

REGULATED PRAIRIE ABSENCE REPORT

Prepared for Tenino Land Company
May 13, 2024

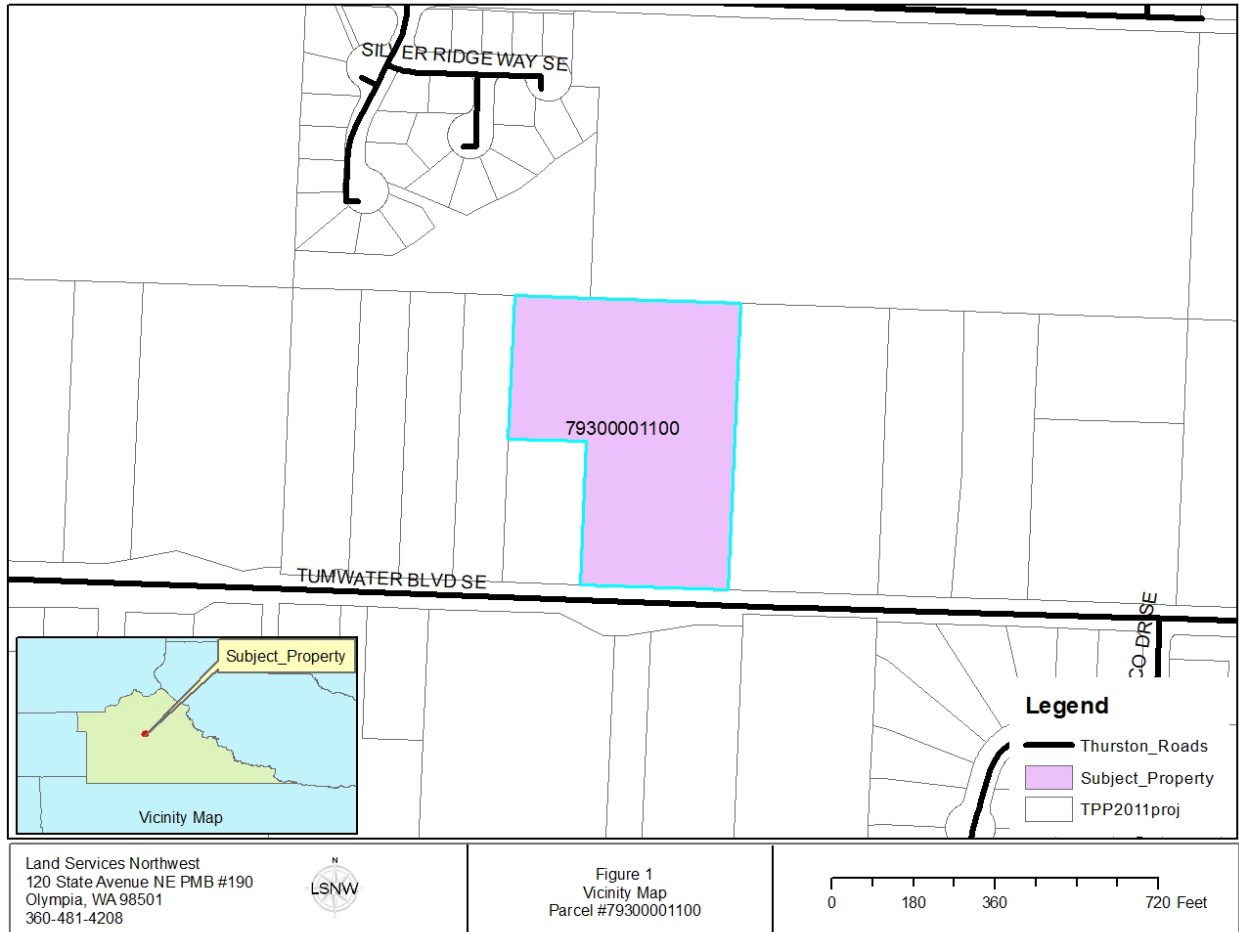


Land Services Northwest
Alex Callender MS, PWS
120 State Ave NE PMB 190, Olympia, WA, 98501
360.481.4208

1.0 INTRODUCTION

This report is the result of a Regulated Prairie Survey of the 5.86 acre parcel #79300001100 at 715 DENNIS ST SE Tumwater, WA with the partial legal description of Section 02 Township 17 Range 2W Quarter NW SE Plat THOMPSONS TO BRIGHTON PARK LL-0605 LT 3 Document 004/413.

(Figure 1)



The Purpose of this report is to provide a study of the presence or absence of indicators of Regulated Prairie under Tumwater Code Title 16 Environment.

Regulated Prairie, Garry Oaks and Mima Mounds

The parcel contains soil types associated with prairies as defined in the Tumwater Code Title 16 Environment. Transects were walked throughout the parcel (or at least throughout the building envelope and 50-foot buffer area). A list of plant species encountered during the survey was recorded and CAO target prairie plants were noted. Regulated prairie can be either wet or dry outwash prairie and is critical habitat for the Taylors checkerspot butterfly and the Mardon skipper butterfly. Prairie habitat is regulated if three indicator species are found within 5 meters (15 feet) of each other with 25 or more of each species in the plot.

2.0 METHODS

2.1 Review of Existing Information

Background Review

Background information on the subject property was reviewed prior to field investigations and included the following:

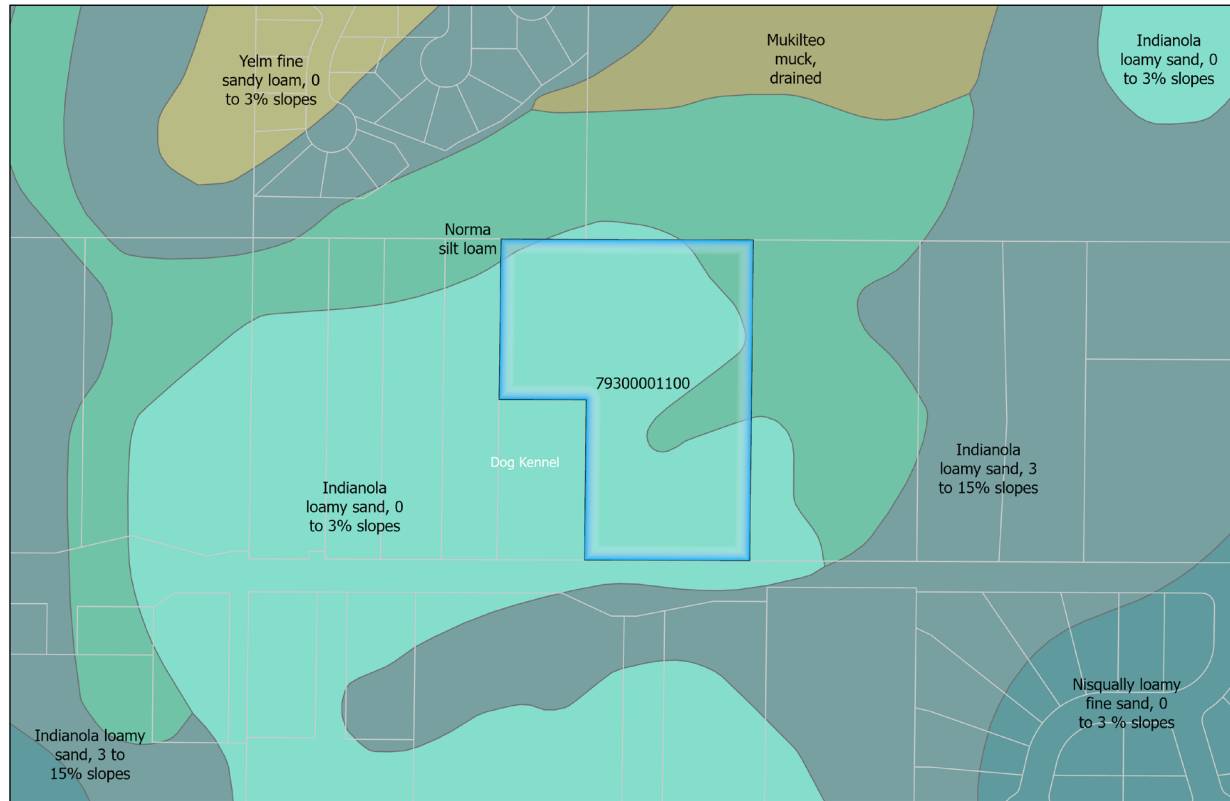
- Thurston County Geodata Gopher Soils Shapefiles
- WDFW Priority Habitats and Species Information
- USFWS species list information
- WDFW species information



2.2 Regulated Prairie Survey Protocol

1.0 Prairie Review Method

The existing information shows Indianola loamy sand 0 to 3 percent slopes, which is a prairie soil (Figure 2 and attachment A).

Transects were walked throughout the parcel (or at least throughout the building envelope and 50-foot buffer area).



 <p>Land Services Northwest 120 State Avenue NE PMB 190 Olympia, WA 98501</p>	<p>Figure Two NRCS Soil Survey</p>	<p>0 187.5 375 750 Feet</p> 
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Soils That Require Prairie Plant Review*

SCS_CODE	SCS_NAME	USFWS Gopher? (Y/N)
005	Baldhill very stony sandy loam, 0 to 3% slopes	N
	Baldhill very stony sandy loam, 15 to 30% slopes	N
007		N
006	Baldhill very stony sandy loam, 3 to 15% slopes	N
	Baldhill very stony sandy loam, 30 to 50% slopes	N
008		N
020	Cagey loamy sand	Y
	Everett very gravelly sandy loam, 0 to 3% slopes	Y
032		Y
	Everett very gravelly sandy loam, 3 to 15% slopes	Y
033		Y
	Grove very gravelly sandy loam, 3 to 15% slopes	N
042		N
046	Indianola loamy sand, 0 to 3% slopes	Y
047	Indianola loamy sand, 3 to 15% slopes	Y
073	Nisqually loamy fine sand, 0 to 3 % slopes	Y
074	Nisqually loamy fine sand, 3 to 15 % slopes	Y
109	Spana gravelly loam	Y
114	Spanaway-Nisqually complex, 2 to 10% slopes	Y
110	Spanaway gravelly sandy loam, 0 to 3% slopes	Y
	Spanaway gravelly sandy loam, 3 to 15% slopes	Y
111		Y
112	Spanaway stony sandy loam, 0 to 3% slopes	Y
113	Spanaway stony sandy loam, 3 to 15% slopes	Y
117	Tenino gravelly loam, 3 to 15% slopes	N

*Soils highlighted in yellow are not considered MPG habitat

Attachment A

2. A list of plant species encountered during the survey was recorded and CAO target prairie plants were noted.

The list of plants encountered is found in Appendix C.

3. Confirmation that CAO prairie plants were surveyed for and either found or not found, prairie criteria met or not met, etc. An example statement of your findings could be:

No CAO prairie plants were found.

See Appendix C.

4. If prairie habitat is identified onsite it is regulated pursuant to Tumwater City Code Chapter 16 Environment.. Provide either a GPS map or hand-drawn aerial map indicating location of prairie plants on the parcel in relation to the proposed building area.

No prairie habitat was identified during the survey.

5. A full species list of plants (prairie and non-prairie) found at the time of survey. Attached is a blank checklist and data sheet if you choose to use. Even if no CAO prairie plants were detected, a complete species list of vegetation observed helps characterize site conditions.

A full list of plants encountered are found on the checklist in Appendix C.

6. Color photos of plant species encountered.

See Appendix A.

7. Transect map. If done concurrently with gopher review, you can use the same transect map.

The transect map is located in Appendix B.

8. Oregon white oak trees, if observed onsite, must also be documented, mapped, and included in the prairie plant survey. As with prairie plants, provide either a GPS map or hand-drawn aerial map indicating location of oaks on the parcel in relation to the proposed building area.

No Oregon white oak trees were found on the subject parcel.

9. Mima mounds, if observed onsite, must also be documented, mapped, and included in the prairie plant survey. Provide either a GPS map or hand-drawn aerial map indicating location of Mima mounds on the parcel in relation to the proposed building area.

There are no Mima mounds on the subject parcel.

3.0 CURRENT CONDITIONS AND METHODS

Land Services Northwest conducted a survey on May 8, 2024, walking the area and looking for signs of the MPG and regulated prairie in accordance with the protocol.

The 5.86 parcel is a cleared field with a slope to the north. It is located in an area of predominantly undeveloped parcels.

4.0 RESULTS

No CAO prairie plants, Garry oaks or Mima mounds were found.

Appendix A – Photos









I SNWw5
Project: Tenino LAND
804 Tumwater Blvd SE, Olympia, WA 98501

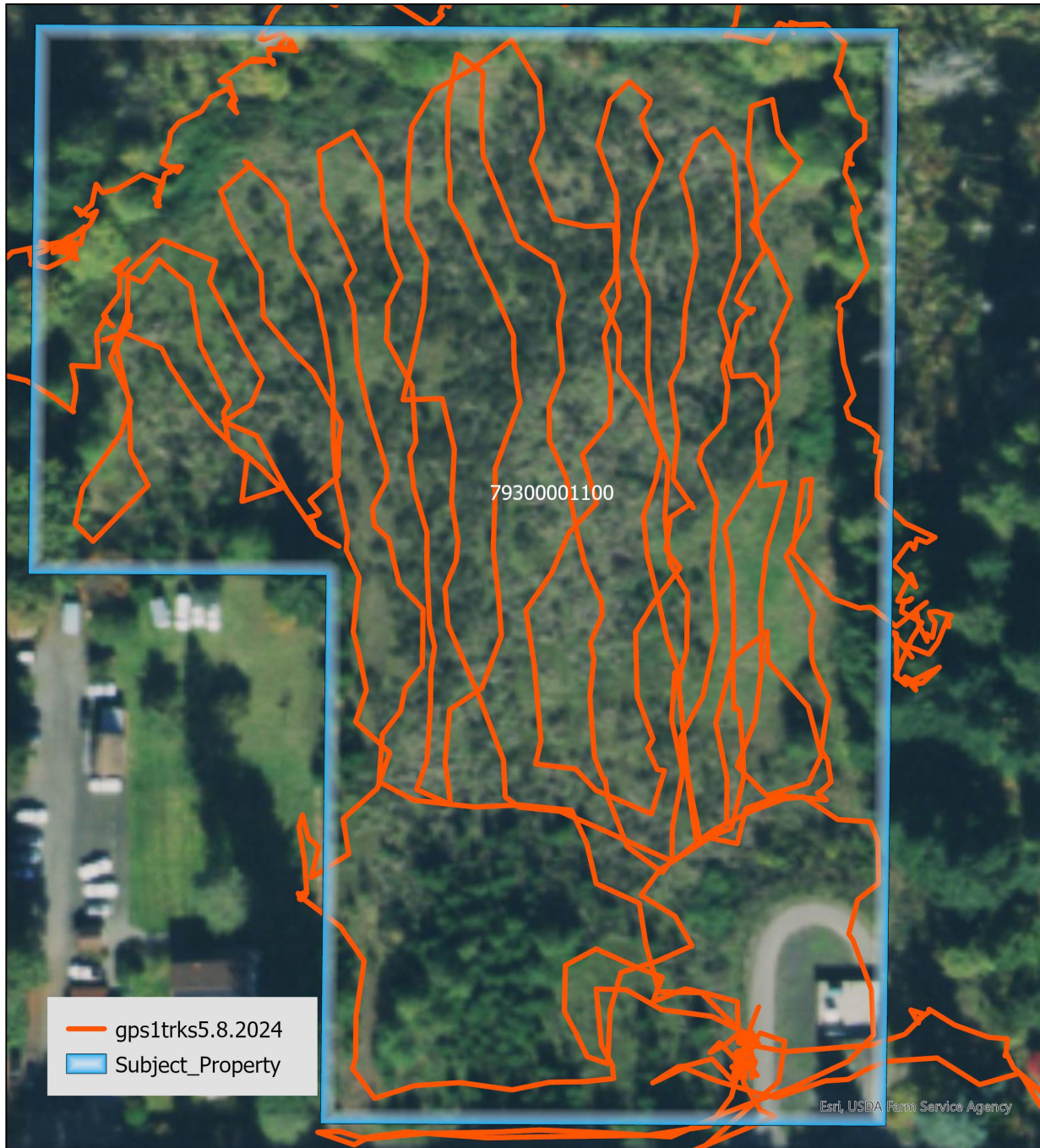




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Appendix B - Transect Map



 <p>Land Services Northwest 120 State Avenue NE PMB 190 Olympia, WA 98501</p>	<p>Appendix B Prairie Survey 5.8.24</p>	<p>0 37.5 75 150 Feet</p> 
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Appendix C - CAO Prairie Data Sheet

2019 Thurston County Critical Areas Ordinance (CAO) Prairie Screening Data Sheet

Parcel Number: 79300001100	CAO prairie criteria met?	Yes or <input checked="" type="radio"/> No
Property Owner: Tenino Land Company	Mima mounds present?	Yes or <input checked="" type="radio"/> No
Surveyor(s): Alex Callender	Oaks (<i>Quercus garryana</i>) present?	Yes or <input checked="" type="radio"/> No
Date: 5.8.24	Mature:	
Composition of Vegetation:	Sapling:	
	Seedling:	

X Target species	Class* (circle)
<i>Apocynum androsaemifolium</i>	1 2 3 4 5 N/A
<i>Balsamorhiza deltoidea</i>	Present / Absent
<i>Bistorta bistortoides</i>	Present / Absent
<i>Brodiaea coronaria</i>	1 2 3 4 5 N/A
<i>Camassia leichtlinii</i>	1 2 3 4 5 N/A
<i>Camassia quamash</i>	Present / Absent
<i>Carex densa</i>	Present / Absent
<i>Carex feta</i>	1 2 3 4 5 N/A
<i>Carex inops</i> ssp. <i>inops</i>	1 2 3 4 5 N/A
<i>Carex tumulicola</i>	1 2 3 4 5 N/A
<i>Carex unilateralis</i>	1 2 3 4 5 N/A
<i>Castilleja hispida</i>	1 2 3 4 5 N/A
<i>Castilleja levisecta</i>	Present / Absent
<i>Danthonia californica</i>	1 2 3 4 5 N/A
<i>Delphinium menziesii</i>	1 2 3 4 5 N/A
<i>Delphinium nuttallii</i>	1 2 3 4 5 N/A
<i>Deschampsia cespitosa</i>	1 2 3 4 5 N/A
<i>Deschampsia danthonioides</i>	1 2 3 4 5 N/A
<i>Dodecatheon hendersonii</i>	1 2 3 4 5 N/A
<i>Downingia yina</i>	1 2 3 4 5 N/A
<i>Erigeron speciosus</i>	1 2 3 4 5 N/A
<i>Eriophyllum lanatum</i>	Cover: ___ m ² N/A
<i>Eryngium petiolatum</i>	Present / Absent
<i>Festuca roemerii</i> (F. <i>idahoensis</i>)	1 2 3 4 5 N/A
<i>Fragaria virginiana</i>	Cover: 3 m ² N/A
<i>Fritillaria affinis</i>	1 2 3 4 5 N/A
<i>Hieracium scouleri</i>	1 2 3 4 5 N/A
<i>Hosackia pinnata</i> (<i>Lotus pinnatus</i>)	Present / Absent
<i>Koeleria macrantha</i> (K. <i>cristata</i>)	1 2 3 4 5 N/A
<i>Leptosiphon bicolor</i> (<i>Linanthus b.</i>)	1 2 3 4 5 N/A
<i>Lomatium bradshawii</i>	Present / Absent
<i>Lomatium nudicaule</i>	1 2 3 4 5 N/A
<i>Lomatium triternatum</i>	1 2 3 4 5 N/A
<i>Lomatium utriculatum</i>	Present / Absent

<i>Lupinus albicaulis</i>	1 2 3 4 5 N/A
<i>Lupinus lepidus</i> var. <i>lepidus</i>	1 2 3 4 5 N/A
<i>Lupinus polyphyllus</i>	1 2 3 4 5 N/A
<i>Micranthes integrifolia</i> (<i>Saxifraga i.</i>)	Present / Absent
<i>Micranthes oregana</i> (<i>Saxifraga o.</i>)	1 2 3 4 5 N/A
<i>Microseris laciniata</i>	Present / Absent
<i>Perideridia gairdneri</i>	1 2 3 4 5 N/A
<i>Plagiobothrys figuratus</i>	1 2 3 4 5 N/A
<i>Plectritis congesta</i>	Present / Absent
<i>Polemonium carneum</i>	Present / Absent
<i>Potentilla gracilis</i>	Present / Absent
<i>Ranunculus alismifolius</i>	1 2 3 4 5 N/A
<i>Ranunculus occidentalis</i>	Present / Absent
<i>Ranunculus orthorhynchus</i>	1 2 3 4 5 N/A
<i>Sericocarpus rigidus</i>	Present / Absent
<i>Sidalcea malviflora</i> var. <i>virgata</i>	Present / Absent
<i>Silene scouleri</i>	Present / Absent
<i>Sisyrinchium idahoense</i>	1 2 3 4 5 N/A
<i>Solidago missouriensis</i>	1 2 3 4 5 N/A
<i>Solidago simplex</i> (S. <i>spathulata</i>)	1 2 3 4 5 N/A
<i>Toxicoscordion venenosum</i> var. <i>venenosum</i> (<i>Zigadenus venenosus</i>)	1 2 3 4 5 N/A
<i>Trifolium willdenowii</i> (T. <i>tridentatum</i>)	1 2 3 4 5 N/A
<i>Triteleia grandiflora</i>	1 2 3 4 5 N/A
<i>Triteleia hyacinthina</i>	1 2 3 4 5 N/A
<i>Veratrum californicum</i>	1 2 3 4 5 N/A
<i>Veratrum viride</i>	1 2 3 4 5 N/A
<i>Viola adunca</i>	1 2 3 4 5 N/A
<i>Viola praemorsa</i> var. <i>nuttallii</i>	1 2 3 4 5 N/A

*Species Count Class:

1 = < 25

2 = 25 - 49

3 = 50 - 74

4 = 75 - 100

5 = >100

Prairie Plant Manual:

<https://www.thurstoncountywa.gov/planning/planningdocuments/cao-prairie-plant-manual-4.23.2018.pdf>

Non-CAO vegetation

Species or codons (i.e. "HYPRAD" for <i>Hypochaeris radicata</i>)	Notes
1 Hairy cats ear (<i>Hypochaeris radicata</i>)	
2 Himalayan blackberry (<i>Rubus armeniacus</i>)	
3 Ox eye daisy (<i>Leucanthemum vulgare</i>)	
4 Hairy brackenfern (<i>Pteridium aquilinum</i>)	
5 Trailing blackberry (<i>Rubus ursinus</i>)	
6 Scotch broom (<i>Cytisus scoparius</i>)	
7 Orchard Grass (<i>Dactylis glomerata</i>)	
8 Reed canary grass (<i>Phalaris arundinacea</i>)	
9 Hawkweed (<i>Hieracium</i> spp.)	
10 Dovefoot geranium (<i>Geranium molle</i>))	
11 Western dock (<i>Rumex occidentalis</i>)	
12 Bitter dock (<i>Rumex obtusifolius</i>)	
13 Common velvetgrass (<i>Holcus lanatus</i>)	
14 Red fescue (<i>Festuca rubra</i>)	
15 Common chickweed (<i>Stellaria media</i>)	

Prairie Habitat Criteria: If at any point at least three target species, totaling in general at least 25 plants each are encountered within about 5 meters of each other (WDFW 2015), the area in question meets the criteria to be established as occurrence of prairie. For certain plants such as WNHP rare plants (indicated here in bold), or species which serves as nectar or host plants for both TCB and either SCC or SGCN butterflies (indicated here with underline), presence is enough to meet prairie habitat criteria for such species, even if their count is less than 25 individual plants. CAO wet and dry prairie plant lists can be found in Tables 24.25-7 and 24.25-8, respectively. More info available at: <https://www.thurstoncountywa.gov/planning/Pages/hcp-prairie-review.aspx>

Mima mounds and oak habitat definitions can be found in TCC 24.03.010