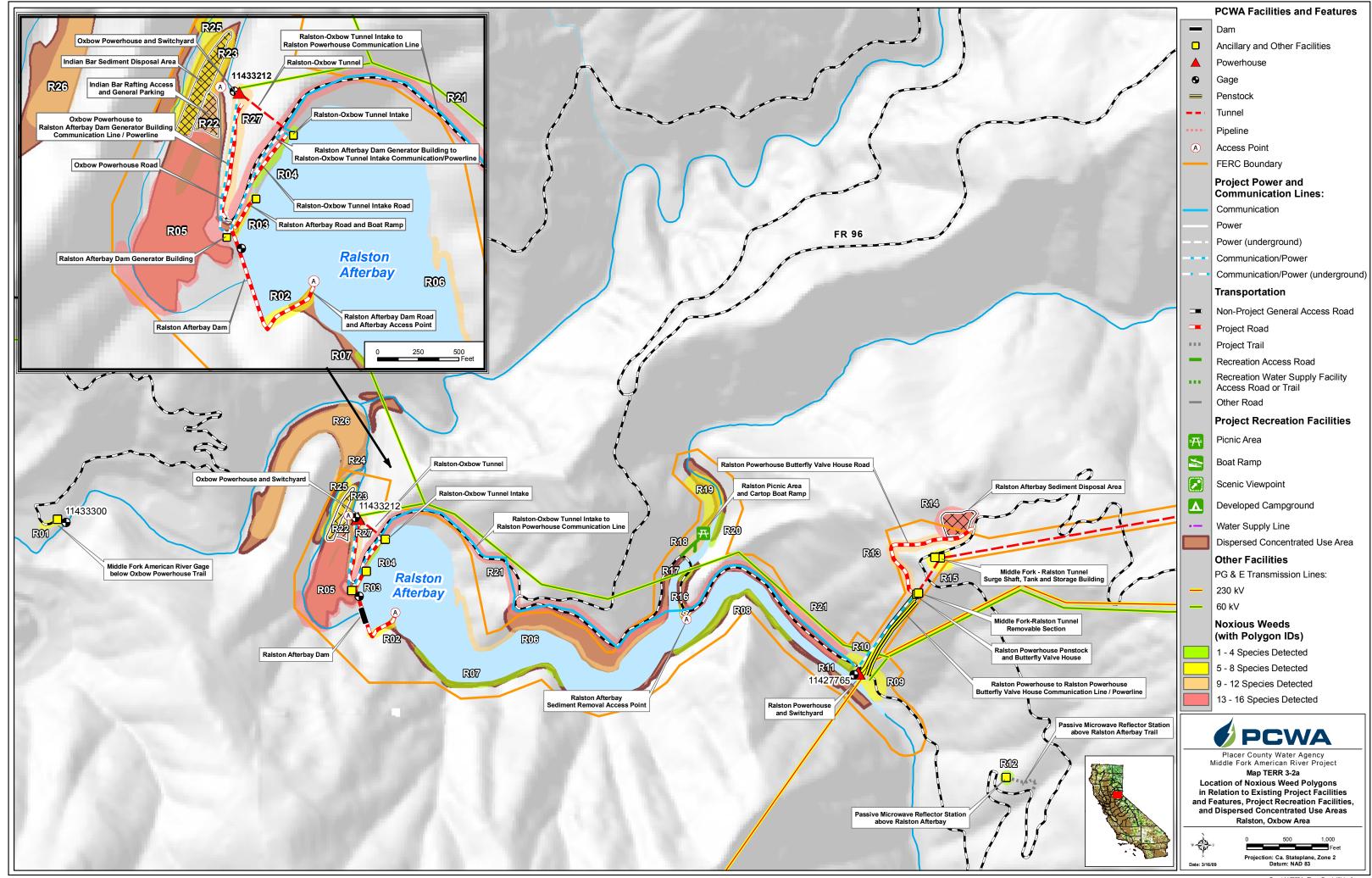
Figure TERR 3-4. Elevational Distribution of Noxious Weed Species in the TERR 3 Study Area.

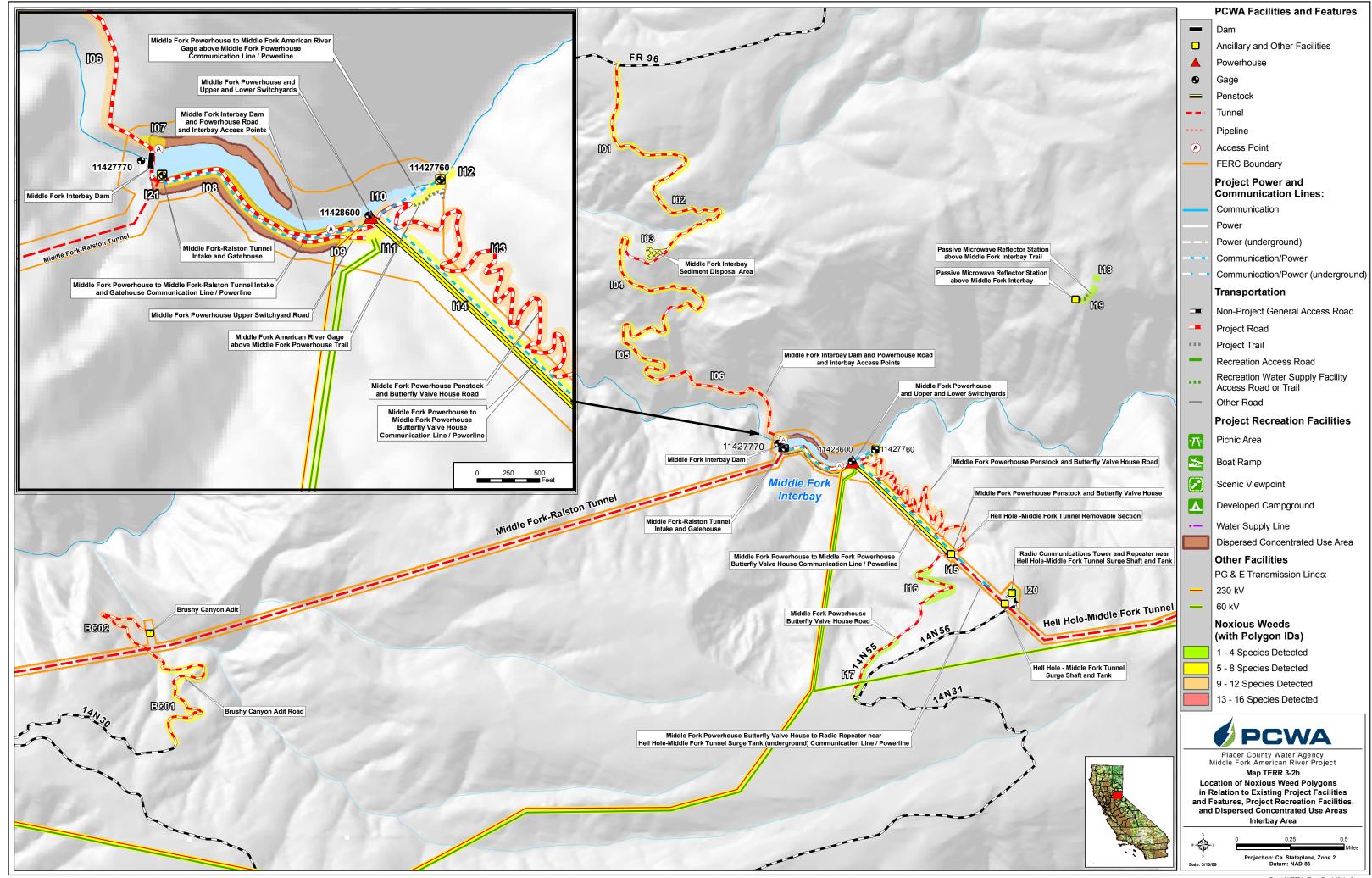


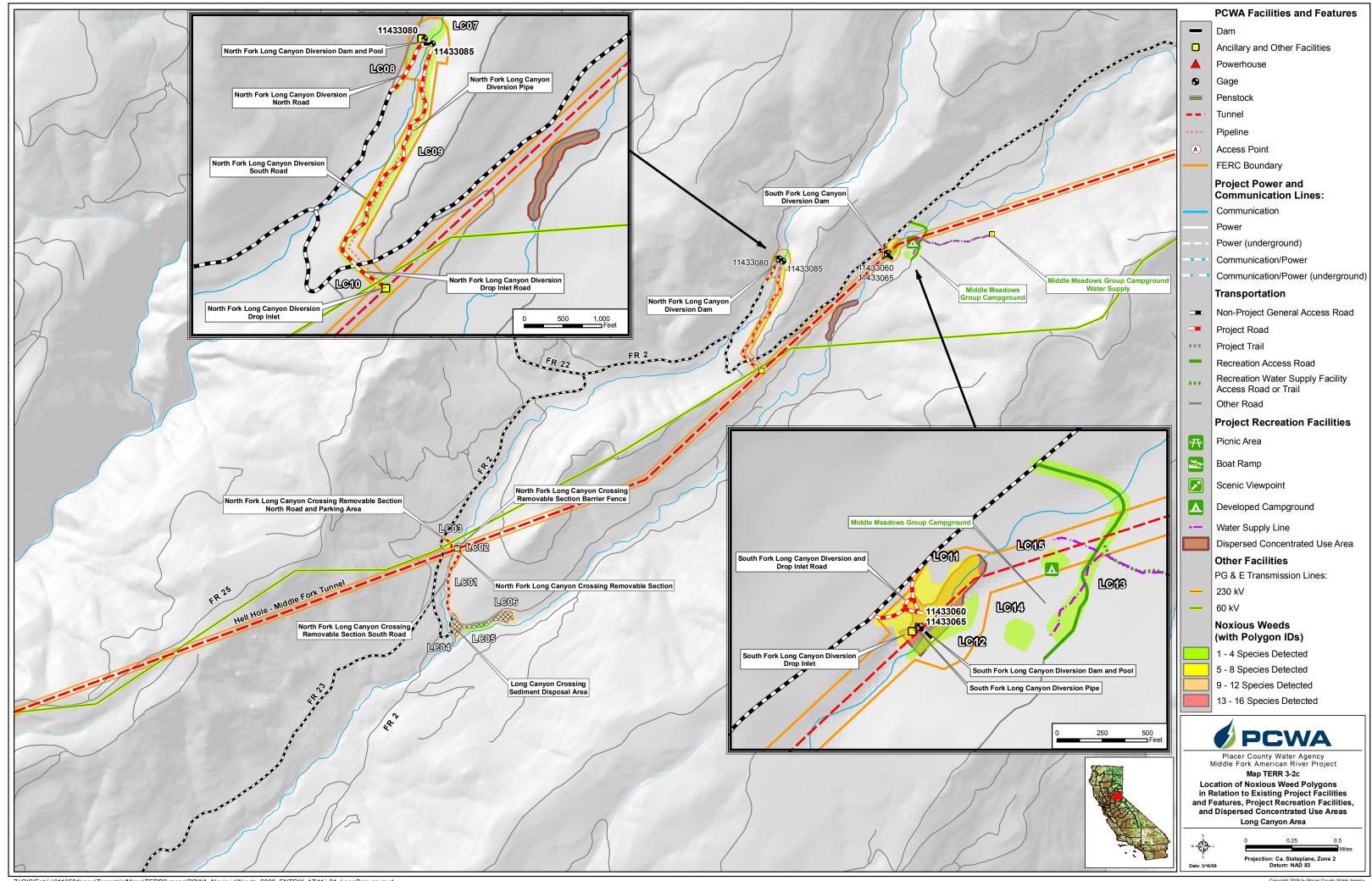
MAPS

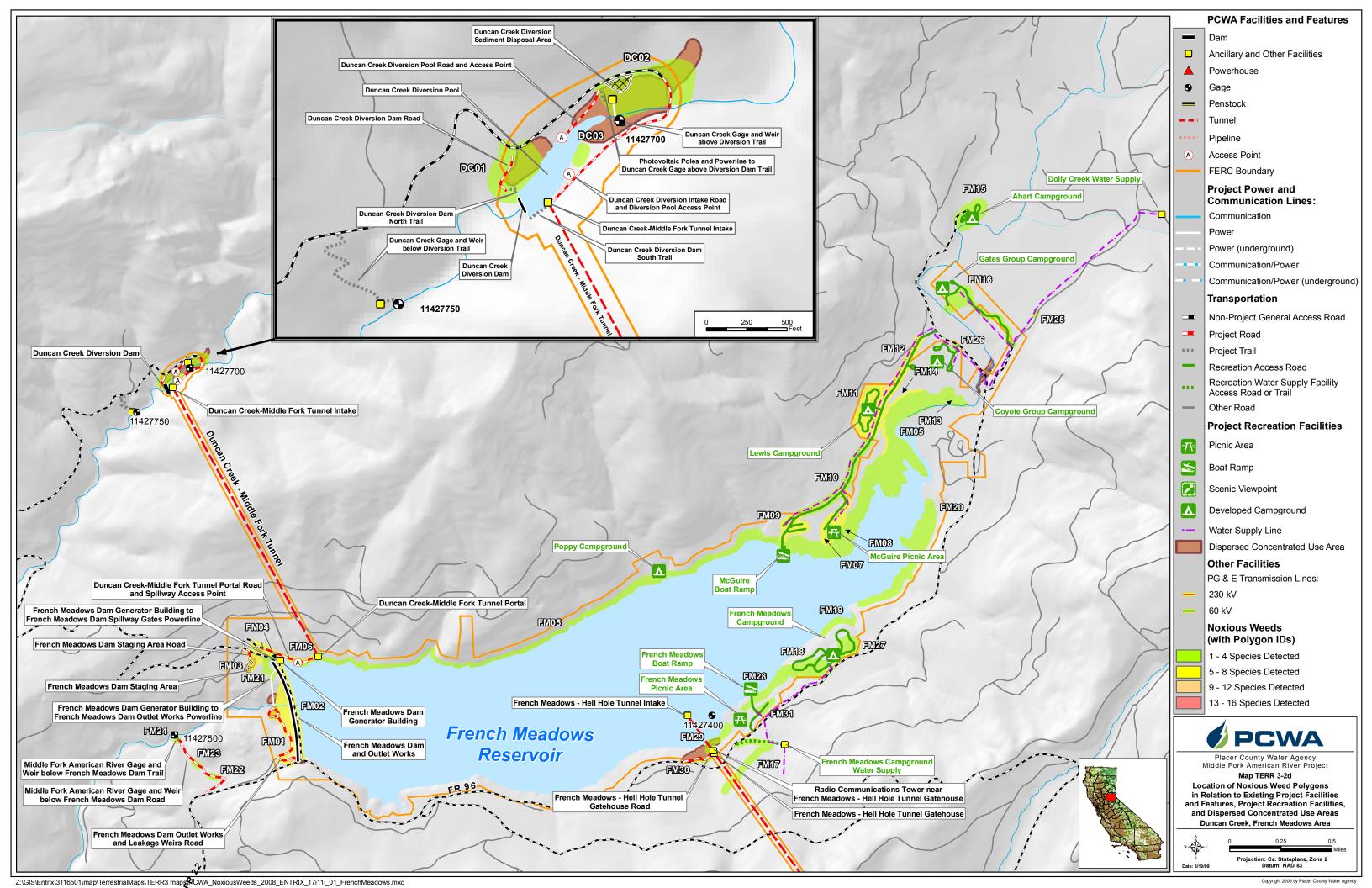


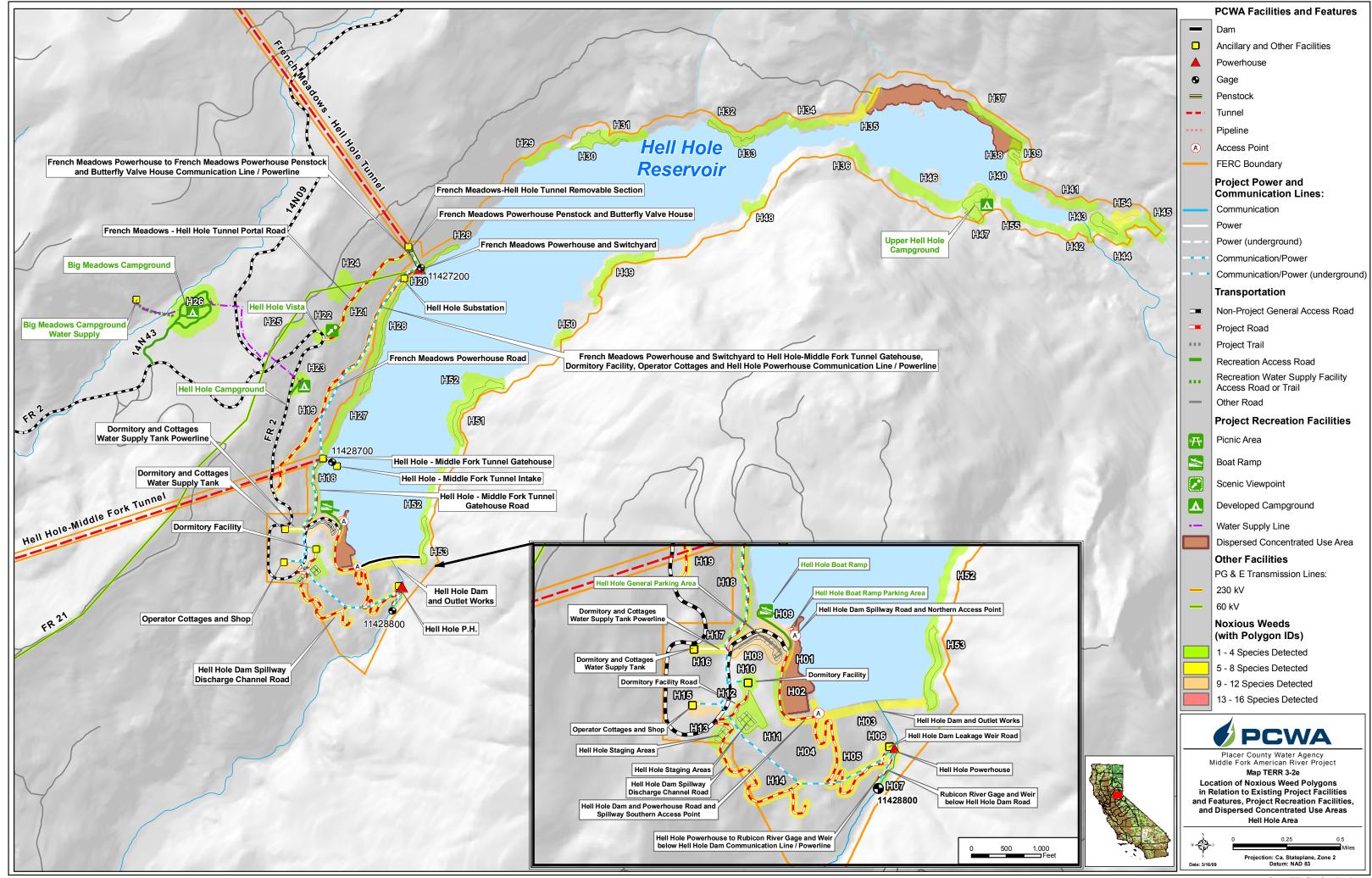


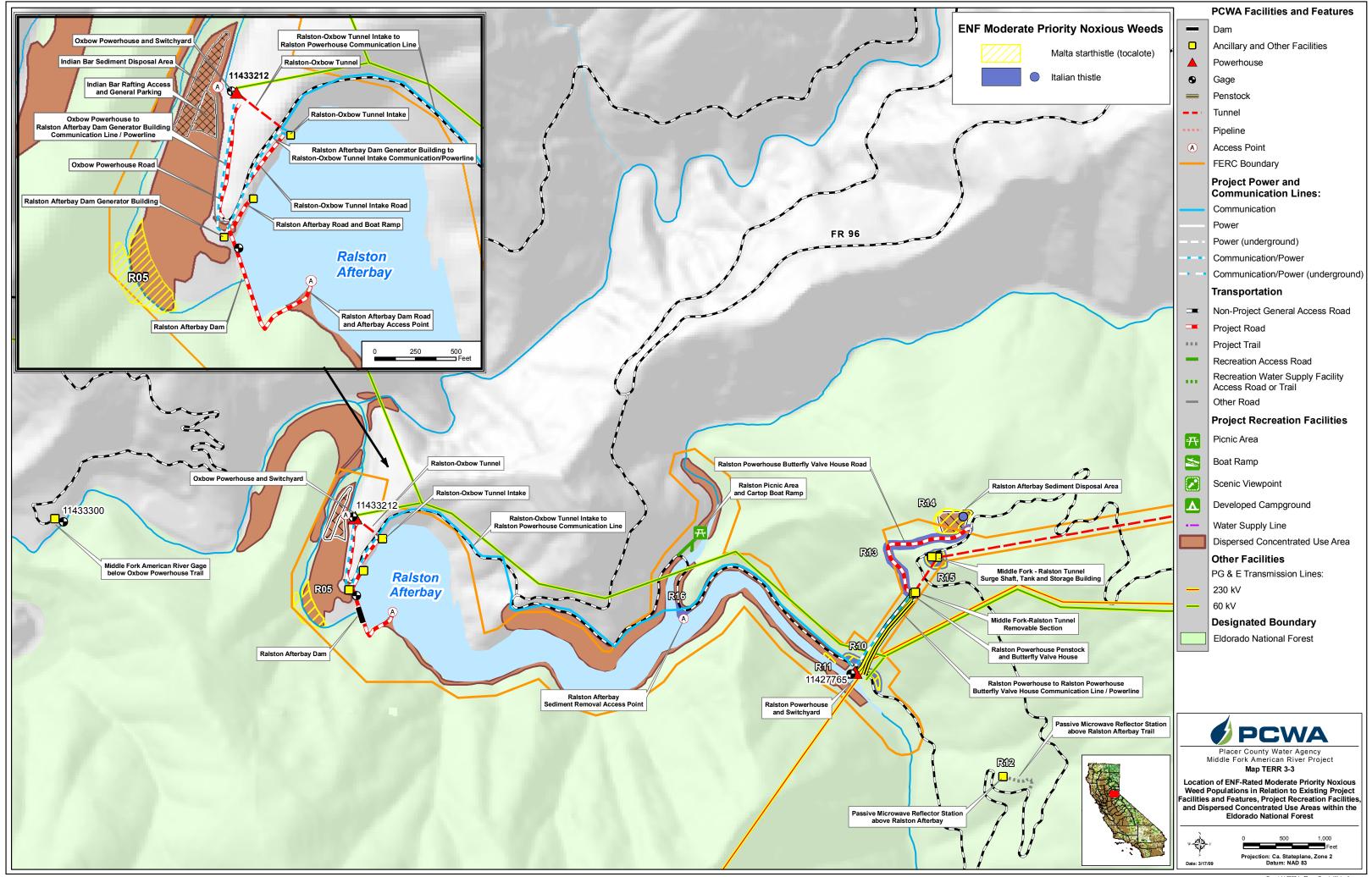


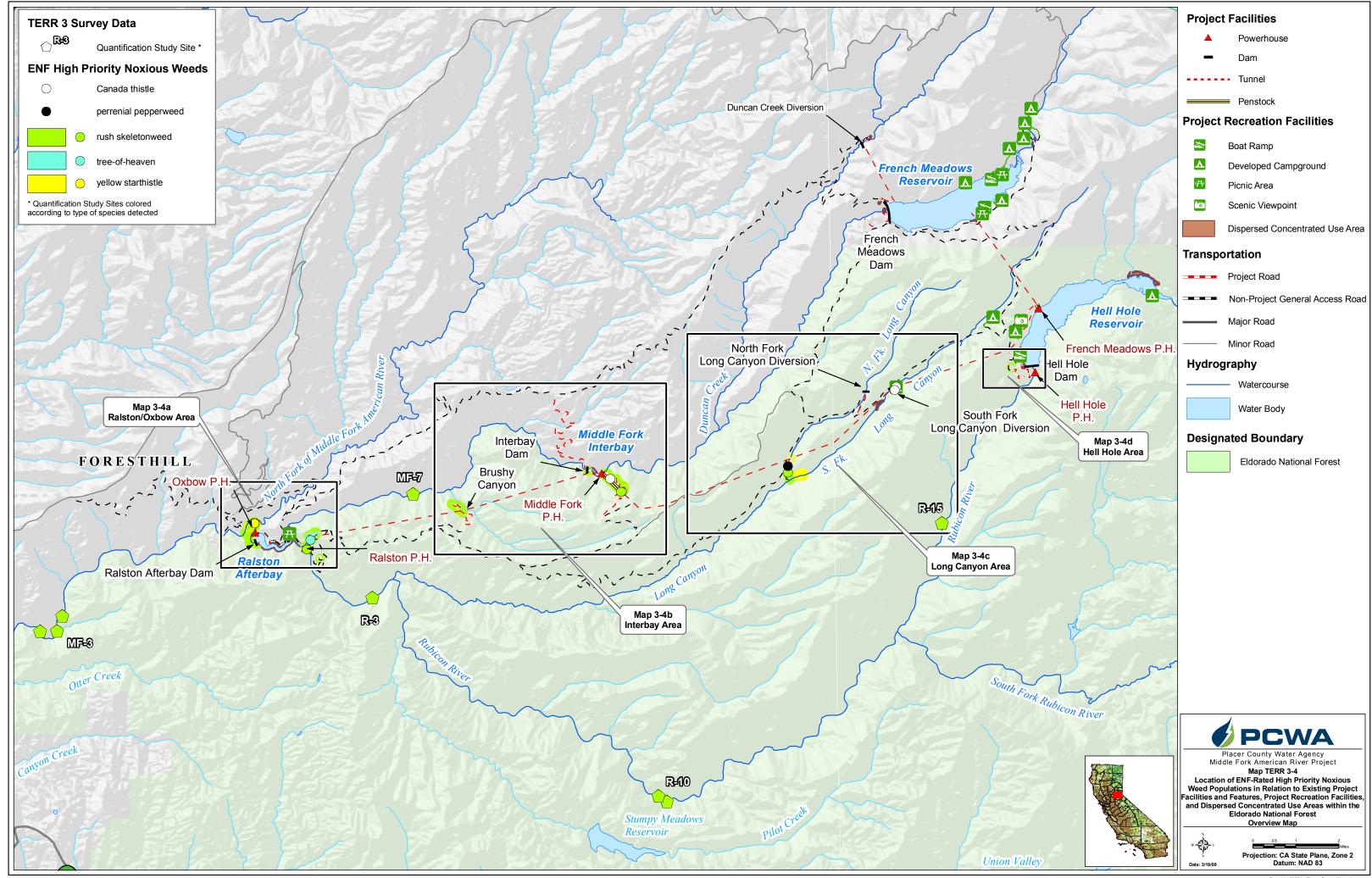


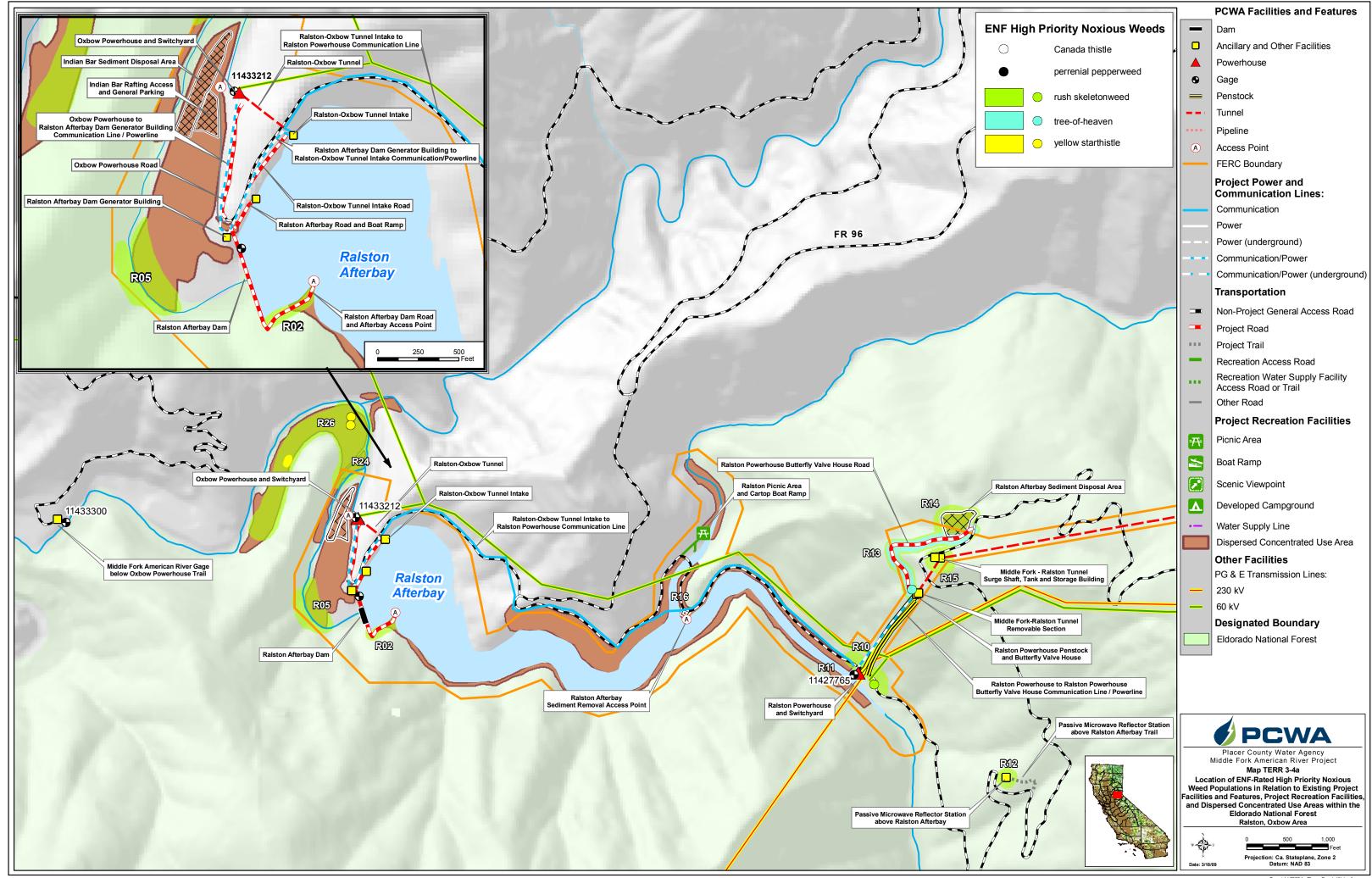


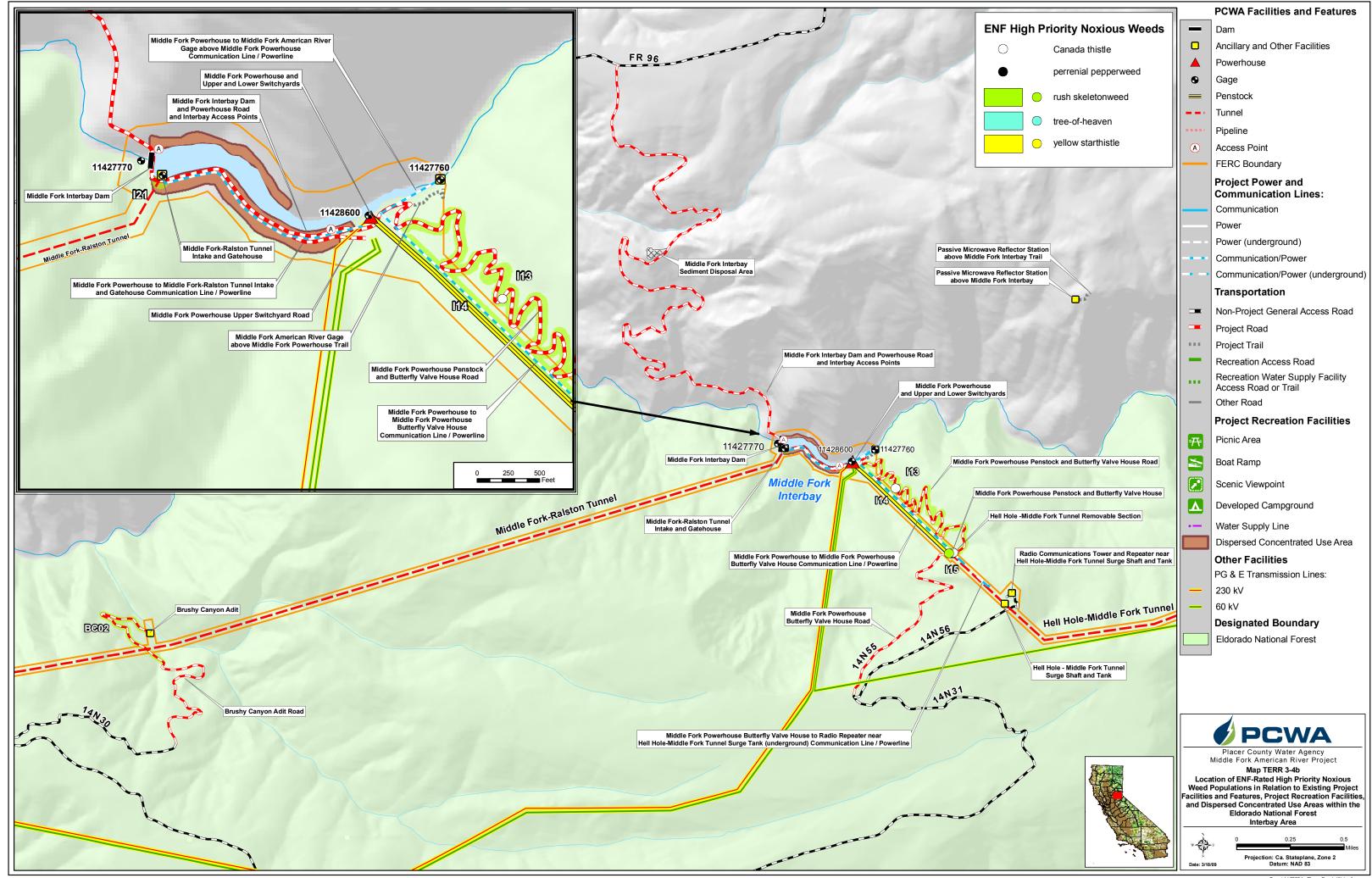


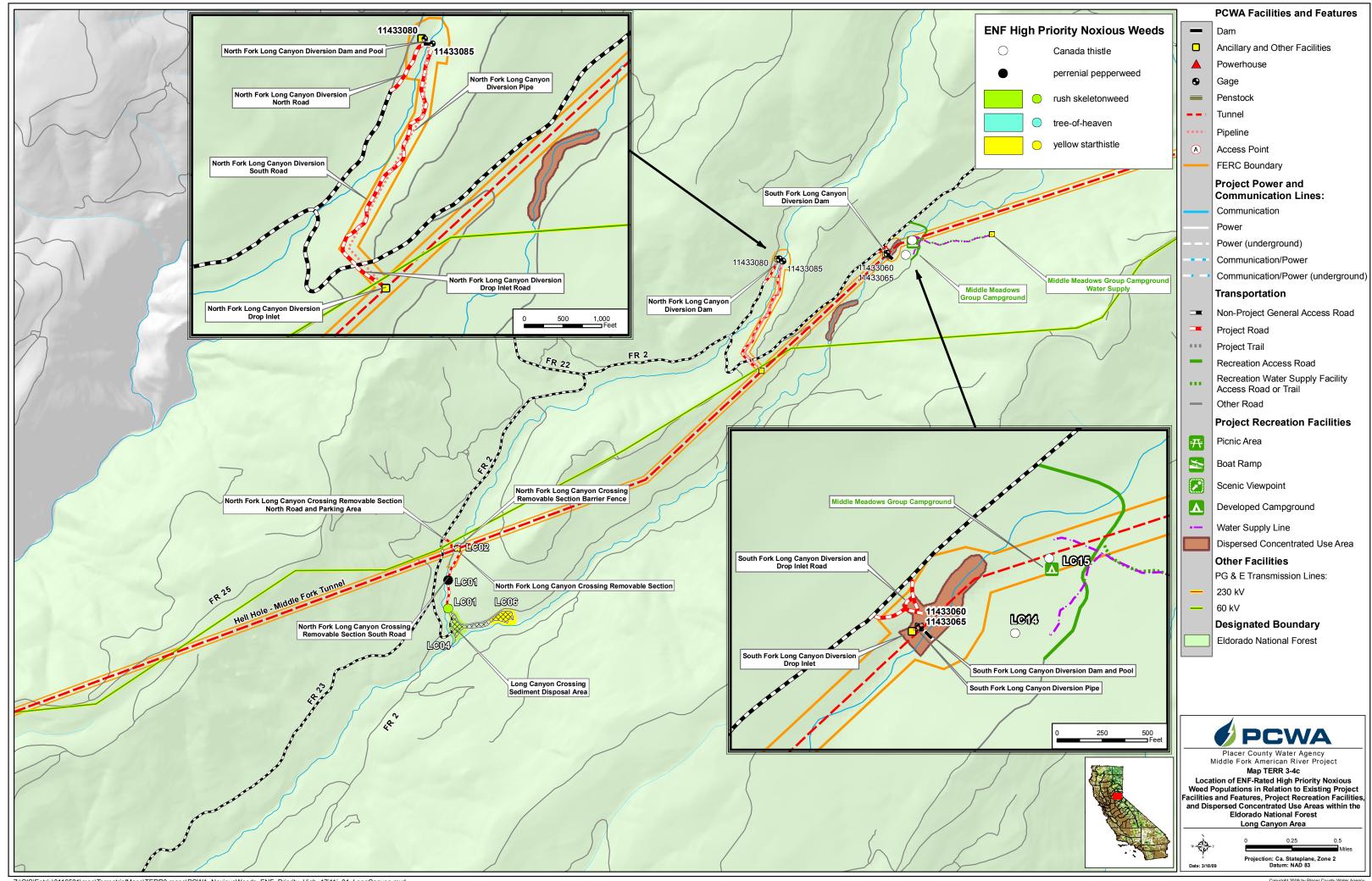


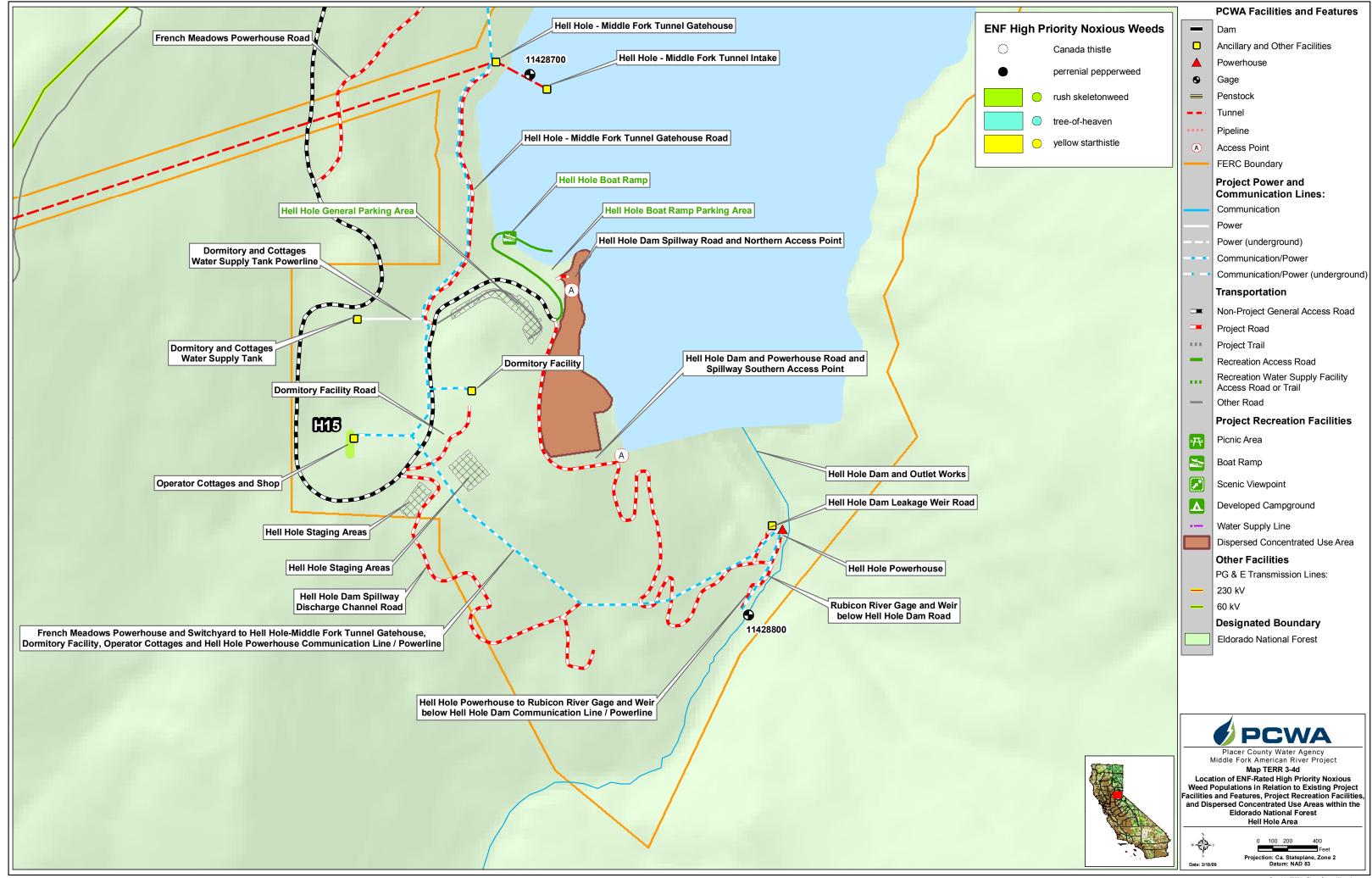


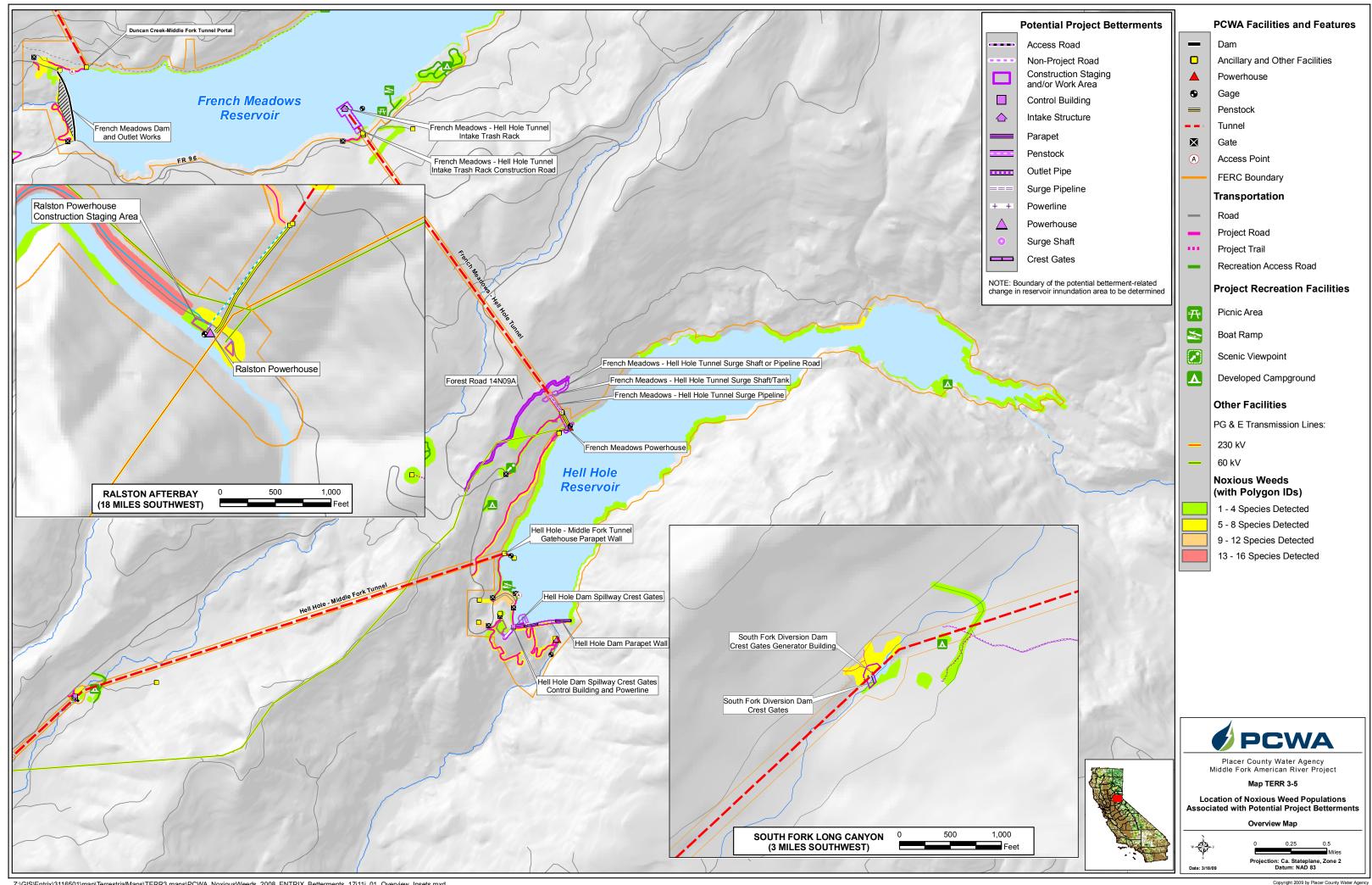


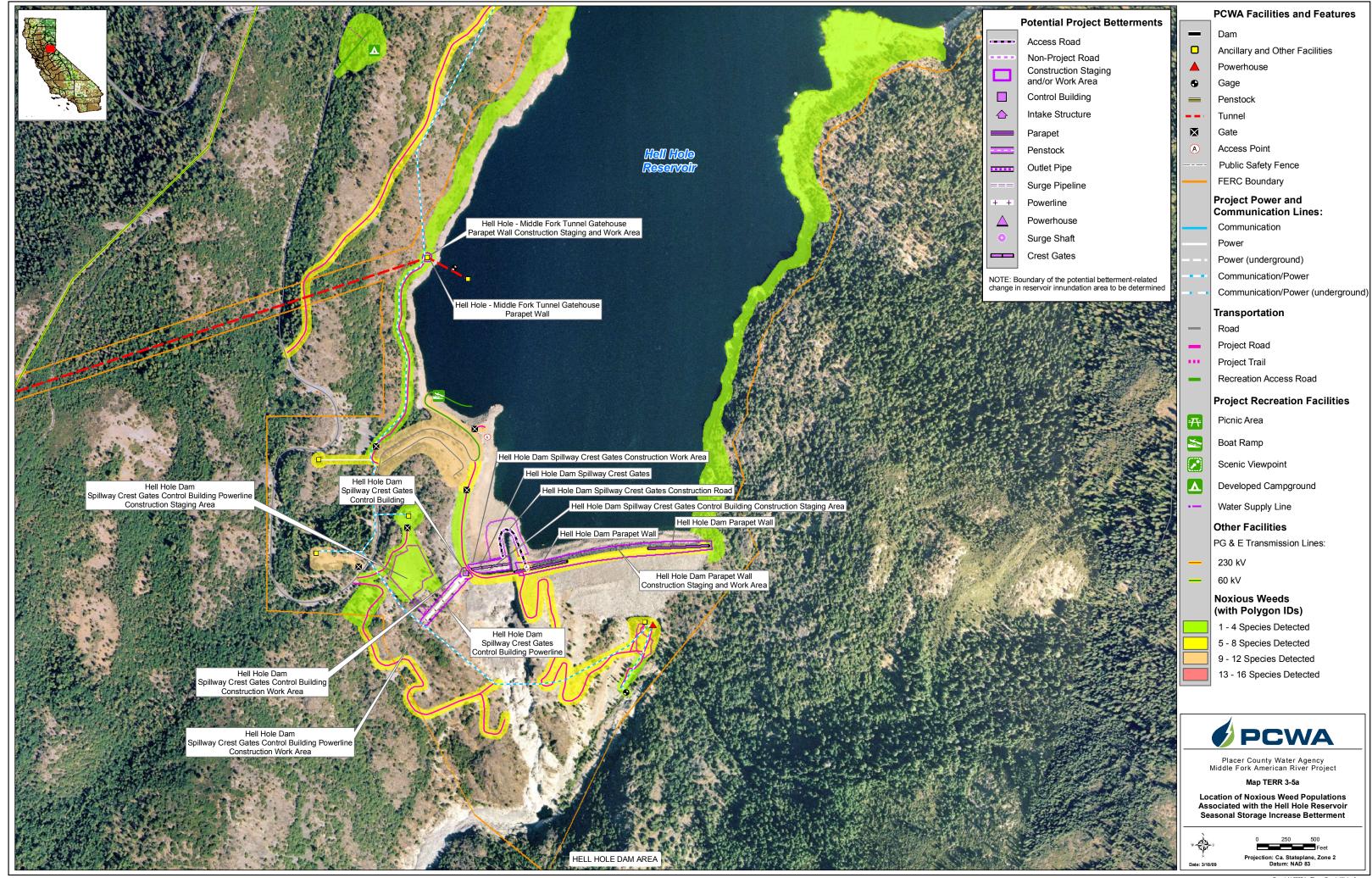


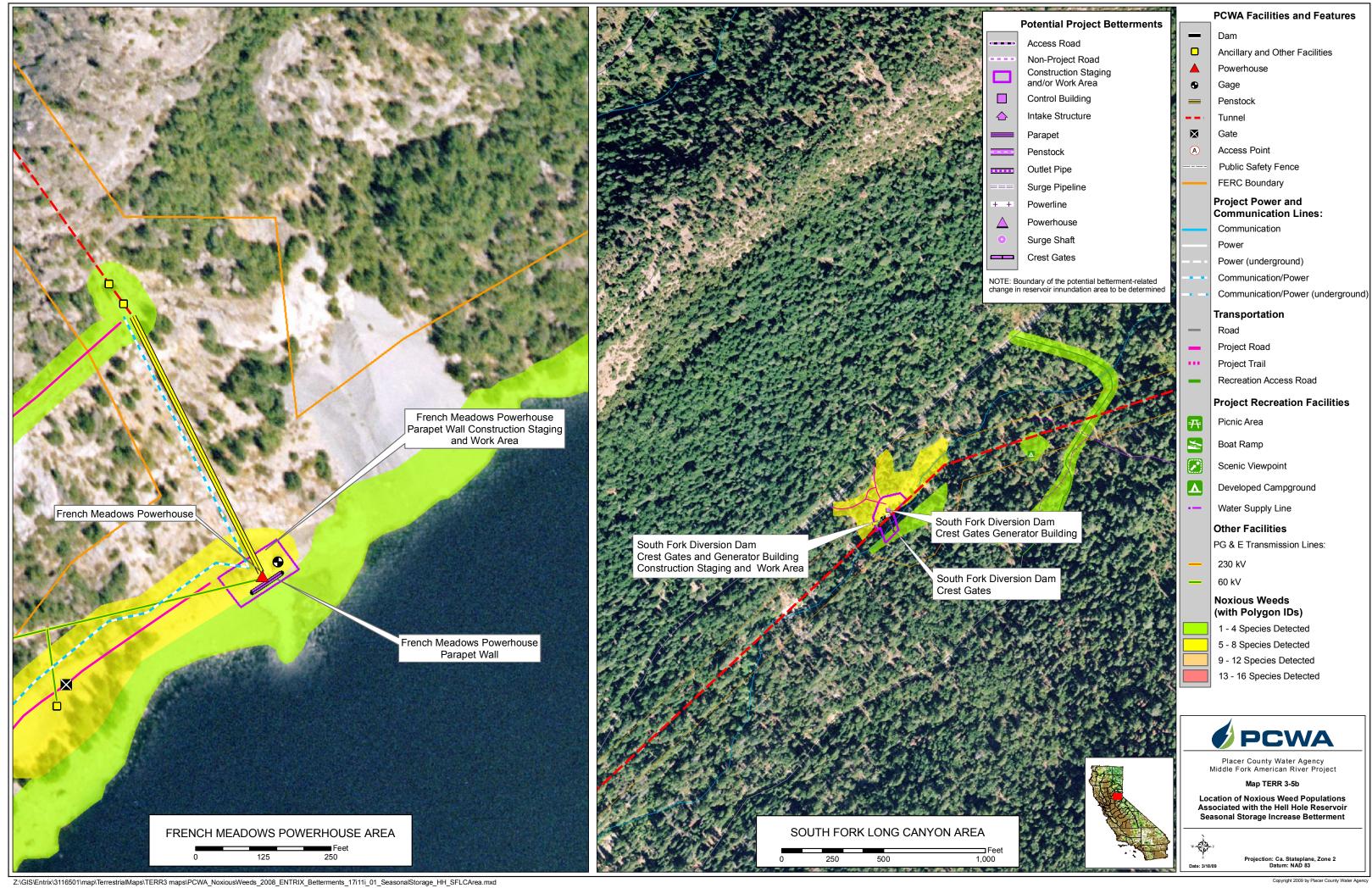


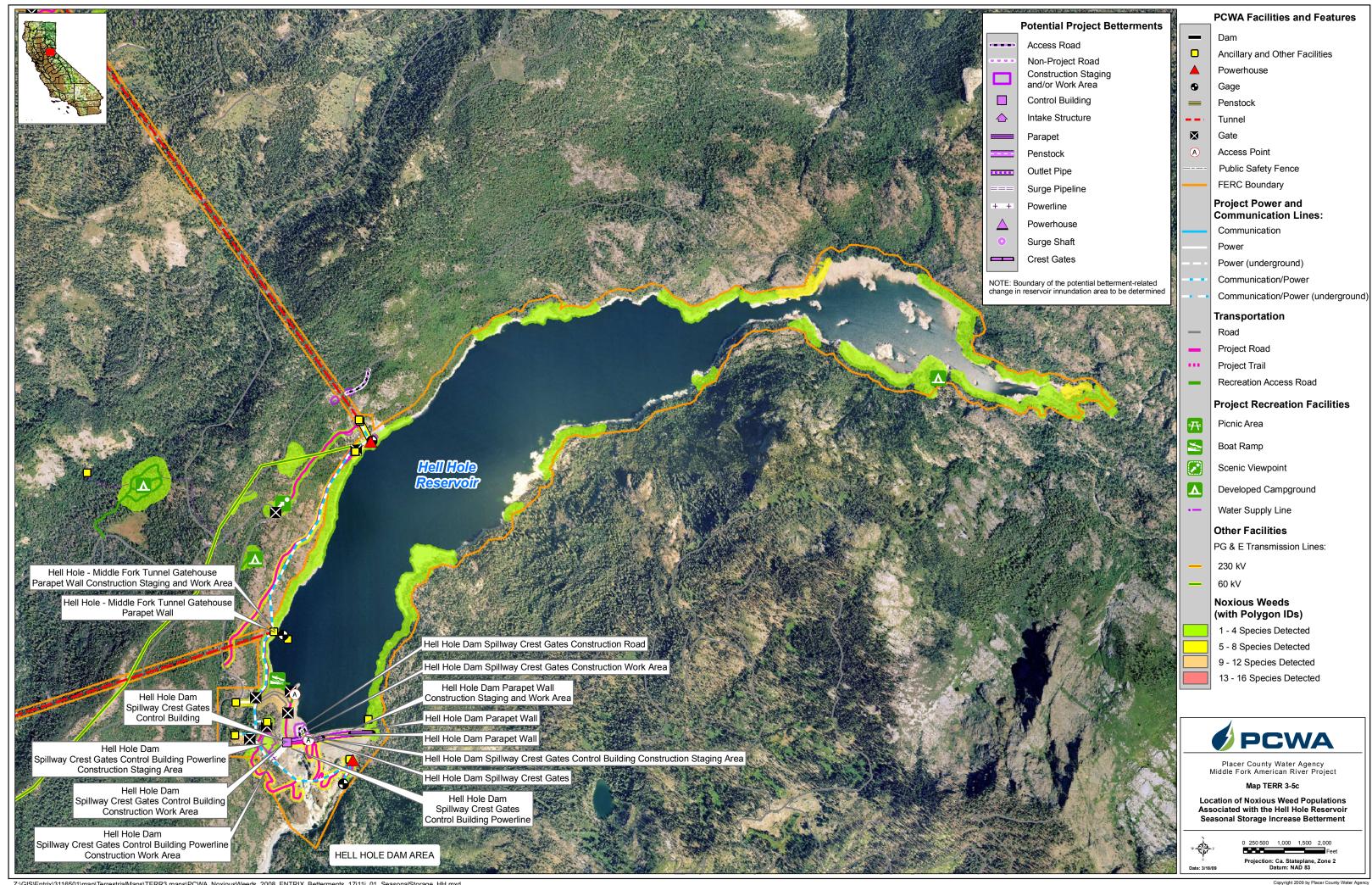


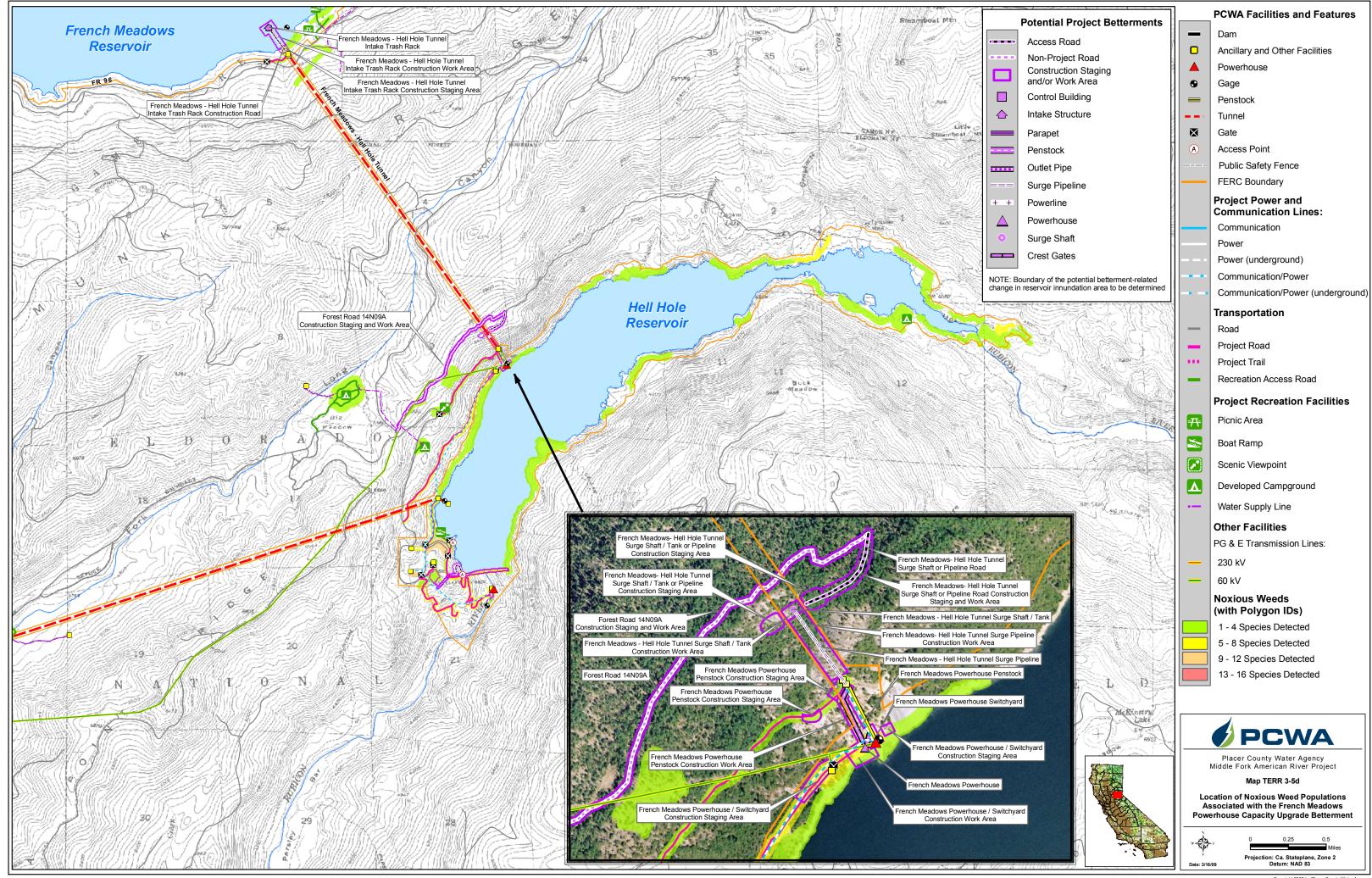


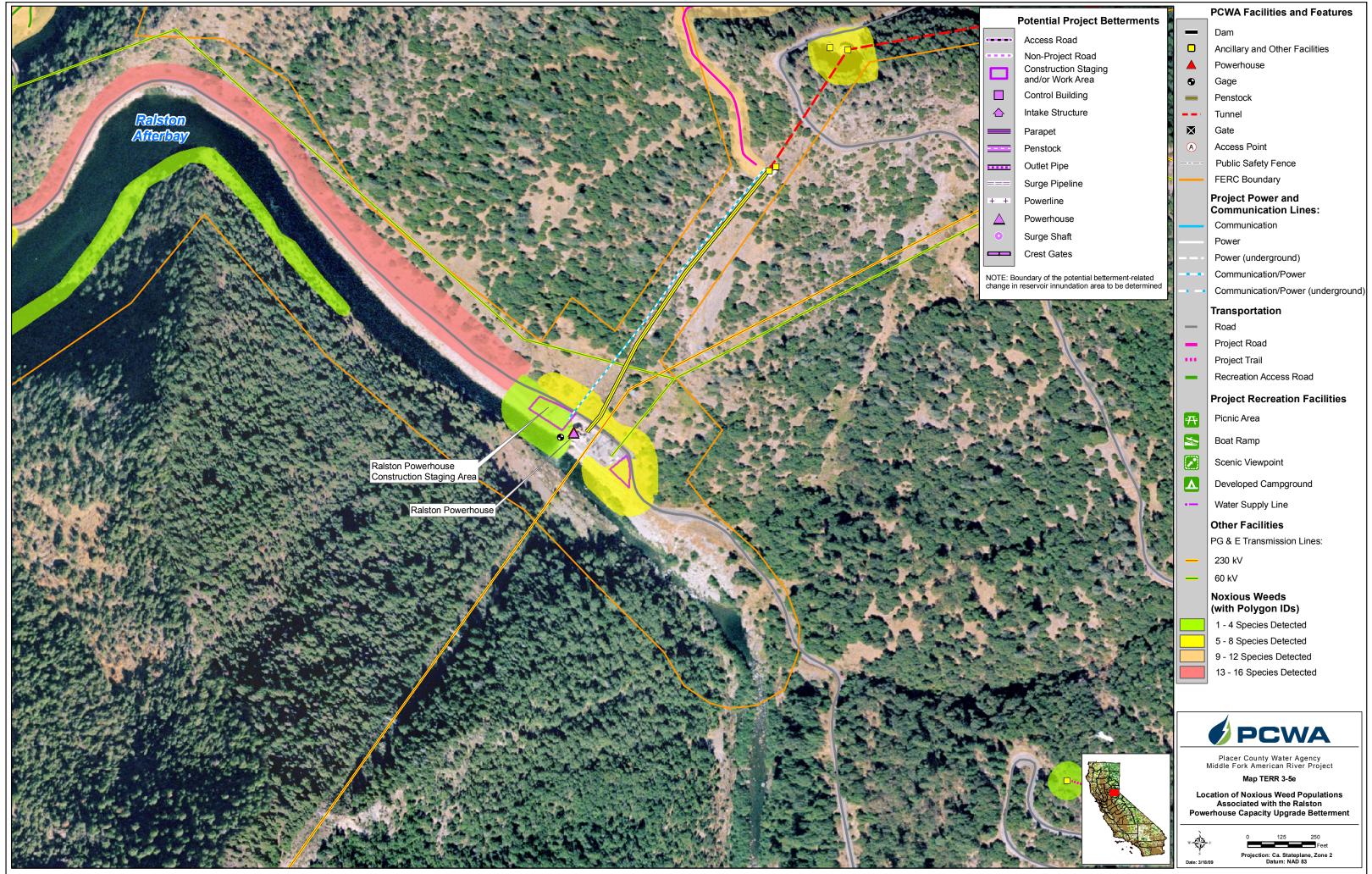


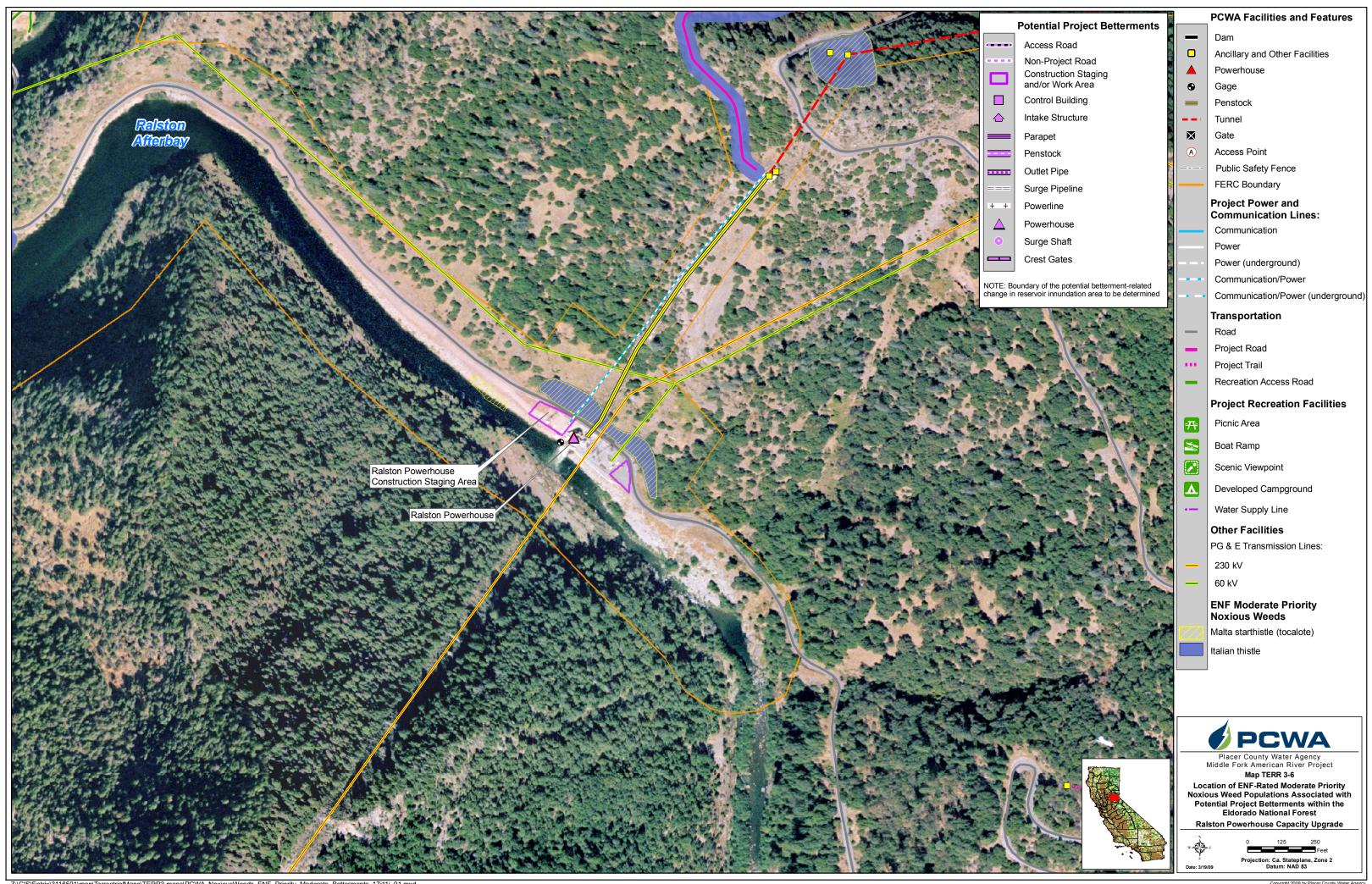


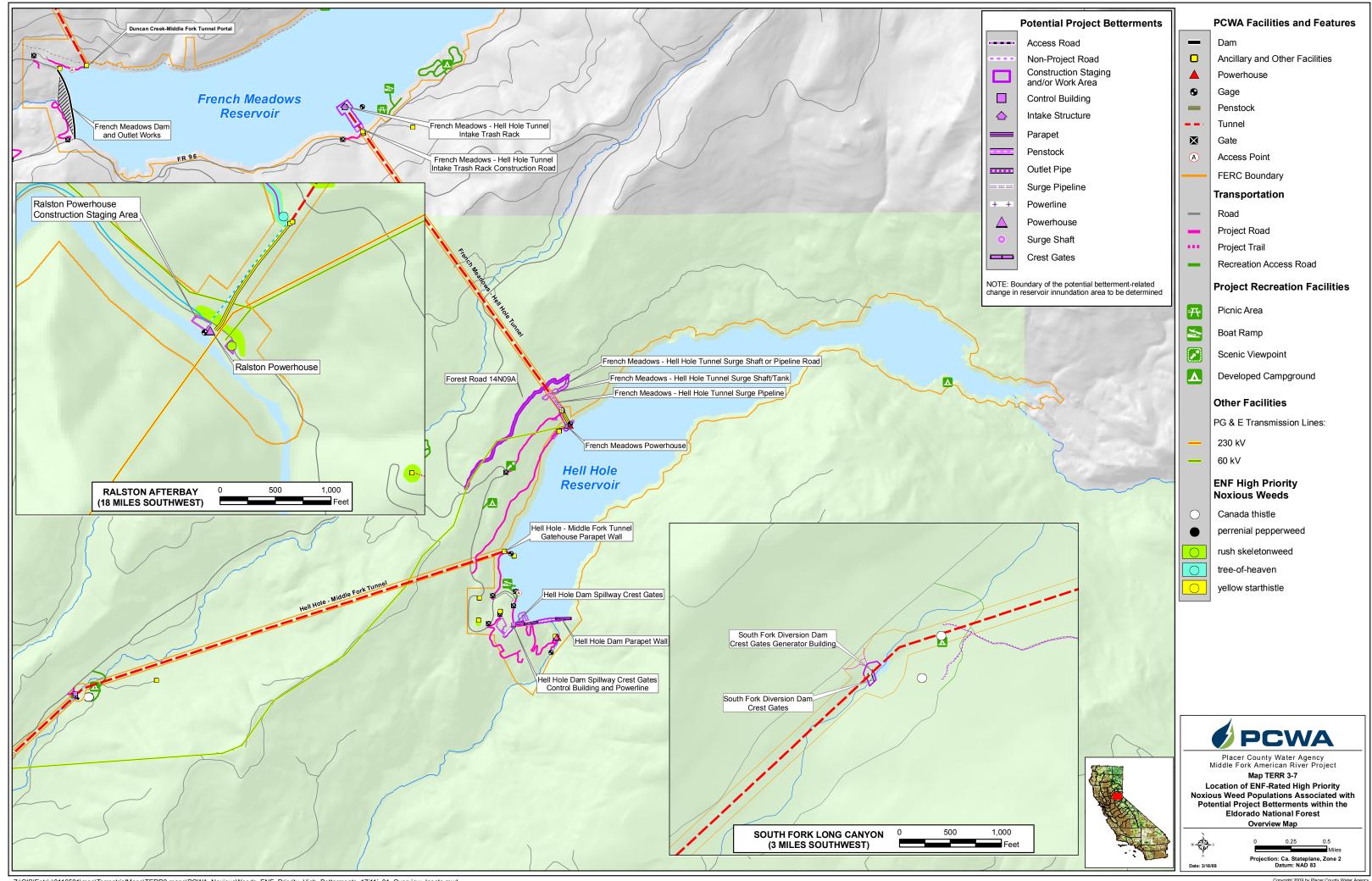






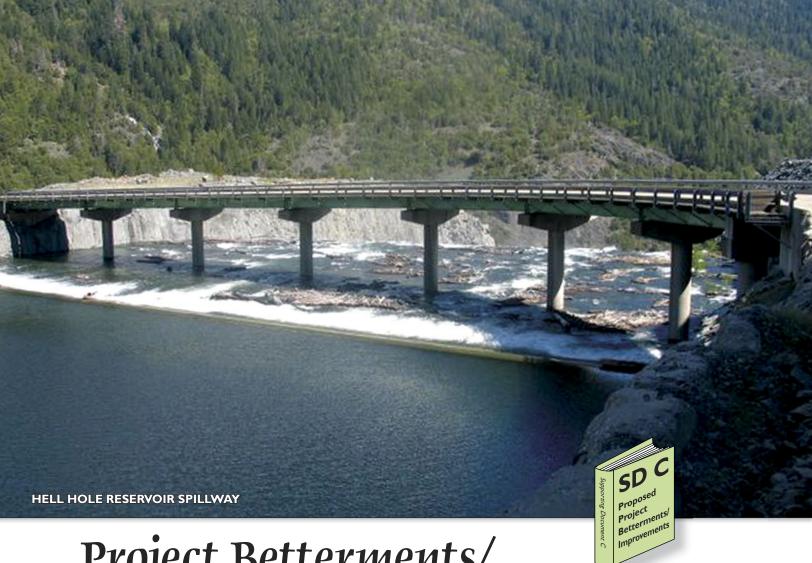






APPENDIX A

Brief Summary of Project Betterments



Project Betterments/ Improvements

REPARATION FOR THE RELICENSING OF THE MFP, PCWA conducted an assessment to identify potential modifications or additions (betterments) to existing Project facilities that would improve operations or maintenance of the Project, and result in an increase in net or peaking generation. As a result of this assessment, PCWA is including the following three potential Project betterments in the PAD:

- Hell Hole Reservoir Seasonal Storage Increase
- French Meadows Powerhouse Capacity Upgrade
- Ralston Powerhouse Capacity Upgrade

PCWA intends to further evaluate these potential betterments during relicensing with respect to their engineering and economic feasibility and the potential protection, mitigation, or enhancement measures that may be necessary to address potential effects on environmental and cultural resources. The specific Project betterments to be included in the License Application will be determined after reviewing the results of on-going engineering, economic, cultural, and environmental studies in relation to potential future license conditions.

HELL HOLE RESERVOIR SEASONAL STORAGE INCREASE

The purpose of this betterment would be to seasonally increase the storage capacity of Hell Hole Reservoir. The betterment would utilize a portion of the existing flood control pool, above the present normal maximum operating water level, to store additional water during the spring and summer after the peak of the runoff period. An approximate 9,750 ac-ft to 12,000 ac-ft increase in seasonal storage in the reservoir would be achieved by installing 8-10 foot high crest gates on the existing dam spillway. The crest gates would be raised when needed to increase reservoir storage. Operation of the crest gates would also seasonally increase the reservoir's inundation area within the existing flood pool by approximately 37 acres.



Installation of spillway gates on Hell Hole Reservoir will increase seasonal storage and power generation.

In years when either French Meadows or Hell Hole reservoirs would have spilled, this betterment would allow the MFP to capture additional water in storage in Hell Hole Reservoir which can later be used to increase net annual energy generation. In all but the driest years, the betterment would also allow the MFP to shift the timing of some generation from the spring run-off period to the summer peak energy demand period. While the shift in the timing of the generation will not increase total annual MFP generation, it will increase the benefit of the Project by increasing generation during the peak energy demand period. This betterment would require a new water right to allow for additional storage at Hell Hole Reservoir.

This betterment would require the following modifications to existing Project facilities:

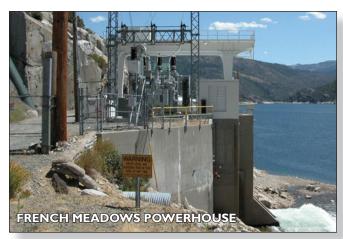
- Hell Hole Dam Spillway install 8-10 foot-high crest gates on the existing concrete spillway
- Hell Hole Dam install 2 foot-high parapet walls on each end of the existing dam to maintain minimum freeboard requirements, if 10 foot-high crest gates are installed
- French Meadow Powerhouse install 4 foothigh parapet wall at the powerhouse to avoid inundation from wave action when the reservoir is at its maximum water surface elevation
- Hell Hole Middle Fork Tunnel Gatehouse - install 4 foot-high parapet wall around the gatehouse to avoid inundation from wave action
- South Fork Long Canyon Diversion Dam install 3 foot-high crest gates on the diversion dam or a check valve at the drop inlet to avoid the backflow of water from the Hell Hole - Middle Fork Tunnel into South Fork Long Canyon Creek when Middle Fork Powerhouse is not operating

The betterment would also require construction of three new Project facilities including:

- Hell Hole Dam Spillway Crest Gates Control Building - construct a small control building adjacent to the spillway to provide power to operate the spillway crest gates
- Hell Hole Dam Spillway Crest Gates Control Building Powerline - construct a short spur line (approximately 525 feet) from the control building to an existing powerline to provide power for spillway crest gate operations
- South Fork Long Canyon Diversion Dam Generator Building - construct a control building with a generator to provide power to operate the crest gate

FRENCH MEADOWS POWERHOUSE **CAPACITY UPGRADE**

The purpose of this betterment would be to increase the generating capacity of the existing French Meadows Powerhouse from 15.3 MW to approximately 30 MW. Generating capacity would be increased by adding a second powerhouse immediately adjacent to the existing powerhouse. The existing French Meadows Powerhouse is only able to utilize approximately one-half of the maximum hydraulic capacity of the French Meadows - Hell Hole Tunnel. The addition



The addition of a second French Meadows Powerhouse will allow PCWA to increase peaking generation.

of a second unit would allow the maximum hydraulic capacity of the tunnel to be used to transport more water over a shorter period of time from French Meadows Reservoir to Hell Hole Reservoir, thereby increasing the MFP's peaking generation capabilities. This betterment would require a new water right to allow for an increase in the permitted direct diversion rate from French Meadows Reservoir to Hell Hole Reservoir.

The new powerhouse would also increase the capability of the MFP to supply electrical grid support services. The new generating unit could be operated simultaneously or independently of the existing generating unit. The existing PG&E 60-kV French Meadows - Middle Fork Transmission Line will be used to interconnect the new powerhouse with the PG&E transmission system.

This betterment would require the following modifications to existing Project facilities:

- French Meadows Hell Hole Tunnel Intake
 Trash Rack possible replacement of the
 existing cylindrical trash rack with a larger trash
 rack to reduce head losses and allow greater
 volume of water to flow into the tunnel
- French Meadows Powerhouse Switchyard expand the existing switchyard to include additional buswork, transformers, and electrical switching equipment necessary to convey the additional power generated at the new powerhouse
- Middle Fork Powerhouse Upper Switchyard upgrade the transformers and switchgear at the existing 60kV substation at Middle Fork Interbay to handle the additional power transfer

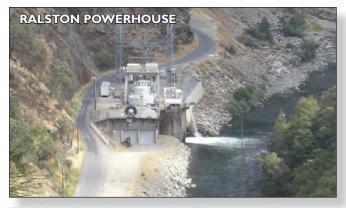
This betterment would also require construction of the following new Project facilities:

- French Meadows Powerhouse construct a second powerhouse with installed generating capacity of approximately 15 MW immediately adjacent to existing powerhouse
- French Meadows Powerhouse Penstock construct a second penstock, parallel to the existing penstock, to provide water to the new powerhouse
- Additional Surge Capacity Facility develop additional surge capacity through construction of a surge shaft, surge shaft and tank, or surge pipeline located above the French Meadows

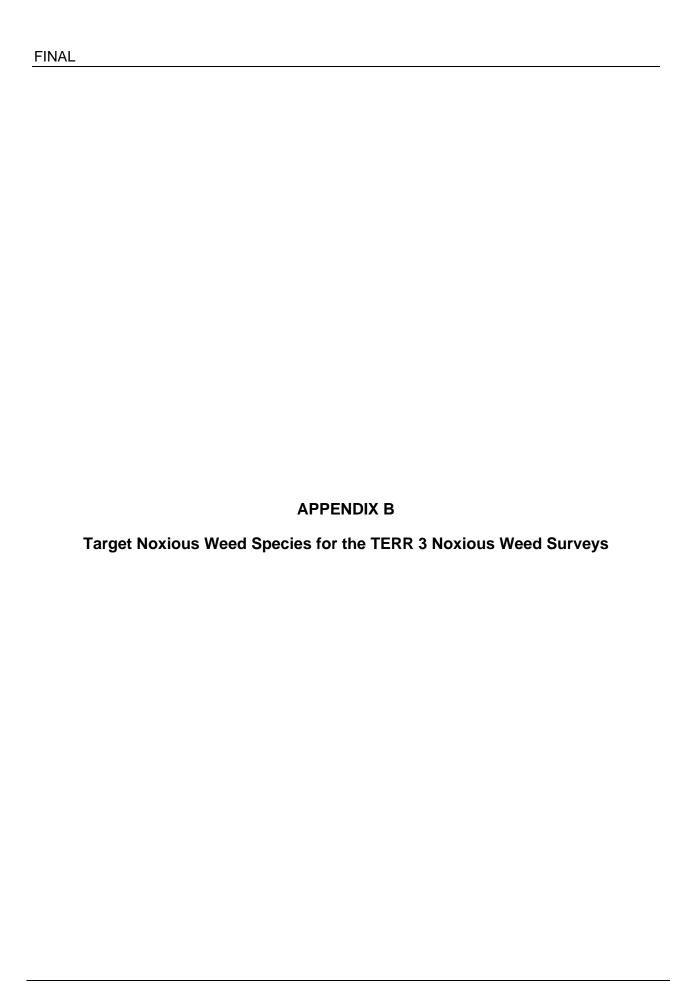
 Hell Hole Tunnel Portal, or installation of a bypass valve in the new powerhouse
- French Meadows Hell Hole Tunnel Surge Shaft or Pipeline Access Road - construct a new Project road from an existing Forest Service road to the surge shaft or pipeline and temporarily improve the existing Forest Service road

RALSTON POWERHOUSE CAPACITY UPGRADE

The purpose of this betterment is to improve the operating efficiency of the Middle Fork - Ralston system by increasing the hydraulic capacity of Ralston Powerhouse to match Middle Fork Powerhouse throughput, plus accretions at Middle Fork Interbay. This betterment would allow the MFP to maximize peaking generation during periods of high energy demand, thereby increasing the overall benefit of the MFP. This betterment would only require upgrades to electrical and mechanical equipment within the Ralston Powerhouse. This betterment may result in the ability of Ralston Powerhouse to utilize more than 1,000 cfs, in which case a new water right will be needed.



The Ralston Powerhouse upgrade will increase peaking generation opportunities.



Appendix B. Target Noxious Weed Species for the TERR 3 Noxious Weed Surveys.

Scientific Name	Common Name	Cal-IPC Rating ³	CDFA Rating⁴	ENF Rating ⁵
Acroptilon repens				
(Centaurea repens) ²	Russian knapweed	Moderate	В	
Aegilops triuncialis ¹	barbed goatgrass	High	В	Moderate
Agrostis stolonifera1	creeping bent grass	Limited		
Ailanthus altissima ¹	tree-of-heaven	Moderate	С	High
Bromus diandrus ¹	ripgut brome	Moderate		Low
Bromus tectorum ¹	cheatgrass	High	_	Moderate
Cardaria chalapensis ²	whitetop	Moderate	В	
Cardaria draba ²	heart podded whitetop	Moderate	В	
Cardaria pubescens ²	hairy whitetop	Limited	В	
Carduus nutans ²	musk thistle	Moderate	Α	
Carduus pycnocephalus ²	Italian thistle	Moderate	С	Moderate
Carthamus lanatus ²	woolly distaff thistle	Moderate	В	
Centaurea diffusa ²	diffuse knapweed	Moderate	Α	
Centaurea maculosa ¹	spotted knapweed	High	Α	High
Centaurea melitensis ²	Malta starthistle (tocalote)	Moderate	С	Moderate
Centaurea solstitialis ¹	yellow starthistle	High	C	High
Chondrilla juncea ¹	rush skeletonweed	Moderate	A	High
Cirsium arvense ²	Canada thistle	Moderate	В	High
Cirsium vulgare ¹	bull thistle	Moderate	C	Low
Conium maculatum ²	poison hemlock	Moderate	_	
Cynodon dactylodon ¹	bermudagrass	Moderate	С	
Cynosurus echinatus ¹	hedgehog dogtailgrass	Moderate	_	
Cytisus scoparius ¹	Scotch broom	High	С	High
Dactylis glomerata ¹	orchardgrass	Limited		_
Euphorbia esula ²	leafy spurge	High	Α	
Euphorbia oblongata ²	eggleaf (oblong) spurge	Limited	В	
Festuca arundinacea ²	tall fescue	Moderate	_	
Foeniculum vulgare ¹	fennel	High	_	Moderate
Genista monspessulana ²	French broom	High	С	_
Halogeton glomeratus ²	Halogeton	Moderate	A	
Hirschfeldia incana ¹	shortpod mustard	Moderate		Moderate
Hydrilla verticillata ²	hydrilla	High	۸	Woderate
Hypericum perforatum ²	klamathweed	Moderate	A C	
Isatis tinctoria ²			C	
	dryer's woad	Moderate		
Lathyrus latifolius ²	perennial sweet pea			
Lepidium latifolium ¹	perennial pepperweed	High	В	High
Leucanthemum vulgare ²	ox-eye daisy	Moderate	_	
Linaria genistifolia ssp. Dalmatica ²	Dalmatian toadflax	Moderate	А	
Lychnis coronaria ²	rose campion	_	_	
Lythrum salicaria ²	purple loosestrife	High	В	
Melilotus albus ²	white sweet clover			Moderate

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Appendix B. Target Noxious Weed Species for the TERR 3 Noxious Weed Surveys (continued).

Scientific Name	Common Name	Cal-IPC Rating ³	CDFA Rating ⁴	ENF Rating ⁵
Melilotus officinalis ¹	yellow sweetclover		_	Moderate
Myriophyllum spicatum ²	Eurasian water milfoil	High	С	
<i>Onopordum acanthium</i> ssp. <i>Acanthium</i> ²	Scotch thistle	High	А	
Plantago lanceolata ¹	English plantain	Limited		
Robinia pseudoacacia ¹	black locust	Limited	_	
Rubus discolor ¹	Himalayan blackberry	High		Low
Rumex acetosella ¹	sheep sorrel	Moderate	_	_
Salsola tragus ²	Russian thistle	Limited	С	_
Silybum marianum²	milk thistle	Limited	_	_
Spartium junceum²	Spanish broom	High	_	_
Taeniatherum caput- medusae ¹	medusahead	High	С	Moderate
Tamarix chinensis ²	tamarisk		В	
Torilis arvensis²	spreading hedgeparsley	Moderate	_	
Ulex europaeus²	gorse	High	В	_
Verbascum thapsus ¹	woolly mullein	Limited	_	Low
Vulpia myuros ¹	rat-tail fescue	Moderate	_	_

¹Noxious weed species known to occur in the Middle Fork American River watershed.

³California Invasive Plant Council (Cal-IPC) Rating:

<u>High:</u> These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.

Moderate: These species have substantial and apparent—but generally not severe—ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.

<u>Limited:</u> These species are invasive but their ecological impacts are minor on a statewide level, or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic.

⁴California Department of Food and Agriculture (CDFA) Rating:

A-rated pests: Weeds of known economic significance, subject to action by CDFA including eradication, quarantine, containment, rejection of shipments, or other holding action at the state-county level. Quarantine interceptions are to be rejected or treated at any point in the state.

B-rated pests: Weeds subject to action by CDFA only when found in a nursery, and otherwise subject to eradication, containment, control, or other holding action at the discretion of the local county agricultural commissioner.

<u>C-rated pests:</u> Not subject to state action except to provide for general pest cleanliness in nurseries; reject by CDFA only when found in a cropseed for planting or at the discretion of the commissioner, action to retard spread outside of nurseries at the discretion of the county agricultural commissioner.

²Noxious weed species potentially occurring in the Middle Fork American River watershed.

⁵Eldorado National Forest (ENF) Rating: The ENF assigns management priorities to noxious weeds based on a species' potential ecological impact. ENF will establish goals of eradication, control, or containment dependant upon each species' rating and level of infestation (Durham, pers. comm. 2009).



APPENDIX C

Photographs of Selected Noxious Weeds in the Study Area

Appendix C. Photographs of Selected Noxious Weeds in the Study Area.



Rush skeleton weed (Chondrilla juncea) on Junction Bar near Ralston Powerhouse.



English plantain (*Plantago lanceolata*) near the North Fork Long Canyon Removable Section.

Appendix C. Photographs of Selected Noxious Weeds in the Study Area.



White sweet clover (*Melilotus alba*) at North Fork Long Canyon Crossing Sediment Disposal Area.



Cheatgrass (*Bromus tectorum*) at North Fork Long Canyon Crossing Sediment Disposal Area.

Appendix C. Photographs of Selected Noxious Weeds in the Study Area.



Rat-tail fescue (Vulpia myuros) at Hell Hole Vista.



Rat-tail fescue occupying flat areas on granite along the shoreline of Hell Hole Reservoir.

Appendix C. Photographs of Selected Noxious Weeds in the Study Area.



Woolly mullein (*Verbascum thapsus*) on the north shore of French Meadows Reservoir in early spring.



Woolly mullein on the north shore of French Meadows Reservoir in early spring.

Appendix C. Photographs of Selected Noxious Weeds in the Study Area.



Woolly mullein on the north shore of French Meadows Reservoir in summer.



Woolly mullein along the exposed shoreline of Hell Hole Reservoir in summer.



APPENDIX D

Results of Noxious Weed Surveys at Existing Project Facilities and Features, Project Recreation Facilities, and Dispersed Concentrated Use Areas

Appendix D. Results of Noxious Weed Surveys at Existing Project Facilities and Features, Project Recreation Facilities, and Dispersed Concentrated Use Areas.

Map ID ¹	Survey Date	Facility	Scientific Name	Common Name	Latitude/ UTM East	Longitude/ UTM North	Population Size (Acres) ²	Population Size (Square feet)	Infestation Level
	5/23/2008	Brushy Canyon Adit Road	Agrostis stolonifera	creeping bent grass	39.00920	-120.65450	0.00	40	low
	5/23/2008	Brushy Canyon Adit Road	Bromus diandrus	ripgut brome	39.01180	-120.65640	6.7	291,852	low
	5/23/2008	Brushy Canyon Adit Road	Bromus tectorum	cheatgrass	39.01180	-120.65640	6.7	291,852	low
	5/23/2008	Brushy Canyon Adit Road	Cirsium vulgare	bull thistle	39.01180	-120.65640	6.7	291,852	low
BC01	5/23/2008	Brushy Canyon Adit Road	Dactylis glomerata	orchardgrass	39.00920	-120.65450	0.00	40	low
	5/23/2008	Brushy Canyon Adit Road	Rumex acetosella	sheep sorrel	39.00840	-120.65320	0.00	25	moderate
	5/23/2008	Brushy Canyon Adit Road	Rumex acetosella	sheep sorrel	39.00920	-120.65450	0.00	40	moderate
		Brushy Canyon Adit Road	Torilis arvensis	spreading hedgeparsley	39.01180	-120.65640	6.7	291,852	low
		Brushy Canyon Adit Road	Vulpia myuros	rat-tail fescue	39.01180	-120.65640	6.7	291,852	low
		Brushy Canyon Adit Road	Bromus diandrus	ripgut brome	39.01180	-120.65640	4.8	209,088	low
	5/23/2008	Brushy Canyon Adit Road	Bromus tectorum	cheatgrass	39.01180	-120.65640	4.8	209,088	low
	5/23/2008	Brushy Canyon Adit Road	Chondrilla juncea	rush skeletonweed	39.01180	-120.65640	4.8	209,088	moderate
	5/23/2008	Brushy Canyon Adit Road	Cirsium vulgare	bull thistle	39.01180	-120.65640	4.8	209,088	low
BC02	5/23/2008	Brushy Canyon Adit Road	Cynosurus echinatus	hedgehog dogtailgrass	39.01180	-120.65640	4.8	209,088	low
BCUZ	5/23/2008	Brushy Canyon Adit Road	Hypericum perforatum	klamathweed	39.01180	-120.65640	4.8	209,088	moderate
	5/23/2008	Brushy Canyon Adit Road	Plantago lanceolata	English plantain	39.01490	-120.66080	0.00	150	low
	5/23/2008	Brushy Canyon Adit Road	Torilis arvensis	spreading hedgeparsley	39.01180	-120.65640	4.8	209,088	low
		Brushy Canyon Adit Road	Verbascum thapsus	woolly mullein	39.01180	-120.65640	4.8	209,088	low
		Brushy Canyon Adit Road	Vulpia myuros	rat-tail fescue	39.01180	-120.65640	4.8	209,088	high
DC01	5/23/2008	Duncan Creek Diversion Dam Road	Bromus tectorum	cheatgrass	39.13490	-120.48160	0.26	11,326	high
		Duncan Creek Diversion Intake Road and Diversion Pool Access							
DC02	5/23/2008	Point	Cirsium vulgare	bull thistle	39.13630	-120.47780	0.01	400	moderate
DC02		Duncan Creek Diversion Intake Road and Diversion Pool Access							
		Point	Verbascum thapsus	woolly mullein	39.13600	-120.47928	0.00	100	moderate
DC03		Duncan Creek Diversion Pool	Cirsium vulgare	bull thistle	39.13512	-120.48020	0.00	200	low
		French Meadows Dam Outlet Works and Leakage Weirs Road	Bromus tectorum	cheatgrass	39.11160	-120.47210	4.1	178,596	low
		French Meadows Dam Outlet Works and Leakage Weirs Road	Cirsium vulgare	bull thistle	39.10862	-120.47050	0.23	10,019	low
		French Meadows Dam Outlet Works and Leakage Weirs Road	Cirsium vulgare	bull thistle	39.11062	-120.47140	0.05	2,000	low
		French Meadows Dam Outlet Works and Leakage Weirs Road	Cirsium vulgare	bull thistle	39.11102	-120.47172	0.02	750	low
FM01		French Meadows Dam Outlet Works and Leakage Weirs Road	Hypericum perforatum	klamathweed	39.10777	-120.47053	4.1	178,596	low
	7/26/2008	French Meadows Dam Outlet Works and Leakage Weirs Road	Melilotus albus	white sweet clover	39.10777	-120.47053	4.1	178,596	low
		French Meadows Dam Outlet Works and Leakage Weirs Road	Plantago lanceolata	English plantain	39.10862	-120.47050	0.23	10,019	low
	6/3/2008	French Meadows Dam Outlet Works and Leakage Weirs Road	Rumex acetosella	sheep sorrel	39.11100	-120.47220	0.00	25	moderate
		French Meadows Dam Outlet Works and Leakage Weirs Road	Rumex acetosella	sheep sorrel	39.11167	-120.47232	0.00	50	low
		French Meadows Dam Outlet Works and Leakage Weirs Road	Verbascum thapsus	woolly mullein	39.11062	-120.47140	0.05	2,000	low
		French Meadows Dam and Outlet Works	Bromus tectorum	cheatgrass	39.11120	-120.47170	18.6	810,216	moderate
		French Meadows Dam and Outlet Works	Dactylis glomerata	orchardgrass	39.11480	-120.47150	18.6	810,216	low
FM02		French Meadows Dam and Outlet Works	Hypericum perforatum	klamathweed	39.10838	-120.46988	18.6	810,216	low
		French Meadows Dam and Outlet Works	Plantago lanceolata	English plantain	39.10838	-120.46988	18.6	810,216	low
		French Meadows Dam and Outlet Works	Rumex acetosella	sheep sorrel	39.10838	-120.46988	18.6	810,216	low
		French Meadows Dam and Outlet Works	Verbascum thapsus	woolly mullein	39.10838	-120.46988	18.6	810,216	low
		French Meadows Dam Staging Area	Bromus tectorum	cheatgrass	39.11470	-120.47410	2.6	113,256	high
		French Meadows Dam Staging Area Road	Cirsium vulgare	bull thistle	39.11570	-120.47470	2.6	113,256	low
		French Meadows Dam Staging Area and Road	Dactylis glomerata	orchardgrass	39.11470	-120.47410	2.6	113,256	low
FM03		French Meadows Dam Staging Area	Hypericum perforatum	klamathweed	39.11430	-120.47430	2.6	113,256	high
			Melilotus albus	white sweet clover	39.11470	-120.47410	2.6	113,256	moderate
		French Meadows Dam Staging Area and Road	Plantago lanceolata	English plantain	39.11470	-120.47410	2.6	113,256	low
		French Meadows Dam Staging Area	Rumex acetosella	sheep sorrel	39.11430	-120.47430	2.6	113,256	moderate
		French Meadows Dam Staging Area	Verbascum thapsus	woolly mullein	39.11470	-120.47410	2.6	113,256	low
FM04		French Meadows Dam Generator Building	Bromus tectorum	cheatgrass	39.11480	-120.47150	0.42	18,295	high
	7/25/2008	French Meadows Dam Generator Building	Dactylis glomerata	orchardgrass	39.11480	-120.47150	0.42	18,295	low

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Appendix D. Results of Noxious Weed Surveys at Existing Project Facilities and Features, Project Recreation Facilities, and Dispersed Concentrated Use Areas (continued).

	Survey				Latitude/	Longitude/	Population Size	Population Size	Infestation
Map ID ¹		Facility	Scientific Name	Common Name	UTM East	UTM North	(Acres) ²	(Square feet)	Level
	5/26/2008	French Meadows Reservoir	Cirsium vulgare	bull thistle	39.11710	-120.44440	0.00	25	low
	7/26/2008	French Meadows Reservoir	Rumex acetosella	sheep sorrel	39.12578	-120.41845	0.06	2,500	low
	5/26/2008	French Meadows Reservoir	Verbascum thapsus	woolly mullein	39.11450	-120.45900	0.28	12,197	moderate
FM05	5/26/2008	French Meadows Reservoir	Verbascum thapsus	woolly mullein	39.11410	-120.46380	0.70	30,492	high
1 11103	5/26/2008	French Meadows Reservoir	Verbascum thapsus	woolly mullein	39.13240	-120.40920	110	4,791,600	low
	5/26/2008	French Meadows Reservoir	Verbascum thapsus	woolly mullein	39.11640	-120.44600	0.11	4,900	low
	5/26/2008	French Meadows Reservoir	Verbascum thapsus	woolly mullein	39.11510	-120.45790	0.13	5,625	low
	5/26/2008	French Meadows Reservoir	Verbascum thapsus	woolly mullein	39.11430	-120.45580	0.02	900	moderate
		Duncan Creek-Middle Fork Tunnel Portal Road and Spillway							
	5/26/2008	Access Point	Bromus tectorum	cheatgrass	39.11510	-120.47060	5.4	235,224	moderate
		Duncan Creek-Middle Fork Tunnel Portal Road and Spillway							
	5/26/2008	Access Point	Cirsium vulgare	bull thistle	39.11470	-120.46960	0.06	2,500	low
		Duncan Creek-Middle Fork Tunnel Portal Road and Spillway							
	7/26/2008	Access Point	Cirsium vulgare	bull thistle	39.11502	-120.46860	0.01	225	low
		Duncan Creek-Middle Fork Tunnel Portal Road and Spillway							
	7/26/2008	Access Point	Cirsium vulgare	bull thistle	39.11510	-120.47060	0.09	4,000	low
	,,	Duncan Creek-Middle Fork Tunnel Portal Road and Spillway							
	5/26/2008	Access Point	Dactylis glomerata	orchardgrass	39.11510	-120.47060	0.02	1,000	moderate
	,,	Duncan Creek-Middle Fork Tunnel Portal Road and Spillway							
	5/26/2008	Access Point	Melilotus albus	white sweet clover	39.11470	-120.46960	0.06	2,500	low
FM06	= (0.0 (0.0 0.0	Duncan Creek-Middle Fork Tunnel Portal Road and Spillway			00.44=40	400 47000	0.00	4.000	
	5/26/2008	Access Point	Melilotus albus	white sweet clover	39.11510	-120.47060	0.09	4,000	moderate
	= (0.0 (0.0 0.0	Duncan Creek-Middle Fork Tunnel Portal Road and Spillway			00.44.	400 47000	0.00	4 000	
	5/26/2008	Access Point	Plantago lanceolata	English plantain	39.11510	-120.47060	0.02	1,000	low
	F (00 (00 00	Duncan Creek-Middle Fork Tunnel Portal Road and Spillway			00.44.470	400 40000	0.00	0.500	
	5/26/2008	Access Point	Plantago lanceolata	English plantain	39.11470	-120.46960	0.06	2,500	low
	E/00/0000	Duncan Creek-Middle Fork Tunnel Portal Road and Spillway	D	ah aan aawal	20 44 400	400 40000	0.00	400	lavv
	5/26/2008	Access Point	Rumex acetosella	sheep sorrel	39.11480	-120.46900	0.00	100	low
	5/26/2008	Duncan Creek-Middle Fork Tunnel Portal Road and Spillway Access Point	Dumov costocollo	ahaan aarral	20 11510	-120.47060	0.00	4,000	low
	3/20/2006		Rumex acetosella	sheep sorrel	39.11510	-120.47000	0.09	4,000	low
	7/26/2008	Duncan Creek-Middle Fork Tunnel Portal Road and Spillway Access Point	Rumex acetosella	sheep sorrel	39.11502	-120.46860	0.01	225	low
	1/20/2006	Duncan Creek-Middle Fork Tunnel Portal Road and Spillway	Rumex acetosella	Sneep sorrer	39.11302	-120.40000	0.01	225	IOW
	5/26/2008	Access Point	Verbascum thapsus	woolly mullein	39.11510	-120.47060	0.01	500	low
		French Meadows Reservoir	Cirsium vulgare	bull thistle	39.12290	-120.47000	5.2	226,512	low
		French Meadows Reservoir	Hypericum perforatum	klamathweed	39.12303	-120.42030	0.04	1,600	moderate
FM08	5/25/2008	French Meadows Reservoir	Plantago lanceolata	English plantain	39.12303	-120.42077	5.2	226,512	low
I WIOO	5/25/2008	French Meadows Reservoir	Rumex acetosella	sheep sorrel	39.12290	-120.42050	5.2	226,512	low
	7/26/2008	French Meadows Reservoir	Verbascum thapsus	woolly mullein	39.12308	-120.42068	5.2	226,512	high
	7/26/2008	French Meadows Reservoir	Cirsium vulgare	bull thistle	39.13263	-120.42008	3.8	165,528	low
FM13	7/26/2008	French Meadows Reservoir	Rumex acetosella	sheep sorrel	39.13263	-120.41022	3.8	165,528	low
1 14113	7/26/2008	French Meadows Reservoir	Verbascum thapsus	woolly mullein	39.13263	-120.41022	3.8	165,528	low
	5/26/2008	French Meadows Reservoir	Cirsium vulgare	bull thistle	39.12860	-120.41620	4	174,240	low
	7/26/2008	French Meadows Reservoir	Cirsium vulgare	bull thistle	39.13013	-120.41620	0.04	1,750	high
	7/26/2008	French Meadows Reservoir	Cirsium vulgare	bull thistle	39.13235	-120.41510	0.04	400	moderate
	7/26/2008	French Meadows Reservoir		klamathweed	39.13235	-120.41510	0.06	2,400	high
E8/14 A	7/26/2008	French Meadows Reservoir	Hypericum perforatum	klamathweed	39.13283	-120.41510	0.06	2,800	
FM14	7/26/2008		Hypericum perforatum			***			high
1	7/26/2008	French Meadows Reservoir French Meadows Reservoir	Hypericum perforatum	klamathweed klamathweed	39.13045 39.12890	-120.41615 -120.41593	0.46	20,000 250	high
	5/26/2008	French Meadows Reservoir	Hypericum perforatum			***	0.01		low
			Plantago lanceolata	English plantain	39.12860	-120.41620	4	174,240	low
	1/20/2008	French Meadows Reservoir	Plantago lanceolata	English plantain	39.13283	-120.41455	0.34	14,810	low

Appendix D. Results of Noxious Weed Surveys at Existing Project Facilities and Features, Project Recreation Facilities, and Dispersed Concentrated Use Areas (continued).

Map ID ¹	Survey Date	Facility	Scientific Name	Common Name	Latitude/ UTM East	Longitude/ UTM North	Population Size (Acres) ²	Population Size (Square feet)	Infestation Level
-	7/26/2008	French Meadows Reservoir	Plantago lanceolata	English plantain	39.13013	-120.41607	0.04	1,750	high
	7/26/2008	French Meadows Reservoir	Plantago lanceolata	English plantain	39.12890	-120.41593	0.11	5,000	low
	5/26/2008	French Meadows Reservoir	Rumex acetosella	sheep sorrel	39.12860	-120.41620	4	174,240	low
FM14	7/26/2008	French Meadows Reservoir	Rumex acetosella	sheep sorrel	39.13283	-120.41455	0.34	14,810	high
	7/26/2008	French Meadows Reservoir	Rumex acetosella	sheep sorrel	39.13323	-120.41310	0.02	1,000	high
	7/26/2008	French Meadows Reservoir	Rumex acetosella	sheep sorrel	39.13235	-120.41510	0.06	2,500	low
	7/26/2008	French Meadows Reservoir	Vulpia myuros	rat-tail fescue	39.13323	-120.41310	0.01	500	high
	5/26/2008	French Meadows Reservoir	Agrostis stolonifera	creeping bent grass	39.11610	-120.42220	2.7	117,612	low
FM19	5/26/2008	French Meadows Reservoir	Cirsium vulgare	bull thistle	39.11610	-120.42220	2.7	117,612	low
FIVITS	5/26/2008	French Meadows Reservoir	Rumex acetosella	sheep sorrel	39.11610	-120.42220	2.7	117,612	low
	5/26/2008	French Meadows Reservoir	Verbascum thapsus	wooly mullein	39.11610	-120.42220	2.7	117,612	low
	5/26/2008	French Meadows Reservoir	Agrostis stolonifera	creeping bent grass	39.11820	-120.41870	20	871,200	low
	5/26/2008	French Meadows Reservoir	Cirsium vulgare	bull thistle	39.11820	-120.41870	20	871,200	low
FM20	5/26/2008	French Meadows Reservoir	Rumex acetosella	sheep sorrel	39.12550	-120.41230	0.14	6,098	moderate
	5/26/2008	French Meadows Reservoir	Rumex acetosella	sheep sorrel	39.11820	-120.41870	20	871,200	low
	5/26/2008	French Meadows Reservoir	Verbascum thapsus	wooly mullein	39.11820	-120.41870	20	871,200	low
	5/25/2008	French Meadows Dam Generator Building to French Meadows Dam Outlet Works Powerline	Bromus tectorum	cheatgrass	39.11420	-120.47220	1.3	56,628	moderate
FM21	7/25/2008	French Meadows Dam Generator Building to French Meadows Dam Outlet Works Powerline	Hypericum perforatum	klamathweed	39.11493	-120.47263	1.3	56,628	moderate
	7/25/2008	French Meadows Dam Generator Building to French Meadows Dam Outlet Works Powerline	Rubus discolor	Himalayan blackberry	39.11493	-120.47263	1.3	56,628	low
	5/25/2008	French Meadows Dam Generator Building to French Meadows Dam Outlet Works Powerline	Vulpia myuros	rat-tail fescue	39.11420	-120.47220	1.3	56,628	low
FM22	7/26/2008	Middle Fork American River Gage and Weir below French Meadows Dam Road Middle Fork American River Gage and Weir below French	Rumex acetosella	sheep sorrel	39.10678	-120.47774	0.00	25	high
	7/26/2008	Meadows Dam Road	Rumex acetosella	shoop sorrol	39.10670	-120.47738	0.00	25	high
	1/20/2008	Middle Fork American River Gage and Weir below French	Numex acetosella	sheep sorrel	39.10070	-120.47730	0.00	25	High
FM23	7/26/2008	Meadows Dam Road	Hypericum perforatum	klamathweed	39.10773	-120.47924	0.05	2,000	low
	1/20/2000	Middle Fork American River Gage and Weir below French	Trypericum perioratum	Namanweed	33.10773	-120.47 324	0.03	2,000	IOW
	7/26/2008	Meadows Dam Trail	Bromus tectorum	cheatgrass	39.10956	-120.48111	0.02	1,000	low
	1/20/2000	Middle Fork American River Gage and Weir below French	Biomas tectoram	Crieatgrass	33.10330	-120.40111	0.02	1,000	IOW
	7/26/2008	Meadows Dam Trail	Bromus tectorum	cheatgrass	39.10962	-120.48091	0.02	1,000	high
FM24	7/26/2008	Middle Fork American River Gage and Weir below French Meadows Dam Trail	Bromus tectorum	cheatgrass	39.10939	-120.48077	0.00	213	high
	7/26/2008	Middle Fork American River Gage and Weir below French Meadows Dam Trail	Cirsium vulgare	bull thistle	39.10968	-120.48105	0.00	75	low
		Middle Fork American River Gage and Weir below French Meadows Dam Trail	Hypericum perforatum	klamathweed	39.10968	-120.48105	0.00	75	moderate
		French Meadows Reservoir	Cirsium vulgare	bull thistle	39.11304	-120.42618	3.9	169,884	low
FM28	7/26/2008	French Meadows Reservoir	Rumex acetosella	sheep sorrel	39.11304	-120.42618	3.9	169,884	high
		French Meadows Reservoir	Verbascum thapsus	woolly mullein	39.11304	-120.42618	3.9	169,884	high
		French Meadows-Hell Hole Tunnel Gatehouse Road	Cirsium vulgare	bull thistle	39.10735	-120.43289	0.01	500	low
			Plantago lanceolata	English plantain	39.10735	-120.43289	0.01	500	low
FM30	7/26/2008	French Meadows-Hell Hole Tunnel Gatehouse Road	Rumex acetosella	sheep sorrel	39.10842	-120.43226	0.00	100	high
		French Meadows-Hell Hole Tunnel Gatehouse Road	Rumex acetosella	sheep sorrel	39.10968	-120.48105	0.00	25	moderate
	7/26/2008	French Meadows-Hell Hole Tunnel Gatehouse Road	Verbascum thapsus	woolly mullein	39.10735	-120.43289	0.01	500	low

Appendix D. Results of Noxious Weed Surveys at Existing Project Facilities and Features, Project Recreation Facilities, and Dispersed Concentrated Use Areas (continued).

Map ID ¹	Survey Date	Facility	Scientific Name	Common Name	Latitude/ UTM East	Longitude/ UTM North	Population Size (Acres) ²	Population Size (Square feet)	Infestation Level
	5/24/2008	Hell Hole Dam and Powerhouse Road and Spillway Southern Access Point	Bromus tectorum	cheatgrass	39.06001	-120.41355	0.55	23,958	high
	5/24/2008	Hell Hole Dam and Powerhouse Road and Spillway Southern Access Point	Cynosurus echinatus	hedgehog dogtailgrass	39.06001	-120.41355	0.55	23,958	low
H01	5/24/2008	Hell Hole Dam and Powerhouse Road and Spillway Southern Access Point	Dactylis glomerata	orchardgrass	39.06001	-120.41355	0.55	23,958	high
ПОТ	5/24/2008	Hell Hole Dam and Powerhouse Road and Spillway Southern Access Point	Hirschfeldia incana	shortpod mustard	39.06001	-120.41355	0.55	23,958	low
	5/24/2008		Hypericum perforatum	klamathweed	39.06001	-120.41355	0.55	23,958	moderate
	5/24/2008	Hell Hole Dam and Powerhouse Road and Spillway Southern Access Point	Verbascum thapsus	woolly mullein	39.06001	-120.41355	0.55	23,958	low
	5/24/2008	Hell Hole Dam and Powerhouse Road and Spillway Southern Access Point	Bromus tectorum	cheatgrass	39.05880	-120.41380	1.5	65,340	moderate
H02	5/24/2008	Hell Hole Dam and Powerhouse Road and Spillway Southern Access Point	Dactylis glomerata	orchardgrass	39.05880	-120.41380	1.5	65,340	low
1102	5/24/2008	Hell Hole Dam and Powerhouse Road and Spillway Southern Access Point	Hypericum perforatum	klamathweed	39.05880	-120.41380	1.5	65,340	low
		Hell Hole Dam and Powerhouse Road and Spillway Southern Access Point	Vulpia myuros	rat-tail fescue	39.05880	-120.41380	1.5	65,340	moderate
		Hell Hole Dam and Outlet Works	Bromus tectorum	cheatgrass	39.05804	-120.41003	3.5	152,460	low
	5/24/2008	Hell Hole Dam and Outlet Works	Hypericum perforatum	klamathweed	39.05792	-120.41122	0.00	158	low
H03	7/27/2008	Hell Hole Dam and Outlet Works	Plantago lanceolata	English plantain	39.05804	-120.41003	3.5	152,460	moderate
	5/24/2008	Hell Hole Dam and Outlet Works	Verbascum thapsus	woolly mullein	39.05804	-120.41003	3.5	152,460	low
	5/24/2008	Hell Hole Dam and Outlet Works	Vulpia myuros	rat-tail fescue	39.05804	-120.41003	3.5	152,460	moderate
	5/24/2008	Hell Hole Dam and Powerhouse Road and Spillway Southern Access Point	Bromus tectorum	cheatgrass	39.05717	-120.41190	1	43,560	moderate
	5/24/2008	Hell Hole Dam and Powerhouse Road and Spillway Southern Access Point	Cirsium vulgare	bull thistle	39.05717	-120.41190	1	43,560	low
H04	5/24/2008	Hell Hole Dam and Powerhouse Road and Spillway Southern Access Point	Hirschfeldia incana	shortpod mustard	39.05717	-120.41190	1	43,560	low
	5/24/2008	Hell Hole Dam and Powerhouse Road and Spillway Southern Access Point	Hypericum perforatum	klamathweed	39.05717	-120.41190	1	43,560	low
	5/24/2008	Hell Hole Dam and Powerhouse Road and Spillway Southern Access Point	Vulpia myuros	rat-tail fescue	39.05717	-120.41190	1	43,560	moderate
	5/24/2008	Hell Hole Dam and Powerhouse Road and Spillway Southern Access Point	Bromus tectorum	cheatgrass	39.05518	-120.41028	4.9	213,444	moderate
	5/24/2008	Hell Hole Dam and Powerhouse Road and Spillway Southern Access Point	Cirsium vulgare	bull thistle	39.05518	-120.41028	4.9	213,444	low
	7/27/2008	Hell Hole Dam and Powerhouse Road and Spillway Southern Access Point	Hirschfeldia incana	shortpod mustard	39.05518	-120.41028	4.9	213,444	low
H05	5/24/2008	Hell Hole Dam and Powerhouse Road and Spillway Southern Access Point	Hypericum perforatum	klamathweed	39.05518	-120.41145	0.00	188	high
	5/24/2008	Hell Hole Dam and Powerhouse Road and Spillway Southern Access Point	Hypericum perforatum	klamathweed	39.05518	-120.41028	4.9	213,444	low
	5/24/2008		Melilotus officinalis	yellow sweetclover	39.05547	-120.41120	0.09	4,000	moderate
	5/24/2008	Hell Hole Dam and Powerhouse Road and Spillway Southern Access Point	Vulpia myuros	rat-tail fescue	39.05518	-120.41028	4.9	213,444	moderate

Appendix D. Results of Noxious Weed Surveys at Existing Project Facilities and Features, Project Recreation Facilities, and Dispersed Concentrated Use Areas (continued).

Map ID ¹	Survey Date	Facility	Scientific Name	Common Name	Latitude/ UTM East	Longitude/ UTM North	Population Size (Acres) ²	Population Size (Square feet)	Infestation Level
	5/24/2008	Hell Hole Dam Leakage Weir Road	Bromus tectorum	cheatgrass	39.05621	-120.40839	1.7	74,052	high
	5/24/2008	Hell Hole Dam Leakage Weir Road	Cirsium vulgare	bull thistle	39.05621	-120.40839	1.7	74,052	low
	5/24/2008	Hell Hole Dam Leakage Weir Road	Hirschfeldia incana	shortpod mustard	39.05621	-120.40839	1.7	74,052	moderate
H06	5/24/2008	Hell Hole Dam Leakage Weir Road	Melilotus officinalis	yellow sweetclover	39.05621	-120.40839	1.7	74,052	moderate
	5/24/2008	Hell Hole Dam Leakage Weir Road	Torilis arvensis	spreading hedgeparsley	39.05621	-120.40839	1.7	74,052	low
	5/24/2008	Hell Hole Dam Leakage Weir Road	Verbascum thapsus	woolly mullein	39.05621	-120.40839	1.7	74,052	moderate
	5/24/2008	Hell Hole Dam Leakage Weir Road	Vulpia myuros	rat-tail fescue	39.05621	-120.40839	1.7	74,052	moderate
	5/24/2008		Bromus tectorum	cheatgrass	39.05538	-120.40872	0.66	28,750	low
H07	5/24/2008		Vulpia myuros	rat-tail fescue	39.05538	-120.40872	0.66	28,750	low
1100			Taeniatherum caput-						
H09	5/24/2008	Rubicon River Gage and Weir below Hell Hole Dam Road	medusae	medusahead	39.06128	-120.41367	0.00	192	moderate
	5/24/2008		Bromus tectorum	cheatgrass	39.05900	-120.41540	0.82	35,719	moderate
H10	5/24/2008	Dormitory Facility	Hypericum perforatum	klamathweed	39.05900	-120.41540	0.82	35,719	low
	5/24/2008	Dormitory Facility	Vulpia myuros	rat-tail fescue	39.05900	-120.41540	0.82	35,719	moderate
	5/24/2008	Dormitory Facility Barrier Fence/Hell Hole Staging Area	Bromus tectorum	cheatgrass	39.05750	-120.41470	3.4	148,104	moderate
1144	7/27/2008	Dormitory Facility Barrier Fence/Hell Hole Staging Area	Dactylis glomerata	orchardgrass	39.05750	-120.41470	3.4	148,104	low
H11	5/24/2008	Dormitory Facility Barrier Fence/Hell Hole Staging Area	Plantago lanceolata	English plantain	39.05752	-120.41463	0.01	400	high
	5/24/2008	Dormitory Facility Barrier Fence/Hell Hole Staging Area	Vulpia myuros	rat-tail fescue	39.05750	-120.41470	3.4	148,104	low
	5/24/2008	Dormitory Facility Road	Bromus tectorum	cheatgrass	39.05830	-120.41590	0.93	40,511	moderate
H12	5/24/2008	Dormitory Facility Road	Hypericum perforatum	klamathweed	39.05830	-120.41590	0.02	750	low
	5/24/2008	Dormitory Facility Road	Vulpia myuros	rat-tail fescue	39.05830	-120.41590	0.93	40,511	low
	7/27/2008	Hell Hole Staging Area	Bromus tectorum	cheatgrass	39.05748	-120.41620	0.01	625	high
	7/27/2008	Hell Hole Staging Area	Hypericum perforatum	klamathweed	39.05748	-120.41620	0.02	1000	high
H13	7/27/2008	Hell Hole Staging Area	Hypericum perforatum	klamathweed	39.05670	-120.41670	0.01	600	low
	7/27/2008	Hell Hole Staging Area	Plantago lanceolata	English plantain	39.05748	-120.41620	1 plant	1 plant	low
	7/27/2008	Hell Hole Staging Area	Verbascum thapsus	woolly mullein	39.05748	-120.41620	0.00	100	high
	5/24/2008	Hell Hole Dam Spillway Discharge Channel Road	Bromus diandrus	ripgut brome	39.05520	-120.41290	3.6	156,816	low
	5/24/2008		Bromus tectorum	cheatgrass	39.05670	-120.41680	3.6	156,816	moderate
	5/24/2008		Cynosurus echinatus	hedgehog dogtailgrass	39.05670	-120.41680	3.6	156,816	low
	5/24/2008		Dactylis glomerata	orchardgrass	39.05670	-120.41680	3.6	156,816	low
H14	5/24/2008	Hell Hole Dam Spillway Discharge Channel Road	Hypericum perforatum	klamathweed	39.05670	-120.41680	3.6	156,816	low
	5/24/2008		Plantago lanceolata	English plantain	39.05670	-120.41680	3.6	156,816	low
	5/24/2008		Verbascum thapsus	woolly mullein	39.05670	-120.41680	3.6	156,816	low
		Hell Hole Dam Spillway Discharge Channel Road	Vulpia myuros	rat-tail fescue	39.05670	-120.41680	3.6	156,816	low
		Operator Cottages and Shop	Agrostis stolonifera	creeping bent grass	39.05820	-120.41790	1	43,560	low
		Operator Cottages and Shop	Bromus diandrus	ripgut brome	39.05820	-120.41790	1	43,560	low
		Operator Cottages and Shop	Bromus tectorum	cheatgrass	39.05820	-120.41790	1	43,560	moderate
		Operator Cottages and Shop	Chondrilla juncea	rush skeletonweed	39.05807	-120.41852	0.2	8,712	low
		Operator Cottages and Shop	Cynosurus echinatus	hedgehog dogtailgrass	39.05820	-120.41790	1	43,560	low
H15	5/24/2008		Dactylis glomerata	orchardgrass	39.05820	-120.41790	1	43,560	low
	5/24/2008		Plantago lanceolata	English plantain	39.05820	-120.41790	1	43,560	low
	7/27/2008		Rubus discolor	Himalayan blackberry	39.05810	-120.41790	0.01	375	high
	5/24/2008		Rumex acetosella	sheep sorrel	39.05830	-120.41830	0.01	43,560	low
	5/24/2008		Verbascum thapsus	woolly mullein	39.05820	-120.41790	1	43,560	low
	7/27/2008		Bromus tectorum	cheatgrass	39.06040	-120.41790	0.95	41,382	low
		Dormitory and Cottages Water Supply Tank Dormitory and Cottages Water Supply Tank	Cirsium vulgare	bull thistle	39.06047	-120.41790	0.95	1,000	low
	7/27/2008								
H16			Cynosurus echinatus	hedgehog dogtailgrass	39.06070	-120.41792	0.01	450	high
	5/24/2008		Dactylis glomerata	orchardgrass	39.06047	-120.41640	0.02	1,000	low
		Dormitory and Cottages Water Supply Tank	Hypericum perforatum	klamathweed	39.06040	-120.41790	0.95	41,382	moderate
	7/27/2008	Dormitory and Cottages Water Supply Tank	Hypericum perforatum	klamathweed	39.06047	-120.41640	0.02	1,000	high

Appendix D. Results of Noxious Weed Surveys at Existing Project Facilities and Features, Project Recreation Facilities, and Dispersed Concentrated Use Areas (continued).

Map ID ¹	Survey Date	Facility	Scientific Name	Common Name	Latitude/ UTM East	Longitude/ UTM North	Population Size (Acres) ²	Population Size (Square feet)	Infestation Level
		Hell Hole-Middle Fork Tunnel Gatehouse Road	Bromus tectorum	cheatgrass	39.06080	-120.41641	0.32	13,939	low
H17		Hell Hole-Middle Fork Tunnel Gatehouse Road	Dactylis glomerata	orchardgrass	39.06080	-120.41641	0.32	13,939	low
1117		Hell Hole-Middle Fork Tunnel Gatehouse Road	Hirschfeldia incana	shortpod mustard	39.06080	-120.41641	0.32	13,939	low
	5/24/2008	Hell Hole-Middle Fork Tunnel Gatehouse Road	Hypericum perforatum	klamathweed	39.06080	-120.41641	0.32	13,939	low
	5/24/2008	Hell Hole-Middle Fork Tunnel Gatehouse Road/French Meadows Powerhouse and Switchyard to Hell Hole-Middle Fork Tunnel Gatehouse, Dormitory Facility, Operator Cottages, and Hell Hole Powerhouse Communication Line / Powerline	Bromus tectorum	cheatgrass	39.06243	-120.41540	3.4	148,104	moderate
H18	7/27/2008	Hell Hole-Middle Fork Tunnel Gatehouse Road/French Meadows Powerhouse and Switchyard to Hell Hole-Middle Fork Tunnel Gatehouse, Dormitory Facility, Operator Cottages, and Hell Hole Powerhouse Communication Line / Powerline Hell Hole-Middle Fork Tunnel Gatehouse Road/French Meadows Powerhouse and Switchyard to Hell Hole-Middle Fork Tunnel	Hypericum perforatum	klamathweed	39.06454	-120.41547	0.03	1,500	high
	7/27/2009	Gatehouse, Dormitory Facility, Operator Cottages, and Hell Hole Powerhouse Communication Line / Powerline	Vulnio muuroo	rot toil focus	20.06192	120 41529	0.14	6 009	modorata
		French Meadows Powerhouse Road	Vulpia myuros Bromus tectorum	rat-tail fescue	39.06183 39.07047	-120.41538 -120.41347	0.14 9.5	6,098 413,820	moderate low
				cheatgrass bull thistle					
			Cirsium vulgare		39.07047	-120.41347	0.02	1,000	moderate
		French Meadows Powerhouse Road	Cirsium vulgare	bull thistle	39.06511	-120.41796	0.02	1,000	low
1140		French Meadows Powerhouse Road	Cynosurus echinatus	hedgehog dogtailgrass	39.07248	-120.41089	0.03	1,500	moderate
H19		French Meadows Powerhouse Road	Cynosurus echinatus	hedgehog dogtailgrass	39.06744	-120.41559	0.01	400	low
		French Meadows Powerhouse Road	Hypericum perforatum	klamathweed	39.07443	-120.41001	0.07	3,000	moderate
		French Meadows Powerhouse Road	Hypericum perforatum	klamathweed	39.06744	-120.41559	0.02	1,000	moderate
		French Meadows Powerhouse Road	Hypericum perforatum	klamathweed	39.06511	-120.41796	0.02	1,000	moderate
		French Meadows Powerhouse Road	Vulpia myuros	rat-tail fescue	39.07443	-120.41001	0.07	3,000	moderate
		French Meadows Powerhouse	Bromus tectorum	cheatgrass	39.07750	-120.40715	2	87,120	moderate
		French Meadows Powerhouse	Cirsium vulgare	bull thistle	39.07764	-120.40691	2	87,120	moderate
		French Meadows Powerhouse	Hirschfeldia incana	shortpod mustard	39.07764	-120.40691	2	87,120	low
H20		French Meadows Powerhouse	Hirschfeldia incana	shortpod mustard	39.07750	-120.40715	0.00	25	high
		French Meadows Powerhouse	Hypericum perforatum	klamathweed	39.07750	-120.40715	2	87,120	high
		French Meadows Powerhouse	Melilotus officinalis	yellow sweetclover	39.07764	-120.40691	2	87,120	low
	7/27/2008	French Meadows Powerhouse	Vulpia myuros	rat-tail fescue	39.07764	-120.40691	2	87,120	low
1104	5/24/2008	French Meadows-Hell Hole Tunnel Portal Road/French Meadows Powerhouse Penstock and Butterfly Valve House	Bromus tectorum	cheatgrass	39.07708	-120.41059	4.7	204,732	low
H21	E/24/2009	French Meadows-Hell Hole Tunnel Portal Road/French Meadows Powerbouse Ponetteck and Butterfly Volve House	Cupacitria cabinatus	hadaahaa daatailaraaa	39.07726	-120.41030	0.01	500	low
		Powerhouse Penstock and Butterfly Valve House French Meadows-Hell Hole Tunnel Portal Road	Cynosurus echinatus	hedgehog dogtailgrass		-120.41059	0.01 4.7		low low
			Vulpia myuros	rat-tail fescue	39.07708			204,732	
H27		Hell Hole Reservoir Hell Hole Reservoir	Bromus tectorum	cheatgrass	39.06860	-120.41237	10.4	453,024 453,024	moderate
		Hell Hole Reservoir Hell Hole Reservoir	Rumex acetosella	sheep sorrel	39.06860 39.07590	-120.41237 -120.40768	10.4	453,024	low
H28			Bromus tectorum	cheatgrass			8.9	387,684	low
		Hell Hole Reservoir	Verbascum thapsus	woolly mullein	39.07724	-120.40694	8.9	387,684	low
H29		Hell Hole Reservoir	Bromus tectorum	cheatgrass	39.08545	-120.39542	2.6	113,256	low
		Hell Hole Reservoir	Vulpia myuros	rat-tail fescue	39.08545	-120.39542	2.6	113,256	low
Цэл		Hell Hole Reservoir	Cirsium vulgare	bull thistle	39.08670	-120.39065	0.06	2,500	moderate
H30		Hell Hole Reservoir	Hypericum perforatum	klamathweed	39.08670	-120.39065	0.34	14,810	high
		Hell Hole Reservoir	Verbascum thapsus	woolly mullein	39.08618	-120.38888	5.1	222,156	high
H31		Hell Hole Reservoir	Bromus tectorum	cheatgrass	39.08663	-120.38827	4.1	178,596	low
		Hell Hole Reservoir	Vulpia myuros	rat-tail fescue	39.08663	-120.38827	4.1	178,596	low
H32		Hell Hole Reservoir	Bromus tectorum	cheatgrass	39.08651	-120.37735	5.3	230,868	low
	7/30/2008	Hell Hole Reservoir	Vulpia myuros	rat-tail fescue	39.08651	-120.37735	5.3	230,868	high

Appendix D. Results of Noxious Weed Surveys at Existing Project Facilities and Features, Project Recreation Facilities, and Dispersed Concentrated Use Areas (continued).

Map ID ¹	Survey Date	Facility	Scientific Name	Common Name	Latitude/ UTM East	Longitude/ UTM North	Population Size (Acres) ²	Population Size (Square feet)	Infestation Level
	7/29/2008	Hell Hole Reservoir	Hypericum perforatum	klamathweed	39.08617	-120.37824	0.01	415	low
H33	7/30/2008	Hell Hole Reservoir	Verbascum thapsus	woolly mullein	39.08733	-120.38065	3.4	148,104	moderate
	7/30/2008	Hell Hole Reservoir	Vulpia myuros	rat-tail fescue	39.08733	-120.38065	3.4	148,104	moderate
110.4	7/30/2008	Hell Hole Reservoir	Bromus tectorum	cheatgrass	39.08722	-120.37221	2.4	104,544	low
H34	7/30/2008	Hell Hole Reservoir	Vulpia myuros	rat-tail fescue	39.08722	-120.37221	2.4	104,544	low
	5/29/2008	Hell Hole Reservoir	Agrostis stolonifera	creeping bent grass	39.08787	-120.36741	0.05	2,000	moderate
1105	5/29/2008	Gray Horse Area/Hell Hole Reservoir	Bromus tectorum	cheatgrass	39.08940	-120.36690	4	174,240	moderate
H35	7/29/2008	Hell Hole Reservoir	Verbascum thapsus	woolly mullein	39.08910	-120.36640	4	174,240	low
	7/30/2008	Gray Horse Area/ Hell Hole Reservoir	Vulpia myuros	rat-tail fescue	39.08940	-120.36690	4	174,240	low
1100	7/30/2008	Hell Hole Reservoir	Bromus tectorum	cheatgrass	39.08540	-120.36832	2.4	104,544	low
H36		Hell Hole Reservoir	Vulpia myuros	rat-tail fescue	39.08540	-120.36832	2.4	104,544	low
		Hell Hole Reservoir	Bromus tectorum	cheatgrass	39.08709	-120.35585	4	174,240	low
H37		Hell Hole Reservoir	Verbascum thapsus	woolly mullein	39.08780	-120.35770	4	174,240	moderate
		Hell Hole Reservoir	Vulpia myuros	rat-tail fescue	39.08780	-120.35770	4	174,240	moderate
		Hell Hole Reservoir	Agrostis stolonifera	creeping bent grass	39.08560	-120.35425	1.7	74,052	low
H38		Hell Hole Reservoir	Bromus tectorum	cheatgrass	39.08560	-120.35425	1.7	74,052	low
		Hell Hole Reservoir	Vulpia myuros	rat-tail fescue	39.08560	-120.35425	1.7	74,052	low
		Hell Hole Reservoir	Bromus tectorum	cheatgrass	39.08471	-120.35444	1.4	60,984	low
H39		Hell Hole Reservoir	Vulpia myuros	rat-tail fescue	39.08471	-120.35444	1.4	60,984	low
		Hell Hole Reservoir	Bromus tectorum	cheatgrass	39.08295	-120.35376	2.7	117,612	low
H40		Hell Hole Reservoir	Vulpia myuros	rat-tail fescue	39.08295	-120.35376	2.7	117,612	moderate
		Hell Hole Reservoir	Bromus tectorum	cheatgrass	39.08150	-120.33370	3.9	169,884	low
H41		Hell Hole Reservoir	Vulpia myuros	rat-tail fescue	39.08150	-120.34955	3.9	169,884	low
H42		Hell Hole Reservoir	Vulpia myuros	rat-tail fescue	39.07945	-120.34981	3.4	148,104	low
1142		Hell Hole Reservoir	Agrostis stolonifera	creeping bent grass	39.08000	-120.34674	2.8	121,968	low
H43		Hell Hole Reservoir	Cirsium vulgare	bull thistle	39.08030	-120.34710	2.8	121,968	low
1143		Hell Hole Reservoir	Verbascum thapsus	woolly mullein	39.08000	-120.34674	2.8	121,968	low
		Hell Hole Reservoir	Bromus tectorum	cheatgrass	39.08030	-120.34360	0.06	2,800	moderate
H44		Hell Hole Reservoir	Vulpia myuros	rat-tail fescue	39.08030	-120.34360	7.6	331,056	moderate
H45		Hell Hole Reservoir	Vulpia myuros	rat-tail fescue	39.08012	-120.34360	1.6	43,560	low
П4Э		Hell Hole Reservoir	<u> </u>		39.08240	-120.34239	2.1	91,476	low
шле			Bromus tectorum	cheatgrass		****			
H46		Hell Hole Reservoir	Verbascum thapsus	woolly mullein	39.08355	-120.36453	12.1	527,076	moderate
U40		Hell Hole Reservoir Hell Hole Reservoir	Vulpia myuros	rat-tail fescue	39.08240	-120.35650	2.1	91,476	moderate
H48			Vulpia myuros	rat-tail fescue	39.08178	120.37704	2.3	100,188	low
H49		Hell Hole Reservoir	Vulpia myuros	rat-tail fescue	39.07838	120.38862	8.1	352,836	low
H50		Hell Hole Reservoir	Vulpia myuros	rat-tail fescue	39.07810	-120.38890	1.7	74,052	low
H51		Hell Hole Reservoir	Verbascum thapsus	woolly mullein	39.06700	-120.40310	6.8	296,208	low
		Hell Hole Reservoir	Vulpia myuros	rat-tail fescue	39.06700	-120.40310	6.8	296,208	moderate
H52		Hell Hole Reservoir	Agrostis stolonifera	creeping bent grass	39.07020	-120.40130	0.04	1,600	moderate
		Hell Hole Reservoir	Verbascum thapsus	woolly mullein	39.06998	-120.40193	17.8	775,368	high
		Hell Hole Reservoir	Bromus tectorum	cheatgrass	39.08160	-120.35550	0.03	1,200	moderate
H53		Hell Hole Reservoir	Bromus tectorum	cheatgrass	39.05820	-120.40620	2.9	126,324	low
		Hell Hole Reservoir	Vulpia myuros	rat-tail fescue	39.08160	-120.35550	0.03	1,200	high
		Hell Hole Reservoir	Vulpia myuros	rat-tail fescue	39.05820	-120.40620	2.9	126,324	moderate
		Hell Hole Reservoir	Agrostis stolonifera	creeping bent grass	39.08085	-120.34559	0.04	1,580	high
		Hell Hole Reservoir	Bromus tectorum	cheatgrass	39.08085	-120.34559	0.04	1,580	low
H54		Hell Hole Reservoir	Plantago lanceolata	English plantain	39.08085	-120.34559	0.04	1,580	moderate
		Hell Hole Reservoir	Rumex acetosella	sheep sorrel	39.08085	-120.34559	0.00	200	high
		Hell Hole Reservoir	Vulpia myuros	rat-tail fescue	39.08085	-120.34559	0.04	1,580	moderate
H55	5/29/2008	Hell Hole Reservoir	Verbascum thapsus	woolly mullein	39.08050	-120.35370	3.8	165,528	low

Appendix D. Results of Noxious Weed Surveys at Existing Project Facilities and Features, Project Recreation Facilities, and Dispersed Concentrated Use Areas (continued).

Map ID ¹	Survey Date	Facility	Scientific Name	Common Name	Latitude/ UTM East	Longitude/ UTM North	Population Size (Acres) ²	Population Size (Square feet)	Infestation Level
	7/31/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Bromus tectorum	cheatgrass	39.05180	-120.61630	5	217,800	moderate
	5/22/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Chondrilla juncea	rush skeletonweed	39.04630	-120.61570	0.02	800	moderate
	0/22/2000	Middle Fork Interbay Dam and Powerhouse Road and Interbay	Ononama janoca	Tusti skolotoriwood	00.04000	120.01070	0.02		moderate
	5/22/2008	Access Points	Cirsium vulgare	bull thistle	39.04850	-120.61650	0.06	2,400	moderate
	5/22/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Cirsium vulgare	bull thistle	39.04626	-120.61509	0.01	400	low
	5/22/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Cynosurus echinatus	hedgehog dogtailgrass	39.05180	-120.61630	5	217,800	low
I 01	5/22/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Plantago lanceolata	English plantain	39.05180	-120.61630	0.00	100	low
	= /00 /00 00	Middle Fork Interbay Dam and Powerhouse Road and Interbay	_		00040	400.04000		~ =	
	5/22/2008	Access Points Middle Fork Interbay Dam and Powerhouse Road and Interbay	Rumex acetosella	sheep sorrel	39.04570	-120.61200	0.00	25	high
	5/22/2008		Rumex acetosella	sheep sorrel	39.05180	-120.61630	5	217,800	moderate
		Middle Fork Interbay Dam and Powerhouse Road and Interbay							
	5/22/2008	Access Points Middle Fork Interbay Dam and Powerhouse Road and Interbay	Rumex acetosella	sheep sorrel	39.04560	-120.61450	0.01	500	high
	5/22/2008	Access Points	Rumex acetosella	sheep sorrel	39.04580	-120.61180	0.00	75	high
	E/22/2009	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Vulnio muuroo	rot toil foodus	20.05190	120 61620	5	217 900	
	5/22/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay	Vulpia myuros	rat-tail fescue	39.05180	-120.61630	5	217,800	moderate
	5/22/2008	Access Points	Chondrilla juncea	rush skeletonweed	39.04170	-120.60860	7	304,920	moderate
	5/22/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Cirsium vulgare	bull thistle	39.04130	-120.60790	7	304,920	low
	5/22/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Cynosurus echinatus	hedgehog dogtailgrass	39.04280	-120.61280	0.00	100	moderate
	5/22/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Cynosurus echinatus	hedgehog dogtailgrass	39.04370	-120.61310	0.02	800	high
	5/22/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Hypericum perforatum	klamathweed	39.04470	-120.61140	0.01	500	low
102		Middle Fork Interbay Dam and Powerhouse Road and Interbay							
102	5/22/2008	Access Points Middle Fork Interbay Dam and Powerhouse Road and Interbay	Hypericum perforatum	klamathweed	39.04190	-120.60750	7	304,920	low
	5/22/2008	Access Points	Plantago lanceolata	English plantain	39.04110	-120.60970	0.00	150	moderate
	,,	Middle Fork Interbay Dam and Powerhouse Road and Interbay							
	5/22/2008	Access Points Middle Fork Interbay Dam and Powerhouse Road and Interbay	Plantago lanceolata	English plantain	39.04170	-120.60860	7	304,920	moderate
	5/22/2008		Rumex acetosella	sheep sorrel	39.04570	-120.61060	7	304,920	low
		Middle Fork Interbay Dam and Powerhouse Road and Interbay							
	5/22/2008	Access Points	Torilis arvensis	spreading hedgeparsley	39.04570	-120.61060	0.00	50	low
	5/22/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Vulpia myuros	rat-tail fescue	39.04230	-120.61240	7	304,920	moderate
		Middle Fork Interbay Sediment Disposal Area	Bromus diandrus	ripgut brome	39.03900	-120.61360	2	87,120	high
		Middle Fork Interbay Sediment Disposal Area	Bromus tectorum	cheatgrass	39.03900	-120.61360	2	87,120	high
100		Middle Fork Interbay Sediment Disposal Area	Chondrilla juncea	rush skeletonweed	39.03900	-120.61360	0.01	625	low
103		Middle Fork Interbay Sediment Disposal Area	Hirschfeldia incana	shortpod mustard	39.03905	-120.61265	0.03	1,500	low
		Middle Fork Interbay Sediment Disposal Area	Melilotus albus	white sweet clover	39.03905	-120.61265	0.03	1,500	low
	7/31/2008	Middle Fork Interbay Sediment Disposal Area	Vulpia myuros	rat-tail fescue	39.03900	-120.61360	1.9	82,764	high

Appendix D. Results of Noxious Weed Surveys at Existing Project Facilities and Features, Project Recreation Facilities, and Dispersed Concentrated Use Areas (continued).

Map ID ¹	Survey Date	Facility	Scientific Name	Common Name	Latitude/ UTM East	Longitude/ UTM North	Population Size (Acres) ²	Population Size (Square feet)	Infestation Level
	5/22/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Cirsium vulgare	bull thistle	39.03950	-120.61570	0.01	350	moderate
	7/31/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Cirsium vulgare	bull thistle	39.03550	-120.61019	1 plant	1 plant	low
	5/22/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Cynosurus echinatus	hedgehog dogtailgrass	39.03950	-120.61570	6.1	265,716	moderate
	5/22/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Hypericum perforatum	klamathweed	39.03950	-120.61570	6.1	265,716	low
104	5/22/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Plantago lanceolata	English plantain	39.03620	-120.60930	0.00	100	moderate
	5/22/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Rumex acetosella	sheep sorrel	39.04000	-120.61600	0.02	1,000	low
		Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Rumex acetosella	sheep sorrel	39.03560	-120.61040	0.00	75	moderate
	5/22/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Torilis arvensis	spreading hedgeparsley	39.03550	-120.60920	6.1	265,716	moderate
	5/22/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Vulpia myuros	rat-tail fescue	39.04000	-120.61600	6.1	265,716	moderate
		Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Bromus diandrus	ripgut brome	39.03400	-120.61420	6	261,360	low
		Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Chondrilla juncea	rush skeletonweed	39.03090	-120.61380	0.01	500	low
105	5/22/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Cynosurus echinatus	hedgehog dogtailgrass	39.03390	-120.61560	6	261,360	low
105	5/22/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Dactylis glomerata	orchardgrass	39.03040	-120.61310	0.01	600	low
	5/22/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Hypericum perforatum	klamathweed	39.03470	-120.61270	6	261,360	low
	5/22/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Torilis arvensis	spreading hedgeparsley	39.03470	-120.61270	6	261,360	moderate
	5/22/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Bromus diandrus	ripgut brome	39.03040	-120.61310	5.6	243,936	moderate
	5/22/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Bromus tectorum	cheatgrass	39.03360	-120.61470	5.6	243,936	moderate
	5/22/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Chondrilla juncea	rush skeletonweed	39.03040	-120.61310	5.6	243,936	low
	5/22/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Cynosurus echinatus	hedgehog dogtailgrass	39.03010	-120.60790	5.6	243,936	low
106	5/22/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Hirschfeldia incana	shortpod mustard	39.03080	-120.61030	0.05	2,250	moderate
	5/22/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Hirschfeldia incana	shortpod mustard	39.02770	-120.60340	0.01	300	low
	5/22/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points Middle Fork Interbay Dam and Powerhouse Road and Interbay	Hypericum perforatum	klamathweed	39.03010	-120.60790	5.6	243,936	low
	7/31/2008	Access Points Middle Fork Interbay Dam and Powerhouse Road and Interbay Middle Fork Interbay Dam and Powerhouse Road and Interbay	Melilotus albus	white sweet clover	39.03080	-120.61038	0.06	2,500	moderate
	5/22/2008	Access Points	Torilis arvensis	spreading hedgeparsley	39.03040	-120.61310	5.6	243,936	low
	5/22/2008	Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	Vulpia myuros	rat-tail fescue	39.02980	-120.60500	5.6	243,936	high

Appendix D. Results of Noxious Weed Surveys at Existing Project Facilities and Features, Project Recreation Facilities, and Dispersed Concentrated Use Areas (continued).

Map ID ¹	Survey Date	Facility	Scientific Name	Common Name	Latitude/ UTM East	Longitude/ UTM North	Population Size (Acres) ²	Population Size (Square feet)	Infestation Level
		Middle Fork Powerhouse to Middle Fork- Ralston Tunnel Intake					(3.3.00)	(24	
	5/21/2008		Bromus diandrus	ripgut brome	39.02570	-120.60210	3.4	148,104	moderate
		Middle Fork Powerhouse to Middle Fork- Ralston Tunnel Intake						,	
	5/21/2008	and Gatehouse Communication Line/Powerline	Bromus tectorum	cheatgrass	39.02570	-120.60210	3.4	148,104	low
		Middle Fork Interbay Dam and Powerhouse Road and Interbay							
	7/31/2008	Access Points	Cirsium vulgare	bull thistle	39.02485	-120.59964	1 plant	1 plant	low
		Middle Fork Powerhouse to Middle Fork- Ralston Tunnel Intake							
108	5/21/2008	and Gatehouse Communication Line/Powerline	Cynosurus echinatus	hedgehog dogtailgrass	39.02570	-120.60210	3.4	148,104	low
100		Middle Fork Powerhouse to Middle Fork- Ralston Tunnel Intake							
	5/21/2008	and Gatehouse Communication Line/Powerline	Hypericum perforatum	klamathweed	39.02570	-120.60210	3.4	148,104	moderate
		Middle Fork Interbay Dam and Powerhouse Road and Interbay							
	5/21/2008	Access Points	Melilotus officinalis	yellow sweetclover	39.02480	-120.59900	0.05	2,250	moderate
		Middle Fork Powerhouse to Middle Fork- Ralston Tunnel Intake							_
	5/21/2008	and Gatehouse Communication Line/Powerline	Melilotus officinalis	yellow sweetclover	39.02570	-120.60210	3.4	148,104	low
		Middle Fork Powerhouse to Middle Fork- Ralston Tunnel Intake							
	5/21/2008	and Gatehouse Communication Line/Powerline	Plantago lanceolata	English plantain	39.02570	-120.60210	3.4	148,104	low
		Middle Fork Powerhouse Upper Switchyard Road	Cirsium vulgare	bull thistle	39.02430	-120.59670	0.58	25,265	low
		Middle Fork Powerhouse Upper Switchyard Road	Dactylis glomerata	orchardgrass	39.02430	-120.59670	0.58	25,265	low
109		Middle Fork Powerhouse Upper Switchyard Road	Hirschfeldia incana	shortpod mustard	39.02430	-120.59670	0.58	25,265	low
100		Middle Fork Powerhouse Upper Switchyard Road	Melilotus officinalis	yellow sweetclover	39.02430	-120.59670	0.58	25,265	moderate
		Middle Fork Powerhouse Upper Switchyard Road	Rubus discolor	Himalayan blackberry	39.02430	-120.59670	0.58	25,265	low
	5/21/2008	Middle Fork Powerhouse Upper Switchyard Road	Verbascum thapsus	woolly mullein	39.02430	-120.59670	0.58	25,265	Low
		Middle Fork Powerhouse and Upper and Lower Switchyard	Bromus diandrus	ripgut brome	39.02490	-120.59610	0.73	31,799	Low
		Middle Fork Powerhouse and Upper and Lower Switchyard	Bromus tectorum	cheatgrass	39.02490	-120.59610	0.73	31,799	Low
		Middle Fork Powerhouse and Upper and Lower Switchyard	Cirsium vulgare	bull thistle	39.02490	-120.59610	0.73	31,799	Low
		Middle Fork Powerhouse and Upper and Lower Switchyard	Hypericum perforatum	klamathweed	39.02490	-120.59610	0.73	31,799	Low
l10		Middle Fork Powerhouse and Upper and Lower Switchyard	Melilotus officinalis	yellow sweetclover	39.02490	-120.59610	0.73	31,799	Low
		Middle Fork Powerhouse and Upper and Lower Switchyard	Rubus discolor	Himalayan blackberry	39.02491	-120.59588	0.01	400	High
		Middle Fork Powerhouse and Upper and Lower Switchyard	Torilis arvensis	spreading hedgeparsley	39.02490	-120.59610	0.73	31,799	Low
		Middle Fork Powerhouse and Upper and Lower Switchyard	Verbascum thapsus	woolly mullein	39.02490	-120.59610	0.73	31,799	low
		Middle Fork Powerhouse and Upper and Lower Switchyard	Vulpia myuros	rat-tail fescue	39.02490	-120.59610	0.73	31,799	low
		Middle Fork Powerhouse and Upper and Lower Switchyard	Bromus diandrus	ripgut brome	39.02430	-120.59650	0.17	7,405	low
		Middle Fork Powerhouse and Upper and Lower Switchyard	Bromus tectorum	cheatgrass	39.02430	-120.59650	0.17	7,405	low
		Middle Fork Powerhouse and Upper and Lower Switchyard	Dactylis glomerata	orchardgrass	39.02430	-120.59650	0.00	20	low
I 11		Middle Fork Powerhouse and Upper and Lower Switchyard	Hypericum perforatum	klamathweed	39.02430	-120.59650	0.17	7,405	low
•••		Middle Fork Powerhouse and Upper and Lower Switchyard	Melilotus officinalis	yellow sweetclover	39.02430	-120.59650	0.17	7,405	low
		Middle Fork Powerhouse and Upper and Lower Switchyard	Torilis arvensis	spreading hedgeparsley	39.02430	-120.59650	0.17	7,405	low
		Middle Fork Powerhouse and Upper and Lower Switchyard	Verbascum thapsus	woolly mullein	39.02430	-120.59650	0.17	7,405	low
	5/21/2008	Middle Fork Powerhouse and Upper and Lower Switchyard	Vulpia myuros	rat-tail fescue	39.02430	-120.59650	0.17	7,405	low
		Middle Fork American River Gage above Middle Fork							
	5/21/2008	Powerhouse Trail	Bromus diandrus	ripgut brome	39.02500	-120.59500	0.43	18,731	low
		Middle Fork American River Gage above Middle Fork							_
	5/21/2008	Powerhouse Trail	Bromus tectorum	cheatgrass	39.02500	-120.59500	0.43	18,731	low
		Middle Fork American River Gage above Middle Fork							_
	7/31/2008	Powerhouse Trail	Cirsium vulgare	bull thistle	39.02558	-120.59417	0.00	100	low
I12	F/04/0005	Middle Fork American River Gage above Middle Fork			00.00=00	400 -0-05	0.40	40 = 24	
-	5/21/2008	Powerhouse Trail	Cynosurus echinatus	hedgehog dogtailgrass	39.02500	-120.59500	0.43	18,731	moderate
	E/04/0000	Middle Fork American River Gage above Middle Fork		I Drawata was ta was	00.00500	400 50500	0.05	0.050	6.2.2
	5/21/2008	Powerhouse Trail	Rubus discolor	Himalayan blackberry	39.02500	-120.59500	0.05	2,250	high
	E/04/0000	Middle Fork American River Gage above Middle Fork	Touille en recie		20.00500	400 50500	0.40	40.704	1
	5/21/2008	Powerhouse Trail	Torilis arvensis	spreading hedgeparsley	39.02500	-120.59500	0.43	18,731	low
	7/04/0000	Middle Fork American River Gage above Middle Fork	Mark against the same	and all a provide to	20.00550	400 50447	0.00	400	Lasso
	1/37/2008	Powerhouse Trail	Verbascum thapsus	woolly mullein	39.02558	-120.59417	0.00	100	low

Appendix D. Results of Noxious Weed Surveys at Existing Project Facilities and Features, Project Recreation Facilities, and Dispersed Concentrated Use Areas (continued).

Map ID ¹	Survey Date	Facility	Scientific Name	Common Name	Latitude/ UTM East	Longitude/ UTM North	Population Size (Acres) ²	Population Size (Square feet)	Infestation Level
		Middle Fork Powerhouse Penstock and Butterfly Valve House							
	5/23/2008	Road	Agrostis stolonifera	creeping bent grass	39.02450	-120.59570	11.7	509,652	low
		Middle Fork Powerhouse Penstock and Butterfly Valve House							
	5/23/2008		Bromus tectorum	cheatgrass	39.02450	-120.59570	11.7	509,652	low
		Middle Fork Powerhouse Penstock and Butterfly Valve House							_
	5/23/2008		Chondrilla juncea	rush skeletonweed	39.02450	-120.59570	11.7	509,652	low
	5/23/2008	Middle Fork Powerhouse Penstock and Butterfly Valve House	Cirsium arvense	Canada thistle	39.01850	-120.58780	0.02	900	low
	5 /00 /00 00	Middle Fork Powerhouse Penstock and Butterfly Valve House			00 0000	400 50070	0.00	000	
	5/23/2008		Cirsium arvense	Canada thistle	39.02290	-120.59270	0.02	900	low
	F /00 /0000	Middle Fork Powerhouse Penstock and Butterfly Valve House	I line alefa lelia irana ana		20.00400	400 50400	0.00	000	
	5/23/2008	Road Middle Fork Devembers Remarks and Distantily Volve House	Hirschfeldia incana	shortpod mustard	39.02460	-120.59490	0.02	900	moderate
	5/23/2008	Middle Fork Powerhouse Penstock and Butterfly Valve House	Hypericum perforatum	klamathweed	39.01850	-120.58780	0.02	900	low
	5/23/2008	Middle Fork Powerhouse Penstock and Butterfly Valve House	Llunarioum narforatum	klamathweed	39.02060	-120.58930	0.00	F0	moderate
		Road Middle Fork Powerhouse Penstock and Butterfly Valve House	Hypericum perforatum			****	0.00	50 900	moderate
I13	5/23/2006	·	Melilotus officinalis	yellow sweetclover	39.01850	-120.58780	0.02	900	low
	5/23/2008	Middle Fork Powerhouse Penstock and Butterfly Valve House Road	Rubus discolor	Himalayan blackberry	39.02440	-120.59460	0.00	100	moderate
	3/23/2006	Middle Fork Powerhouse Penstock and Butterfly Valve House	Rubus discolor	Tillilalayan blackberry	39.02440	-120.59400	0.00	100	moderate
	5/23/2008	Road	Rubus discolor	Himalayan blackberry	39.02400	-120.59400	0.00	200	moderate
	3/23/2000	Middle Fork Powerhouse Penstock and Butterfly Valve House	Tubus discolor	I lililalayan blackberry	33.02400	-120.55400	0.00	200	moderate
	5/23/2008		Rubus discolor	Himalayan blackberry	39.02350	-120.59370	0.01	250	high
	3/23/2000	Middle Fork Powerhouse Penstock and Butterfly Valve House	Tubus discolor	Timalayan blackberry	33.02330	120.00070	0.01	200	riigii
	5/23/2008		Rumex acetosella	sheep sorrel	39.02450	-120.59570	11.7	509,652	low
	0/20/2000	Middle Fork Powerhouse Penstock and Butterfly Valve House	Tramox doctooona	опоор сентен	00.02.100	120.00070		000,002	
	5/23/2008	Road	Torilis arvensis	spreading hedgeparsley	39.02450	-120.59570	11.7	509,652	moderate
		Middle Fork Powerhouse Penstock and Butterfly Valve House	Verbascum thapsus	woolly mullein	39.01850	-120.58780	0.02	900	low
	5.25,255	Middle Fork Powerhouse Penstock and Butterfly Valve House							
	5/23/2008		Verbascum thapsus	woolly mullein	39.02450	-120.59570	11.7	509,652	low
		Middle Fork Powerhouse Penstock and Butterfly Valve House		,					
	5/23/2008		Vulpia myuros	rat-tail fescue	39.02450	-120.59570	11.7	509,652	moderate
		Middle Fork Powerhouse to Middle Fork Powerhouse Butterfly							
	5/23/2008	Valve House Communication Line/Powerline	Bromus tectorum	cheatgrass	39.02450	-120.59570	5.2	226,512	moderate
		Middle Fork Powerhouse to Middle Fork Powerhouse Butterfly							
	5/23/2008		Chondrilla juncea	rush skeletonweed	39.02450	-120.59570	5.2	226,512	moderate
I14		Middle Fork Powerhouse to Middle Fork Powerhouse Butterfly							
	5/23/2008	Valve House Communication Line/Powerline	Hypericum perforatum	klamathweed	39.02450	-120.59570	5.2	226,512	low
		Middle Fork Powerhouse to Middle Fork Powerhouse Butterfly							
	5/23/2008		Melilotus officinalis	yellow sweetclover	39.02450	-120.59570	5.2	226,512	low
	F /00 /0000	Middle Fork Powerhouse to Middle Fork Powerhouse Butterfly	W to be an analysis	201.101.10.20	00.00450	400 50570	5 0	000 540	1.
	5/23/2008	Valve House Communication Line/Powerline	Vulpia myuros	rat-tail fescue	39.02450	-120.59570	5.2	226,512	low
		Middle Fork Powerhouse Butterfly Valve House Road	Agrostis stolonifera	creeping bent grass	39.01860	-120.58840	0.16	6,970	moderate
l15		Middle Fork Powerhouse Butterfly Valve House Road Middle Fork Powerhouse Butterfly Valve House Road	Bromus tectorum	cheatgrass rush skeletonweed	39.01860	-120.58840	0.16	6,970	low
	6/6/2008		Chondrilla juncea		39.01845	-120.58815	0.00	100	low low
		Middle Fork Powerhouse Butterfly Valve House Road	Cynosurus echinatus	hedgehog dogtailgrass	39.01860	-120.58840	0.16	6,970	
		Middle Fork Powerhouse Butterfly Valve House Road Middle Fork Powerhouse Butterfly Valve House Road	Vulpia myuros Bromus tectorum	rat-tail fescue cheatgrass	39.01845 39.01530	-120.58815 -120.59040	0.00 0.02	100 1,000	moderate low
	6/6/2008	Middle Fork Powerhouse Butterfly Valve House Road Middle Fork Powerhouse Butterfly Valve House Road	Bromus tectorum	cheatgrass	39.01750	-120.59040	0.02	50	low
I16	6/6/2008	Middle Fork Powerhouse Butterfly Valve House Road Middle Fork Powerhouse Butterfly Valve House Road	Bromus tectorum	cheatgrass	39.01620	-120.58810	0.00	80	low
116	6/6/2008	Middle Fork Powerhouse Butterfly Valve House Road	Cynosurus echinatus	hedgehog dogtailgrass	39.01530	-120.59040	0.00	1,000	low
	6/6/2008	Middle Fork Powerhouse Butterfly Valve House Road	Torilis arvensis	spreading hedgeparsley	39.01750	-120.59040	0.02	50	low
l17	6/6/2008	Middle Fork Powerhouse Butterfly Valve House Road	Bromus tectorum	cheatgrass	39.01270	-120.59010	2.6	113,256	low
	0/0/2000	Passive Microwave Reflector Station above Middle Fork Interbay	Diomas todorum	onodigidos	55.01270	120.03230	۷.0	110,200	1000
I18	7/31/2008		Cirsium vulgare	bull thistle	39.03687	-120.57519	0.10	4,446	high
L	.,51,2000	1	Juliani valgaro	Jan anodo	23.00007	1 .20.07010	1 0.10	1,110	,g

Appendix D. Results of Noxious Weed Surveys at Existing Project Facilities and Features, Project Recreation Facilities, and Dispersed Concentrated Use Areas (continued).

Passive Microwave Reflector Station above Middle Fork Interbay Trail	opulation Size Infestation (Square feet) Level
Passive Microwave Reflector Station above Middle Fork Interbay Vulpia myuros rat-tail fescue 39.03620 -120.57540 0.00	100
120 Fall Foliar Properties Fall Fall	100 moderate
Radio Communications Tower and Repeater near Hell Hole- Middle Fork Tunnel Surge Shaft and Tank Radio Communications Tower and Repeater near Hell Hole- Radio Communications Tower and Repeater near Hell Hole- Middle Fork Tunnel Surge Shaft and Tank Cirsium vulgare 5/21/2008 Middle Fork-Ralston Tunnel Intake and Gatehouse Bromus diandrus ripgut brome 39.01590 -120.58290 0.01	100 moderate
120 5/23/2008 Middle Fork Tunnel Surge Shaft and Tank Bromus tectorum Cheatgrass 39.01590 -120.58290 0.38 Radio Communications Tower and Repeater near Hell Hole- Middle Fork Tunnel Surge Shaft and Tank Cirsium vulgare bull thistle 39.01590 -120.58290 0.01 5/21/2008 Middle Fork-Ralston Tunnel Intake and Gatehouse Bromus diandrus ripgut brome 39.02560 -120.60210 0.19 5/21/2008 Middle Fork-Ralston Tunnel Intake and Gatehouse Chondrilla juncea rush skeletonweed 39.02560 -120.60210 0.19 5/21/2008 Middle Fork-Ralston Tunnel Intake and Gatehouse Cynosurus echinatus hedgehog dogtailgrass 39.02560 -120.60210 0.19 5/21/2008 Middle Fork-Ralston Tunnel Intake and Gatehouse Dactylis glomerata Orchardgrass 39.02560 -120.60210 0.19 5/21/2008 Middle Fork-Ralston Tunnel Intake and Gatehouse Dactylis glomerata Shortpod mustard 39.02560 -120.60210 0.19 5/21/2008 Middle Fork-Ralston Tunnel Intake and Gatehouse Dactylis glomerata Shortpod mustard 39.02560 -120.60210 0.19	
7/28/2008 Middle Fork Tunnel Surge Shaft and Tank Cirsium vulgare bull thistle 39.01590 -120.58290 0.01 5/21/2008 Middle Fork-Ralston Tunnel Intake and Gatehouse Fromus diandrus ripgut brome 39.02560 -120.60210 0.19 5/21/2008 Middle Fork-Ralston Tunnel Intake and Gatehouse Chondrilla juncea rush skeletonweed 39.02560 -120.60210 0.19 5/21/2008 Middle Fork-Ralston Tunnel Intake and Gatehouse Cynosurus echinatus hedgehog dogtailgrass 39.02560 -120.60210 0.19 5/21/2008 Middle Fork-Ralston Tunnel Intake and Gatehouse Dactylis glomerata orchardgrass 39.02560 -120.60210 0.19 5/21/2008 Middle Fork-Ralston Tunnel Intake and Gatehouse Figure Fork-Ralston Tunnel Intake and Gatehouse Shortpod mustard Shortpod mustard Shortpod mustard 39.02560 -120.60210 0.19	16,553 low
5/21/2008 Middle Fork-Ralston Tunnel Intake and Gatehouse Bromus diandrus ripgut brome 39.02560 -120.60210 0.19 5/21/2008 Middle Fork-Ralston Tunnel Intake and Gatehouse Chondrilla juncea rush skeletonweed 39.02560 -120.60210 0.19 5/21/2008 Middle Fork-Ralston Tunnel Intake and Gatehouse Cynosurus echinatus hedgehog dogtailgrass 39.02560 -120.60210 0.19 5/21/2008 Middle Fork-Ralston Tunnel Intake and Gatehouse Dactylis glomerata orchardgrass 39.02560 -120.60210 0.19 5/21/2008 Middle Fork-Ralston Tunnel Intake and Gatehouse Dactylis glomerata shortpod mustard 39.02560 -120.60210 0.19	
5/21/2008Middle Fork-Ralston Tunnel Intake and GatehouseChondrilla juncearush skeletonweed39.02560-120.602100.195/21/2008Middle Fork-Ralston Tunnel Intake and GatehouseCynosurus echinatushedgehog dogtailgrass39.02560-120.602100.195/21/2008Middle Fork-Ralston Tunnel Intake and GatehouseDactylis glomerataorchardgrass39.02560-120.602100.195/21/2008Middle Fork-Ralston Tunnel Intake and GatehouseHirschfeldia incanashortpod mustard39.02560-120.602100.19	400 moderate
5/21/2008 Middle Fork-Ralston Tunnel Intake and Gatehouse Cynosurus echinatus hedgehog dogtailgrass 39.02560 -120.60210 0.19 5/21/2008 Middle Fork-Ralston Tunnel Intake and Gatehouse Dactylis glomerata orchardgrass 39.02560 -120.60210 0.19 5/21/2008 Middle Fork-Ralston Tunnel Intake and Gatehouse Hirschfeldia incapa shortpod mustard 39.02560 -120.60210 0.19	8,276 moderate
5/21/2008 Middle Fork-Ralston Tunnel Intake and Gatehouse Dactylis glomerata orchardgrass 39.02560 -120.60210 0.19	8,276 low
5/21/2008 Middle Fork-Ralston Tunnel Intake and Gatehouse Hirschfeldia incapa shortnod mustard 39 02560 -120 60210 0.19	8,276 low
5/21/2008 Middle Fork-Ralston Tunnel Intake and Gatehouse Hirschfeldia incana shortpod mustard 39.02560 -120.60210 0.19	8,276 low
	8,276 low
5/21/2008 Middle Fork-Raiston Tunnel Intake and Gatenouse Hypericum perforatum Klamathweed 39.02560 -120.60210 0.19	8,276 low
5/21/2008 Middle Fork-Ralston Tunnel Intake and Gatehouse Melilotus officinalis yellow sweetclover 39.02560 -120.60210 0.19	8,276 high
5/21/2008 Middle Fork-Ralston Tunnel Intake and Gatehouse Plantago lanceolata English plantain 39.02560 -120.60210 0.19	8,276 low
5/21/2008 Middle Fork-Ralston Tunnel Intake and Gatehouse Rumex acetosella sheep sorrel 39.02560 -120.60210 0.19	8,276 low
5/21/2008 Middle Fork-Ralston Tunnel Intake and Gatehouse Verbascum thapsus woolly mullein 39.02560 -120.60210 0.19	8,276 low
North Fork Long Canyon Crossing Removable Section South	
	130,680 moderate
North Fork Long Canyon Crossing Removable Section South	
5/27/2008 Road Chondrilla juncea rush skeletonweed 39.02400 -120.51578 0.03	1,500 high
North Fork Long Canyon Crossing Removable Section South	400.000
	130,680 moderate
North Fork Long Canyon Crossing Removable Section South	400
5/27/2008 Road <i>Hypericum perforatum</i> klamathweed 39.02520 -120.51570 0.00	100 low
North Fork Long Canyon Crossing Removable Section South	200
LC01 5/27/2008 Road Hypericum perforatum klamathweed 39.02810 -120.51470 0.01	300 low
North Fork Long Canyon Crossing Removable Section South Fork Long Canyon Crossing Removable Section South Lepidium latifolium (tall whitetop) 39.02623 -120.51572 0.00	100 low
	100 low
North Fork Long Canyon Crossing Removable Section South 7/24/2008 Road Melilotus albus white sweet clover 39.02760 -120.51510 3	130,680 high
North Fork Long Canyon Crossing Removable Section South	130,060 High
7/24/2008 Road Plantago lanceolata English plantain 39.02720 -120.51540 0.02	700 low
North Fork Long Canyon Crossing Removable Section South	700
	130,680 low
North Fork Long Canyon Crossing Removable Section South	130,000
	130,680 low
5/27/2008 North Fork Long Canyon Crossing Removable Section Bromus tectorum cheatgrass 39.02870 -120.51460 0.09	3,750 high
5/27/2008 North Fork Long Canyon Crossing Removable Section Centaurea solstitialis yellow starthistle 39.02860 -120.51470 0.26	11,326 low
5/27/2008 North Fork Long Canyon Crossing Removable Section Cirsium vulgare bull thistle 39.02870 -120.51460 0.02	900 low
5/27/2008 North Fork Long Canyon Crossing Removable Section Hypericum perforatum klamathweed 39.02870 -120.51460 0.00	100 moderate
5/27/2008 North Fork Long Capyon Crossing Removable Section Molilatus albus white sweet clover 30.02860 -120.51470 0.00	25 low
LC02 3/27/2008 North Fork Long Canyon Crossing Removable Section Melilotus albus White sweet clover 39.02870 -120.51460 0.02	750 high
5/27/2008 North Fork Long Canyon Crossing Removable Section Plantago lanceolata English plantain 39.02860 -120.51470 0.01	600 low
5/27/2008 North Fork Long Canyon Crossing Removable Section Rumex acetosella sheep sorrel 39.02870 -120.51460 0.01	400 high
5/27/2008 North Fork Long Canyon Crossing Removable Section Rumex acetosella sheep sorrel 39.02860 -120.51470 0.01	600 low
7/24/2008 North Fork Long Canyon Crossing Removable Section Vulpia myuros rat-tail fescue 39.02870 -120.51460 0.00	100 moderate

Appendix D. Results of Noxious Weed Surveys at Existing Project Facilities and Features, Project Recreation Facilities, and Dispersed Concentrated Use Areas (continued).

Map ID ¹	Survey Date	Facility	Scientific Name	Common Name	Latitude/ UTM East	Longitude/ UTM North	Population Size (Acres) ²	Population Size (Square feet)	Infestation Level
LC03	5/27/2008	North Fork Long Canyon Crossing Removable Section North Road and Parking Area	Bromus tectorum	cheatgrass	39.02900	-120.51530	0.89	38,768	high
	5/27/2008	North Fork Long Canyon Crossing Removable Section North Road and Parking Area	Bromus tectorum	cheatgrass	39.02900	-120.51530	0.03	1,500	moderate
	5/27/2008	North Fork Long Canyon Crossing Removable Section North Road and Parking Area	Cynosurus echinatus	hedgehog dogtailgrass	39.02880	-120.51500	0.89	38,768	moderate
	7/24/2008	North Fork Long Canyon Crossing Removable Section North Road and Parking Area	Dactylis glomerata	orchardgrass	39.02900	-120.51530	0.02	900	moderate
	5/27/2008	North Fork Long Canyon Crossing Removable Section North Road and Parking Area	Hypericum perforatum	klamathweed	39.02880	-120.51500	0.01	400	low
	5/27/2008	North Fork Long Canyon Crossing Removable Section North Road and Parking Area	Melilotus albus	white sweet clover	39.02880	-120.51500	0.04	1,600	high
	5/27/2008	North Fork Long Canyon Crossing Removable Section North Road and Parking Area	Melilotus albus	white sweet clover	39.02900	-120.51530	0.13	5,625	low
	7/24/2008	North Fork Long Canyon Crossing Removable Section North Road and Parking Area	Plantago lanceolata	English plantain	39.02880	-120.51500	0.05	2,000	moderate
	5/27/2008	North Fork Long Canyon Crossing Removable Section North Road and Parking Area	Rumex acetosella	sheep sorrel	39.02900	-120.51530	0.04	1,800	moderate
		North Fork Long Canyon Crossing Removable Section North Road and Parking Area	Verbascum thapsus	woolly mullein	39.02900	-120.51530	0.03	1,500	low
LC04		Long Canyon Crossing Sediment Disposal Area	Bromus tectorum	cheatgrass	39.02290	-120.51490	5	217,800	high
		Long Canyon Crossing Sediment Disposal Area	Chondrilla juncea	rush skeletonweed	39.02290	-120.51490	5	217,800	low
		Long Canyon Crossing Sediment Disposal Area	Cynosurus echinatus	hedgehog dogtailgrass	39.02290	-120.51490	0.16	6,970	low
		Long Canyon Crossing Sediment Disposal Area	Dactylis glomerata	orchardgrass	39.02290	-120.51490	0.16	6,970	low
	5/27/2008	Long Canyon Crossing Sediment Disposal Area	Hypericum perforatum	klamathweed	39.02290	-120.51490	0.16	6,970	low
	5/27/2008	Long Canyon Crossing Sediment Disposal Area	Melilotus albus	white sweet clover	39.02290	-120.51490	5	217,800	high
	5/27/2008	Long Canyon Crossing Sediment Disposal Area	Plantago lanceolata	English plantain	39.02230	-120.51570	0.00	50	low
	5/27/2008	Long Canyon Crossing Sediment Disposal Area	Verbascum thapsus	woolly mullein	39.02230	-120.51570	0.00	150	low
	5/27/2008	Long Canyon Crossing Sediment Disposal Area	Vulpia myuros	rat-tail fescue	39.02290	-120.51490	5	217,800	moderate
LC05	5/27/2008	Long Canyon Crossing Sediment Disposal Area	Bromus tectorum	cheatgrass	39.02280	-120.51200	0.01	400	high
	7/24/2008	Long Canyon Crossing Sediment Disposal Area	Cynosurus echinatus	hedgehog dogtailgrass	39.02280	-120.51200	3	130,680	low
LC05	5/27/2008	Long Canyon Crossing Sediment Disposal Area	Melilotus albus	white sweet clover	39.02280	-120.51200	0.01	400	high
	5/27/2008	Long Canyon Crossing Sediment Disposal Area	Verbascum thapsus	woolly mullein	39.02280	-120.51200	0.01	400	low
		Long Canyon Crossing Sediment Disposal Area	Bromus tectorum	cheatgrass	39.02340	-120.50970	6	261,360	high
		Long Canyon Crossing Sediment Disposal Area	Centaurea solstitialis	yellow starthistle	39.02340	-120.50970	6	261,360	low
		Long Canyon Crossing Sediment Disposal Area	Cirsium vulgare	bull thistle	39.02340	-120.50970	0.23	10,019	low
	7/24/2008		Hypericum perforatum	klamathweed	39.02340	-120.50970	6	261,360	low
LC06		Long Canyon Crossing Sediment Disposal Area	Melilotus albus	white sweet clover	39.02340	-120.50970	6	261,360	high
	5/27/2008	Long Canyon Crossing Sediment Disposal Area	Rumex acetosella	sheep sorrel	39.02340	-120.50970	0.23	10,019	low
			Taeniatherum caput-				_		_
		Long Canyon Crossing Sediment Disposal Area	medusae	medusahead	39.02340	-120.50970	6	261,360	low
	5/27/2008	Long Canyon Crossing Sediment Disposal Area	Verbascum thapsus	woolly mullein	39.02340	-120.50970	0.23	10,019	low
		Long Canyon Crossing Sediment Disposal Area	Vulpia myuros	rat-tail fescue	39.02340	-120.50970	6	261,360	low
LC07		North Fork Long Canyon Diversion Dam and Pool	Cirsium vulgare	bull thistle	39.05110	-120.48130	0.00	200	low
		North Fork Long Canyon Diversion Dam and Pool	Melilotus albus	white sweet clover	39.05110	-120.48130	0.01	600	low
		North Fork Long Canyon Diversion Dam and Pool	Rumex acetosella	sheep sorrel	39.05098	-120.48158	1	43,560	low
		North Fork Long Canyon Diversion Dam and Pool	Verbascum thapsus	woolly mullein	39.05098	-120.48158	0.02	900	low
LC08		North Fork Long Canyon Diversion North Road	Bromus tectorum	cheatgrass	39.04930	-120.48310	1 0.04	43,560	moderate
		North Fork Long Canyon Diversion North Road	Cirsium vulgare	bull thistle	39.04930	-120.48310	0.01	250	low
		North Fork Long Canyon Diversion North Road	Rumex acetosella	sheep sorrel	39.04930	-120.48310	0.00	43,560	moderate
	5/27/2008	North Fork Long Canyon Diversion North Road	Verbascum thapsus	woolly mullein	39.04930	-120.48310	0.00	100	low

Appendix D. Results of Noxious Weed Surveys at Existing Project Facilities and Features, Project Recreation Facilities, and Dispersed Concentrated Use Areas (continued).

Map ID ¹	Survey Date	Facility	Scientific Name	Common Name	Latitude/ UTM East	Longitude/ UTM North	Population Size (Acres) ²	Population Size (Square feet)	Infestation Level
	7/24/2008	North Fork Long Canyon Diversion South Road	Cirsium vulgare	bull thistle	39.04995	-120.48182	0.10	4,500	low
LC09	7/24/2008	North Fork Long Canyon Diversion South Road	Hypericum perforatum	klamathweed	39.05053	-120.48193	0.11	4,900	low
	5/27/2008	North Fork Long Canyon Diversion South Road	Rumex acetosella	sheep sorrel	39.04320	-120.48550	0.03	1,200	high
	5/27/2008	North Fork Long Canyon Diversion South Road	Rumex acetosella	sheep sorrel	39.04460	-120.48460	0.01	225	high
	5/27/2008	North Fork Long Canyon Diversion South Road	Rumex acetosella	sheep sorrel	39.04740	-120.48280	0.01	400	low
LC10	5/27/2008	North Fork Long Canyon Diversion Drop Inlet Road	Bromus tectorum	cheatgrass	39.04260	-120.48400	0.03	1,200	moderate
	5/27/2008	North Fork Long Canyon Diversion Drop Inlet Road	Cirsium vulgare	bull thistle	39.04230	-120.48380	0.01	400	moderate
2010	5/27/2008	North Fork Long Canyon Diversion Drop Inlet Road	Rumex acetosella	sheep sorrel	39.04260	-120.48400	0.05	2,000	moderate
	5/27/2008	North Fork Long Canyon Diversion Drop Inlet Road	Rumex acetosella	sheep sorrel	39.04230	-120.48380	0.01	625	moderate
	5/27/2008	South Fork Long Canyon Diversion Dam and Pool	Agrostis stolonifera	creeping bent grass	39.05186	-120.47070	0.03	1,250	low
	5/27/2008	South Fork Long Canyon Diversion and Drop Inlet Road	Bromus tectorum	cheatgrass	39.05170	-120.47080	2	87,120	low
	5/27/2008	South Fork Long Canyon Diversion Dam and Pool	Cirsium vulgare	bull thistle	39.05186	-120.47070	2	87,120	low
LC11	5/27/2008	South Fork Long Canyon Diversion Dam and Pool	Cirsium vulgare	bull thistle	39.05130	-120.47120	0.06	2,500	low
LCII	5/27/2008	South Fork Long Canyon Diversion Dam and Pool	Melilotus albus	white sweet clover	39.05186	-120.47035	0.00	120	moderate
	7/24/2008	South Fork Long Canyon Diversion and Drop Inlet Road	Rumex acetosella	sheep sorrel	39.05170	-120.47080	2	87,120	low
	7/24/2008	South Fork Long Canyon Diversion Dam and Pool	Verbascum thapsus	woolly mullein	39.05186	-120.47070	2	87,120	low
	5/27/2008	South Fork Long Canyon Diversion and Drop Inlet Road	Vulpia myuros	rat-tail fescue	39.05170	-120.47080	2	87,120	low
	5/27/2008	South Fork Long Canyon Diversion Dam and Pool	Bromus tectorum	cheatgrass	39.05132	-120.47042	0.68	29,621	low
LC12	5/27/2008	South Fork Long Canyon Diversion Dam and Pool	Rumex acetosella	sheep sorrel	39.05132	-120.47042	0.68	29,621	low
	5/27/2008	South Fork Long Canyon Diversion Dam and Pool	Verbascum thapsus	woolly mullein	39.05132	-120.47042	0.68	29,621	low
	8/1/2008	Middle Fork American River Gage below Oxbow Powerhouse	Bromus diandrus	ripgut brome	39.00647	-120.76025	0.15	6,534	moderate
	8/1/2008	Middle Fork American River Gage below Oxbow Powerhouse	Bromus tectorum	cheatgrass	39.00647	-120.76025	0.03	1,500	moderate
	8/1/2008	Middle Fork American River Gage below Oxbow Powerhouse	Cynosurus echinatus	hedgehog dogtailgrass	39.00647	-120.76025	0.01	250	moderate
R01	8/1/2008	Middle Fork American River Gage below Oxbow Powerhouse	Hypericum perforatum	klamathweed	39.00662	-120.75942	0.15	6,534	moderate
	8/1/2008	Middle Fork American River Gage below Oxbow Powerhouse	Torilis arvensis	spreading hedgeparsley	39.00647	-120.76025	0.00	100	moderate
	8/1/2008	Middle Fork American River Gage below Oxbow Powerhouse	Vulpia myuros	rat-tail fescue	39.00662	-120.75942	0.15	6,534	moderate
	5/20/2008	Ralston Afterbay Dam Road and Afterbay Access Point	Bromus diandrus	ripgut brome	39.00300	-120.74520	0.55	23,958	moderate
	5/20/2008	Ralston Afterbay Dam Road and Afterbay Access Point	Bromus tectorum	cheatgrass	39.00300	-120.74520	0.55	23,958	moderate
	5/20/2008	Ralston Afterbay Dam Road and Afterbay Access Point	Chondrilla juncea	rush skeletonweed	39.00300	-120.74520	0.55	23,958	low
R02	5/20/2008	Ralston Afterbay Dam Road and Afterbay Access Point	Hypericum perforatum	klamathweed	39.00300	-120.74520	0.55	23,958	moderate
NUZ	5/20/2008	Ralston Afterbay Dam Road and Afterbay Access Point	Plantago lanceolata	English plantain	39.00300	-120.74520	0.55	23,958	moderate
	5/20/2008	Ralston Afterbay Dam Road and Afterbay Access Point	Rubus discolor	Himalayan blackberry	39.00300	-120.74520	0.55	23,958	
	5/20/2008	•	Vulpia myuros	rat-tail fescue	39.00300	-120.74520	0.55		moderate
	5/20/2008	Ralston Afterbay Dam Road and Afterbay Access Point	Bromus diandrus		39.00300	-120.74520	0.35	23,958 15,246	high
		Ralston Afterbay Road and Boat Ramp		ripgut brome					moderate
DOO		Ralston Afterbay Road and Boat Ramp	Cynosurus echinatus	hedgehog dogtailgrass	39.00430	-120.74660	0.35	15,246	low
R03	5/20/2008	Ralston Afterbay Road and Boat Ramp	Hypericum perforatum	klamathweed	39.00430	-120.74660	0.35	15,246	low
	5/20/2008	Ralston Afterbay Road and Boat Ramp	Plantago lanceolata	English plantain	39.00430	-120.74660	0.35	15,246	moderate
	5/20/2008	Ralston Afterbay Road and Boat Ramp	Torilis arvensis	spreading hedgeparsley	39.00430	-120.74660	0.35	15,246	low
R04	5/20/2008	Ralston-Oxbow Tunnel Intake Road	Bromus diandrus	ripgut brome	39.00570	-120.74550	0.57	24,829	low
	5/20/2008	Ralston-Oxbow Tunnel Intake Road	Vulpia myuros	rat-tail fescue	39.00570	-120.74550	0.57	24,829	low
	5/21/2008	Ralston Afterbay	Plantago lanceolata	English plantain	39.00270	-120.73340	3	130,680	low
	5/21/2008	Ralston Afterbay	Bromus diandrus	ripgut brome	39.00250	-120.73400	3	130,680	low
	5/21/2008	Ralston Afterbay	Carduus pycnocephalus	Italian thistle	39.00210	-120.73840	0.02	1,000	low
	5/21/2008	Ralston Afterbay	Centaurea solstitialis	yellow starthistle	39.00260	-120.73860	0.13	5,625	high
	5/21/2008	Ralston Afterbay	Cynosurus echinatus	hedgehog dogtailgrass	39.00250	-120.73400	0.07	3,000	low
R06	5/21/2008	Ralston Afterbay	Cynosurus echinatus	hedgehog dogtailgrass	39.00310	-120.74180	0.01	400	low
	5/21/2008	Ralston Afterbay	Hypericum perforatum	klamathweed	39.00270	-120.73340	3	130,680	moderate
	5/21/2008	Ralston Afterbay	Rubus discolor	Himalayan blackberry	39.00230	-120.74190	0.02	1,000	high
	5/21/2008	Ralston Afterbay	Rubus discolor	Himalayan blackberry	39.00360	-120.74230	0.04	1,600	high
	5/21/2008	Ralston Afterbay	Rubus discolor	Himalayan blackberry	39.00240	-120.73990	0.01	225	high
	5/21/2008	Ralston Afterbay	Rubus discolor	Himalayan blackberry	39.00270	-120.73340	0.10	4,500	moderate
	5/21/2008	Ralston Afterbay	Rubus discolor	Himalayan blackberry	39.00140	-120.73650	0.02	675	high

Appendix D. Results of Noxious Weed Surveys at Existing Project Facilities and Features, Project Recreation Facilities, and Dispersed Concentrated Use Areas (continued).

Map ID ¹	Survey Date	Facility	Scientific Name	Common Name	Latitude/ UTM East	Longitude/ UTM North	Population Size (Acres) ²	Population Size (Square feet)	Infestation Level
	5/21/2008	Ralston Afterbay	Torilis arvensis	spreading hedgeparsley	39.00250	-120.73400	3	130,680	moderate
R06	5/21/2008	Ralston Afterbay	Verbascum thapsus	woolly mullein	39.00210	-120.73840	0.09	4,000	moderate
	5/21/2008	Ralston Afterbay	Verbascum thapsus	woolly mullein	39.00210	-120.73730	0.11	5,000	moderate
	5/21/2008	Ralston Afterbay	Hypericum perforatum	klamathweed	39.00200	-120.74410	2		low
	5/21/2008	Ralston Afterbay	Rubus discolor	Himalayan blackberry	39.00110	-120.74290	0.04	1,800	high
R07	5/21/2008	Ralston Afterbay	Rubus discolor	Himalayan blackberry	39.00080	-120.73780	0.01	400	low
KU/	5/21/2008	Ralston Afterbay	Torilis arvensis	spreading hedgeparsley	39.00140	-120.73980	0.03	1,200	moderate
	5/21/2008	Ralston Afterbay	Torilis arvensis	spreading hedgeparsley	39.00080	-120.73780	0.01	400	low
	5/21/2008	Ralston Afterbay	Torilis arvensis	spreading hedgeparsley	39.00130	-120.73830	0.02	800	low
	5/21/2008	Ralston Afterbay	Bromus diandrus	ripgut brome	39.00190	-120.73290	0.01	400	moderate
R08	5/21/2008	Ralston Afterbay	Hypericum perforatum	klamathweed	39.00190	-120.73290	2.3	100,188	low
	5/21/2008	Ralston Afterbay	Plantago lanceolata	English plantain	39.00360	-120.72920	2.3	100,188	moderate
	5/20/2008	Ralston Powerhouse and Switchyard	Bromus diandrus	ripgut brome	39.00060	-120.72440	0.84	36,590	low
	5/20/2008	Ralston Powerhouse and Switchyard	Chondrilla juncea	rush skeletonweed	39.00060	-120.72440	0.00	25	low
	5/20/2008	Ralston Powerhouse and Switchyard	Cirsium arvense	Canada thistle	39.00060	-120.72440	1 plant	1 plant	low
R09	5/20/2008	Ralston Powerhouse and Switchyard	Hirschfeldia incana	shortpod mustard	39.00060	-120.72440	0.84	36,590	low
RUS	5/20/2008	Ralston Powerhouse and Switchyard	Melilotus officinalis	yellow sweetclover	39.00060	-120.72440	0.00	25	low
	5/20/2008	Ralston Powerhouse and Switchyard	Rubus discolor	Himalayan blackberry	39.00060	-120.72440	0.84	36,590	low
	5/20/2008	Ralston Powerhouse and Switchyard	Torilis arvensis	spreading hedgeparsley	39.00060	-120.72440	0.84	36,590	low
	5/20/2008	Ralston Powerhouse and Switchyard	Vulpia myuros	rat-tail fescue	39.00060	-120.72440	0.84	36,590	low
	5/20/2008	Ralston Powerhouse and Switchyard	Bromus diandrus	ripgut brome	39.00080	-120.72430	0.88	38,333	high
	5/20/2008	Ralston Powerhouse and Switchyard	Carduus pycnocephalus	Italian thistle	39.00080	-120.72430	0.88	38,333	high
	5/20/2008	Ralston Powerhouse and Switchyard	Centaurea melitensis	Malta starthistle (tocalote)	39.00080	-120.72430	0.88	38,333	low
	5/20/2008	Ralston Powerhouse and Switchyard	Chondrilla juncea	rush skeletonweed	39.00080	-120.72430	0.88	38,333	low
R10	5/20/2008	Ralston Powerhouse and Switchyard	Melilotus officinalis	yellow sweetclover	39.00080	-120.72430	0.88	38,333	high
	5/20/2008	Ralston Powerhouse and Switchyard	Plantago lanceolata	English plantain	39.00080	-120.72430	0.88	38,333	moderate
			Taeniatherum caput-						
	5/20/2008	Ralston Powerhouse and Switchyard	medusae	medusahead	39.00080	-120.72430	0.88	38,333	moderate
	5/20/2008	Ralston Powerhouse and Switchyard	Verbascum thapsus	woolly mullein	39.00080	-120.72430	0.88	38,333	low
	5/20/2008	Ralston Powerhouse and Switchyard	Bromus diandrus	ripgut brome	39.00140	-120.72610	1	43,560	high
R11	5/20/2008	Ralston Powerhouse and Switchyard	Bromus tectorum	cheatgrass	39.00140	-120.72610	1	43,560	moderate
1	5/20/2008	Ralston Powerhouse and Switchyard	Centaurea melitensis	Malta starthistle (tocalote)	39.00140	-120.72610	0.10	4,500	moderate
	5/20/2008	Ralston Powerhouse and Switchyard	Hirschfeldia incana	shortpod mustard	39.00140	-120.72610	1	43,560	moderate
	5/21/2008	Passive Microwave Reflector Station above Ralston Powerhouse	Bromus diandrus	ripgut brome	38.99740	-120.71840	0.33	14,375	low
R12		Passive Microwave Reflector Station above Ralston Powerhouse	Chondrilla juncea	rush skeletonweed	38.99740	-120.71840	0.33	14,375	low
1	5/21/2008	Passive Microwave Reflector Station above Ralston Powerhouse	Cynosurus echinatus	hedgehog dogtailgrass	38.99740	-120.71840	0.33	14,375	low
		Passive Microwave Reflector Station above Ralston Powerhouse	Torilis arvensis	spreading hedgeparsley	38.99740	-120.71840	0.33	14,375	low
		Ralston Powerhouse Butterfly Valve House Road	Ailanthus altissima	tree-of-heaven	39.00390	-120.72280	2.5	108,900	low
		Ralston Powerhouse Penstock and Butterfly Valve House	Ailanthus altissima	tree-of-heaven	39.00380	-120.72270	2.75	119,790	moderate
		Ralston Powerhouse Butterfly Valve House Road	Bromus tectorum	cheatgrass	39.00390	-120.72280	2.4	104,544	low
	5/21/2008	Ralston Powerhouse Penstock and Butterfly Valve House	Carduus pycnocephalus	Italian thistle	39.00380	-120.72270	2.4	104,544	low
	F /04 /0000	Ralston Powerhouse Butterfly Valve House Road/	Observatoritle is used as	week alsolate asses al	00.00500	400 700 40	0.4	404.544	
		Ralston Powerhouse Penstock and Butterfly Valve House	Chondrilla juncea	rush skeletonweed	39.00530	-120.72340	2.4	104,544	moderate
R13		Ralston Powerhouse Butterfly Valve House Road	Cynosurus echinatus	hedgehog dogtailgrass	39.00390	-120.72280	2.4	104,544	low
		Ralston Powerhouse Butterfly Valve House Road	Hypericum perforatum	klamathweed	39.00390	-120.72280	2.4	104,544	low
		Ralston Powerhouse Butterfly Valve House Road	Melilotus officinalis	yellow sweetclover	39.00560	-120.72040	2.4	104,544	moderate
		Ralston Powerhouse Butterfly Valve House Road	Rubus discolor	Himalayan blackberry	39.00390	-120.72280	2.4	104,544	low
		Ralston Powerhouse Butterfly Valve House Road	Torilis arvensis	spreading hedgeparsley	39.00390	-120.72280	2.4	104,544	low
	5/21/2008	Ralston Powerhouse Penstock and Butterfly Valve House	Verbascum thapsus	woolly mullein	39.00380	-120.72270	2.4	104,544	moderate
	E/04/0000	Ralston Powerhouse Butterfly Valve House Road/Ralston	Viulaio muuros	rot toil for our	20,00200	120 72222	2.4	104.544	moderate
<u> </u>	5/21/2008	Powerhouse Penstock and Butterfly Valve House	Vulpia myuros	rat-tail fescue	39.00390	-120.72280	2.4	104,544	moderate

Appendix D. Results of Noxious Weed Surveys at Existing Project Facilities and Features, Project Recreation Facilities, and Dispersed Concentrated Use Areas (continued).

Map ID ¹	Survey Date	Facility	Scientific Name	Common Name	Latitude/ UTM East	Longitude/ UTM North	Population Size (Acres) ²	Population Size (Square feet)	Infestation Level
	5/21/2008	Ralston Ridge Sediment Disposal Área	Bromus diandrus	ripgut brome	39.00620	-120.72020	2.3	100,188	moderate
	5/21/2008	Ralston Ridge Sediment Disposal Area	Bromus tectorum	cheatgrass	39.00620	-120.72020	2.3	100,188	moderate
	5/21/2008	Ralston Ridge Sediment Disposal Area	Carduus pycnocephalus	Italian thistle	39.00620	-120.72030	0.01	600	high
	5/21/2008	Ralston Ridge Sediment Disposal Area	Centaurea melitensis	Malta starthistle (tocalote)	39.00620	-120.72020	2.3	100,188	low
	5/21/2008	Ralston Ridge Sediment Disposal Area	Chondrilla juncea	rush skeletonweed	39.00620	-120.72020	2.3	100,188	moderate
	5/21/2008	Ralston Ridge Sediment Disposal Area	Chondrilla juncea	rush skeletonweed	39.00620	-120.72030	0.01	600	high
	5/21/2008	Ralston Ridge Sediment Disposal Area	Cynosurus echinatus	hedgehog dogtailgrass	39.00620	-120.72020	2.3	100,188	low
	5/21/2008	Ralston Ridge Sediment Disposal Area	Dactylis glomerata	orchardgrass	39.00620	-120.72020	2.3	100,188	low
R14	5/21/2008	Ralston Ridge Sediment Disposal Area	Hirschfeldia incana	shortpod mustard	39.00600	-120.72050	0.06	2,500	moderate
	5/21/2008	Ralston Ridge Sediment Disposal Area	Hirschfeldia incana	shortpod mustard	39.00620	-120.72020	2.3	100,188	low
	5/21/2008	Ralston Ridge Sediment Disposal Area	Melilotus officinalis	yellow sweetclover	39.00620	-120.72020	2.3	100,188	moderate
	5/21/2008	Ralston Ridge Sediment Disposal Area	Rubus discolor	Himalayan blackberry	39.00620	-120.72020	2.3	100,188	moderate
			Taeniatherum caput-						
	5/21/2008	Ralston Ridge Sediment Disposal Area	medusae .	medusahead	39.00620	-120.72020	2.3	100,188	low
	5/21/2008	Ralston Ridge Sediment Disposal Area	Torilis arvensis	spreading hedgeparsley	39.00620	-120.72020	2.3	100,188	low
	5/21/2008	Ralston Ridge Sediment Disposal Area	Verbascum thapsus	woolly mullein	39.00620	-120.72020	2.3	100,188	low
	5/21/2008	Ralston Ridge Sediment Disposal Area	Vulpia myuros	rat-tail fescue	39.00620	-120.72020	2.3	100,188	low
		Storage Building at Middle-Fork Ralston Tunnel Surge Shaft and	i supremining and a				-		-
	5/21/2008	Tank	Bromus diandrus	ripgut brome	39.00500	-120.72160	0.92	40,075	low
		Storage Building at Middle-Fork Ralston Tunnel Surge Shaft and		1 3					_
	5/21/2008	Tank	Carduus pycnocephalus	Italian thistle	39.00500	-120.72160	0.92	40,075	low
		Storage Building at Middle-Fork Ralston Tunnel Surge Shaft and							
	5/21/2008		Centaurea melitensis	Malta starthistle (tocalote)	39.00500	-120.72160	0.92	40,075	low
		Storage Building at Middle-Fork Ralston Tunnel Surge Shaft and		,					_
	5/21/2008	Tank	Chondrilla juncea	rush skeletonweed	39.00500	-120.72160	0.92	40,075	low
R15		Storage Building at Middle-Fork Ralston Tunnel Surge Shaft and							_
	5/21/2008	Tank	Cynosurus echinatus	hedgehog dogtailgrass	39.00500	-120.72160	0.92	40,075	moderate
		Storage Building at Middle-Fork Ralston Tunnel Surge Shaft and							
	5/21/2008	Tank	Hypericum perforatum	klamathweed	39.00500	-120.72160	0.92	40,075	moderate
		Storage Building at Middle-Fork Ralston Tunnel Surge Shaft and							
	5/21/2008		Torilis arvensis	spreading hedgeparsley	39.00500	-120.72160	0.92	40,075	low
		Storage Building at Middle-Fork Ralston Tunnel Surge Shaft and							_
	5/21/2008	Tank	Verbascum thapsus	woolly mullein	39.00500	-120.72160	0.92	40,075	moderate
	5/21/2008	Ralston Afterbay Sediment Removal Access Point	Bromus diandrus	ripgut brome	39.00300	-120.73270	0.32	13,939	high
	5/21/2008		Bromus tectorum	cheatgrass	39.00300	-120.73270	0.32	13,939	low
		Ralston Afterbay Sediment Removal Access Point	Carduus pycnocephalus	Italian thistle	39.00300	-120.73270	0.32	13,939	moderate
R16	5/21/2008		Cynosurus echinatus	hedgehog dogtailgrass	39.00300	-120.73270	0.32	13,939	low
	5/21/2008		Hirschfeldia incana	shortpod mustard	39.00300	-120.73270	0.32	13,939	moderate
	5/21/2008		Plantago lanceolata	English plantain	39.00300	-120.73270	0.32	13,939	low
	5/21/2008		Rubus discolor	Himalayan blackberry	39.00300	-120.73270	0.32	13,939	moderate
_	3/2 1/2000	Ralston-Oxbow Tunnel Intake to Ralston Powerhouse	. 14240 41000101	iaiayan biaonbony	00.0000	120.10210	0.02	10,000	modorato
R17	5/21/2008	Communication Line	Rubus discolor	Himalayan blackberry	39.00460	-120.73240	0.01	450	moderate
	0/21/2000	Ralston-Oxbow Tunnel Intake to Ralston Powerhouse	Trabas discordi	Timilalayan blackborry	00.00 .00	12011 02 10	0.01	100	moderate
	5/21/2008		Bromus diandrus	ripgut brome	39.00150	-120.72590	13	566,280	moderate
	3,2.,2000	Ralston-Oxbow Tunnel Intake to Ralston Powerhouse			00.00100			000,200	modorato
	5/21/2008		Bromus tectorum	cheatgrass	39.00150	-120.72590	13	566,280	low
	3,21,2000	Ralston-Oxbow Tunnel Intake to Ralston Powerhouse			00.00100	123.72000			
R21	5/21/2008		Carduus pycnocephalus	Italian thistle	39.00150	-120.72590	13	566,280	low
	3,2,,2000	Ralston-Oxbow Tunnel Intake to Ralston Powerhouse	zarada pjonocopnano		22.20.00			333,200	.3
	5/21/2008	Communication Line	Centaurea melitensis	Malta starthistle (tocalote)	39.00150	-120.72590	13	566,280	low
	5,21,2000	Ralston-Oxbow Tunnel Intake to Ralston Powerhouse		manu ciari nono (todaloto)	23.00.00	0., _000			
	5/21/2008		Chondrilla juncea	rush skeletonweed	39.00150	-120.72590	13	566,280	low
		J							

Appendix D. Results of Noxious Weed Surveys at Existing Project Facilities and Features, Project Recreation Facilities, and Dispersed Concentrated Use Areas (continued).

Map ID ¹	Survey Date	Facility	Scientific Name	Common Name	Latitude/ UTM East	Longitude/ UTM North	Population Size (Acres) ²	Population Size (Square feet)	Infestation Level
		Ralston-Oxbow Tunnel Intake to Ralston Powerhouse							
	5/21/2008	Communication Line	Hirschfeldia incana	shortpod mustard	39.00150	-120.72590	13	566,280	low
	,,	Ralston-Oxbow Tunnel Intake to Ralston Powerhouse							_
	5/21/2008	Communication Line	Hypericum perforatum	klamathweed	39.00150	-120.72590	13	566,280	low
	= /0.4 /0.000	Ralston-Oxbow Tunnel Intake to Ralston Powerhouse				400 =0=00	4.0	- 00.000	
	5/21/2008	Communication Line	Melilotus officinalis	yellow sweetclover	39.00150	-120.72590	13	566,280	low
	E/04/0000	Ralston-Oxbow Tunnel Intake to Ralston Powerhouse		E collected and a state	00 00450	400 70500	40	500,000	1.
	5/21/2008		Plantago lanceolata	English plantain	39.00150	-120.72590	13	566,280	low
R21	E/24/2009	Ralston-Oxbow Tunnel Intake to Ralston Powerhouse	Dubus dissolar	Himalayan blaakharn	20 00150	120 72500	12	FGC 200	low
	5/21/2008	Communication Line Ralston-Oxbow Tunnel Intake to Ralston Powerhouse	Rubus discolor	Himalayan blackberry	39.00150	-120.72590	13	566,280	low
	5/21/2008		Rubus discolor	Himalayan blaakharry	39.00150	-120.72590	13	566,280	moderate
	5/21/2006	Ralston-Oxbow Tunnel Intake to Ralston Powerhouse	Rubus discolor	Himalayan blackberry	39.00150	-120.72590	13	300,200	moderate
	5/21/2008		Torilis arvensis	spreading hedgeparsley	39.00150	-120.72590	13	566,280	low
	3/21/2000	Ralston-Oxbow Tunnel Intake to Ralston Powerhouse	TOTIIS at verisis	spreading nedgeparsiey	39.00130	-120.72390	13	300,200	IOW
	5/21/2008		Verbascum thapsus	woolly mullein	39.00150	-120.72590	13	566,280	low
	3/21/2000	Ralston-Oxbow Tunnel Intake to Ralston Powerhouse	verbascum triapsus	woony manem	33.00130	-120.72330	13	300,200	IOW
	5/21/2008		Vulpia myuros	rat-tail fescue	39.00150	-120.72590	13	566,280	low
		Indian Bar Sediment Disposal Area	Bromus diandrus	ripgut brome	39.00660	-120.74720	0.17	7,405	high
	5/20/2008		Bromus diandrus	ripgut brome	39.00660	-120.74730	1.5	65,340	low
	5/20/2008		Bromus tectorum	cheatgrass	39.00720	-120.74710	0.46	20,000	low
R23	5/20/2008		Hirschfeldia incana	shortpod mustard	39.00720	-120.74710	0.07	3,200	low
	5/20/2008		Hirschfeldia incana	shortpod mustard	39.00680	-120.74700	0.17	7,405	low
	5/20/2008		Rumex acetosella	sheep sorrel	39.00700	-120.74700	0.34	14,810	low
	5/20/2008		Torilis arvensis	spreading hedgeparsley	39.00660	-120.74720	0.03	1,200	low
	5/20/2008		Torilis arvensis	spreading hedgeparsley	39.00700	-120.74700	0.11	5,000	low
	5/20/2008	Indian Bar Sediment Disposal Area	Verbascum thapsus	woolly mullein	39.00720	-120.74710	0.07	3,200	low
	5/20/2008	Indian Bar Sediment Disposal Area	Vulpia myuros	rat-tail fescue	39.00720	-120.74710	0.07	3,200	low
	5/20/2008	Oxbow Powerhouse Road	Bromus diandrus	ripgut brome	39.00620	-120.74650	1.2	52,272	moderate
	5/20/2008	Oxbow Powerhouse Road	Bromus tectorum	cheatgrass	39.00620	-120.74650	1.2	52,272	low
	5/20/2008	Oxbow Powerhouse Road	Chondrilla juncea	rush skeletonweed	39.00620	-120.74650	1.2	52,272	low
	5/20/2008	Oxbow Powerhouse Road	Cynosurus echinatus	hedgehog dogtailgrass	39.00620	-120.74650	1.2	52,272	low
R27	5/20/2008	Oxbow Powerhouse Road	Hirschfeldia incana	shortpod mustard	39.00620	-120.74650	1.2	52,272	low
1121	5/20/2008	Oxbow Powerhouse Road	Hypericum perforatum	klamathweed	39.00620	-120.74650	1.2	52,272	low
	5/20/2008		Plantago lanceolata	English plantain	39.00620	-120.74650	1.2	52,272	low
		Oxbow Powerhouse Road	Torilis arvensis	spreading hedgeparsley	39.00620	-120.74650	1.2	52,272	moderate
		Oxbow Powerhouse Road	Vulpia myuros	rat-tail fescue	39.00620	-120.74650	1.2	52,272	moderate
		Miranda Cabin Snow Course	Dactylis glomerata	orchardgrass	39.12032	-120.36068	0.00	50	high
SC01		Miranda Cabin Snow Course	Rumex acetosella	sheep sorrel	39.12032	-120.36068	0.04	1,600	high
SC02		Diamond Crossing Snow Course	Plantago lanceolata	English plantain	39.11090	-120.28412	0.41	17,860	high
	7/28/2008	0	Dactylis glomerata	orchardgrass	39.22705	-120.40208	0.00	4	high
SC03	7/28/2008		Rumex acetosella	sheep sorrel	39.22708	-120.40238	0.02	800	low
		McGuire Picnic Area	Bromus tectorum	cheatgrass	39.12350	-120.42090	0.23	10,019	moderate
		McGuire Picnic Area	Bromus tectorum	cheatgrass	39.12280	-120.42150	0.13	5,625	high
		McGuire Picnic Area	Cirsium vulgare	bull thistle	39.12328	-120.42118	0.26	11,326	low
		McGuire Picnic Area	Cirsium vulgare	bull thistle	39.12433	-120.42127	0.04	1,875	low
		McGuire Picnic Area	Dactylis glomerata	orchardgrass	39.12328	-120.42118	0.26	11,326	low
FM07		McGuire Picnic Area	Hypericum perforatum	klamathweed	39.12433	-120.42127	0.04	1,875	moderate
		McGuire Picnic Area	Plantago lanceolata	English plantain	39.12433	-120.42127	0.04	1,875	low
		McGuire Picnic Area	Plantago lanceolata	English plantain	39.12300	-120.42172	0.01	400	low
		McGuire Picnic Area	Rumex acetosella	sheep sorrel	39.12360	-120.42530	9.2	400,752	low
		McGuire Picnic Area	Verbascum thapsus	woolly mullein	39.12433	-120.42127	0.04	1,875	low

Appendix D. Results of Noxious Weed Surveys at Existing Project Facilities and Features, Project Recreation Facilities, and Dispersed Concentrated Use Areas (continued).

PMOT 725/2008 MicCuire Portic Area Verbascum hapsus voolly mullion 39:12407 120:42093 0.08 2,000	Map ID¹	Survey Date	Facility	Scientific Name	Common Name	Latitude/ UTM East	Longitude/ UTM North	Population Size (Acres) ²	Population Size (Square feet)	Infestation Level
Modern Princis Area Verbascum Hugesus woolly mullein 39,12300 -120,42172 0.01 400 400 77,87000 Modure Princi Area Verbascum Hugesus woolly mullein 39,12300 -120,42372 0.02 1.000 900 1.00	·	7/25/2008	McGuire Picnic Area	Verbascum thapsus	woolly mullein	39.12407	-120.42053			low
725/2008 McGuire Picnic Area Vertascum thapeus woolf mullein 39.12260 0.02 9.00		7/25/2008	McGuire Picnic Area	Verbascum thapsus	woolly mullein	39.12415	-120.42083	0.02	800	high
Prize Priz	FM07	7/25/2008	McGuire Picnic Area	Verbascum thapsus	woolly mullein	39.12300	-120.42172	0.01	400	low
Fifton		7/25/2008	McGuire Picnic Area	Verbascum thapsus	woolly mullein	39.12360	-120.42530	0.02	900	low
\$25/25/009 Popty Campground Traillead Biomus ectoroum Cheatgrass 39,12360 -1,20,42530 0.02 700 770 775/25/208 McGuire Boat Ramp Cristm volgare buil thistiles 39,12200 -1,20,42510 0.02 770 3,000 775/25/208 McGuire Boat Ramp Duchylis glorimenta orchardgrass 39,12370 -1,20,42430 0.07 3,000 1,000		7/25/2008	McGuire Picnic Area	Vulpia myuros	rat-tail fescue	39.12253	-120.42192	0.02	1,000	high
Fifting		5/25/2008	McGuire Boat Ramp	Bromus tectorum	cheatgrass	39.12300	-120.42560	0.04	1,600	moderate
FM09 Fixe		5/25/2008	Poppy Campground Trailhead	Bromus tectorum	cheatgrass	39.12360	-120.42530	5.8	252,648	moderate
T7552008 McGuire Boat Ramp Dacylis glomerata Orchardgrass 39.12343 120.42432 0.03 1.500		5/25/2008		Cirsium vulgare	bull thistle	39.12200	-120.42510	0.02	700	low
7/25/2008 McGuire Bota Ramp Decytis glomerate Orchardgrass 39.12/93 -120.425/32 0.03 1,500		7/25/2008	McGuire Boat Ramp	Cynosurus echinatus	hedgehog dogtailgrass	39.12370	-120.42430	0.07	3,000	low
PM06 FM06		7/25/2008	McGuire Boat Ramp			39.12343	-120.42432	0.03	1,500	low
FM10		7/25/2008	McGuire Boat Ramp	Dactylis glomerata	orchardgrass	39.12297	-120.42503	0.00	100	low
Final Strate Property Prope		7/25/2008	McGuire Boat Ramp	Dactylis glomerata	orchardgrass	39.12292	-120.42555	0.06	2,500	moderate
Final State	EM00	5/25/2008	McGuire Boat Ramp			39.12290	-120.42520	0.04	1,600	low
Fig.	FINIU9	5/25/2008	McGuire Boat Ramp		English plantain	39.12290	-120.42520	0.04	1,600	low
6/25/2008 McGuire Boat Ramp Rumex acetosella sheep sorrel 39,12290 .120,4250 0.04 1,600 25 5/25/2008 McGuire Boat Ramp Rumex acetosella sheep sorrel 39,12390 .120,4250 0.07 3,000 25 5/25/2008 McGuire Boat Ramp Rumex acetosella sheep sorrel 39,12390 .120,4250 0.07 3,000 7/25/2008 McGuire Boat Ramp Rumex acetosella sheep sorrel 39,12260 .120,4250 0.01 5,000 7/25/2008 McGuire Boat Ramp Wetbascum thapsus wolly mullein 39,12260 .120,4250 0.00 1			·			39.12370	-120.42430	-	3,000	moderate
6/25/2008 McGuire Boal Ramp Rumex acetoselia sheep sorrel 39,12390 .120,42390 .0,00 .25										high
6/25/2008 McGuire Boat Ramp Rumex acetoselle sheep sorrel 39,12260 -120,42360 0.07 3.000 sheep sorrel 39,12260 1-20,42360 0.11 5.000 7/25/2008 McGuire Boat Ramp Rumex acetoselle sheep sorrel 39,12260 -120,42520 0.00 100 model 100 100 model 100 100 model 100					·····			-	· · · · · · · · · · · · · · · · · · ·	low
FM10					•			-		low
FM10 FZ52008 Poppy Campground Trailhead Rumex acetosella Sheep sorrel 39,12405 -120,42520 0.00 100					•					moderate
FM10 FS25/2009 Dolly Creek Water Supply Hypericum perforatum Alamathweed 39,12290 1-120,42520 5.9 257,004					•					low
FM10					•			-		high
FM10 FM10 FM10 FM10 FM10 FM10 FM10 FM10									·	moderate
PM10 7/25/2008 Dolly Creek Water Supply Rumex acetosella sheep sorrel 39.12812 -120.41927 0.01 5.00										moderate
Transport Tran	FM10				•			-		low
T/25/2008 Dolly Creek Water Supply Rumex acetosella sheep sorrel 39.12583 -120.42085 10 435,600					•			-		moderate
5/25/2008 Dolly Creek Water Supply Verbascum thapsus woolly mullein 39.12530 -120.42190 10 435.600					·····					low
7/25/2008 Lewis Campground					•				i	low
T/25/2008									·	low
T/25/2008								-		
T/25/2008 Dolly Creek Water Supply Hypericum perforatum klamathweed 39.13365 -120.41505 0.04 1,800 1,725/2008 Dolly Creek Water Supply Hypericum perforatum klamathweed 39.13365 -120.41675 0.01 600 0.06 0.								-		moderate
Ty25/2008								-	i	low
FM11 7/25/2008 Lewis Campground Plantago lanceolata Rumex acetosella English plantain 39.13190 -120.41638 0.06 2,500 FM11 7/25/2008 Lewis Campground Rumex acetosella sheep sorrel 39.13337 -120.41642 0.05 2,000 7/25/2008 Lewis Campground Rumex acetosella sheep sorrel 39.13302 -120.41742 0.05 2,000 7/25/2008 Lewis Campground Rumex acetosella sheep sorrel 39.13190 -120.41638 0.06 2,500 5/25/2008 Lewis Campground Rumex acetosella sheep sorrel 39.13190 -120.41638 0.06 2,500 7/25/2008 Lewis Campground Rumex acetosella sheep sorrel 39.13300 -120.41660 0.06 2,500 7/25/2008 Lewis Campground Verbascum thapsus woolly mullein 39.13302 -120.41642 0.05 2,000 7/25/2008 Lewis Campground Verbascum thapsus woolly mullein 39.13472 -120.41642 0.05 2,000 7/25/2008 Dolly Creek Water Supply Cirsium vulgare bull thistle 39.13472								-		low
FM11 7/25/2008 Lewis Campground Rumex acetosella sheep sorrel 39.13337 -120.41642 0.05 2,000 7/25/2008 Lewis Campground Rumex acetosella sheep sorrel 39.13302 -120.41697 0.04 1,600 7/25/2008 Lewis Campground Rumex acetosella sheep sorrel 39.13190 -120.41638 0.06 2,500 5/25/2008 Lewis Campground Rumex acetosella sheep sorrel 39.13300 -120.41638 0.06 2,500 7/25/2008 Lewis Campground Rumex acetosella sheep sorrel 39.13300 -120.41638 0.06 2,500 7/25/2008 Lewis Campground Rumex acetosella sheep sorrel 39.13300 -120.41638 0.06 2,500 7/25/2008 Lewis Campground Verbascum thapsus woolly mullein 39.13300 -120.41632 0.05 2,000 7/25/2008 Dolly Creek Water Supply Cirsium vulgare bull thistle 39.13472 -120.41430 6.2 270,072 7/25/2008 Dolly Creek Water S								-		low
7/25/2008	EN44							-	· · · · · · · · · · · · · · · · · · ·	low
T/25/2008 Lewis Campground Rumex acetosella Sheep sorrel 39.13302 -120.41742 0.05 2,000	FIN11				•			-	-	low
T/25/2008 Lewis Campground Rumex acetosella Sheep sorrel 39.13190 -120.41638 0.06 2,500								-		low
5/25/2008 Lewis Campground Rumex acetosella Sheep sorrel 39.13300 -120.41660 0.06 2,500									· · · · · · · · · · · · · · · · · · ·	high
7/25/2008 Lewis Campground Verbascum thapsus woolly mullein 39.13337 -120.41642 0.05 2,000 7/25/2008 Lewis Campground Verbascum thapsus woolly mullein 39.13337 -120.41742 0.05 2,000 7/25/2008 Dolly Creek Water Supply Cirsium vulgare bull thistle 39.13472 -120.41430 6.2 270,072 7/25/2008 Dolly Creek Water Supply Cynosurus echinatus hedgehog dogtailgrass 39.13472 -120.41430 6.2 270,072 FM12 7/25/2008 Dolly Creek Water Supply Hypericum perforatum klamathweed 39.13320 -120.41560 0.11 5,000 FM12 7/25/2008 Dolly Creek Water Supply Plantago lanceolata English plantain 39.13320 -120.41560 0.06 2,500 5/25/2008 Dolly Creek Water Supply Rumex acetosella sheep sorrel 39.13320 -120.41560 6 261,360 5/25/2008 Dolly Creek Water Supply Verbascum thapsus woolly mullein 39.13320 -120.41560 0.07 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>·</td><td>moderate</td></t<>									·	moderate
T/25/2008 Lewis Campground Verbascum thapsus Woolly mullein 39.13302 -120.41742 0.05 2,000					·····			-	· · · · · · · · · · · · · · · · · · ·	low
T/25/2008 Dolly Creek Water Supply Cirsium vulgare Dolly Creek Water Supply Cynosurus echinatus hedgehog dogtailgrass 39.13472 -120.41430 6.2 270,072								-		low
T/25/2008 Dolly Creek Water Supply Cynosurus echinatus hedgehog dogtailgrass 39.13472 -120.41430 6.2 270,072										low
FM12 5/25/2008 Dolly Creek Water Supply Hypericum perforatum klamathweed 39.13320 -120.41560 0.11 5,000 FM12 7/25/2008 Dolly Creek Water Supply Plantago lanceolata English plantain 39.13320 -120.41560 0.06 2,500 5/25/2008 Dolly Creek Water Supply Rumex acetosella sheep sorrel 39.13320 -120.41560 6 261,360 5/25/2008 Dolly Creek Water Supply Verbascum thapsus woolly mullein 39.13320 -120.41560 0.07 3,000 7/25/2008 Lewis Campground Verbascum thapsus woolly mullein 39.13365 -120.41505 1 plant 1 plant FM15 7/25/2008 Ahart Campground Rumex acetosella sheep sorrel 39.14501 -120.40835 0.07 3,000			, , , , , , , , , , , , , , , , , , , ,					-	i	low
FM12 7/25/2008 Dolly Creek Water Supply Plantago lanceolata English plantain 39.13320 -120.41560 0.06 2,500 5/25/2008 Dolly Creek Water Supply Rumex acetosella sheep sorrel 39.13320 -120.41560 6 261,360 5/25/2008 Dolly Creek Water Supply Verbascum thapsus woolly mullein 39.13320 -120.41560 0.07 3,000 7/25/2008 Lewis Campground Verbascum thapsus woolly mullein 39.13365 -120.41505 1 plant 1 plant FM15 7/25/2008 Ahart Campground Rumex acetosella sheep sorrel 39.14501 -120.40835 0.07 3,000								-	i	low
5/25/2008 Dolly Creek Water Supply Rumex acetosella sheep sorrel 39.13320 -120.41560 6 261,360 5/25/2008 Dolly Creek Water Supply Verbascum thapsus woolly mullein 39.13320 -120.41560 0.07 3,000 7/25/2008 Lewis Campground Verbascum thapsus woolly mullein 39.13365 -120.41505 1 plant 1 plant FM15 7/25/2008 Ahart Campground Rumex acetosella sheep sorrel 39.14501 -120.40835 0.07 3,000								-	· · · · · · · · · · · · · · · · · · ·	low
5/25/2008 Dolly Creek Water Supply Verbascum thapsus woolly mullein 39.13320 -120.41560 0.07 3,000 7/25/2008 Lewis Campground Verbascum thapsus woolly mullein 39.13365 -120.41505 1 plant 1 plant FM15 7/25/2008 Ahart Campground Rumex acetosella sheep sorrel 39.14501 -120.40835 0.07 3,000	FM12							0.06	· · · · · · · · · · · · · · · · · · ·	high
7/25/2008 Lewis Campground Verbascum thapsus woolly mullein 39.13365 -120.41505 1 plant 1 plant FM15 7/25/2008 Ahart Campground Rumex acetosella sheep sorrel 39.14501 -120.40835 0.07 3,000									i	moderate
T/25/2008 Ahart Campground Rumex acetosella sheep sorrel 39.14501 -120.40835 0.07 3,000								0.07	3,000	low
					woolly mullein	39.13365	-120.41505	1 plant	1 plant	low
TWILD 7/05/0000 About Compared 004	EM15			Rumex acetosella	sheep sorrel	39.14501	-120.40835	0.07	3,000	moderate
7/25/2008 Ahart Campground Rumex acetosella sheep sorrel 39.14580 -120.40716 0.01 400	1-1VI 13	7/25/2008	Ahart Campground	Rumex acetosella	sheep sorrel	39.14580	-120.40716	0.01	400	moderate
7/25/2008 Gates Group Campground				Rumex acetosella		39.13909	-120.41032	0.00	100	low
FM16 7/25/2008 Gates Group Campground Rumex acetosella sheep sorrel 39.13928 -120.41003 0.01 300	FM16									moderate
7/25/2008 Gates Group Campground										low

Appendix D. Results of Noxious Weed Surveys at Existing Project Facilities and Features, Project Recreation Facilities, and Dispersed Concentrated Use Areas (continued).

Map ID ¹	Survey Date	Facility	Scientific Name	Common Name	Latitude/ UTM East	Longitude/ UTM North	Population Size (Acres) ²	Population Size (Square feet)	Infestation Level
FM17	5/25/2008	French Meadows Campground Water Supply and Trail	Cirsium vulgare	bull thistle	39.10480	-120.43140	6	261,360	low
1 141 1 7	5/25/2008		Rumex acetosella	sheep sorrel	39.10480	-120.43140	6	261,360	low
	7/26/2008	French Meadows Campground	Dactylis glomerata	orchardgrass	39.11395	-120.42332	0.73	31,799	high
FM18	7/26/2008	French Meadows Campground	Dactylis glomerata	orchardgrass	39.11441	-120.42341	0.05	2,100	moderate
I WITO	7/26/2008	French Meadows Campground	Dactylis glomerata	orchardgrass	39.11337	-120.42474	0.06	2,794	high
	7/26/2008	French Meadows Campground	Dactylis glomerata	orchardgrass	39.11395	-120.42332	7.5	326,700	low
FM25	7/26/2008	Dolly Creek Water Supply	Dactylis glomerata	orchardgrass	39.13860	-120.40222	1.1	47,916	low
FM26	7/25/2008	Coyote Group Campground	Cirsium vulgare	bull thistle	39.13629	-120.40962	0.03	1,147	low
	7/26/2008	French Meadows Campground	Hypericum perforatum	klamathweed	39.11530	-120.42021	0.03	1,415	moderate
FM27	7/26/2008	French Meadows Campground	Hypericum perforatum	klamathweed	39.06511	-120.41796	0.00	114	moderate
FIVIZ/	7/26/2008	French Meadows Campground	Hypericum perforatum	klamathweed	39.11492	-120.41948	0.01	282	moderate
	7/26/2008	French Meadows Campground	Rumex acetosella	sheep sorrel	39.11484	-120.41966	0.00	75	moderate
	7/26/2008	French Meadows Picnic Area	Cirsium vulgare	bull thistle	39.11155	-120.42846	1.6	69,696	low
	7/26/2008	French Meadows Reservoir	Cirsium vulgare	bull thistle	39.11304	-120.42618	3.9	169,884	low
	7/26/2008	French Meadows Picnic Area	Melilotus officinalis	yellow sweetclover	39.11155	-120.42846	1.6	69,696	low
FM28	7/26/2008	French Meadows Picnic Area	Rumex acetosella	sheep sorrel	39.11155	-120.42846	1.6	69,696	low
	7/26/2008	French Meadows Reservoir	Rumex acetosella	sheep sorrel	39.11304	-120.42618	3.9	169,884	high
	7/26/2008	French Meadows Picnic Area	Verbascum thapsus	woolly mullein	39.11155	-120.42846	1.6	69,696	high
	7/26/2008	French Meadows Reservoir	Verbascum thapsus	woolly mullein	39.11304	-120.42618	3.9	169,884	high
	7/26/2008	French Meadows Picnic Area	Dactylis glomerata	orchardgrass	39.11087	-120.42817	0.00	105	low
	7/26/2008	French Meadows Picnic Area	Hypericum perforatum	klamathweed	39.11093	-120.42770	2 plants	2 plants	low
	7/26/2008	French Meadows Picnic Area	Melilotus officinalis	yellow sweetclover	39.11128	-120.42720	0.08	3,685	moderate
FM31	7/26/2008	French Meadows Picnic Area	Melilotus officinalis	yellow sweetclover	39.11054	-120.42775	0.00	40	high
1 1415 1	7/26/2008	French Meadows Picnic Area	Melilotus officinalis	yellow sweetclover	39.11147	-120.42693	0.00	40	low
	7/26/2008	French Meadows Picnic Area	Rumex acetosella	sheep sorrel	39.11106	-120.42715	0.06	2,500	low
	7/26/2008	French Meadows Pichic Area	Rumex acetosella	sheep sorrel	39.11087	-120.42713	0.01	600	high
		Hell Hole General Parking Area	Bromus diandrus	ripgut brome	39.06090	-120.42617	3.7	161,172	low
	5/24/2008					-120.41496	3.7	161,172	
			Bromus tectorum	cheatgrass	39.06090				moderate
	7/27/2008	Hell Hole General Parking Area	Cynosurus echinatus	hedgehog dogtailgrass	39.06090	-120.41496	3.7	161,172	low
	5/24/2008	Hell Hole General Parking Area	Dactylis glomerata	orchardgrass	39.06090	-120.41496	3.7	161,172	low
1100	5/24/2008		Hypericum perforatum	klamathweed	39.06053	-120.41584	0.02	1,000	high
H08	5/24/2008	Hell Hole General Parking Area	Melilotus officinalis	yellow sweetclover	39.06090	-120.41496	3.7	161,172	low
	5/24/2008	Hell Hole General Parking Area	Rumex acetosella	sheep sorrel	39.06092	-120.41524	0.00	25	high
	7/07/0000		Taeniatherum caput-		00 00000	400 44400	0.7	404 470	
		Hell Hole General Parking Area	medusae	medusahead	39.06090	-120.41496	3.7	161,172	moderate
		Hell Hole General Parking Area	Verbascum thapsus	woolly mullein	39.06090	-120.41496	3.7	161,172	low
		Hell Hole General Parking Area	Vulpia myuros	rat-tail fescue	39.06090	-120.41496	3.7	161,172	low
		Hell Hole Boat Ramp / Hell Hole Boat Ramp Parking Area	Bromus diandrus	ripgut brome	39.06129	-120.41469	3.5	152,460	low
		Hell Hole Boat Ramp / Hell Hole Boat Ramp Parking Area	Bromus tectorum	cheatgrass	39.06129	-120.41469	3.5	152,460	moderate
		Hell Hole Boat Ramp / Hell Hole Boat Ramp Parking Area	Cirsium vulgare	bull thistle	39.06129	-120.41469	3.5	152,460	low
		Hell Hole Boat Ramp / Hell Hole Boat Ramp Parking Area	Dactylis glomerata	orchardgrass	39.06129	-120.41469	3.5	152,460	low
		Hell Hole Boat Ramp / Hell Hole Boat Ramp Parking Area	Hirschfeldia incana	shortpod mustard	39.06129	-120.41469	3.5	152,460	low
H09		Hell Hole Boat Ramp / Hell Hole Boat Ramp Parking Area	Hypericum perforatum	klamathweed	39.06129	-120.41469	3.5	152,460	low
		Hell Hole Boat Ramp / Hell Hole Boat Ramp Parking Area	Plantago lanceolata	English plantain	39.06129	-120.41469	3.5	152,460	low
	5/24/2008	Hell Hole Boat Ramp / Hell Hole Boat Ramp Parking Area	Rumex acetosella	sheep sorrel	39.06129	-120.41469	3.5	152,460	low
			Taeniatherum caput-						
	5/24/2008	Rubicon River Gage and Weir below Hell Hole Dam Road	medusae .	medusahead	39.06128	-120.41367	0.00	192	moderate
	7/27/2008	Hell Hole Boat Ramp / Hell Hole Boat Ramp Parking Area	Verbascum thapsus	woolly mullein	39.06129	-120.41469	3.5	152,460	low
шоо		Hell Hole Vista	Bromus tectorum	cheatgrass	39.07390	-120.41370	3.3	143,748	high
H22	5/25/2008	Hell Hole Vista	Vulpia myuros	rat-tail fescue	39.07390	-120.41370	3.3	143,748	moderate
				•	•			· · · · · · · · · · · · · · · · · · ·	

Appendix D. Results of Noxious Weed Surveys at Existing Project Facilities and Features, Project Recreation Facilities, and Dispersed Concentrated Use Areas (continued).

Map ID ¹	Survey Date	Facility	Scientific Name	Common Name	Latitude/ UTM East	Longitude/ UTM North	Population Size (Acres) ²	Population Size (Square feet)	Infestation Level
	7/27/2008	Hell Hole Campground	Bromus tectorum	cheatgrass	39.06988	-120.41607	3.3	143,748	low
H23	7/27/2008	Hell Hole Campground	Cynosurus echinatus	hedgehog dogtailgrass	39.06988	-120.41607	3.3	143,748	low
	7/27/2008	Hell Hole Campground	Vulpia myuros	rat-tail fescue	39.06988	-120.41607	3.3	143,748	low
	5/27/2008	Big Meadows Campground	Cirsium vulgare	bull thistle	39.07430	-120.42580	0.00	100	low
H26	5/27/2008	Big Meadows Campground	Melilotus officinalis	yellow sweetclover	39.07425	-120.42635	0.00	25	moderate
	7/25/2008	Big Meadows Campground	Rumex acetosella	sheep sorrel	39.07340	-120.42900	23.5	1,023,660	low
H47	5/24/2008	Upper Hell Hole Campground	Bromus tectorum	cheatgrass	39.08200	-120.35790	5.94	258,746	low
П41	5/24/2008	Upper Hell Hole Campground	Vulpia myuros	rat-tail fescue	39.08200	-120.35790	5.94	258,746	low
LC13	5/27/2008	Middle Meadows Group Campground	Bromus tectorum	cheatgrass	39.05280	-120.46720	0.04	1,600	high
LC13	5/27/2008	Middle Meadows Group Campground	Rumex acetosella	sheep sorrel	39.05370	-120.46800	2	87,120	low
LC14	5/27/2008	Middle Meadows Group Campground	Cirsium arvense	Canada thistle	39.05127	-120.46899	0.00	200	low
LC14	5/27/2008	Middle Meadows Group Campground	Rumex acetosella	sheep sorrel	39.05127	-120.46899	0.00	200	high
1.045	5/27/2008	Middle Meadows Group Campground	Cirsium arvense	Canada thistle	39.05240	-120.46830	0.00	100	moderate
LC15	7/24/2008	Middle Meadows Group Campground	Rumex acetosella	sheep sorrel	39.05240	-120.46830	0.00	50	moderate
	5/20/2008	Ralston Picnic Area	Bromus diandrus	ripgut brome	39.00520	-120.73230	0.2	8,712	low
	5/20/2008	Ralston Picnic Area	Carduus pycnocephalus	Italian thistle	39.00520	-120.73230	0.01	600	low
	5/20/2008	Ralston Picnic Area	Centaurea solstitialis	yellow starthistle	39.00520	-120.73230	0.07	3,000	low
	5/20/2008	Ralston Picnic Area	Chondrilla juncea	rush skeletonweed	39.00520	-120.73230	0.07	3,000	low
	5/20/2008	Ralston Picnic Area	Cynosurus echinatus	hedgehog dogtailgrass	39.00520	-120.73230	0.09	4,000	moderate
R18	5/20/2008	Ralston Picnic Area	Hirschfeldia incana	shortpod mustard	39.00520	-120.73230	0.07	3,000	moderate
	5/20/2008	Ralston Picnic Area	Plantago lanceolata	English plantain	39.00520	-120.73230	0.07	3,000	high
	5/20/2008	Ralston Picnic Area	Rubus discolor	Himalayan blackberry	39.00520	-120.73230	1.2	52,272	moderate
	5/20/2008	Ralston Picnic Area	Torilis arvensis	spreading hedgeparsley	39.00520	-120.73230	0.14	6,098	moderate
	5/20/2008	Ralston Picnic Area	Vulpia myuros	rat-tail fescue	39.00520	-120.73230	0.14	6,098	moderate
	5/20/2008	Ralston Picnic Area	Bromus diandrus	ripgut brome	39.00730	-120.73140	2.4	104,544	low
	5/20/2008	Ralston Picnic Area	Cynosurus echinatus	hedgehog dogtailgrass	39.00750	-120.73230	2.4	104,544	moderate
	5/20/2008	Ralston Picnic Area	Hypericum perforatum	klamathweed	39.00750	-120.73230	2.4	104,544	low
R19	5/20/2008	Ralston Picnic Area	Melilotus officinalis	yellow sweetclover	39.00730	-120.73140	2.4	104,544	moderate
IX 13	5/20/2008	Ralston Picnic Area	Torilis arvensis	spreading hedgeparsley	39.00750	-120.73140	2.4	104,544	low
	5/20/2008	Ralston Picnic Area	Verbascum thapsus	woolly mullein	39.00730	-120.73140	2.4	104,544	low
	5/20/2008	Ralston Picnic Area	Vulpia myuros	rat-tail fescue	39.00750	-120.73140	2.4	104,544	low
	5/20/2008	Ralston Picnic Area	Bromus tectorum	cheatgrass	39.00730	-120.73230	0.09	4,000	low
	5/20/2008	Ralston Picnic Area	Melilotus officinalis	yellow sweetclover	39.00590	-120.73160	0.09	4,000	moderate
R20	5/20/2008	Ralston Picnic Area	Plantago lanceolata	English plantain	39.00590	-120.73160	0.09	4,000	low
		Ralston Picnic Area	Rubus discolor	Himalayan blackberry	39.00590	-120.73160	0.09	4,000	low
	5/20/2008	Indian Bar Rafting Access Point and General Parking	Bromus diandrus	· · · · · · · · · · · · · · · · · · ·	39.00590	-120.73100	0.09	33,541	
	5/20/2008	Indian Bar Rafting Access Point and General Parking Indian Bar Rafting Access Point and General Parking	Bromus tectorum	ripgut brome	39.00590	-120.74710	0.77	33,541	high
	5/20/2008	Indian Bar Rafting Access Point and General Parking Indian Bar Rafting Access Point and General Parking		cheatgrass Italian thistle	39.00590	-120.74710	0.77		low
		Indian Bar Rafting Access Point and General Parking Indian Bar Rafting Access Point and General Parking	Chandrilla jungas					33,541	low
	5/20/2008		Chondrilla juncea	rush skeletonweed	39.00590	-120.74710	0.77	33,541	low
	5/20/2008	Indian Bar Rafting Access Point and General Parking	Cynosurus echinatus	hedgehog dogtailgrass	39.00590	-120.74710	0.77	33,541	low
Doo	5/20/2008	Indian Bar Rafting Access Point and General Parking	Hirschfeldia incana	shortpod mustard	39.00590	-120.74710	0.77	33,541	low
R22	5/20/2008	Indian Bar Rafting Access Point and General Parking	Plantago lanceolata	English plantain	39.00590	-120.74710	0.77	33,541	low
	5/20/2008	Indian Bar Rafting Access Point and General Parking	Rubus discolor	Himalayan blackberry	39.00640	-120.74720	0.05	2,000	moderate
	5/20/2008	Indian Bar Rafting Access Point and General Parking	Rumex acetosella	sheep sorrel	39.00590	-120.74710	0.77	33,541	low
	F/00/0000	Indian Day Datting Assess Daint and Consent Davids	Taeniatherum caput-	maduach as d	20.00040	400 74700	0.00	0.500	h.;!-
	5/20/2008		medusae	medusahead	39.00640	-120.74720	0.06	2,500	high
1	5/20/2008	Indian Bar Rafting Access Point and General Parking	Torilis arvensis	spreading hedgeparsley	39.00590	-120.74710	0.77	33,541	low
DCC:	5/20/2008		Vulpia myuros	rat-tail fescue	39.00590	-120.74710	0.77	33,541	low
DC01	5/23/2008	Duncan Creek Diversion Dam Road	Bromus tectorum	cheatgrass	39.13490	-120.48160	0.26	11,326	high

Appendix D. Results of Noxious Weed Surveys at Existing Project Facilities and Features, Project Recreation Facilities, and Dispersed Concentrated Use Areas (continued).

Map ID ¹	Survey Date	Facility	Scientific Name	Common Name	Latitude/ UTM East	Longitude/ UTM North	Population Size (Acres) ²	Population Size (Square feet)	Infestation Level
		Duncan Creek Diversion Intake Road and Diversion Pool Access							
DC02	5/23/2008		Cirsium vulgare	bull thistle	39.13630	-120.47780	0.01	400	moderate
	7/04/0000	Duncan Creek Diversion Intake Road and Diversion Pool Access			00.40000	400 47000	2.22	400	
	7/24/2008		Verbascum thapsus	woolly mullein	39.13600	-120.47928	0.00	100	moderate
		French Meadows Dam Staging Area	Bromus tectorum	cheatgrass	39.11470	-120.47410	2.6	113,256	high
	7/25/2008		Cirsium vulgare	bull thistle	39.11570	-120.47470	2.6	113,256	low
	5/25/2008		Dactylis glomerata	orchardgrass	39.11470	-120.47410	2.6	113,256	low
FM03	5/26/2008		Hypericum perforatum	klamathweed	39.11430	-120.47430	2.6	113,256	high
	5/25/2008		Melilotus albus	white sweet clover	39.11470	-120.47410	2.6	113,256	moderate
	5/25/2008	0 0	Plantago lanceolata	English plantain	39.11470	-120.47410	2.6	113,256	low
	5/25/2008		Rumex acetosella	sheep sorrel	39.11430	-120.47430	2.6	113,256	moderate
	5/25/2008	French Meadows Dam Staging Area	Verbascum thapsus	woolly mullein	39.11470	-120.47410	2.6	113,256	low
		French Meadows Dam Generator Building to French Meadows							
	5/25/2008		Bromus tectorum	cheatgrass	39.11420	-120.47220	1.3	56,628	moderate
		French Meadows Dam Generator Building to French Meadows							
FM21	7/25/2008		Hypericum perforatum	klamathweed	39.11493	-120.47263	1.3	56,628	moderate
1 1412 1		French Meadows Dam Generator Building to French Meadows							
	7/25/2008		Rubus discolor	Himalayan blackberry	39.11493	-120.47263	1.3	56,628	low
		French Meadows Dam Generator Building to French Meadows							
	5/25/2008		Vulpia myuros	rat-tail fescue	39.11420	-120.47220	1.3	56,628	low
		French Meadows-Hell Hole Tunnel Intake Trash Rack Work Area	Cirsium vulgare	bull thistle	39.10912	-120.43171	3.01	131,116	low
FM29	7/26/2008	French Meadows-Hell Hole Tunnel Intake Trash Rack Work Area	Rumex acetosella	sheep sorrel	39.10912	-120.43171	3.01	131,116	moderate
	7/26/2008	French Meadows-Hell Hole Tunnel Intake Trash Rack Work Area	Verbascum thapsus	woolly mullein	39.10912	-120.43171	3.01	131,116	high
	7/26/2008	French Meadows-Hell Hole Tunnel Gatehouse Road	Cirsium vulgare	bull thistle	39.10735	-120.43289	0.01	500	low
		French Meadows-Hell Hole Tunnel Intake Trash Rack							
	7/26/2008	Construction Staging Area	Cirsium vulgare	bull thistle	39.10830	-120.43215	0.04	1,950	low
FM30	7/26/2008	French Meadows-Hell Hole Tunnel Gatehouse Road	Plantago lanceolata	English plantain	39.10735	-120.43289	0.01	500	low
	7/26/2008	French Meadows-Hell Hole Tunnel Gatehouse Road	Rumex acetosella	sheep sorrel	39.10842	-120.43226	0.00	100	high
	7/26/2008	French Meadows-Hell Hole Tunnel Gatehouse Road	Rumex acetosella	sheep sorrel	39.10968	-120.48105	0.00	25	moderate
	7/26/2008	French Meadows-Hell Hole Tunnel Gatehouse Road	Verbascum thapsus	woolly mullein	39.10735	-120.43289	0.01	500	low
		Hell Hole Dam and Powerhouse Road and Spillway Southern		-					
	5/24/2008	Access Point	Bromus tectorum	cheatgrass	39.06001	-120.41355	0.55	23,958	high
		Hell Hole Dam and Powerhouse Road and Spillway Southern		-				·	
	5/24/2008		Cynosurus echinatus	hedgehog dogtailgrass	39.06001	-120.41355	0.55	23,958	low
		Hell Hole Dam and Powerhouse Road and Spillway Southern		0 0 0					
	5/24/2008	Access Point	Dactylis glomerata	orchardgrass	39.06001	-120.41355	0.55	23,958	high
H01		Hell Hole Dam and Powerhouse Road and Spillway Southern		3					<u> </u>
	5/24/2008		Hirschfeldia incana	shortpod mustard	39.06001	-120.41355	0.55	23,958	low
		Hell Hole Dam and Powerhouse Road and Spillway Southern					***		
	5/24/2008	Access Point	Hypericum perforatum	klamathweed	39.06001	-120.41355	0.55	23,958	moderate
	0.11.11.11.11	Hell Hole Dam and Powerhouse Road and Spillway Southern					-		
	5/24/2008	Access Point	Verbascum thapsus	woolly mullein	39.06001	-120.41355	0.55	23,958	low
	0,11,11000	Hell Hole Dam and Powerhouse Road and Spillway Southern	To the decision what people				0.00		1011
	5/24/2008	Access Point	Bromus tectorum	cheatgrass	39.05880	-120.41380	1.5	65,340	moderate
	3,2 ,,2000	Hell Hole Dam and Powerhouse Road and Spillway Southern			00.0000	120.11000		00,010	
	5/24/2008	, ,	Dactylis glomerata	orchardgrass	39.05880	-120.41380	1.5	65,340	low
H02	3,2 ,,2000	Hell Hole Dam and Powerhouse Road and Spillway Southern		2.3.14.49.400	00.0000	120.11000		00,010	1511
	5/24/2008		Hypericum perforatum	klamathweed	39.05880	-120.41380	1.5	65,340	low
	5,2 1,2000	Hell Hole Dam and Powerhouse Road and Spillway Southern	ypanaam panaiaim		23.0000	120.11000	1.0	30,010	1011
	5/24/2008	Access Point	Vulpia myuros	rat-tail fescue	39.05880	-120.41380	1.5	65,340	moderate
	5,2 1,2000	, 100000 : Onit	- sipia iliyal oo	14. (4)1 100040	55.55555	120. 11000	1.0	55,570	moderate

Appendix D. Results of Noxious Weed Surveys at Existing Project Facilities and Features, Project Recreation Facilities, and Dispersed Concentrated Use Areas (continued).

52/4/2008 Hell Hole General Parking Area Cyrosurus ectionum hedgehog dogaligrass 39,06090 120,41496 3.7 116	172 moderate 172 low 172 low 00 high 172 low 5 high 172 moderate	161,172 161,172 161,172 161,172 1,000 161,172	3.7		UTM East	Common Name	Scientific Name	Facility	Date	Map ID ¹
Total Hole General Parking Area Cynosurus echinatus Acquiside Cynosurus echinatus Experimenta September Septem	172 low 172 low 00 high 172 low 5 high 172 moderate	161,172 161,172 1,000	0.7	-120.41496	39.06090	ripgut brome	Bromus diandrus	Hell Hole General Parking Area	5/24/2008	-
52/4/2008 Hell Hole General Parking Area Dactylis glomerata Hypencum perforatum Hamathweed 39,0603 120,41496 3.7 15 15 15 15 15 15 15 1	172 low 00 high 172 low 5 high 172 moderate	161,172 1,000	3.7	-120.41496	39.06090	cheatgrass	Bromus tectorum	Hell Hole General Parking Area	5/24/2008	
Hol8 524/2008 Hell Hole General Parking Area Hypercrum perforatum Mamathweed 39,06053 -120,41584 0.02 1	00 high 172 low 5 high 172 moderate	1,000	3.7	-120.41496	39.06090	hedgehog dogtailgrass	Cynosurus echinatus	Hell Hole General Parking Area	7/27/2008	
Ho8 5/24/2008 Hell Hole General Parking Area Melilous officinalis Rumex acetale 39,06090 1-120,41496 3.7 116	172 low 5 high 172 moderate	'	3.7	-120.41496	39.06090	orchardgrass	Dactylis glomerata	Hell Hole General Parking Area	5/24/2008	
Fig. 1/2/2008 Hell Hole General Parking Area Rumex acctosella Sheep sorrel 39,06092 -120,41524 0.00	high moderate	161.172	0.02	-120.41584	39.06053	klamathweed	Hypericum perforatum	Hell Hole General Parking Area	5/24/2008	
Transitientum caput	172 moderate		3.7	-120.41496	39.06090	yellow sweetclover	Melilotus officinalis	Hell Hole General Parking Area	5/24/2008	H08
T/27/2008 Hell Hole General Parking Area medusae medusahead 39,06090 -120,41496 3.7 16		25	0.00	-120.41524	39.06092	sheep sorrel	Rumex acetosella	Hell Hole General Parking Area	5/24/2008	
T/27/2008 Hell Hole General Parking Area medusae medusahead 39,06090 -120,41496 3,7 16							Taeniatherum caput-			
S/24/2008 Hell Hole General Parking Area Vulpia myuros rat-tail fescue 39,06090 -120,41496 3.7 16	172 low	161,172	3.7	-120.41496	39.06090	medusahead			7/27/2008	
5/24/2008		161,172	3.7	-120.41496	39.06090	woolly mullein	Verbascum thapsus			
Fized/2008 Hell Hole Boat Ramp / Hell Hole Boat Ramp Parking Area Bromus tectorum Cheatgrass 39.06129 -120.41469 3.5 15	172 low	161,172	3.7	-120.41496	39.06090	rat-tail fescue	Vulpia myuros	Hell Hole General Parking Area	5/24/2008	
Fized Fize	460 low	152,460	3.5	-120.41469	39.06129	ripgut brome	Bromus diandrus	Hell Hole Boat Ramp / Hell Hole Boat Ramp Parking Area	5/24/2008	
Hole Boat Ramp / Hell Hole Boat Ramp Parking Area Dactylis glomerata Orchardgrass 39,06129 -120,41469 3.5 15	460 moderate	152,460	3.5	-120.41469	39.06129	cheatgrass	Bromus tectorum	Hell Hole Boat Ramp / Hell Hole Boat Ramp Parking Area	5/24/2008	
Hote S/24/2008	460 low	152,460	3.5	-120.41469	39.06129	bull thistle	Cirsium vulgare		5/24/2008	
S/24/2008	460 low	152,460	3.5	-120.41469	39.06129	orchardgrass	Dactylis glomerata	Hell Hole Boat Ramp / Hell Hole Boat Ramp Parking Area	5/24/2008	
5/24/2008 Hell Hole Boat Ramp / Hell Hole Boat Ramp Parking Area Plantago lanceolata English plantain 39.06129 -120.41469 3.5 15.5/24/2008 Hell Hole Boat Ramp / Hell Hole Boat Ramp Parking Area Rumex acetosella sheep sorrel 39.06129 -120.41469 3.5 15.5/29/2008 Hell Hole Boat Ramp / Hell Hole Boat Ramp Parking Area Verbascum thapsus woolly mullein 39.06129 -120.41469 3.5 15.5/29/2008 Hell Hole Reservoir Agrostis stolonifera creeping bent grass 39.08787 -120.36741 2.5/29/2008 Gray Horse Area / Hell Hole Reservoir Bromus diandrus ripgut brome 39.08940 -120.36690 4 17.5/29/2008 Gray Horse Area / Hell Hole Reservoir Bromus tectorum cheatgrass 39.08940 -120.36690 4 17.5/29/2008 Gray Horse Area Cirsium vulgare bull thistle 39.08940 -120.36690 4 17.5/29/2008 Hell Hole Reservoir Verbascum thapsus woolly mullein 39.08940 -120.36690 4 17.5/29/2008 Hell Hole Reservoir Verbascum thapsus woolly mullein 39.08940 -120.36690 4 17.5/29/2008 Hell Hole Reservoir Verbascum thapsus woolly mullein 39.08940 -120.36690 4 17.5/29/2008 Hell Hole Reservoir Verbascum thapsus woolly mullein 39.08940 -120.36690 4 17.5/29/2008 Hell Hole Reservoir Verbascum thapsus woolly mullein 39.08940 -120.36690 4 17.5/29/2008 Hell Hole Reservoir Vulpia myuros rat-tail fescue 39.08940 -120.36690 4 17.5/29/2008 Hell Hole Reservoir Vulpia myuros rat-tail fescue 39.08940 -120.36690 4 17.5/29/2008 Hell Hole Reservoir Vulpia myuros rat-tail fescue 39.08940 -120.36690 4 17.5/29/2008 Hell Hole Reservoir Vulpia myuros rat-tail fescue 39.08940 -120.36690 4 17.5/29/2008 Hell Hole Reservoir Vulpia myuros rat-tail fescue 39.08940 -120.36690 4 17.5/29/2008 Hell Hole Reservoir Vulpia myuros rat-tail fescue 39.08940 -120.36690 4 17.5/29/2008 Hell Hole Reservoir Hell Hole Reservoir Vulpia myuros rat-tail fescue 39.	460 low	152,460	3.5	-120.41469	39.06129	shortpod mustard	Hirschfeldia incana	Hell Hole Boat Ramp / Hell Hole Boat Ramp Parking Area	5/24/2008	H09
Figure F	460 low	152,460	3.5	-120.41469	39.06129	klamathweed	Hypericum perforatum	Hell Hole Boat Ramp / Hell Hole Boat Ramp Parking Area	5/24/2008	
5/24/2008 Hell Hole Boat Ramp / Hell Hole Boat Ramp Parking Area Rumex acetosella Sheep sorrel 39.06129 -120.41469 3.5 15.	460 low	152,460	3.5	-120.41469	39.06129	English plantain		Hell Hole Boat Ramp / Hell Hole Boat Ramp Parking Area	5/24/2008	
T/27/2008 Hell Hole Boat Ramp / Hell Hole Boat Ramp Parking Area Verbascum thapsus Woolly mullein 39.06129 -120.41469 3.5 15	460 low	152,460	3.5	-120.41469	39.06129	sheep sorrel		Hell Hole Boat Ramp / Hell Hole Boat Ramp Parking Area	5/24/2008	
Figure F	460 low	152,460	3.5	-120.41469	39.06129	····	Verbascum thansus	•	7/27/2008	
H35 S/29/2008 Gray Horse Area Bromus diandrus Figult brome 39.08940 -120.36690 4 17		2,000								
H35 5/29/2008 Gray Horse Area / Hell Hole Reservoir Bromus tectorum Cheatgrass 39.08940 -120.36690 4 17		174,240	4							H35
H35 5/29/2008 Gray Horse Area Cirsium vulgare Dull thistle 39.08940 -120.36690 4 17 17/30/2008 Gray Horse Area Cynosurus echinatus hedgehog dogtailgrass 39.08940 -120.36690 4 17 17/29/2008 Hell Hole Reservoir Verbascum thapsus woolly mullein 39.08910 -120.36640 4 17 17/30/2008 Gray Horse Area / Hell Hole Reservoir Vulpia myuros rat-tail fescue 39.08940 -120.36690 4 17 17/30/2008 Middle Fork Interbay Dispersed Concentrated Use Area Dactylis glomerata Orchardgrass 39.02630 -120.60220 0.00 17/31/2008 Middle Fork Interbay Dispersed Concentrated Use Area Hypericum perforatum Klamathweed 39.02633 -120.60219 0.14 6 17/31/2008 Middle Fork Interbay Dispersed Concentrated Use Area Plantago lanceolata English plantain 39.02633 -120.60219 0.14 6 17/31/2008 Middle Fork Interbay Dispersed Concentrated Use Area Plantago lanceolata English plantain 39.02633 -120.60219 0.14 6 17/31/2008 Middle Fork Interbay Dispersed Concentrated Use Area Rumex acetosella Sheep sorrel 39.02633 -120.60219 0.14 6 17/31/2008 Middle Fork Interbay Dispersed Concentrated Use Area Rumex acetosella Sheep sorrel 39.02633 -120.60219 0.14 6 17/31/2008 Middle Fork Interbay Dispersed Concentrated Use Area Rumex acetosella Sheep sorrel 39.02633 -120.60219 0.14 6 17/31/2008 Middle Fork Interbay Dispersed Concentrated Use Area Plantago landrus Sheep sorrel 39.02633 -120.60219 0.14 6 17/31/2008 Middle Fork Interbay Dispersed Concentrated Use Area Plantago landrus Sheep sorrel 39.02633 -120.60219 0.14 6 17/31/2008 Middle Fork Interbay Dispersed Concentrated Use Area Plantago landrus Sheep sorrel 39.02633 -120.60219 0.14 6 17/31/2008 Middle Fork Interbay Dispersed Concentrated Use Area Plantago landrus Sheep sorrel 39.02633 -120.60219 0.14 6 17/31/2008 Middle Fork Interbay Dispersed Concentrated Use Area Plantago landru		174,240	··							
17/30/2008 Gray Horse Area Cynosurus echinatus hedgehog dogtailgrass 39.08940 -120.36690 4 17/7/29/2008 Hell Hole Reservoir Verbascum thapsus woolly mullein 39.08910 -120.36640 4 17/7/30/2008 Gray Horse Area / Hell Hole Reservoir Vulpia myuros rat-tail fescue 39.08940 -120.36690 4 17/7/30/2008 Middle Fork Interbay Dispersed Concentrated Use Area Dactylis glomerata Orchardgrass 39.02630 -120.60220 0.00		174,240						•		
T/29/2008 Hell Hole Reservoir Verbascum thapsus Woolly mullein 39.08910 -120.36640 4 17 17/30/2008 Gray Horse Area / Hell Hole Reservoir Vulpia myuros rat-tail fescue 39.08940 -120.36690 4 17 17 17 17 17 17 17		174,240						•		
17/30/2008 Gray Horse Area / Hell Hole Reservoir Vulpia myuros rat-tail fescue 39.08940 -120.36690 4 17/30/2008 Middle Fork Interbay Dispersed Concentrated Use Area Dactylis glomerata orchardgrass 39.02630 -120.60220 0.00 7/31/2008 Middle Fork Interbay Dispersed Concentrated Use Area Hypericum perforatum klamathweed 39.02633 -120.60219 0.14 66.00000 7/31/2008 Middle Fork Interbay Dispersed Concentrated Use Area Melilotus albus white sweet clover 39.02633 -120.60219 0.14 66.000000 7/31/2008 Middle Fork Interbay Dispersed Concentrated Use Area Plantago lanceolata English plantain 39.02633 -120.60219 0.14 66.0000000000000000000000000000000000		174,240	· · · · · · · · · · · · · · · · · · ·				· · · · · · · · · · · · · · · · · · ·			
IOT Solution Fork Interbay Dispersed Concentrated Use Area Dactylis glomerata Orchardgrass 39.02630 -120.60220 0.00		174,240								
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7/31/2008 Middle Fork Interbay Dispersed Concentrated Use Area Plantago lanceolata English plantain 39.02633 -120.60219 0.14 67/31/2008 Middle Fork Interbay Dispersed Concentrated Use Area Rumex acetosella sheep sorrel 39.02633 -120.60219 0.14 67/31/2008 Middle Fork Interbay Dispersed Concentrated Use Area Verbascum thapsus woolly mullein 39.02633 -120.60219 0.14 67/31/2008 Middle Fork Powerhouse to Middle Fork-Ralston Tunnel Intake and Gatehouse Communication Line/Powerline Bromus diandrus ripgut brome 39.02570 -120.60210 3.4 14		6,098								
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7/31/2008 Middle Fork Interbay Dispersed Concentrated Use Area Verbascum thapsus woolly mullein 39.02633 -120.60219 0.14 6 Middle Fork Powerhouse to Middle Fork- Ralston Tunnel Intake and Gatehouse Communication Line/Powerline Bromus diandrus ripgut brome 39.02570 -120.60210 3.4 14		6,098								
Middle Fork Powerhouse to Middle Fork- Ralston Tunnel Intake and Gatehouse Communication Line/Powerline Bromus diandrus ripgut brome 39.02570 -120.60210 3.4 14		6,098		······						
5/21/2008 and Gatehouse Communication Line/Powerline Bromus diandrus ripgut brome 39.02570 -120.60210 3.4 14	,0 1011	0,000	0.11	120.00210	00.02000	Weeny manem	verbassarri triapsas		170172000	
	104 moderate	148,104	3.4	-120,60210	39.02570	ripaut brome	Bromus diandrus		5/21/2008	
I WILCOLD TOTAL OWN TO THE CONTROL OF THE CONTROL O	- Inodorate	1 10,101	0.1	120.00210	00.02070	i inpgat brome	Diomas diamas		0/21/2000	
	104 low	148,104	3.4	-120 60210	39 02570	cheatgrass	Bromus tectorum		5/21/2008	
Middle Fork Interbay Dam and Powerhouse Road and Interbay		1 10,101	0.1	120.00210	00.02070	onodigraco	Diomas tectoram		0/21/2000	
	ant low	1 plant	1 plant	-120 59964	39 02485	bull thistle	Cirsium vulgare		7/31/2008	
Middle Fork Powerhouse to Middle Fork- Ralston Tunnel Intake		ı plant	Pian	120.00001	00.02.100		onoidin valgaro		170172000	
5/21/2008 and Catabouse Communication Line/Powerline Cynosurus achinatus hadgebog dogtailgrass 30.02570 -120.60210 3.4	104 low	148,104	3.4	-120 60210	39 02570	hedgehog dogtailgrass	Cynosurus echinatus		5/21/2008	
108 Middle Fork Powerhouse to Middle Fork- Ralston Tunnel Intake		1 10,101	0		00.020.0		- Cyrrecarae commutae		0/21/2000	108
	104 moderate	148,104	3.4	-120,60210	39.02570	klamathweed	Hypericum perforatum		5/21/2008	
Middle Fork Interbay Dam and Powerhouse Road and Interbay	- moderate		<u> </u>		00.020.0		John State		5, 2 ., 2000	
	50 moderate	2,250	0.05	-120,59900	39.02480	vellow sweetclover	Melilotus officinalis		5/21/2008	
Middle Fork Powerhouse to Middle Fork- Ralston Tunnel Intake	1110001010	_,	5.55		55.52.100	, = = =	ometae emeriane		5, 2 ., 2000	
	1	148,104	3.4	-120,60210	39.02570	vellow sweetclover	Melilotus officinalis		5/21/2008	
Middle Fork Powerhouse to Middle Fork- Ralston Tunnel Intake	104 low		J		00.020.0	,			5, 2 ., 2000	
5/21/2008 and Gatehouse Communication Line/Powerline Plantago lanceolata English plantain 39.02570 -120.60210 3.4 14	104 low		3.4	-120.60210	39.02570	English plantain	Plantago lanceolata		5/21/2008	

Appendix D. Results of Noxious Weed Surveys at Existing Project Facilities and Features, Project Recreation Facilities, and Dispersed Concentrated Use Areas (continued).

S21/2008 Middle Fort Powerhouse Upper Switchyard Road Circum ruighare bull Intelle 39.0/430 120.99670 0.58 22.265	Infestation Level
109 521/2008 Middle Fork Powerhouse Upper Swirthyrad Road Heschhickifa incama shortpod mustard 39.02430 -120.59670 0.58 25.265 521/2008 Middle Fork Powerhouse Upper Swirthyrad Road Rubus discolor Himalayan blackberry 39.02430 -120.59670 0.58 25.265 521/2008 Middle Fork Powerhouse Upper Swirthyrad Road Rubus discolor Himalayan blackberry 39.02430 -120.59670 0.58 25.265 527/2008 Middle Fork Powerhouse Upper Swirthyrad Road Rubus discolor Middle Fork Powerhouse Upper Swirthyrad Road Rubus discolor Middle Fork Powerhouse Upper Swirthyrad Road Rubus discolor Middle Fork Long Canyon Diversion and Pool Agrostis stelloritiera Creeping bert grass 39.6196 -120.47070 0.03 1.250 0.58 25.265 0.58 0.570 0.570 0.57	low
Sel 12,008 Middle Fork Powerhouse Upper Switchyard Road Melibus officination Middle Fork Powerhouse Upper Switchyard Road Melibus officination Middle Fork Powerhouse Upper Switchyard Road Verbascum ribapsus Verbascum ribap	low
S221/2008 Model Fork Powerhouse Upper Switchyard Road Melinolas orticitals Section Sec	low
S5/17/2008 Middle Fork Powerhouse Upper Switchyard Road Verbascum thapaus voolly mullein 39,0/430 -120,59670 0.58 25,265 527/2008 South Fork Long Caryon Diversion Dam and Pool Circism vulgare bull thistle 39,05130 -120,47900 2 87,120 1.00	moderate
S27/2008 South Fork Long Carryon Diversion Dam and Pool Agrests stolenifora Cresping bert grass 39.05186 120.47070 0.03 1.250	low
September Sept	low
S27/2008 South Fork Long Carryon Diversion Dam and Pool Cirsium vulgare Dull thistle 39.05186 120.47070 2 87.120	low
LC11 577/2008 South Fork Long Carryon Diversion Dam and Pool Melliotus albus Methes weet clover 39,05130 -120,47020 0,06 2,500 120	low
LC11 577/2008 South Fork Long Carryon Diversion Dam and Pool Melilous albus Multi sweet clover 39,05130 -120,47120 0.06 2,500 120 1724/2008 South Fork Long Carryon Diversion and Pool Melilous albus Multi sweet clover 39,05130 -120,47030 2 87,120 120	low
5277/2008 South Fork Long Carryon Diversion Dam and Pool Mellifotus albus white sweets clover 39.05186 -120.47035 0.00 120 724/2008 7724/2008 South Fork Long Carryon Diversion and Drop Intel Kong Carryon Diversion and Drop Intel Kong Carryon Diversion and Drop Intel Kong Carryon Diversion Dam and Pool Verbascum thageus voolly multien 39.05186 -120.47070 2 87,120 120,47020 120,47020 2 87,120 120,47020	low
T724/2008 South Fork Long Canyon Diversion and Drop Inlet Road Rumex aceixsella Sheep sorrel 39,05170 120,47080 2 87,120 57,272008 South Fork Long Canyon Diversion and Drop Inlet Road Vulpia myuros rat-tail fescue 39,05170 120,47080 2 87,120 57,272008 South Fork Long Canyon Diversion and Drop Inlet Road Vulpia myuros rat-tail fescue 39,05170 120,47080 2 87,120 120,27008 120,47092 120,47042 10,68 29,621 120,47092 120,47042 10,68 29,621 120,47092 120,47042 10,68 29,621 120,47092 10,68 120,47092 10,68 120,47092 10,68 120,47092 10,68 120,47092 10,68 120,47092 10,68 120,47092 10,68 120,47092 10,68 120,47092 10,68 120,47092 10,68 120,47092 10,68 120,47092 10,68 120,47092 10,68 120,47092 10,68 120,47092 10,68 120,47092 10,68 120,47092 10,68 120,47092 10,68 120,47092 120,47092 10,68 120,47092 12	moderate
F72472008 South Fork Long Canyon Diversion Dam and Pool Verhasscur thagsus Moolly mullein 39.05186 -120.47070 2 87.120	low
527/2008 South Fork Long Canyon Diversion and Drop Inlet Road Vulpia myuros rat-tail fescue 39.05172 -120.47080 2 87.120	low
Sci27/2008 South Fork Long Caryon Diversion Dam and Pool Bromus tectorum Cheatgrass 39.05132 120.47042 0.68 29.621	low
CC12 6/27/2008 South Fork Long Canyon Diversion Dam and Pool Rumex acetosella sheep sortel 39,05132 -120,47042 0.68 29,621	low
Si27/2008 South Fork Long Canyon Diversion Dam and Pool Verbascum thapsus woolly mullein 39.05132 -120.74942 0.68 29.621	low
Siz0iz2008 Indian Bar Biramus teitorium Siz0iz2008 Siz0iz2008 Siz0iz2008 Indian Bar Biramus teitorium Siz0iz2008 Indian Bar Biramus teitorium Siz0iz2008 Indian Bar Carduus pyenocephalus Italian thistle 39,00460 -120,74740 9 392,040	low
Siz20/2008 Indian Bar Scrmus tectorum Cheatgrass 39.00490 -120.74740 9 392,040	moderate
F/20/2008	low
F/20/2008	low
5/20/2008	IOW
Fig.	low
Page	low
R05 Figure Figu	low
Formula Form	low
R05 S/20/2008 Indian Bar Lepidium latifolium Lepidium latifolium S/20/2008 Indian Bar Lepidium latifolium Lepidium latifolium S/20/2008 Indian Bar Melilotus officinalis yellow sweetclover 39,00490 -120,74740 9 392,040	low
5/20/2008	IOW
S/20/2008 Indian Bar Melilotus officinalis yellow sweetclover 39.00490 -120.74740 9 392,040 S/20/2008 Indian Bar Plantago lanceolata English plantain 39.00490 -120.74740 9 392,040 S/20/2008 Indian Bar Rubus discolor Himalayan blackberry 39.00370 -120.74830 9 392,040 S/20/2008 Indian Bar Rumex acetosella sheep sorrel 39.00370 -120.74830 9 392,040 S/20/2008 Indian Bar Rumex acetosella sheep sorrel 39.00370 -120.74830 9 392,040 S/20/2008 Indian Bar Rumex acetosella sheep sorrel 39.00370 -120.74740 9 392,040 S/20/2008 Indian Bar Rumex acetosella medusahead 39.00490 -120.74740 9 392,040 S/20/2008 Indian Bar Rumex acetosella medusahead 39.00490 -120.74740 9 392,040 S/20/2008 Indian Bar Rumex acetosella medusahead 39.00490 -120.74740 9 392,040 S/20/2008 Indian Bar Rumex acetosella medusahead 39.00490 -120.74740 9 392,040 S/20/2008 Indian Bar Rumex acetosella medusahead 39.00490 -120.74740 9 392,040 S/20/2008 Ralston Ridge Sediment Disposal Area Bromus diandrus ripgut brome 39.00620 -120.74740 9 392,040 S/21/2008 Ralston Ridge Sediment Disposal Area Bromus diandrus ripgut brome 39.00620 -120.72020 2.3 100,188 S/21/2008 Ralston Ridge Sediment Disposal Area Centaurea melitensis (tocalote) 39.00620 -120.72020 2.3 100,188 S/21/2008 Ralston Ridge Sediment Disposal Area Chondrilla juncea rush skeletonweed 39.00620 -120.72020 2.3 100,188 S/21/2008 Ralston Ridge Sediment Disposal Area Chondrilla juncea rush skeletonweed 39.00620 -120.72020 2.3 100,188 S/21/2008 Ralston Ridge Sediment Disposal Area Chondrilla juncea rush skeletonweed 39.00620 -120.72020 2.3 100,188 S/21/2008 Ralston Ridge Sediment Disposal Area Chondrilla juncea rush skeletonweed 39.00620 -120.72020 2.3 100,188	la
Figure F	low
S/20/2008	low
S/20/2008 Indian Bar Rumex acetosella Sheep sorrel 39.00370 -120.74830 9 392,040	low
Taeniatherum caput-medusae medusahead 39.00490 -120.74740 9 392,040 5/20/2008 Indian Bar Torilis arvensis spreading hedgeparsley 39.00490 -120.74740 9 392,040 5/20/2008 Indian Bar Vulpia myuros spreading hedgeparsley 39.00490 -120.74740 9 392,040 5/20/2008 Ralston Ridge Sediment Disposal Area Bromus diandrus ritgut brome 39.00620 -120.72020 2.3 100,188 5/21/2008 Ralston Ridge Sediment Disposal Area Bromus tectorum cheatgrass 39.00620 -120.72020 2.3 100,188 5/21/2008 Ralston Ridge Sediment Disposal Area Carduus pycnocephalus Italian thistle 39.00620 -120.72030 0.01 600 Malta starthistle Sediment Disposal Area Centaurea melitensis (tocalote) 39.00620 -120.72020 2.3 100,188 5/21/2008 Ralston Ridge Sediment Disposal Area Chondrilla juncea rush skeletonweed 39.00620 -120.72020 2.3 100,188 5/21/2008 Ralston Ridge Sediment Disposal Area Chondrilla juncea rush skeletonweed 39.00620 -120.72030 0.01 600 Folia	low
5/20/2008 Indian Bar Indi	low
5/20/2008 Indian Bar Torilis arvensis Spreading hedgeparsley 39.00490 -120.74740 9 392,040	l .
5/20/2008 Indian Bar Vulpia myuros rat-tail fescue 39.00490 -120.74740 9 392,040	low
5/21/2008 Ralston Ridge Sediment Disposal Area Bromus diandrus ripgut brome 39.00620 -120.72020 2.3 100,188 5/21/2008 Ralston Ridge Sediment Disposal Area Bromus tectorum cheatgrass 39.00620 -120.72020 2.3 100,188 5/21/2008 Ralston Ridge Sediment Disposal Area Carduus pycnocephalus Italian thistle 39.00620 -120.72030 0.01 600 Malta starthistle (tocalote) 39.00620 -120.72020 2.3 100,188 5/21/2008 Ralston Ridge Sediment Disposal Area Centaurea melitensis (tocalote) 39.00620 -120.72020 2.3 100,188 5/21/2008 Ralston Ridge Sediment Disposal Area Chondrilla juncea rush skeletonweed 39.00620 -120.72020 2.3 100,188 5/21/2008 Ralston Ridge Sediment Disposal Area Chondrilla juncea rush skeletonweed 39.00620 -120.72030 0.01 600 5/21/2008 Ralston Ridge Sediment Disposal Area Cynosurus echinatus hedgehog dogtailgrass 39.00620 -120.72020 2.3 100,188 5/21/2008 Ralston Ridge Sediment Disposal Area Cynosurus echinatus hedgehog dogtailgrass 39.00620 -120.72020 2.3 100,188 5/21/2008 Ralston Ridge Sediment Disposal Area Cynosurus echinatus hedgehog dogtailgrass 39.00620 -120.72020 2.3 100,188	moderate
5/21/2008 Ralston Ridge Sediment Disposal Area Bromus tectorum Cheatgrass 39.00620 -120.72020 2.3 100,188 5/21/2008 Ralston Ridge Sediment Disposal Area Carduus pycnocephalus Italian thistle 39.00620 -120.72030 0.01 600 Malta starthistle (tocalote) 39.00620 -120.72020 2.3 100,188 5/21/2008 Ralston Ridge Sediment Disposal Area Centaurea melitensis (tocalote) 39.00620 -120.72020 2.3 100,188 5/21/2008 Ralston Ridge Sediment Disposal Area Chondrilla juncea rush skeletonweed 39.00620 -120.72020 2.3 100,188 5/21/2008 Ralston Ridge Sediment Disposal Area Chondrilla juncea rush skeletonweed 39.00620 -120.72030 0.01 600 5/21/2008 Ralston Ridge Sediment Disposal Area Cynosurus echinatus hedgehog dogtailgrass 39.00620 -120.72020 2.3 100,188 5/21/2008 Ralston Ridge Sediment Disposal Area Cynosurus echinatus hedgehog dogtailgrass 39.00620 -120.72020 2.3 100,188 5/21/2008 Ralston Ridge Sediment Disposal Area Cynosurus echinatus hedgehog dogtailgrass 39.00620 -120.72020 2.3 100,188	low
5/21/2008 Ralston Ridge Sediment Disposal Area Carduus pycnocephalus Italian thistle 39.00620 -120.72030 0.01 600	moderate
Solution Solution	moderate
5/21/2008 Ralston Ridge Sediment Disposal Area Centaurea melitensis (tocalote) 39.00620 -120.72020 2.3 100,188 5/21/2008 Ralston Ridge Sediment Disposal Area Chondrilla juncea rush skeletonweed 39.00620 -120.72020 2.3 100,188 5/21/2008 Ralston Ridge Sediment Disposal Area Chondrilla juncea rush skeletonweed 39.00620 -120.72030 0.01 600 5/21/2008 Ralston Ridge Sediment Disposal Area Cynosurus echinatus hedgehog dogtailgrass 39.00620 -120.72020 2.3 100,188 100,188 100,188 1	high
5/21/2008 Ralston Ridge Sediment Disposal Area Chondrilla juncea rush skeletonweed 39.00620 -120.72020 2.3 100,188 5/21/2008 Ralston Ridge Sediment Disposal Area Chondrilla juncea rush skeletonweed 39.00620 -120.72030 0.01 600 5/21/2008 Ralston Ridge Sediment Disposal Area Cynosurus echinatus hedgehog dogtailgrass 39.00620 -120.72020 2.3 100,188	l
5/21/2008 Ralston Ridge Sediment Disposal Area Chondrilla juncea rush skeletonweed 39.00620 -120.72030 0.01 600 5/21/2008 Ralston Ridge Sediment Disposal Area Cynosurus echinatus hedgehog dogtailgrass 39.00620 -120.72020 2.3 100,188	low
P14 5/21/2008 Ralston Ridge Sediment Disposal Area Cynosurus echinatus hedgehog dogtailgrass 39.00620 -120.72020 2.3 100,188	moderate
	high
5/21/2008 Ralston Ridge Sediment Disposal Area Dactylis glomerata orchardgrass 39.00620 -120.72020 2.3 100,188	low
	low
5/21/2008 Ralston Ridge Sediment Disposal Area Hirschfeldia incana shortpod mustard 39.00600 -120.72050 0.06 2,500	moderate
5/21/2008 Ralston Ridge Sediment Disposal Area Hirschfeldia incana shortpod mustard 39.00620 -120.72020 2.3 100,188	low
5/21/2008 Ralston Ridge Sediment Disposal Area Melilotus officinalis yellow sweetclover 39.00620 -120.72020 2.3 100,188	moderate
5/21/2008 Ralston Ridge Sediment Disposal Area Rubus discolor Himalayan blackberry 39.00620 -120.72020 2.3 100,188	moderate
Taeniatherum caput-	·
5/21/2008 Ralston Ridge Sediment Disposal Area <i>medusae</i> medusahead 39.00620 -120.72020 2.3 100,188	low
5/21/2008 Ralston Ridge Sediment Disposal Area Torilis arvensis spreading hedgeparsley 39.00620 -120.72020 2.3 100,188	low

Appendix D. Results of Noxious Weed Surveys at Existing Project Facilities and Features, Project Recreation Facilities, and Dispersed Concentrated Use Areas (continued).

Map ID ¹	Survey Date	Facility	Scientific Name	Common Name	Latitude/ UTM East	Longitude/ UTM North	Population Size (Acres) ²	Population Size (Square feet)	Infestation Level
R14	5/21/2008		Verbascum thapsus	woolly mullein	39.00620	-120.72020	2.3	100,188	low
17.14	5/21/2008		Vulpia myuros	rat-tail fescue	39.00620	-120.72020	2.3	100,188	low
	5/20/2008		Bromus diandrus	ripgut brome	39.00520	-120.73230	0.2	8,712	low
	5/20/2008	Ralston Picnic Area	Bromus diandrus	ripgut brome	39.00520	-120.73230	0.03	1,500	low
	5/20/2008	Ralston Picnic Area	Carduus pycnocephalus	Italian thistle	39.00520	-120.73230	0.01	600	low
	5/20/2008	Ralston Picnic Area	Carduus pycnocephalus	Italian thistle	39.00520	-120.73230	0.01	600	low
	5/20/2008	Ralston Picnic Area	Centaurea solstitialis	yellow starthistle	39.00520	-120.73230	0.07	3,000	low
	5/20/2008	Ralston Picnic Area	Chondrilla juncea	rush skeletonweed	39.00520	-120.73230	0.07	3,000	low
R18	5/20/2008	Ralston Picnic Area	Cynosurus echinatus	hedgehog dogtailgrass	39.00520	-120.73230	0.03	1,500	low
KIO	5/20/2008	Ralston Picnic Area	Cynosurus echinatus	hedgehog dogtailgrass	39.00520	-120.73230	0.05	2,000	low
	5/20/2008	Ralston Picnic Area	Cynosurus echinatus	hedgehog dogtailgrass	39.00520	-120.73230	0.09	4,000	moderate
	5/20/2008	Ralston Picnic Area	Hirschfeldia incana	shortpod mustard	39.00520	-120.73230	0.07	3,000	moderate
	5/20/2008	Ralston Picnic Area	Plantago lanceolata	English plantain	39.00520	-120.73230	0.07	3,000	high
	5/20/2008	Ralston Picnic Area	Rubus discolor	Himalayan blackberry	39.00520	-120.73230	1.2	52,272	moderate
	5/20/2008	Ralston Picnic Area	Torilis arvensis	spreading hedgeparsley	39.00520	-120.73230	0.14	6,098	moderate
	5/20/2008	Ralston Picnic Area	Vulpia myuros	rat-tail fescue	39.00520	-120.73230	0.14	6,098	moderate
	5/20/2008	Ralston Picnic Area	Bromus diandrus	ripgut brome	39.00730	-120.73140	2.4	104,544	low
	5/20/2008	Ralston Picnic Area	Cynosurus echinatus	hedgehog dogtailgrass	39.00750	-120.73230	2.4	104,544	moderate
	5/20/2008	Ralston Picnic Area	Hypericum perforatum	klamathweed	39.00750	-120.73230	2.4	104,544	low
R19	5/20/2008	Ralston Picnic Area	Melilotus officinalis	yellow sweetclover	39.00730	-120.73140	2.4	104,544	moderate
100	5/20/2008	Ralston Picnic Area	Torilis arvensis	spreading hedgeparsley	39.00750	-120.73230	2.4	104,544	low
	5/20/2008	Ralston Picnic Area	Verbascum thapsus	woolly mullein	39.00730	-120.73140	2.4	104,544	low
	5/20/2008	Ralston Picnic Area	Vulpia myuros	rat-tail fescue	39.00750	-120.73230	2.4	104,544	low
	5/20/2008		Bromus tectorum	cheatgrass	39.00790	-120.73250	0.09	4,000	low
	5/20/2008	Ralston Picnic Area	Melilotus officinalis	yellow sweetclover	39.00590	-120.73160	0.09	4,000	moderate
R20	5/20/2008	Ralston Picnic Area	Plantago lanceolata	English plantain	39.00590	-120.73160	0.09	4,000	low
	5/20/2008		Rubus discolor	Himalayan blackberry	39.00590	-120.73160	0.09	4,000	low
	3/20/2006	Raiston-Oxbow Tunnel Intake to Raiston Powerhouse	Rubus discolor	Hillialayan biackberry	39.00390	-120.73100	0.09	4,000	IOW
	5/21/2008	Communication Line	Bromus diandrus	ripgut brome	39.00150	-120.72590	13	566,280	moderate
		Ralston-Oxbow Tunnel Intake to Ralston Powerhouse	_						
	5/21/2008		Bromus tectorum	cheatgrass	39.00150	-120.72590	13	566,280	low
		Ralston-Oxbow Tunnel Intake to Ralston Powerhouse							
	5/21/2008		Carduus pycnocephalus	Italian thistle	39.00150	-120.72590	13	566,280	low
		Ralston-Oxbow Tunnel Intake to Ralston Powerhouse		Malta starthistle					
	5/21/2008	Communication Line	Centaurea melitensis	(tocalote)	39.00150	-120.72590	13	566,280	low
		Ralston-Oxbow Tunnel Intake to Ralston Powerhouse							
	5/21/2008	Communication Line	Chondrilla juncea	rush skeletonweed	39.00150	-120.72590	13	566,280	low
		Ralston-Oxbow Tunnel Intake to Ralston Powerhouse							
R21	5/21/2008		Hirschfeldia incana	shortpod mustard	39.00150	-120.72590	13	566,280	low
1121		Ralston-Oxbow Tunnel Intake to Ralston Powerhouse							
	5/21/2008	Communication Line	Hypericum perforatum	klamathweed	39.00150	-120.72590	13	566,280	low
		Ralston-Oxbow Tunnel Intake to Ralston Powerhouse							
	5/21/2008	Communication Line	Melilotus officinalis	yellow sweetclover	39.00150	-120.72590	13	566,280	low
		Ralston-Oxbow Tunnel Intake to Ralston Powerhouse							
	5/21/2008	Communication Line	Plantago lanceolata	English plantain	39.00150	-120.72590	13	566,280	low
		Ralston-Oxbow Tunnel Intake to Ralston Powerhouse							
	5/21/2008	Communication Line	Rubus discolor	Himalayan blackberry	39.00150	-120.72590	13	566,280	low
		Ralston-Oxbow Tunnel Intake to Ralston Powerhouse							
	5/21/2008	Communication Line	Rubus discolor	Himalayan blackberry	39.00150	-120.72590	13	566,280	moderate
		Ralston-Oxbow Tunnel Intake to Ralston Powerhouse							
	5/21/2008	Communication Line	Torilis arvensis	spreading hedgeparsley	39.00150	-120.72590	13	566,280	low

Appendix D. Results of Noxious Weed Surveys at Existing Project Facilities and Features, Project Recreation Facilities, and Dispersed Concentrated Use Areas (continued).

Map ID ¹	Survey Date	Facility	Scientific Name	Common Name	Latitude/ UTM East	Longitude/ UTM North	Population Size (Acres) ²	Population Size (Square feet)	Infestation Level
Map 15	Date	Ralston-Oxbow Tunnel Intake to Ralston Powerhouse	Colemno Hame	Common Name	O I III Edot		(Adics)	(Oquare reet)	Levei
	5/21/2008	Communication Line	Verbascum thapsus	woolly mullein	39.00150	-120.72590	13	566,280	low
R21	5, = 1, = 5 5	Ralston-Oxbow Tunnel Intake to Ralston Powerhouse							
	5/21/2008		Vulpia myuros	rat-tail fescue	39.00150	-120.72590	13	566,280	low
	5/20/2008	Junction Bar	Bromus tectorum	cheatgrass	39.00840	-120.74710	2.9	126,324	moderate
	5/20/2008	Junction Bar	Bromus diandrus	ripgut brome	39.00840	-120.74710	2.9	126,324	low
	7/23/2008	Junction Bar	Chondrilla juncea	rush skeletonweed	39.00855	-120.74673	2.9	126,324	low
	5/20/2008	Junction Bar	Hirschfeldia incana	shortpod mustard	39.00800	-120.75010	0.11	5,000	moderate
D04	7/23/2008	Junction Bar	Hypericum perforatum	klamathweed	39.00793	-120.74708	1 plant	1 plant	low
R24	7/23/2008	Junction Bar	Melilotus albus	white sweet clover	39.00855	-120.74673	1 plant	1 plant	low
	7/23/2008	Junction Bar	Rumex acetosella	sheep sorrel	39.00858	-120.74672	1 plant	1 plant	low
	5/20/2008	Junction Bar	Torilis arvensis	spreading hedgeparsley	39.00840	-120.74710	2.9	126,324	low
	7/23/2008	Junction Bar	Verbascum thapsus	woolly mullein	39.00855	-120.74673	2 plants	2 plants	low
	5/20/2008	Junction Bar	Vulpia myuros	rat-tail fescue	39.00840	-120.74710	2.9	126,324	low
	5/20/2008	Junction Bar	Cynosurus echinatus	hedgehog dogtailgrass	39.00770	-120.74750	0.01	400	low
	5/20/2008	Indian Bar Sediment Disposal Area	Hypericum perforatum	klamathweed	39.00730	-120.74730	0.14	6,098	low
	5/20/2008	Indian Bar Sediment Disposal Area	Rubus discolor	Himalayan blackberry	39.00730	-120.74730	1.1	6,098	high
R25	5/20/2008	Junction Bar	Rubus discolor	Himalayan blackberry	39.00790	-120.74740	0.05	2,000	high
	7/23/2008	Junction Bar	Rubus discolor	Himalayan blackberry	39.00767	-120.74708	0.00	100	high
	5/20/2008		Rumex acetosella	sheep sorrel	39.00770	-120.74750	0.00	100	low
	5/20/2008	Junction Bar	Torilis arvensis	spreading hedgeparsley	39.00770	-120.74750	0.00	100	low
	5/20/2008	Junction Bar	Bromus diandrus	ripgut brome	39.00690	-120.75020	0.70	30,492	high
	7/23/2008	Junction Bar	Bromus diandrus	ripgut brome	39.00827	-120.74982	0.14	6,098	high
	7/23/2008	Junction Bar	Bromus diandrus	ripgut brome	39.00592	-120.74753	9	392,040	moderate
	7/23/2008	Junction Bar	Bromus tectorum	cheatgrass	39.00605	-120.75098	9	392,040	low
	5/20/2008	Junction Bar	Centaurea solstitialis	yellow starthistle	39.00830	-120.74970	0.14	6,098	moderate
	5/20/2008	Junction Bar	Centaurea solstitialis	yellow starthistle	39.00960	-120.74690	0.08	3,600	high
	7/23/2008	Junction Bar	Centaurea solstitialis	yellow starthistle	39.00988	-120.74685	0.01	400	moderate
	7/23/2008	Junction Bar	Chondrilla juncea	rush skeletonweed	39.00827	-120.74982	0.14	6,098	high
	7/23/2008	Junction Bar	Chondrilla juncea	rush skeletonweed	39.00988	-120.74685	9	392,040	low
	7/23/2008	Junction Bar	Hirschfeldia incana	shortpod mustard	39.00802	-120.75017	0.06	2,500	low
R26	5/20/2008	Junction Bar	Plantago lanceolata	English plantain	39.00830	-120.74970	0.00	100	moderate
	5/20/2008	Junction Bar	Plantago lanceolata	English plantain	39.00860	-120.74930	0.00	100	moderate
	7/23/2008	Junction Bar	Robinia pseudoacacia	black locust	39.00955	-120.74868	1 tree	1 tree	
	5/20/2008		Rubus discolor	Himalayan blackberry	39.00860	-120.74930	0.00	100	high
	5/20/2008		Rubus discolor	Himalayan blackberry	39.00620	-120.75070	0.06	2,500	high
	7/23/2008		Rubus discolor	Himalayan blackberry	39.00883	-120.74970	0.18	7,841	high
	5/20/2008		Rumex acetosella	sheep sorrel	39.00710	-120.75030	0.01	400	low
	5/20/2008		Rumex acetosella	sheep sorrel	39.00720	-120.75020	0.02	900	low
	5/20/2008		Torilis arvensis	spreading hedgeparsley	39.00690	-120.75020	0.70	30,492	low
	5/20/2008		Torilis arvensis	spreading hedgeparsley	39.00830	-120.74970	0.02	1,000	moderate
		Junction Bar	Vulpia myuros	rat-tail fescue	39.00690	-120.75020	0.70	30,492	low

¹Map identification number corresponds to map identification numbers shown on Maps TERR 3-2a through 3-2e. ²Acreages amounts are provided only for populations greater than 200 square feet.



APPENDIX E

Results of Noxious Weed Surveys at Potential Project Betterments

Appendix E. Results of Noxious Weed Surveys at Potential Project Betterments.

Map ID ¹	Survey Date	Facility	Scientific Name	Common Name	Latitude/ UTM East	Longitude/ UTM North	Population Size (Acres) ²	Population Size (Square feet)	Infestation Level
	= /00/0000	French Meadows-Hell Hole Tunnel Intake Trash Rack			00.40040	400 404=4		404.070	
	7/26/2008		Cirsium vulgare	bull thistle	39.10912	-120.43171	3.0	131,076	low
FM29	7/00/0000	French Meadows-Hell Hole Tunnel Intake Trash Rack	Dumay and and		20.40042	400 40474	2.0	404.070	
	7/26/2008	Construction Work Area French Meadows-Hell Hole Tunnel Intake Trash Rack	Rumex acetosella	sheep sorrel	39.10912	-120.43171	3.0	131,076	moderate
	7/26/2008		Verbascum thapsus	woolly mullein	39.10912	-120.43171	3.0	131,076	high
	1/20/2000	French Meadows-Hell Hole Tunnel Intake Trash Rack	verbascum triapsus	Woony manem	00.10012	120.40171	3.0	101,070	riigii
FM30	7/26/2008	Construction Staging Area	Cirsium vulgare	bull thistle	39.10830	-120.43215	0.04	1,950	low
	1,10,100	Hell Hole Dam and Outlet Works / Hell Hole Dam Parapet Wall						1,000	
	5/24/2008	Construction Staging and Work Area	Bromus tectorum	cheatgrass	39.05804	-120.41003	3.5	152,460	low
		Hell Hole Dam and Outlet Works / Hell Hole Dam Parapet Wall						,	
	5/24/2008	Construction Staging and Work Area	Hypericum perforatum	klamathweed	39.05792	-120.41122	0.00	158	low
H03		Hell Hole Dam and Outlet Works / Hell Hole Dam Parapet Wall							
поз	7/27/2008	0 0	Plantago lanceolata	English plantain	39.05804	-120.41003	3.5	152,460	moderate
		Hell Hole Dam and Outlet Works / Hell Hole Dam Parapet Wall							
	5/24/2008	0 0	Verbascum thapsus	woolly mullein	39.05804	-120.41003	3.5	152,460	low
		Hell Hole Dam and Outlet Works / Hell Hole Dam Parapet Wall							
	5/24/2008	Construction Staging and Work Area	Vulpia myuros	rat-tail fescue	39.05804	-120.41003	3.5	152,460	moderate
		Hell Hole Staging Area / Hell Hole Dam Spillway Crest Gates							
	7/27/2008	Control Building Powerline Construction Staging Area	Bromus tectorum	cheatgrass	39.05748	-120.41620	0.01	625	high
H13	7/07/0000	Hell Hole Staging Area / Hell Hole Dam Spillway Crest Gates		I I a see all see all	00.05740	400 44000	0.00	4000	1.1.1
	7/27/2008	Control Building Powerline Construction Staging Area	Hypericum perforatum	klamathweed	39.05748	-120.41620	0.02	1000	high
	7/27/2009	Hell Hole Staging Area / Hell Hole Dam Spillway Crest Gates	I have a view one or end and to one	klamathuraad	20.05670	120 41670	0.01	600	low
	1/21/2006	Control Building Powerline Construction Staging Area Hell Hole Staging Area / Hell Hole Dam Spillway Crest Gates	Hypericum perforatum	klamathweed	39.05670	-120.41670	0.01	600	low
	7/27/2008		Plantago lanceolata	English plantain	39.05748	-120.41620	1 plant	1 plant	low
	1/21/2000	Hell Hole Staging Area / Hell Hole Dam Spillway Crest Gates	r lantago lanceolata	Liigiisii piantairi	33.03740	-120.41020	Ιριαιιι	i piant	IOW
	7/27/2008		Verbascum thapsus	woolly mullein	39.05748	-120.41620	0.00	100	high
		French Meadows Powerhouse	Bromus tectorum	cheatgrass	39.07750	-120.40715	2	87,120	moderate
	7/27/2008		Cirsium vulgare	bull thistle	39.07764	-120.40691	2	87,120	moderate
	5/24/2008		Hirschfeldia incana	shortpod mustard	39.07764	-120.40691	2	87,120	low
H20	7/27/2008		Hirschfeldia incana	shortpod mustard	39.07750	-120.40715	0.00	25	high
	7/27/2008		Hypericum perforatum	klamathweed	39.07750	-120.40715	2	87,120	high
	7/27/2008		Melilotus officinalis	yellow sweetclover	39.07764	-120.40691	2	87,120	low
	7/27/2008		Vulpia myuros	rat-tail fescue	39.07764	-120.40691	2	87,120	low
		French Meadows-Hell Hole Tunnel Portal Road / French	' '					,	
		Meadows Powerhouse Penstock and Butterfly Valve House /							
		French Meadows Powerhouse Penstock Construction Staging							
	5/24/2008	Areas	Bromus tectorum	cheatgrass	39.07708	-120.41059	4.7	204,732	low
H21		French Meadows-Hell Hole Tunnel Portal Road / French							
1121		Meadows Powerhouse Penstock and Butterfly Valve House /							
		French Meadows Powerhouse Penstock Construction Staging							
	5/24/2008		Cynosurus echinatus	hedgehog dogtailgrass	39.07726	-120.41030	0.01	500	low
	7/07/0000	French Meadows-Hell Hole Tunnel Portal Road / French	N. Asia and a	and the Hofer of	00.07700	400 44050	4.7	004.700	1.
110.4	7/27/2008	Meadows Powerhouse Penstock Construction Staging Areas	Vulpia myuros	rat-tail fescue	39.07708	-120.41059	4.7	204,732	low
H24	5/27/2008		Bromus tectorum	cheatgrass	39.07730	-120.41310	5.4	235,224	moderate
H25	5/27/2008	Forest Road 14N09A	Bromus tectorum	cheatgrass	39.07440	-120.41610	1.7	74,052	moderate

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Appendix E. Results of Noxious Weed Surveys at Potential Project Betterments (continued).

Map ID ¹	Survey Date	Facility	Scientific Name	Common Name	Latitude/ UTM East	Longitude/ UTM North	Population Size (Acres) ²	Population Size (Square feet)	Infestation Level
H28	7/30/2008	Hell Hole Reservoir / Powerhouse/Switchyard Construction Staging Area	Bromus tectorum	cheatgrass	39.07590	-120.40768	8.9	387,684	low
	7/30/2008	Hell Hole Reservoir / Powerhouse/Switchyard Construction Staging Area	Verbascum thapsus	woolly mullein	39.07724	-120.40694	8.9	387,684	low
		Middle Fork Powerhouse and Upper and Lower Switchyard	Bromus diandrus	ripgut brome	39.02490	-120.59610	0.73	31,799	low
	5/21/2008		Bromus tectorum	cheatgrass	39.02490	-120.59610	0.73	31,799	low
	5/21/2008	Middle Fork Powerhouse and Upper and Lower Switchyard	Cirsium vulgare	bull thistle	39.02490	-120.59610	0.73	31,799	low
	5/21/2008	Middle Fork Powerhouse and Upper and Lower Switchyard	Hypericum perforatum	klamathweed	39.02490	-120.59610	0.73	31,799	low
140	5/21/2008	Middle Fork Powerhouse and Upper and Lower Switchyard	Melilotus officinalis	yellow sweetclover	39.02490	-120.59610	0.73	31,799	low
l10	7/31/2008	Middle Fork Powerhouse and Upper and Lower Switchyard	Rubus discolor	Himalayan blackberry	39.02491	-120.59588	0.01	400	high
				spreading					
	5/21/2008	Middle Fork Powerhouse and Upper and Lower Switchyard	Torilis arvensis	hedgeparsley	39.02490	-120.59610	0.73	31,799	low
	5/21/2008	Middle Fork Powerhouse and Upper and Lower Switchyard	Verbascum thapsus	woolly mullein	39.02490	-120.59610	0.73	31,799	low
	5/21/2008	Middle Fork Powerhouse and Upper and Lower Switchyard	Vulpia myuros	rat-tail fescue	39.02490	-120.59610	0.73	31,799	low
	5/21/2008	Middle Fork Powerhouse and Upper and Lower Switchyard	Bromus diandrus	ripgut brome	39.02430	-120.59650	0.17	7,405	low
	5/21/2008	Middle Fork Powerhouse and Upper and Lower Switchyard	Bromus tectorum	cheatgrass	39.02430	-120.59650	0.17	7,405	low
	7/31/2008	Middle Fork Powerhouse and Upper and Lower Switchyard	Dactylis glomerata	orchardgrass	39.02430	-120.59650	0.00	20	low
	5/21/2008	Middle Fork Powerhouse and Upper and Lower Switchyard	Hypericum perforatum	klamathweed	39.02430	-120.59650	0.17	7,405	low
l11	5/21/2008	Middle Fork Powerhouse and Upper and Lower Switchyard	Melilotus officinalis	yellow sweetclover	39.02430	-120.59650	0.17	7,405	low
				spreading					
		Middle Fork Powerhouse and Upper and Lower Switchyard	Torilis arvensis	hedgeparsley	39.02430	-120.59650	0.17	7,405	low
	5/21/2008	Middle Fork Powerhouse and Upper and Lower Switchyard	Verbascum thapsus	woolly mullein	39.02430	-120.59650	0.17	7,405	low
	5/21/2008		Vulpia myuros	rat-tail fescue	39.02430	-120.59650	0.17	7,405	low
		South Fork Long Canyon Diversion Dam and Pool / South Fork Long Canyon Diversion Dam Crest Gates and Generator							
	5/27/2008		Agrostis stolonifera	creeping bent grass	39.05186	-120.47070	0.03	1,250	low
		South Fork Long Canyon Diversion Dam and Pool / South Fork							
		Long Canyon Diversion Dam Crest Gates and Generator							
	5/27/2008		Cirsium vulgare	bull thistle	39.05186	-120.47070	2	87,120	low
		South Fork Long Canyon Diversion Dam and Pool / South Fork							
LC11		Long Canyon Diversion Dam Crest Gates and Generator							
	5/27/2008	Building Construction Staging and Work Area	Cirsium vulgare	bull thistle	39.05130	-120.47120	0.06	2,500	low
		South Fork Long Canyon Diversion Dam and Pool / South Fork							
	_	Long Canyon Diversion Dam Crest Gates and Generator							
	5/27/2008		Melilotus albus	white sweet clover	39.05186	-120.47035	0.00	120	moderate
		South Fork Long Canyon Diversion Dam and Pool / South Fork						07.400	
	7/04/0000	Long Canyon Diversion Dam Crest Gates and Generator	Mark and the same	and the second of	00.05400	400 47070	0	87,120	1.
	7/24/2008	Building Construction Staging and Work Area	Verbascum thapsus	woolly mullein	39.05186	-120.47070	2		low
	F/07/0000	South Fork Long Canyon Diversion Dam and Pool / South Fork	Duamento de edemina	ah a ataura a	00.05400	400 47040	0.00	00.004	la
	5/27/2008	Long Canyon Diversion Dam Crest Gates	Bromus tectorum	cheatgrass	39.05132	-120.47042	0.68	29,621	low
LC12	5/27/2008	South Fork Long Canyon Diversion Dam and Pool / South Fork Long Canyon Diversion Dam Crest Gates	Rumex acetosella	sheep sorrel	39.05132	-120.47042	0.68	29,621	low
	3/21/2000	South Fork Long Canyon Diversion Dam and Pool / South Fork	Tarrox doctoona	Choop doner	00.00102	120.71072	0.00	20,021	10 44
	5/27/2008	Long Canyon Diversion Dam Crest Gates	Verbascum thapsus	woolly mullein	39.05132	-120.47042	0.68	29,621	low

Appendix E. Results of Noxious Weed Surveys at Potential Project Betterments (continued).

	Survey				Latitude/	Longitude/	Population Size	Population Size	Infestation
Map ID ¹	Date	Facility	Scientific Name	Common Name	UTM East	UTM North	(Acres) ²	(Square feet)	Level
	5/20/2008	Ralston Powerhouse and Switchyard / Ralston Powerhouse	Bromus diandrus	ripgut brome	39.00060	-120.72440	0.84	36,590	low
	5/20/2008	Ralston Powerhouse and Switchyard / Ralston Powerhouse	Cirsium arvense	Canada thistle	39.00060	-120.72440	1 plant	1 plant	low
	5/20/2008	Ralston Powerhouse and Switchyard / Ralston Powerhouse	Chondrilla juncea	rush skeletonweed	39.00060	-120.72440	0.00	25	low
	5/20/2008	Ralston Powerhouse and Switchyard / Ralston Powerhouse	Hirschfeldia incana	shortpod mustard	39.00060	-120.72440	0.84	36,590	low
R09	5/20/2008	Ralston Powerhouse and Switchyard / Ralston Powerhouse	Melilotus officinalis	yellow sweetclover	39.00060	-120.72440	0.00	25	low
	5/20/2008	Ralston Powerhouse and Switchyard / Ralston Powerhouse	Rubus discolor	Himalayan blackberry	39.00060	-120.72440	0.84	36,590	low
		Ralston Powerhouse and Switchyard / Ralston Powerhouse		spreading					
	5/20/2008		Torilis arvensis	hedgeparsley	39.00060	-120.72440	0.84	36,590	low
	5/20/2008	Ralston Powerhouse and Switchyard / Ralston Powerhouse	Vulpia myuros	rat-tail fescue	39.00060	-120.72440	0.84	36,590	low
	5/20/2008	Ralston Powerhouse and Switchyard / Ralston Powerhouse	Bromus diandrus	ripgut brome	39.00080	-120.72430	0.88	38,333	high
	5/20/2008	Ralston Powerhouse and Switchyard / Ralston Powerhouse	Carduus pycnocephalus	Italian thistle	39.00080	-120.72430	0.88	38,333	high
		Ralston Powerhouse and Switchyard / Ralston Powerhouse		Malta starthistle					
	5/20/2008		Centaurea melitensis	(tocalote)	39.00080	-120.72430	0.88	38,333	low
R10	5/20/2008	Ralston Powerhouse and Switchyard / Ralston Powerhouse	Chondrilla juncea	rush skeletonweed	39.00080	-120.72430	0.88	38,333	low
KIU	5/20/2008	Ralston Powerhouse and Switchyard / Ralston Powerhouse	Melilotus officinalis	yellow sweetclover	39.00080	-120.72430	0.88	38,333	high
	5/20/2008	Ralston Powerhouse and Switchyard / Ralston Powerhouse	Plantago lanceolata	English plantain	39.00080	-120.72430	0.88	38,333	moderate
		Ralston Powerhouse and Switchyard / Ralston Powerhouse	Taeniatherum caput-						
	5/20/2008	·	medusae	medusahead	39.00080	-120.72430	0.88	38,333	moderate
	5/20/2008	Ralston Powerhouse and Switchyard / Ralston Powerhouse	Verbascum thapsus	woolly mullein	39.00080	-120.72430	0.88	38,333	low
		Ralston Powerhouse and Switchyard / Ralston Powerhouse							
	5/20/2008		Bromus diandrus	ripgut brome	39.00140	-120.72610	1	43,560	high
R11		Ralston Powerhouse and Switchyard / Ralston Powerhouse							
	5/20/2008		Bromus tectorum	cheatgrass	39.00140	-120.72610	1	43,560	moderate
IX II		Ralston Powerhouse and Switchyard / Ralston Powerhouse		Malta starthistle					
	5/20/2008		Centaurea melitensis	(tocalote)	39.00140	-120.72610	0.10	4,500	moderate
		Ralston Powerhouse and Switchyard / Ralston Powerhouse							
	5/20/2008	Construction Staging Area	Hirschfeldia incana	shortpod mustard	39.00140	-120.72610	1	43,560	moderate

¹Map identification number corresponds to map identification numbers shown on Maps TERR 3-3a through 3-3d. ²Acreages amounts are provided only for populations greater than 200 square feet.

APPENDIX F

Results of Noxious Weed Surveys at Quantitative Geomorphic and Riparian Sampling Sites

Appendix F. Results of Noxious Weed Surveys at Quantitative Geomorphic and Riparian Sampling Sites.

Map ID ¹	Transect Number	Survey Date	Facility	Scientific Name	Common Name	UTM East	UTM North	Population Size (acres) ²	Population Size (square feet)	Infestation Level
		10/16/2006	Middle Fork American River	Bromus diandrus	ripgut brome	677264	4311975	0.18	7,841	low
		10/16/2006	Middle Fork American River	Chondrilla juncea	rush skeletonweed	677264	4311974	0.18	7,841	low
	1	10/16/2006	Middle Fork American River	Cytisus scoparius	Scotch broom	677264	4311975	0.18	7,841	low
		10/16/2006	Middle Fork American River	Hirschfeldia incana	shortpod mustard	677264	4311975	0.18	7,841	low
		10/16/2006	Middle Fork American River	Rubus discolor	Himalayan blackberry	677264	4311975	0.18	7,841	low
		10/16/2006	Middle Fork American River	Bromus diandrus	ripgut brome	676073	4311264	0.24	10,454	low
		10/16/2006	Middle Fork American River	Centaurea solstitialis	yellow starthistle	676073	4311264	0.24	10,454	low
	2	10/16/2006	Middle Fork American River	Chondrilla juncea	rush skeletonweed	676073	4311264	0.24	10,454	low
MF-1		10/16/2006	Middle Fork American River	Cynodon dactylodon	bull thistle	676073	4311264	0.24	10,454	low
IVIF-I		10/16/2006	Middle Fork American River	Hirschfeldia incana	shortpod mustard	676073	4311264	0.24	10,454	low
		10/16/2006	Middle Fork American River	Rubus discolor	Himalayan blackberry	676073	4311264	0.24	10,454	low
		10/16/2006	Middle Fork American River	Centaurea solstitialis	ripgut brome	674892	4310834	0.48	20,909	low
		10/16/2006	Middle Fork American River	Centaurea solstitialis	yellow starthistle	674892	4310834	0.48	20,909	low
		10/16/2006	Middle Fork American River	Chondrilla juncea	rush skeletonweed	674892	4310834	0.48	20,909	low
	3	10/16/2006	Middle Fork American River	Cytisus scoparius	Scotch broom	674892	4310834	0.48	20,909	low
		10/16/2006	Middle Fork American River	Dactylus glomerata	orchardgrass	674892	4310834	0.48	20,909	low
		10/16/2006	Middle Fork American River	Hirschfeldia incana	shortpod mustard	674892	4310834	0.48	20,909	low
		10/16/2006	Middle Fork American River	Rubus discolor	Himalayan blackberry	674892	4310834	0.48	20,909	low
	1	10/9/2006	Middle Fork American River	Rubus discolor	Himalayan blackberry	681590	4313762	0.15	6,534	low
MF-2		10/9/2006	Middle Fork American River	Chondrilla juncea	rush skeletonweed	681013	4313835	0.02	871	low
	2	10/9/2006	Middle Fork American River	Cytisus scoparius	Scotch broom	681013	4313835	0.02	871	low
	_	10/9/2006	Middle Fork American River	Melilotus officina	yellow sweetclover	681013	4313835	0.02	871	low
	3	10/9/2006	Middle Fork American River	Rubus discolor	Himalayan blackberry	680125	4314358	0.03	1,307	low
	1	10/17/2006	Middle Fork American River	Bromus diandrus	ripgut brome	687920	4316712	0.07	3,049	low
		10/17/2006	Middle Fork American River	Chondrilla juncea	rush skeletonweed	687920	4316712	0.07	3,049	low
		10/17/2006	Middle Fork American River	Plantago lanceolata	English plantain	687920	4316712	0.07	3,049	low
		10/17/2006	Middle Fork American River	Rubus discolor	Himalayan blackberry	687920	4316712	0.07	3,049	high
	3	10/17/2006	Middle Fork American River	Chondrilla juncea	rush skeletonweed	687730	4316153	0.10	4,356	low
		10/17/2006	Middle Fork American River	Cynodon dactylodon	bull thistle	687730	4316153	0.10	4,356	low
MF-3		10/17/2006	Middle Fork American River	Rubus discolor	Himalayan blackberry	687730	4316153	0.10	4,356	moderate
0		10/17/2006	Middle Fork American River	Verbascum thapsus	woolly mullein	687730	4316153	0.10	4,356	low
		10/17/2006	Middle Fork American River	Bromus diandrus	ripgut brome	687092	4316136	0.18	7,841	low
		10/17/2006	Middle Fork American River	Chondrilla juncea	rush skeletonweed	687092	4316136	0.18	7,841	low
		10/17/2006	Middle Fork American River	Cynosurus echinatus	hedgehog dogtailgras	687092	4316136	0.18	7,841	low
		10/17/2006	Middle Fork American River	Plantago lanceolata	English plantain	687092	4316136	0.18	7,841	low
		10/17/2006	Middle Fork American River	Rubus discolor	Himalayan blackberry	687092	4316136	0.18	7,841	low
MF-4	2	8/1/2006	Middle Fork American River	Rumex acetosella	sheep sorrel	716374	4324288	0.04	1,742	low
1411	1	9/26/2006	Middle Fork American River	Bromus diandrus	ripgut brome	700337	4321499	0.07	3,049	low
MF-6	2	9/26/2006	Middle Fork American River	Bromus diandrus	ripgut brome	699925	4321349	0.09	3,920	low
1411 -0	3	9/26/2006	Middle Fork American River	Bromus diandrus	ripgut brome	699801	4321340	0.05	2,178	low
	1	9/26/2006	Middle Fork American River	Bromus diandrus	ripgut brome	701158	4321487	0.06	2,614	low
MF-7	2	9/26/2006	Middle Fork American River	Chondrilla juncea	rush skeletonweed	701013	4321433	0.10	4,356	moderate
		9/26/2006	Middle Fork American River	Cynosurus echinatus	hedgehog dogtailgras	701013	4321433	0.10	4,356	low
		9/26/2006	Middle Fork American River	Bromus diandrus	ripgut brome	701013	4321326	0.05	2,178	low
	3	8/29/2006	Middle Fork American River	Agrostis stolonifera	creeping bent grass	716563	4329823	0.06	2,176	low
	1	8/29/2006	Middle Fork American River	Cirsium vulgare	bull thistle	716563	4329823	0.06	2,614	low
MF-10	2	8/29/2006	Middle Fork American River		bull thistle	716563		•	·	•
IVIF-1U		8/29/2006	Middle Fork American River Middle Fork American River	Cirsium vulgare		716554	4329823	0.06 0.02	2,614 871	low
		8/29/2006		Agrostis stolonifera	creeping bent grass		4329657			low
NEL C 4	1		Middle Fork American River	Rumex acetosella	sheep sorrel	716374	4324288	0.02	871	low
NFLC-1	1	8/1/2006	North Fork Long Canyon Creek	Cirsium vulgare	bull thistle	716447	4324379	0.03	1,307	low

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Appendix F. Results of Noxious Weed Surveys at Quantitative Geomorphic and Riparian Sampling Sites (continued).

Map ID¹	Transect Number	Survey Date	Facility	Scientific Name	Common Name	UTM East	UTM North	Population Size (acres) ²	Population Size (square feet)	Infestation Level
R-1	1	8/18/2006	Rubicon River	Rubus discolor	Himalayan blackberry	697152	4319180	0.12	5,227	low
R-2	2	8/18/2006	Rubicon River	Bromus diandrus	ripgut brome	697323	4318377	0.08	3,485	low
N-Z	2	8/18/2006	Rubicon River	Hirschfeldia incana	shortpod mustard	697323	4318377	0.08	3,485	low
	1	9/27/2006	Rubicon River	Chondrilla juncea	rush skeletonweed	699533	4317524	0.07	3,049	low
R-3		9/27/2006	Rubicon River	Verbascum thapsus	woolly mullein	699533	4317524	0.07	3,049	low
	2	9/27/2006	Rubicon River	Rubus discolor	Himalayan blackberry	699046	4317262	0.07	3,049	low
	2	10/10/2006	Rubicon River	Rubus discolor	Himalayan blackberry	700154	4318171	0.07	3,049	low
R-4		10/10/2006	Rubicon River	Verbascum thapsus	woolly mullein	700154	4318171	0.07	3,049	low
	3	10/10/2006	Rubicon River	Rubus discolor	Himalayan blackberry	700050	4318009	0.08	3,485	low
	2	10/10/2006	Rubicon River	Cynodon dactylodon	bull thistle	700537	4318151	80.0	3,485	low
R-5		10/10/2006	Rubicon River	Cynosurus echinatus	hedgehog dogtailgras	700537	4318151	0.08	3,485	low
		10/10/2006	Rubicon River	Melilotus officinalis	yellow sweetclover	700537	4318151	0.08	3,485	low
	2	9/28/2006	Rubicon River	Bromus diandrus	ripgut brome	710653	4310009	0.12	5,227	low
		9/28/2006	Rubicon River	Chondrilla juncea	rush skeletonweed	710653	4310009	0.12	5,227	low
R-10		9/28/2006	Rubicon River	Rumex acetosella	sheep sorrel	710653	4310009	0.12	5,227	low
K-10		9/28/2006	Rubicon River	Vulpia myuros	rat-tail fescue	710653	4310009	0.12	5,227	low
	3	9/28/2006	Rubicon River	Chondrilla juncea	rush skeletonweed	710334	4310217	0.06	2,614	low
		9/28/2006	Rubicon River	Verbascum thapsus	woolly mullein	710334	4310217	0.06	2,614	low
	1	8/24/2006	Rubicon River	Hirschfeldia incana	shortpod mustard	716801	4313287	0.02	871	low
R-12	1	8/24/2006	Rubicon River	Rubus discolor	Himalayan blackberry	716801	4313287	0.02	871	low
	2	8/24/2006	Rubicon River	Hirschfeldia incana	shortpod mustard	716534	4313268	0.06	2,614	low
R-13	2	8/24/2006	Rubicon River	Hirschfeldia incana	shortpod mustard	717693	4314618	0.06	2,614	low
R-15	2	8/24/2006	Rubicon River	Chondrilla juncea	rush skeletonweed	720836	4320560	0.07	3,049	low
K-15		8/24/2006	Rubicon River	Rubus discolor	Himalayan blackberry	720836	4320560	0.07	3,049	low
	1	8/22/2006	South Fork Long Canyon Creek	Rumex acetosella	sheep sorrel	718146	4324447	0.03	1,307	low
	2	8/22/2006	South Fork Long Canyon Creek	Rumex acetosella	sheep sorrel	717916	4324237	0.02	871	low
SFLC-1		8/22/2006	South Fork Long Canyon Creek	Cirsium vulgare	bull thistle	717864	4324178	0.03	1,307	low
	3	8/22/2006	South Fork Long Canyon Creek	Rubus discolor	Himalayan blackberry	717864	4324178	0.03	1,307	low
		8/22/2006	South Fork Long Canyon Creek	Rumex acetosella	sheep sorrel	717864	4324178	0.03	1,307	low

¹Map identification number corresponds to map identification numbers shown on Maps TERR 3-2a through 3-2e. ²Acreages amounts are provided only for populations greater than 200 square feet.