ATTACHMENT G

Invasive Plant Survey and TES Plant Habitat Assessment on Fremont-Winema Forest Lands

Stantec Consulting Services Inc.
376 Hartnell Ave, Suite B, Redding California 96002

September 1, 2020

Attention: Jeannette Wilson, Fremont-Winema National Forest Botanist - Jeannette.wilson@usda.gov

Reference: Invasive Plant Survey and TES Plant Habitat Assessment on Fremont-Winema Forest Lands, Zayo Prineville-to-Reno Fiber Optic Project
National

Dear Jeannette Wilson:

Stantec Consulting Services Inc. (Stantec) is submitting this letter along with a Fremont-Winema National Forest (F-W NF) threatened, endangered, and sensitive (TES) plant field survey form to summarize an invasive plant survey and TES plant habitat assessment conducted for the Zayo Prineville-to-Reno Fiber Optic Project (project). The survey and assessment occurred within the F-W NF on Silver Lake District lands adjacent to Oregon State Highway (OR) 31 between mile posts 17 and 20.

On August 7, 2020, Stantec biologist Cecile Shohet conducted the invasive plant survey and rare plant habitat assessment, which consisted of a single meandering pedestrian survey within the survey area. The survey area consisted of the northeast portion of the OR 31 right-of-way, and generally extends 15 feet east from the edge of pavement between highway mile posts 17 and 20. This area encompasses all potential project related ground disturbances on the F-W NF. A list of plant species observed is included in the accompanying F-W NF TES plant field survey form.

The survey area consisted of road shoulder gravel re-occupied by herbaceous plant species, except for a 200-foot long section at approximately mile post 18, where natural substrate occurred and vegetation re-occupied the cut-slope of the road. This natural vegetation occurred between 6 and 10 feet from the pavement edge and consisted of dense antelope bush (*Purshia tridentata*) with squirrel-tail grass (*Elymus elymoides*) and cheat grass (*Bromus tectorum*). The vegetation beyond the survey area in this section consisted of lodgepole pine (*Pinus contorta*) with some ponderosa pine (*Pinus ponderosa*), and an antelope bush understory with perennial grasses such as Idaho grass (*Festuca idahoensis*) and squirrel-tail grass.

Invasive plants targeted during the survey included all plants listed in the *2020 Invasive Plant Species List Fremont-Winema National Forest.* There were no invasive species from this list located during the survey**.** However, cheat grass, a naturalized invasive species in this area that is not included in the above list was ubiquitous throughout the survey area.

Stantec reviewed the list of TES species known to occur on the F-W NF and determined that the road shoulder and small section of natural vegetation at mile post 18 does not provide potential habitat to support the TES species identified on the F-W NF list.

Regards,

Stantec Consulting Services Inc.

Sarah Jona

Reference: **Invasive Plant Survey and TES Plant Habitat Assessment on Fremont-Winema National Forest Lands, Zayo Prineville-to-Reno Fiber Optic Project**

Sarah Tona
Associate Biologist
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Attachment: TES Plant Survey Field Form

TES Plant Survey Field Form **Survey ID:** _____
Fremont-Winema National Forests

Survey Name: Zayo Prineville to Reno Fiber Optic Project **Target:** TESP **INPA** & **Rare Plant Habitat**
Invasive Plant and Rare Habitat Survey
Survey Type (circle one)**:** FC Cur **Gen** Focused (IC) Random Strat Random Systematic

Survey Focus (circle one)**:** **Terrestrial** Riparian Aquatic Features

Estimate of Survey Area Size: 2.4 acres

Examiner(s) Name: Cecile Shohet **Date(s) Surveyed:** August 7, 2020

Location: Township 24S Range 11E Section 36 ¼ / ¼ Section S 1/2 SW 1/4
T: 25S R: 11E 01 N ½ NE ¼
T: 25S R: 12E 06 NE ¼ SE 1/4

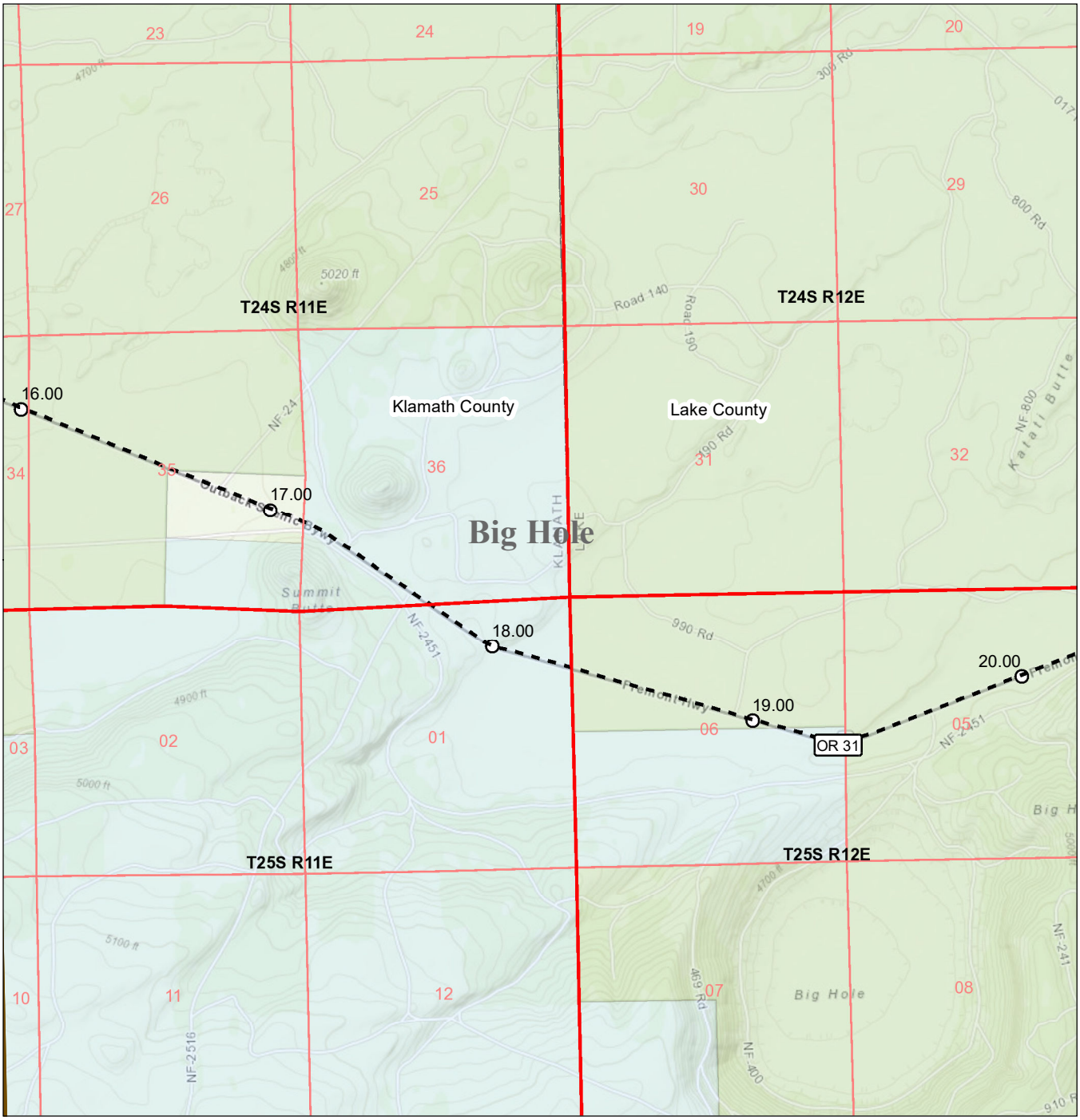
Directions to Survey Area (road travel route)**:** From the junction of Oregon State Highway (OR) 97 and OR 31 south of La Pine, Oregon, travel south on OR 31 for 17 miles. The boundary of the Fremont-Winema National Forest is the start of the survey and is 0.13 mile from OR 31 mile marker 17.

*****ALL fields above are required*****

Habitat Info (Unique Feature, Substrates, etc.)

The survey area was located on Fremont-Winema National Forest System lands along the east side of OR 31 between mile posts 17 and 20. The survey between these two mile posts was concentrated on the OR 31 right-of-way, which generally extends 15 feet east from the edge of pavement. The study area encompasses all potential project related ground disturbances.

The conditions of the area consisted of road shoulder gravel re-occupied by predominantly native vegetation (see the following species observed list) with the exception of cheat grass (*Bromus tectorum*), which was ubiquitous, and minor amounts of lambs quarters (*Chenopodium album*) and Kentucky blue grass (*Poa pratensis*). There was evidence of mowing in the road shoulder. At mile post 18, a 200-foot section of natural substrate is present between 6 and 10 feet from the pavement edge. In this area, natural vegetation re-occupied the cut-slope of the road shoulder and consisted of dense antelope bush (*Purshia tridentata*) with squirrel-tail grass (*Elymus elymoides*) and cheat grass. The vegetation beyond the survey area in this section consisted of lodgepole pine (*Pinus contorta*) with some ponderosa pine (*Pinus ponderosa*), and an antelope bush understory with perennial grasses such as Idaho grass (*Festuca idahoensis*) and squirrel-tail grass.



Legend

- Mileposts
- Alignment
- USGS Quadrangle
- Deschutes NF
- Fremont-Winema NF
- PLSS Township
- PLSS Section

0 1,250 2,500 Feet

1:36,000 (at original document size of 8.5x11)

N

Stantec

Notes

1. Coordinate System: NAD 1983 UTM Zone 10N
2. Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community
Compiled by the Bureau of Land Management (BLM), National Operations Center (NOC), OC-530

Project Location
Klamath and Lake County, OR

227202011
Prepared by LS on 2020-08-19
Technical Review by ST on 2020-08-19
Independent Review by JC on 2020-08-19

Client/Project
Zayo
Fiber Optic Line--Prineville to Reno

Figure No.
1

Title
Project Location on Fremont-Winema National Forest

Target Species

List all targeted plant species (TES or species of local interest) that are the focus of the survey. Enter all the species individually using the NRCS *PLANTS* code and/or scientific name. Attach additional pages if needed.

*****All columns are required.*****

NRCS Plant Code	Scientific name	Suitable habitat found	Plant found	FS Site ID(s) for EOs (If EO forms completed)
ADJO	*Adiantum jordanii* (California maidenhair fern)	No	No	
ARVI6	*Arnica viscosa* (Shasta arnica)	No	No	
ASSE	*Asplenium septentrionale* (northern spleenwort)	No	No	
ASLE6	*Astragalus lemmonii* (Lemmon's milkvetch)	No	No	
ASPE4	*Astragalus peckii* (Peck's milkvetch)	No	No	
BOCR	*Botrychium crenulatum* (crenulate moonwort)	No	No	
CAGR	*Calochortus greenei* (Greene's mariposa lily)	No	No	
CAPU16	*Camissonia pusilla* (Washoe suncup)	No	No	
CACA13	*Carex capitata* (capitate sedge)	No	No	
CACO8	*Carex comosa* (bristly sedge)	No	No	
CACO81	*Carex cordillerana* (Cordilleran sedge)	No	No	
CADI4	*Carex diandra* (lesser panicled sedge)	No	No	
CALAA	*Carex lasiocarpa* var. *americana* (slender sedge)	No	No	
CASA10	*Carex saxatilis* (russet sedge)	No	No	
CAVE5	*Carex vernacula* (native sedge)	No	No	
CACH15	*Castilleja chlorotica* (green-tinged paintbrush)	No	No	
CHFE	*Cheilanthes feei* (Fee's lip-fern)	No	No	

CHIN	*Cheilanthes intertexta* (Coastal lip-fern)	No	No	
COMA	*Collomia mazama* (Mt Mazama collomia)	No	No	
CRSI2	*Cryptantha simulans* (pine woods Cryptantha)	No	No	
MITR3	*Diplacus tricolor* (tri-colored monkeyflower)	No	No	
ELBR5	*Elatine brachysperma* (short seeded waterwort)	No	No	
ELBO	*Eleocharis bolanderi* (Bolander's spikerush)	No	No	
ERPR9	*Eriogonum prociduum* (prostrate buckwheat)	No	No	
ERUMG	*Eriogonum umbellatum* var. *glaberrimum* (green buckwheat)	No	No	
MIEV	*Erythranthe inflatula* (disappearing monkeyflower)	No	No	
GASEW	*Galium serpenticum* var. w*arnerense* (Warner Mtn bedstraw)	No	No	
GENEN	*Gentiana newberryi var. newberryi* (Newberry's gentian)	No	No	
GRHE	*Gratiola heterosepala* (Boggs Lake hedge-hyssop)	No	No	
HECU3	*Heliotropium curassavicum* (salt heliotrope)	No	No	
IVSH	*Ivesia shockleyi* (Shockley's ivesia)	No	No	
JUTI	*Juncus tiehmii* (Nevada dwarf rush)	No	No	
LIAR6	*Lipocarpha aristulata* (halfchaff awned sedge)	No	No	
LYIN2	*Lycopodiella inundata* (bog club-moss)	No	No	
MUMI2	*Muhlenbergia minutissima* (annual dropseed)	No	No	
PEGL10	*Penstemon glaucinus* (blue-leaved penstemon)	No	No	
PEER3	*Perideridia erythrorhiza* (red-root yampa)	No	No	
PIAM	*Pilularia americana* (American pillwort)	No	No	
PIAL	*Pinus albicaulis* (white bark pine)	No	No	
PLSA3	*Plagiobothrys salsus* (salty popcornflower)	No	No	
PLOR3	*Pleuropogon oregonus* (Oregon semaphore grass)	No	No	
POFL17	*Pogogyne floribunda* (profuse-flowered pogogyne)	No	No	

PODI	*Potamogeton diversifolius* (Diverse-leaved pondweed)	No	No	
ROCO3	*Rorippa columbiae* (Columbia cress)	No	No	
RORA	*Rotala ramosior* (lowland toothcup)	No	No	
SCPA2	*Scheuchzeria palustris* (American scheuchzeria)	No	No	
SCSU10	*Schoenoplectus subterminalis* (swaying bulrush)	No	No	
SCPE4	*Scirpus pendulus* (drooping bulrush)	No	No	
SEVE2	*Sesuvium verrucosum* (verrucose sea-purslane)	No	No	
UTMI	*Utricularia minor* (lesser bladderwort)	No	No	
UTOC	*Utricularia ochroleuca* (northern bladderwort)	No	No	
	Bryophytes			
ANMI8	*Anastrophyllum minutum* (Tiny Notchwort)	No	No	
BALY	*Barbilophozia lycopodioides* (Maple liverwort)	No	No	
CESP6	*Cephaloziella spinigera* (Spiny threadwort)	No	No	
HAFL9	*Harpanthus flotovianus* (Great mountain flapwort)	No	No	
LOGI3	*Lophozia gillmanii* *(*Gillman's pawwort)	No	No	
POSE16	*Polytrichastrum sexangulare* var. *vulcanicum* (Dwarf rock haircap*)*	No	No	
N/A	*Pseudocalliergon trifarium* (Blunt water moss)	No	No	
RADE6	*Racomitrium depressum* (Racomitrium moss)	No	No	
N/A	*Rivulariella gemmipara* (alpine liverwort)	No	No	
SCCI5	*Schistidium cinclidodonteum*	No	No	
N/A	*Trematodon asanoi* (Boas' trematodon moss)	No	No	
	Fungi			
N/A	*Gastroboletus vividus*	No	No	
N/A	*Pseudorhizina californica* (umbrella false-morel)	No	No	
N/A	*Ramaria amyloidea* (pinkish coral mushroom)	No	No	
	Lichens			
N/A	*Texosporium sancti-jacobi* (Woven-spore lichen)	No	No	
	Local Species of Concern			
N/A	*Albatrellus ellisii*	No	No	
N/A	*Hygrophorus caeruleus*	No	No	

N/A	*Ramaria rubripermanens*	No	No	
N/A	*Sedecula pulvinata*	No	No	

Species List of Surveyed Area

List other vascular plant species found during the vascular plant survey. List other vascular and non-vascular plant species found during non-vascular plant survey. Record the NRCS PLANTS Code, scientific name, and indicate habitat (forested, non-forested, riparian, meadow, seep, spring, etc.).

*****All columns are required.*****

NRCS Plant Code	Scientific Name	Habitat
ACMI2	*Achillea millefolium*	*Gravel Shoulder*
N/A	*Agrostis sp.*	*Gravel Shoulder*
ALAE	*Alopecurus aequalis*	*Gravel Shoulder*
BRSIM	*Bromus sitchensis var. marginatus*	*Gravel Shoulder*
BRTE	*Bromus tectorum*	*Gravel Shoulder*
CHAL7	*Chenopodium album*	*Gravel Shoulder*
CHVIV2	*Chrysothamnus viscidiflorus ssp. viscidiflorus*	*Gravel Shoulder*
MACAC	*Dieteria canescens var. canescens*	*Gravel Shoulder*
MACAS3	*Dieteria canescens var. shastensis*	*Gravel Shoulder*
ELEL5	*Elymus elymoides*	*Gravel Shoulder*
ERNA10	*Ericameria nauseosa var. oreophila*	*Gravel Shoulder*
ERNAS2	*Ericameria nauseosa var. speciosa*	*Gravel Shoulder*
ERBAB	*Eriogonum baileyi var. baileyi*	*Gravel Shoulder*
ERNUN	*Eriogonum nudum var. nudum*	*Gravel Shoulder*
ERSPR	*Eriogonum spergulinum var. reddingianum*	*Gravel Shoulder*
ERVIN	*Eriogonum vimineum*	*Gravel Shoulder*
ERLAI	*Eriophyllum lanatum var. integrifolium*	*Gravel Shoulder*
GADI2	*Gayophytum diffusum*	*Gravel Shoulder*
LEDE	*Lepidium densiflorum*	*Gravel Shoulder*
LESEL2	*Lupinus lepidus var. lobbii*	*Gravel Shoulder*
MEDI	*Mentzelia dispersa*	*Gravel Shoulder*
PHHAH	*Phacelia hastata var. hastata*	*Gravel Shoulder*
PICOL	*Pinus contorta ssp. latifolia*	*Gravel Shoulder*

POPR	*Poa pratensis*	*Gravel Shoulder*
PUTR2	*Purshia tridentata*	*Gravel Shoulder*
SCNA	*Scutellaria nana*	*Gravel Shoulder*