



Threatened and Endangered Species Exhibit

PREPARED FOR



DATE

December 2025

REFERENCE

Oregon Energy Facility Siting Council

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ACRONYMS AND ABBREVIATIONS

Acronym	Description
Applicant	DECH bn, LLC
ERM	Environmental Resources Management, Inc.
Facility	Solar photovoltaic power generation facility and related or supporting facilities in Wasco County, Oregon
CTWS	Confederated Tribes of the Warm Springs Reservation
FSOC	Federal Species of Concern
FT	Federally Threatened
OCS	Oregon Conservation Strategy species
ODA	Oregon Department of Agriculture
ODFW	Oregon Department of Fish and Wildlife
ORBIC	Oregon Biodiversity Information Center
SC	State Candidate
ST	State Threatened



1. INTRODUCTION

DECH bn, LLC (Applicant) plans to construct a solar photovoltaic power generation facility and related or supporting facilities in Wasco County, Oregon (Facility). The Facility will include up to 1,000 megawatts of solar capacity and a battery energy storage system with up to 4,000 megawatt hours storage capacity. This Threatened and Endangered Species Exhibit has been prepared to meet the standard outlined in OAR 345-022-0070.

2. ANALYSIS AREA

The analysis area for this Exhibit is the site boundary plus 5-miles around the site boundary (Attachment 1, Figure 1).

3. AGENCY AND TRIBAL OUTREACH

The Applicant first conducted outreach to Oregon Department of Fish and Wildlife (ODFW) by email on 18 July 2024, which was followed by an introductory coordination call on 31 July 2024. ODFW confirmed the survey approach and attended a site walk on 7 November 2024 that was attended by the Applicant, Environmental Resources Management, Inc. (ERM), and representatives from the Confederated Tribes of the Warm Springs Reservation (CTWS). During the site walk, ODFW provided input on habitat categorization and requested a macroinvertebrate survey to confirm the absence of fairy shrimp and listed amphibians. ERM communicated with ODFW about the macroinvertebrate survey protocol via email and by phone, and ODFW approved the survey methodology in an email on 2 February 2025. The macroinvertebrate survey was completed in April 2025 as described in Section 5.1.5. The Applicant and ERM had a follow up meeting with ODFW on 10 September 2025 following completion of the field surveys. Following that meeting, ERM provided a draft copy of the biological resources report to ODFW for their review and feedback on 12 September 2025. Regional Habitat Biologist, Jessica Wilkes-Clark provided initial feedback on the biological resources report on 18 September 2025. The initial feedback included potential mitigation options, clarification on observed and mapped habitat categorization, avoidance measures, data sharing, and questions regarding additional survey information. ERM provided an initial response on 11 October 2025 and a more detailed response on 11 November 2025. ODFW responded back to ERM on 20 November 2025; feedback from ODFW has been incorporated into the draft Habitat Mitigation Plan, provided as Attachment 3 of the Fish and Wildlife Exhibit and into the Construction and Operation Vegetation and Soil Management Plans, provided as Attachments 2 and 3 of the Soil Protection Exhibit. Correspondence with ODFW is included as Attachment 4 of the Fish and Wildlife Exhibit.

In addition to the consultation with ODFW described above, the Applicant completed a coordination meeting with CTWS on 27 August 2025. Overall key themes of the meeting included a strong emphasis on partnership beyond legal requirements, a commitment to early and transparent consultation, and the importance of tribal treaty rights, cultural resources, and ecological protections. CTWS expressed their concerns regarding impacts to elk and deer migration, eagle nesting, cultural foods, Deschutes River tributaries, and salmon and steelhead



habitat. The Applicant confirmed their commitment to wildlife-friendly fencing, habitat corridors, and setbacks from streams. The Applicant intends to continue outreach with ODFW and CTWS on fish and wildlife, integrate tribal ecological knowledge into the design, and to continue coordination with CTWS on cultural resources and mitigation throughout the application review process. In addition to the consultation described above, ODFW provided a comment letter on the Applicant's Notice of Intent, which included the following comments relevant to threatened and endangered species.

- ODFW recommended avoiding and minimizing impacts to special-status species and their habitat where possible and engaging early with local ODFW staff to develop appropriate mitigation where impacts cannot be avoided.
- ODFW recommended surveys to verify presence of fairy shrimp and other macroinvertebrates within vernal pools to help determine the quality of these habitats.
- ODFW encouraged the Applicant to avoid rare intact habitats in favor of siting in previously disturbed areas.

ODFW recommendations relevant to fish, wildlife, and habitat are described in the Fish and Wildlife Habitat Exhibit.

4. IDENTIFICATION OF SPECIES

OAR 345-022-0070(3) Information about threatened and endangered plant and animal species that may be affected by the proposed facility, providing evidence to support a finding by the Council as required by OAR 345-022-0070. The applicant must include:

(a) Based on appropriate literature and field study, identification of all threatened or endangered species listed under ORS 496.172(2) and ORS 564.105(2) that may be affected by the proposed facility;

The Applicant identified potential threatened and endangered animal and plant species that may be affected by the Facility through a desktop review of U.S. Fish and Wildlife Service Information for Planning and Consultation (IPaC) species list (USFWS 2024), plant species listed by the Oregon Department of Agriculture (ODA) under ORS 564.105(2), wildlife species listed by the ODFW under ORS 496.172(2), the ODFW Compass – Oregon Conservation Strategy Reporting Tool, and a rare taxa occurrence data request from the Oregon Biodiversity Information Center (ORBIC). The conducted desktop review was then used to inform the biological field surveys.

4.1 DESKTOP REVIEW

4.1.1 DESKTOP METHODS

The Applicant conducted a desktop review prior to field survey efforts to identify federal and state endangered, threatened, proposed, and candidate species with potential to occur within the analysis area (Fish and Wildlife Habitat Exhibit, Attachment 1; OCS 2024, ODFW 2021, ODFW 2024, ODFW 2025, ORBIC 2025, ODA 2024, USFWS 2021, USFWS 2025, USFWS 2022, USFWS 2024). Species identified within the analysis area were then reviewed for potential to occur within



the microsites corridor¹ (Attachment 1, Figure 2). Habitat and range information was reviewed for special-status wildlife species that are known to occur within Wasco County. Species with the potential to occur within the microsites corridor were included, though if a species' habitat was absent or their range did not overlap with the microsites corridor, they were eliminated from consideration.

Rare plant species that have the potential to occur within the microsites corridor were identified through ODA species lists, the ORBIC rare plant list, herbaria records, and other sources (ODA 2024; SEINet 2025; OFP 2025; USFWS 2024; iNaturalist 2024). Additionally, Applicant submitted a request to ORBIC and obtained site-specific records of special-status species and sensitive habitats within the analysis area (ORBIC 2025).

4.1.2 DESKTOP RESULTS

Six state threatened, endangered, and candidate wildlife species (one mammal, one bird, two fish, and two invertebrates) and twelve state threatened, endangered, and candidate plant species were identified as having the potential to occur within the analysis area (Table 1).

Six federal and state listed species known to occur within Wasco County were initially identified as having the potential to occur within the analysis area but were eliminated from further site-specific consideration due to lack of habitat presence within the microsites corridor. The eliminated species included one wildlife species: Northern spotted owl (*Strix occidentalis caurina*) and five plant species: Barrett's penstemon (*Penstemon barrettiae*), diffuse stickseed (*Hackelia diffusa* var. *diffusa*), hepatic monkeyflower (*Erythranthe jungermannioides*), northern wormwood (*Artemisia campestris* var. *wormskioldii*), and Oregon daisy (*Erigeron oreganus*). Twelve of the 18 wildlife and plant species identified in Table 1 have the potential to occur within the microsites corridor based on presence of suitable habitat. Five of these are wildlife species: gray wolf (*Canis lupus*); two fish: bull trout (*Salvelinus confluentus*) and Columbia basin redband trout/summer steelhead/coastal rainbow trout² (*Oncorhynchus mykiss* ssp); two invertebrates: monarch butterfly (*Danaus plexippus*) and vernal pool fairy shrimp (*Branchinecta lynchi*); and seven are plants: disappearing monkeyflower (*Erythranthe inflatula*), dwarf evening-primrose (*Eremothera pygmaea*), Henderson's ricegrass (*Eriocoma hendersonii*), sessile mousetail (*Myosurus sessilis*), Suksdorf's lomatium (*Lomatium suksdorfii*), Tygh Valley milkvetch (*Astragalus tyghensis*), and white meconella (*Meconella oregana*). According to the National Oceanic and Atmospheric Administration National Marine Fisheries Service Endangered Species Act Critical Habitat Mapper (2023), and Oregon Department of State Lands (ODSL) there is potential critical habitat for steelhead (*Oncorhynchus mykiss*) in Wapinitia and Rice Creeks (NOAA 2023).

¹ The microsites corridor is defined in the Background Information Exhibit. It is the portion of the field survey area that is inside of the site boundary.

² Potential critical habitat for steelhead (*Oncorhynchus mykiss*) is mapped by the National Oceanic and Atmospheric Administration National Marine Fisheries Service Endangered Species Act Critical Habitat Mapper (2023) and Oregon Department of State Lands (ODSL) in Wapinitia and Rice Creeks (NOAA 2023).

TABLE 1 STATE-LISTED AND CANDIDATE SPECIES WITH THE POTENTIAL TO OCCUR IN THE ANALYSIS AREA

Common Name	Scientific Name (Synonym)	Federal Status ¹	State Status ²	Occurrence within Analysis Area	Potential Habitat within the Micrositing Corridor	Observed During Surveys?
Mammals						
Gray wolf	<i>Canis lupus</i>	FE	OCS	1 ORBIC record (2017) west of the micrositing corridor centered near the intersection of US Route 26 and Highway 216. This record includes counts for every year between 2017 and 2020. The last observation associated with this record was in 2020 when 9 wolves were observed.	Yes. Can occur in a variety of different habitat types, including grasslands/herbaceous, desert, hardwood forests, savanna, shrubland, woodlands, and tundra. Potential suitable denning habitat is present within the micrositing corridor. Potential foraging habitat is present within the micrositing corridor.	No
Birds						
Northern Spotted Owl	<i>Strix occidentalis caurina</i>	FT	ST, OCS	3 ORBIC records (1981-1991) from forested areas to the west of the micrositing corridor.	No. Potential suitable nesting habitat of mature coniferous with dense canopies is absent from the micrositing corridor.	No
Fish						
Bull trout	<i>Salvelinus confluentus</i>	FT	SC, OCS	1 ORBIC record (1993) from the Deschutes River to the east of the micrositing corridor.	Limited. Potential suitable habitat of headwater streams with cold, clean water and gravelly bottoms may be present within Wapinitia Creek in the micrositing corridor.	No
Columbia Basin redband trout/ summer steelhead/ coastal rainbow trout	<i>Oncorhynchus mykiss ssp</i>	FT	OCS	3 ORBIC records (1999) from the Deschutes River, Wapinitia Creek, and Paquet Gulch. The Wapinitia Creek	Limited. Potential suitable habitat of streams with clean gravel, complex habitat, and cool temperatures for spawning and rearing	No

Common Name	Scientific Name (Synonym)	Federal Status ¹	State Status ²	Occurrence within Analysis Area	Potential Habitat within the Micrositing Corridor	Observed During Surveys?
Invertebrates						
Monarch butterfly	<i>Danaus plexippus</i>	FC	SC, OCS	None per ORBIC 2025	record overlaps the micrositing corridor.	
					Yes. Suitable habitat of weedy fields and sparsely vegetated habitats, near wetlands or riparian areas, and patches of milkweed and nectar sources is presented throughout the micrositing corridor.	No, but milkweed plants were observed within the micrositing corridor.
Vernal Pool Fairy Shrimp	<i>Branchinecta lynchi</i>	FT	OCS	None per ORBIC 2025. Surveys recommended by ODFW.	Yes. Suitable habitat of vernal pools or ephemeral pools are present throughout the micrositing corridor.	No
Plants						
Barrett's penstemon	<i>Penstemon barrettiae</i>	None	SC	None per ORBIC 2025	None. Habitat of crevices in basalt cliffs, ledges, and outcrops, open talus, and sometime well-drained roadsides is absent from the micrositing corridor.	No
Diffuse stickseed	<i>Hackelia diffusa</i> var. <i>diffusa</i>	None	SC	None per ORBIC 2025. The only non-ORBIC herbaria records from the analysis area are from the Columbia River Gorge, Mt. Hood, and the mouths of the Deschutes and John Federal Day Rivers.	None. Habitat of bottoms of mossy talus and scree slopes, shaded areas, cliffs, roadsides, and other disturbed sites does not occur in the micrositing corridor.	No
Disappearing monkeyflower	<i>Erythranthe inflatula</i>	None	SC	None per ORBIC 2025	Limited. Habitat of moist, gravelly, rocky areas and low, wet fields in the sagebrush-juniper zone	No

Common Name	Scientific Name (Synonym)	Federal Status ¹	State Status ²	Occurrence within Analysis Area	Potential Habitat within the Micrositing Corridor	Observed During Surveys?
Dwarf evening- primrose	<i>Eremothera pygmaea</i>	None	SC	None per ORBIC 2025. The only non- ORBIC herbaria records from the area are from the John Day River drainage.	Limited. Habitat of sagebrush steppe, on unstable soil or gravel in steep talus, dry washes, banks, and roadcuts has a limited distribution within the micrositing corridor.	No
Henderson's ricegrass	<i>Eriocoma hendersonii</i>	None	SC	None per ORBIC 2025. The only non- ORBIC herbaria records from the area are from the John Day River drainage.	Limited. Habitat of shallow, rocky soil in scablands, sagebrush steppe, or ponderosa pine forests has a limited distribution within the micrositing corridor.	No
Hepatic monkeyflower	<i>Erythranthe jungermanniioides</i>	None	SC	None per ORBIC 2025	None. Habitat of moist basalt crevices and seeps in vertical cliffs and canyon walls is not present in the micrositing corridor.	No
Northern wormwood	<i>Artemisia canadensis</i> var. <i>wormskioldii</i>	FSOC	SE, OCS	None per ORBIC 2025	None. Habitat of rocky, sandy and cobbly shoreline and banks of rivers is not present within the micrositing corridor.	No
Oregon daisy	<i>Erigeron oregonus</i>	None	SC	None per ORBIC 2025	None. Habitat of wet environments on basalt outcroppings and moist and shady basalt cliffs and ledges, often beneath overhangs and near waterfalls is not present in the micrositing corridor.	No

Common Name	Scientific Name (Synonym)	Federal Status ¹	State Status ²	Occurrence within Analysis Area	Potential Habitat within the Micrositing Corridor	Observed During Surveys?
Sessile mousetail	<i>Myosurus sessilis</i>	FSOC	SC	2 ORBIC records (2012) from vernal pools east of the micrositing corridor near the intersection of US Route 197 and Highway 216.	Yes. Habitat of vernal pools are present throughout the micrositing corridor.	Yes
Suksdorf's lomatium	<i>Lomatium suksdorfii</i>	None	SC	None per ORBIC 2025. The only non-ORBIC herbaria records from the area are from Mt. Hood and the Columbia River Gorge.	Limited. Habitat of gravelly or rocky slopes, talus, rock outcrops, scrubland, oak forests, conifer forests has a limited distribution within the micrositing corridor.	No
Tygh Valley milkvetch	<i>Astragalus tyghensis</i>	FSOC	ST, OCS	16 ORBIC records (1981-2011), some of which overlap the micrositing corridor in the vicinity of Graveyard Butte.	Yes. Habitat of dry hillsides and valleys, open pine woodlands, and sagebrush communities occurs within the northern portion of the micrositing corridor.	Yes
White meconella	<i>Meconella oregana</i>	FSOC	ST	None per ORBIC 2025. The only non-ORBIC herbaria records within Oregon are restricted to the Siskiyou Mountains and the Columbia River Gorge.	Limited. Habitat of vernal moist areas of open grasslands has a limited distribution within the micrositing corridor.	No

Sources:

FC = federal candidate species; FSOC = federal species of concern; FT = federally threatened; OCS = Oregon conservation strategy species; SC = state candidate; ST = state threatened
Source = Bald and Golden Eagle Protection Act (1940)



4.1.2.1 WILDLIFE AND FISH

Of the six federally or state listed or candidate wildlife species identified with the potential to occur within the analysis area, Table 1 identifies five species with the potential to occur within the microsinning corridor: gray wolf (federally endangered, Oregon Conservation Strategy Species), bull trout (federally threatened, state candidate, Oregon Conservation Strategy Species), steelhead (federally threatened, Oregon Conservation Strategy Species), monarch butterfly (federal candidate endangered, state candidate, Oregon Conservation Strategy Species), and vernal pool fairy shrimp (federally threatened, Oregon Conservation Strategy Species). ORBIC records indicate the occurrence of gray wolf (one 2017 record), bull trout (one 1993 record), and steelhead (three 1999 records) within the analysis area. One of the steelhead records from Wapinitia Creek overlaps the microsinning corridor.

While gray wolf has potential to occur within the microsinning corridor, the known occurrence within the analysis area is primarily restricted to forested areas to the west of the microsinning corridor within the Mount Hood National Forest and Warm Springs Reservation. The suitable habitat for steelhead and bull trout is likely limited to perennial and intermittent streams within the microsinning corridor, particularly those streams with a perennial connection to Wapinitia Creek and Rice Creek. However, the Facility is not anticipated to have permanent in-water impacts to any potential fish bearing waters. Therefore, targeted fish surveys were not conducted as a part of the biological field surveys. While there were no ORBIC records of vernal pool fairy shrimp within the analysis area, potentially suitable habitat for vernal pool fairy shrimp is present within vernal pools throughout the microsinning corridor and targeted fairy shrimp surveys were conducted in spring of 2025.

4.1.2.2 PLANTS

Of the 12 federally listed, state listed, or candidate plant species identified with the potential to occur within the analysis area, there are seven species with the potential to occur within the microsinning corridor. These species are listed in Table 1 and include disappearing monkeyflower (state candidate), dwarf evening-primrose (state candidate), Henderson's ricegrass (state candidate), sessile mousetail (state candidate), Suksdorf's lomatium (state candidate), Tygh Valley milkvetch (state threatened, Oregon Conservation Strategy Species), and white meconella (state candidate). ORBIC records also indicate the occurrence of Tygh Valley milk-vetch and sessile mousetail within the analysis area. Two of the Tygh Valley milkvetch records overlap the microsinning corridor in the vicinity of Graveyard Butte. Potentially suitable habitat for all seven of these species occurs within the microsinning corridor and targeted surveys for these species were completed during the appropriate blooming period(s) in 2024 and 2025.

4.2 FIELD SURVEYS

4.2.1 FIELD METHODS

Biological and botanical surveys were conducted between 2024 and 2025 to determine the potential presence of federal and state endangered, threatened, proposed, and candidate species



and their habitat in the micrositing corridor. Survey methods are outlined in the Biological Survey Report, provided as Attachment 1 of the Fish and Wildlife Habitat Exhibit. Attached Figure 2 shows the 2024 and 2025 survey areas, which completely overlap the micrositing corridor.

4.2.2 FIELD RESULTS

4.2.2.1 WILDLIFE AND FISH

Surveys were completed for state-listed, federally listed and candidate wildlife species that have potential to occur within the micrositing corridor. The Facility is not anticipated to impact perennial streams; therefore, targeted fish surveys were not conducted. One federal candidate wildlife species was observed during the 2024 biological surveys: monarch butterfly (federal and state candidate species). Additionally, narrowleaf milkweed (*Asclepias fascicularis*), a caterpillar host plant for monarch butterflies, was observed throughout the micrositing corridor.

Three non-listed but otherwise sensitive species were observed during the surveys: Bald eagle (*Haliaeetus leucocephalus*; protected under the Bald and Golden Eagle Protection Act), Common nighthawk (*Chordeiles minor*; Oregon Conservation Strategy Species), and Lewis's woodpecker (*Melanerpes lewis*; federal species of concern). Further details are in the Fish and Wildlife Habitat Exhibit for the completed biological field surveys for non-listed special-status species.

4.2.2.2 PLANTS

Botanical field surveys were conducted within the micrositing corridor from 5 June to 6 July and 26 August to 13 September 2024 and from 8 April to 2 May, 20 to 22 May, 8 to 19 July, and 14 to 15 July 2025. One state listed species, Tygh Valley milkvetch (state threatened species and federal species of concern) and one state candidate species, sessile mousetail (state candidate species), were observed within the micrositing corridor and are described in further detail in Section 5.2.

5. OCCURRENCE AND POTENTIAL ADVERSE EFFECTS

(b) For each species identified under (a), a description of the nature, extent, locations and timing of its occurrence in the analysis area and how the facility might adversely affect it.

5.1 WILDLIFE AND FISH

Five state or federally listed or candidate wildlife species were identified to have the potential to occur within the micrositing corridor: gray wolf, bull trout, steelhead, monarch butterfly, and vernal pool fairy shrimp. Of these five species, only the monarch butterfly was observed within the micrositing corridor during 2024 and 2025 biological surveys. Avoidance and mitigation strategies for threatened and endangered species are further explained in Section 6. The construction and operation of the Facility are not expected to result in adverse effects to these species, as described below.

5.1.1 GRAY WOLF

The gray wolf is a federally endangered species and an Oregon Conservation Strategy Species. Gray wolves can occur in a variety of different habitat types, including grasslands/herbaceous, desert, hardwood forests, savanna, shrubland, woodlands, and tundra. Potential suitable denning habitat is present within the micrositeing corridor. ORBIC data indicates one occurrence of this species within the analysis area. Desktop review and field survey results indicate that potential foraging habitat is present within the micrositeing corridor. However, no gray wolf individuals were observed during the biological surveys and the known population within the analysis area is primarily restricted to the forested areas of the Mount Hood National Forest and Warm Springs Reservation to the southwest of the micrositeing corridor. Therefore, no adverse effects to this federally listed wildlife species are expected due to the construction and operation of the Facility.

5.1.2 BULL TROUT

Bull Trout are listed as threatened by the federal Endangered Species Act. Bull trout have specific habitat requirements for cold, clean, and complex habitat. They are most common in high mountainous areas where snowfields and glaciers are present. They mainly occur in deep pools of large, cold, rivers and lakes. Due to the disturbed nature of perennial streams within the micrositeing corridor, and lack of connectivity to larger bodies of water, bull trout habitat is likely extremely limited, and no adverse effects are expected due to the construction and operation of the Facility.

5.1.3 STEELHEAD

As per ODFW, summer steelhead naturally occur in some coastal basins and most large Columbia River tributaries from Hood River upstream. The Mid-Columbia Summer Steelhead stock management unit (SMU) for the Deschutes includes 11 historic populations in Columbia River tributaries between The Dalles Dam and the Snake River. The Deschutes, Lower John Day, and Umatilla are affected by naturally-spawning hatchery fish. Historical populations in the upper Deschutes and Willow Creek are extinct. Although some perennial stream habitat does exist within the micrositeing corridor, the lack of unrestricted connectivity and the disturbed nature of the habitat likely limits the amount of viable habitat for this species. No adverse effects are expected due to the construction and operation of the Facility.

5.1.4 MONARCH BUTTERFLY

Monarch butterfly is a federal and state candidate listed species and Oregon Conservation Strategy Species. Habitat consists of weedy fields and sparsely vegetated habitats, typically near wetlands or riparian areas, where there are abundant patches of milkweed (*Asclepias* spp.) and nectar sources. Two individual butterflies were observed (one in June 2024 and one in August 2024) and 336 patches of narrowleaf milkweed were observed across the micrositeing corridor during the biological surveys in 2024 and 2025 (Figure 3). While narrowleaf milkweed is present within the micrositeing corridor, it is not extensive enough to represent important habitat for monarch butterflies, and the observed individual butterflies were likely transient, migrating

individuals. Therefore, no adverse effects to this federal candidate wildlife species are expected due to the construction and operation of the Facility.

5.1.5 VERNAL POOL FAIRY SHRIMP

Vernal pool fairy shrimp is a federally listed threatened species and an Oregon Conservation Species. Habitat consists of vernal pools or ephemeral pools, or any area with cool ponding water. While there were no ORBIC records of vernal pool fairy shrimp within the analysis area, potentially suitable habitat for vernal pool fairy shrimp is present within vernal pools throughout the microsinning corridor. Targeted fairy shrimp surveys were conducted within the microsinning corridor from 1 to 3 April and 22 to 23 April 2025. While common fairy shrimp species were observed within vernal pools during surveys, no listed vernal pool fairy shrimp individuals were observed within the microsinning corridor. Therefore, this species is not considered to be present within the microsinning corridor and no adverse effects to this federally threatened wildlife species are expected due to the construction and operation of the Facility.

5.2 PLANTS

Based on the desktop analysis, there are no federally listed vascular plant species and seven state listed and candidate vascular plant species that have the potential to occur within the analysis area. Two of the state listed and candidate species, Tygh Valley milk-vetch and sessile mousetail, were observed in small, isolated populations during biological surveys in 2024 and 2025. The remaining five species were not observed during surveys. The final site plan will be designed to avoid impacts on the Tygh Valley milk-vetch and sessile mousetail populations. The construction and operation of the Facility are not expected to result in adverse effects to these species, as described below.

5.2.1 DISAPPEARING MONKEYFLOWER

Disappearing monkeyflower is a state candidate species. Habitat for this species consists of moist, gravelly, rocky areas and low, wet fields in the sagebrush-juniper zone. There are no ORBIC records of this species within the analysis area and the closest available herbaria record is from the Columbia River Gorge, approximately 31 miles to the north of the microsinning corridor. While suitable habitat occurs within the microsinning corridor, this species was not observed during 2024 or 2025 biological surveys. Therefore, construction and operation of the Facility is not expected to adversely affect this species.

5.2.2 DWARF EVENING-PRIMROSE

Dwarf evening-primrose is a state candidate species. Habitat for this species consists of sagebrush steppe, on unstable soil or gravel in steep talus, dry washes, banks, and roadcuts. There are no ORBIC records of this species within the analysis area and the closest available herbaria record is from the John Day River drainage, approximately 44 miles southeast of the microsinning corridor. This species is not known to occur in the Deschutes River drainage. While suitable habitat occurs within the microsinning corridor, this species was not observed during 2024 or 2025 biological

surveys. Therefore, construction and operation of the Facility is not expected to adversely affect this species.

5.2.3 HENDERSON'S RICEGRASS

Henderson's ricegrass is a state candidate species. Habitat for this species consists of shallow, rocky soil in scablands, sagebrush steppe, or ponderosa pine forests. There are no ORBIC records of this species within the analysis area and the closest available herbaria record is from the John Day River drainage, approximately 30 miles east of the microsite corridor. This species is not known to occur in the Deschutes River drainage. While suitable habitat occurs within the microsite corridor, this species was not observed during 2024 or 2025 biological surveys. Therefore, construction and operation of the Facility is not expected to adversely affect this species.

5.2.4 SESSILE MOUSETAIL

Sessile mouse tail is a state candidate species. Habitat for this species consists of vernal pools. The closest available herbaria record is from the John Day River drainage, approximately 54 miles northeast of the microsite corridor. ORBIC records identified two element occurrences within the analysis area, both approximately 6 miles northeast of the site boundary. Many vernal pools were identified within the microsite corridor (see the Wetlands and Waters Report, which is attached to the State and Local Laws and Regulations Exhibit), and sessile mouse tail individuals were observed in 12 vernal pools within the easternmost parcels within the microsite corridor during 2025 botanical surveys (Figure 4). Approximately 785 individuals were observed across 0.06 acres of the microsite corridor within these 12 isolated vernal pools. The final site plan will avoid impacts to these sessile mouse tail populations.

5.2.5 SUKSDORF'S LOMATIUM

Suksdorf's lomatium is a state candidate species. Habitat for this species consists of gravelly or rocky slopes, talus, rock outcrops, scrubland, oak forests, conifer forests. There are no ORBIC records of this species within the analysis area and the closest available herbaria record is from Seven Mile Hill west of The Dalles, approximately 35 miles north of the microsite corridor. While suitable habitat occurs within the microsite corridor, this species was not observed during 2024 or 2025 biological surveys. Therefore, construction and operation of the Facility is not expected to adversely affect this species.

5.2.6 TYGH VALLEY MILK-VETCH

Tygh Valley milk-vetch is a state listed threatened species and an Oregon Conservation Strategy Species. Habitat for this species consists of dry, rocky soils often with a thin overlying sandy or silty layer within pine and sagebrush transition areas, such as dry oak and dry oak-pine savannas, bitterbrush steppe and moist margin sagebrush communities. This species is also found along roadsides within its range. Associated species are *Pseudoroegneria spicata*, *Festuca idahoensis*, *Bromus tectorum*, *Astragalus purshii*, *Sanguisorba occidentalis*, and *Alyssum alyssoides*. There are 16 ORBIC records of this species within the analysis area. Suitable habitat occurs within the

micrositing corridor and this species was observed during 2024 and 2025 surveys. Approximately 5,395 individuals were observed across approximately 39 acres of the micrositing corridor in the northernmost parcels on and adjacent to Graveyard Butte (Figure 5). This mapped population overlaps with an ORBIC element occurrence originally recorded in 2019. The final site plan has been designed around a 25-foot avoidance setback of this population to avoid impacts to this species from construction and operation of the Facility.

5.2.7 WHITE MECONELLA

White meconella is a state candidate species. Habitat for this species consists of vernal moist areas of open grasslands. There are no ORBIC records of this species within the analysis area and the closest available herbaria record is from The Dalles, approximately 35 miles north of the micrositing corridor. While suitable habitat occurs within the micrositing corridor, this species was not observed during 2024 or 2025 biological surveys. Therefore, construction and operation of the Facility is not expected to adversely affect this species.

6. AVOIDANCE AND MITIGATION

(c) For each species identified under (a), a description of measures proposed by the applicant, if any, to avoid or reduce adverse impact.

Tygh Valley milk-vetch, a state threatened species, and sessile mousetail, a state candidate species were observed within the micrositing corridor during biological surveys in 2024 and 2025. The Applicant will design the final site plan to completely avoid these plant populations, thus avoiding impacts on all rare plants within the micrositing corridor. A 25-foot avoidance setback surrounding all mapped Tygh Valley milkvetch and sessile mousetails populations will be incorporated into final site plans to ensure avoidance of these populations. Additionally, an Environmental Construction Monitor will flag the extent of these populations prior to construction to ensure work crews know to avoid them during construction. Indirect impacts to these species are limited to dust deposition and will be avoided through timing of construction activities within the vicinity of the mapped populations to take place either before emergence of the species in spring or after senescence of the species in late June/early July, or, if construction does occur during the bloom period, then appropriate dust control measures will be implemented near the populations.

No other threatened or endangered plant species were observed within the micrositing corridor. Therefore, the Applicant does not propose avoidance and mitigation measures for disappearing monkeyflower, dwarf evening-primrose, Henderson's ricegrass, Suksdorf's lomatium, and white meconella.

Construction, operation, and maintenance of the Facility are not expected to result in adverse impacts to threatened or endangered wildlife species. No threatened or endangered wildlife species were found within the micrositing corridor besides two monarch butterfly individuals. While narrowleaf milkweed is present within the micrositing corridor, it is not extensive enough to represent important habitat for monarch butterflies, and the observed individual butterflies were

likely transient, migrating individuals. Though the microsites corridor does not provide important monarch butterfly habitat, the Facility layout will avoid milkweed patches, where possible.

Additionally, though wolves were not observed during field surveys and the known population within the analysis area is primarily restricted to the forested areas of the Mount Hood National Forest and Warm Springs Reservation to the southwest of the microsites corridor, the Facility has been designed to create corridors for migration of wildlife, such as wolves. Wildlife-friendly fencing will also be used by the Facility to further facilitate wildlife passage. Additional information about the avoidance and minimization measures to facilitate wildlife passage through the Facility are described in the Fish and Wildlife Habitat Exhibit.

Several over or in-water crossing improvements and new crossings are likely necessary for the construction and operation of the Facility. Proposed crossings will follow ODFW fish passage review and DSL removal fill permitting to avoid and minimize impacts. Potential adverse impacts due to crossing are likely limited to temporary impacts to fish passage during in-water work windows established by ODFW and DSL.

7. PROTECTION AND CONSERVATION PROGRAM COMPLIANCE/IMPACTS

(d) For each plant species identified under (a), a description of how the proposed facility, including any mitigation measures, complies with the protection and conservation program, if any, that the Oregon Department of Agriculture has adopted under ORS 564.105(3).

There are no species with the potential to occur within the analysis area for which ODA has adopted a protection and conservation program. As a result, the Facility is not likely to impact any of ODA's recovery efforts, nor is the Facility likely to cause a significant reduction in the likelihood of survival or recovery of plants with a protection or conservation program under Oregon Revised Statutes (ORS) 564.105(3).

8. POTENTIAL IMPACTS TO PLANTS, INCLUDING MITIGATION MEASURES

(e) For each plant species identified under paragraph (a), if the Oregon Department of Agriculture has not adopted a protection and conservation program under ORS 564.105(3), a description of significant potential impacts of the proposed facility on the continued existence of the species and on the critical habitat of such species and evidence that the proposed facility, including any mitigation measures, is not likely to cause a significant reduction in the likelihood of survival or recovery of the species.

One state listed and one candidate plant species were observed within the microsites corridor during biological and botanical surveys: Tygh Valley milkvetch (ODA listed threatened) and sessile mousetails (ODA candidate). Permanent, direct impacts to these species from construction activities could include crushing of individual plants by heavy machinery and damage to individual

plants and seed banks from soil disturbance. Temporary, indirect impacts to this species from construction activities could include dust deposition.

Due to the presence of Tygh Valley milk-vetch and sessile mousetails within the microsites corridor, the Applicant will design the final site plan to completely avoid these populations. Therefore, construction, operation, and maintenance of the Facility are not expected to result in direct impacts on these state threatened or candidate plant species and will not represent a significant reduction in the likelihood of survival or recovery. Indirect impacts to these species are limited to dust deposition and will be avoided through timing of construction activities within the vicinity of the mapped populations to take place either before emergence of the species in spring or after senescence of the species in late June/early July, or, if construction does occur during the bloom period, then appropriate dust control measures will be implemented near the populations. Additionally, an Environmental Construction Monitor will flag the extent of these populations prior to construction to ensure work crews avoid them during construction activities.

9. POTENTIAL IMPACTS TO ANIMALS, INCLUDING MITIGATION MEASURES

(f) For each animal species identified under (a), a description of significant potential impacts of the proposed facility on the continued existence of such species and on the critical habitat of such species and evidence that the proposed facility, including any mitigation measures, is not likely to cause a significant reduction in the likelihood of survival or recovery of the species.

No state-listed or candidate animal species are expected to occur within the microsites corridor. Construction, operation, and maintenance of the Facility are not expected to result in adverse impacts to state listed animal species. No mitigation measures for threatened and endangered species are planned or required.

10. MONITORING

(g) The applicant's proposed monitoring program, if any, for impacts to threatened and endangered species.

Because direct and indirect impacts to the mapped Tygh Valley milkvetch and sessile mousetails populations will be avoided during construction, operation, and maintenance of the Facility, no monitoring program for threatened and endangered plant species is planned or required. However, ongoing monitoring for noxious weeds control and revegetation success in impacted areas is required. Plans for noxious weeds and revegetation success monitoring are consolidated into the Construction Vegetation and Soil Management Plan and Operations Vegetation and Soil Management Plan, provided as Attachments 2 and 3 of the Soil Protection Exhibit, respectively.

Construction, operation, and maintenance of the Facility are not expected to result in adverse impacts to state listed wildlife species. Therefore, no monitoring program for threatened and endangered wildlife species is planned or required.

11. SUBMITTAL REQUIREMENTS AND APPROVAL STANDARDS

11.1 SUBMITTAL REQUIREMENTS

TABLE 2 SUBMITTAL REQUIREMENTS MATRIX

Requirement	Location
OAR 345-022-0070(3) Information about threatened and endangered plant and animal species that may be affected by the proposed facility, providing evidence to support a finding by the Council as required by OAR 345-022-0070. The applicant shall include:	-
(A) Based on appropriate literature and field study, identification of all threatened or endangered species listed under ORS 496.172(2), 564.105(2) or 16 USC 1533 that may be affected by the proposed facility.	Section 3
(B) For each species identified under (A), a description of the nature, extent, locations and timing of its occurrence in the analysis area and how the facility might adversely affect it.	Section 4
(C) For each species identified under (A), a description of measures proposed by the applicant, if any, to avoid or reduce adverse impact.	Section 5
(D) For each plant species identified under (A), a description of how the proposed facility, including any mitigation measures, complies with the protection and conservation program, if any, that the Oregon Department of Agriculture has adopted under ORS 564.105(3).	Section 6
(E) For each plant species identified under paragraph (A), if the Oregon Department of Agriculture has not adopted a protection and conservation program under ORS 564.105(3), a description of significant potential impacts of the proposed facility on the continued existence of the species and on the critical habitat of such species and evidence that the proposed facility, including any mitigation measures, is not likely to cause a significant reduction in the likelihood of survival or recovery of the species.	Section 7
(F) For each animal species identified under (A), a description of significant potential impacts of the proposed facility on the continued existence of such species and on the critical habitat of such species and evidence that the proposed facility, including any mitigation measures, is not likely to cause a significant reduction in the likelihood of survival or recovery of the species.	Section 8
(G) The applicant's proposed monitoring program, if any, for impacts to threatened and endangered species.	Section 9

11.2 APPROVAL STANDARDS

TABLE 3 APPROVAL STANDARD

Approval Standard	Location
OAR 345-022-0070 Threatened and Endangered Species	-
To issue a site certificate, the Council, after consultation with appropriate state agencies, must find that:	-
(1) For plant species that the Oregon Department of Agriculture has listed as threatened or endangered under ORS 564.105(2), the design, construction and operation of the proposed facility, taking into account mitigation:	-
(a) Are consistent with the protection and conservation program, if any, that the Oregon Department of Agriculture has adopted under ORS 564.105(3); or	Section 6
(b) If the Oregon Department of Agriculture has not adopted a protection and conservation program, are not likely to cause a significant reduction in the likelihood of survival or recovery of the species; and	Section 7
(2) For wildlife species that the Oregon Fish and Wildlife Commission has listed as threatened or endangered under ORS 496.172(2), the design, construction and operation of the proposed facility, taking into account mitigation, are not likely to cause a significant reduction in the likelihood of survival or recovery of the species.	Section 8

12. REFERENCES

- iNaturalist. 2024. iNaturalist species occurrence data. Available from <https://www.inaturalist.org>. Accessed June 2024.
- OCS (Oregon Conservation Strategy). 2024. Oregon Conservation Strategy species. Oregon Department of Fish and Wildlife, Salem, Oregon.
- ODA (Oregon Department of Agriculture). 2024. State listed Threatened and Endangered (T or E) plant species that occur within Oregon. Retrieved from: <https://www.oregon.gov/oda/plant-conservation/SiteAssets/Pages/AboutThePlants/ODA%20state-listed%20species%202024.pdf>.
- ODFW (Oregon Department of Fish and Wildlife). 2021. ODFW Sensitive Species List. Available online at: http://www.dfw.state.or.us/wildlife/diversity/species/docs/2016_Sensitive_Species_List.pdf. Accessed March 2025.
- ODFW (Oregon Department of Fish and Wildlife). 2024. ODFW Compass Oregon Conservation Strategy Report – Deschutes Dodge Solar. Received April 5, 2024.
- ODFW (Oregon Department of Fish and Wildlife). 2025. Threatened, Endangered, and Candidate Fish and Wildlife Species in Oregon. Available online at: https://www.dfw.state.or.us/wildlife/diversity/species/docs/Threatened_and_Endangered_Species.pdf. Accessed March 2025.
- OFP (Oregon Flora Project). 2025. Biodiversity occurrence data published by: OregonFlora (accessed through the OregonFlora Portal, oregonflora.org, 2025-03-06).
- ORBIC (Oregon Biodiversity Information Center). 2025. Rare, threatened, and endangered plant and animal species records. Portland State University, Institute for Natural Resources. Requested February 21, 2025. Received and accessed February 28, 2025.
- SEINet. 2025. Biodiversity occurrence data published by: SEINet Portal Network (accessed through the SEINet Portal Network Portal, <https://swbiodiversity.org/seinet>, 2025-03-06).
- USFWS (U.S. Fish and Wildlife Service). 2021. Birds of Conservation Concern 2021. Migratory Bird Program. Available online at: <https://www.fws.gov/sites/default/files/documents/birds-of-conservation-concern-2021.pdf>. Accessed March 2025.
- USFWS (U.S. Fish and Wildlife Service). 2022. Federally listed, proposed, candidate, delisted species, and species of concern under the jurisdiction of the Fish and Wildlife Service which may occur in Oregon. Available online at: https://www.fws.gov/sites/default/files/documents/OregonSpeciesStateList_1.pdf. Accessed March 2025.
- USFWS. 2024. IPaC (Information for Planning and Consultation). Endangered Species in Wasco County. Available online at: <https://ipac.ecosphere.fws.gov/>. Accessed April 2024.
- USFWS (U.S. Fish and Wildlife Service). 2025. Critical Habitat for Threatened and Endangered Species [USFWS] Web Map Viewer. Available online at: <https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77>. Accessed March 2025.

ATTACHMENT 1 FIGURES

Figure 1 - Analysis Area

Figure 2 - Survey Areas

Figure 3 - Milkweed Observations

Figure 4 - Mousetail Observations

Figure 5 - Milkvetch Observations



