Attachment 19

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DRIFT CREEK RESERVOIR
THREATENED AND ENDANGERED PLANT SURVEYS

Prepared for:

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DRIFT CREEK RESERVOIR

THREATENED AND ENDANGERED PLANT SURVEYS

INTRODUCTION:

The East Valley Water District is proposing to build an irrigation reservoir on Drift Creek. The reservoir and dam footprint were surveyed for threatened or endangered (T&E) plant species

SITE DESCRIPTION:

The proposed reservoir site is a small valley which is characterized by a broad flat valley terrace, which is mostly used for agricultural purposes. The property near the dam site is heavily grazed by cattle. Most of the rest of the valley bottom is either planted to Christmas trees, or grass seed. The only areas along the valley bottom that have not been converted to agricultural use are along Drift Creek and its tributaries. Most of the valley side slopes, that aren't being grazed, are mostly forested.

METHODS:

Both the US Fish and Wildlife Service (USFWS) and the Oregon Biodiversity Information Center were contacted for information on T&E species that might occur in the vicinity of the proposed project. The flowering periods were identified by using both the Flora of the Pacific Northwest (Hitchock & Cronquist 1973) and Rare and Endangered Plants of Oregon (Eastman 1990). The flowering periods were used to determine the optimum dates to conduct field surveys.

The site was examined for potential habitat required by the T&E species and the species of concern. If the habitat of a particular species was not present, it eliminated the need to look for that species.

The areas surveyed were the areas that had potential habitat for the potential T&E plant species. The areas under cultivation were deemed to be unsuitable for all the possible T&E species, and only a minimal effort was spent surveying these areas. Almost all the effort surveying was in the areas not being used for agricultural purposes. These areas were along the creeks and other drainages, and on the side slopes of the valley, which were not used for agriculture. Because these areas tended to be narrow and followed the drainages or topography, a standard transect could not be established. Instead, the survey area followed the shape of the area.

SAMPLING DATES:

The surveys started when we started the wetland delineation field work. During the wetland delineation process the entire study area was examined for both wetland and potential T&E plant species. Field work occurred on 5/19/06, 5/25/06, 6/23/06, 7/1/06, 7/13/06, 8/20/06, 8/30/06, 6/23/09, 6/24/09, 6/25/09, 8/20/09, 4/14/10, 4/16/10, 5/6/10, 5/7/10, 6/4/10, 6/7/10, 6/28/10, and 7/5/10.

LISTED POTENTIAL PLANT T&E SPECIES

Golden Indian Paintbrush (*Castilleja leviscta*) (Threatened)
Habitat: Willamette Valley
Flowering Period: April – August

Willamette daisy (*Erigeron decumbens* var. *decumbens*) (Endangered)
Habitat : Heavy soils on native Willamette Valley prairies and grasslands
Flowering period June – Early July

Howellia (*Howellia aquatilis*) (Threatened)
Habitat: Shallow ponds
Flowering Period: May

Bradshaw's lomatium (*Lomatium bradshawii*) (Endangered)
Habitat: Wet open areas of the Willamette Valley
Flowering Period: April – May

Kincaid's lupine (*Lupinus sulphureus* var. *kincaidii*) (Threatened)
Habitat: Willamette Valley and Umpqua Valley
Flowering Period: May – July

Nelson's checker-mallow (*Sidalcea nelsoniana*) (Threatened)
Habitat: Wetlands, open areas
Flowering Period: June – July

SPECIES OF CONCERN

Howell's bent grass (*Agrostis howellii*)
Habitat: Moist rocks
Flowering Period: June – August

White top aster (*Aster curtus*)
Habitat: Native grassland
Flowering Period: August – September

Cliff Paintbrush (*Castilleja rupicola*)
Habitat: High elevations, cliffs
Flowering Period: June – August

Cold-water corydalis (*Corydalis aquae-gelidae*)
Habitat: Cold water at higher elevations
Flowering Period: June – July

Pale larkspur (*Delphinium leucophaeum*)
Habitat: Cliffs and ledges
Flowering period: Early June

Willamette Valley larkspur (*Delphinium oreganum*)
Habitat:
Flowering Period:

Peacock larkspur (*Delphinium pavonaceum*)
Habitat: Dry Hillsides
Flowering Period: May – June

Shaggy horkelia (*Horkelia congesta* ssp. *Congesta*
Habitat: Sandy to Rocky flats to open woods
Flowering Period: May – August

Thin-leaved peavine (*Lathyrus holochlorus*)
Habitat:
Flowering Period:

Pale blue-eyed grass (*Sisyrinchium sarmentosum*)
Habitat: Margins of wet meadows
Flowering Period: June – July

RESULTS

No T&E species were found. No other species of concern were found. The very heavy grazing on the property being grazed probably eliminated any potential for most of the T&E and species of concern being found. This area was examined carefully because white top aster had been found near Victor

Point School. The agricultural use of the valley bottom eliminated the potential for many of the species to occupy most of the area.

REFERENCES

Hitchcock, L. and A. Cronquist. 1973. Flora of the Pacific Northwest. *An Illustrated Manual.* University of Washington Press. 750 pp.

Eastman, D.C. 1990. Rare and Endangered Plants of Oregon. Beautiful America Publishing. 194 pp.