

EnviroVector

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30 July 2024

Rob Rice
Rob Rice Homes
22011 NE 99th Street
Vancouver, WA 98682

Reference: Vista Views at Black Lake
Subject: Mazama Pocket Gopher Screening

Dear Client:

At your request, EnviroVector has prepared this report to document a Mazama pocket gopher screening on the subject property (**Figure 1; Table 1**).

Table 1. Subject Property

No#	Address	Parcel Number	Map Coordinates	Area
1	3717 49TH AVE SW	12832310700	Section 32 Township 18 Range 2W	50.01
2	3825 58TH LN SW	12832310800		5.00
2 Parcels	Total Size			55.01 acres

Permitting Jurisdiction is City of Tumwater.

1.0 INTRODUCTION

The Mazama pocket gopher is a Federally Threatened species protected under the Endangered Species Act and the City of Tumwater Code. Mazama pocket gopher screenings were performed by a qualified biologist certified by the US Fish and Wildlife Service (USFWS) for the purpose of satisfying the City of Tumwater (2018) Mazama Pocket Gopher Screening Protocol and the USFWS (2018) Mazama Pocket Gopher Screening Protocol (**Appendix E**).

2.0 METHODOLOGY

The Mazama pocket gopher screening was performed per City of Tumwater recommendations for one (1) requested site visit to verify the findings of previous gopher screenings on the subject property (**Appendix E**). The screening was performed within the USFWS prescribed survey window (June 1 through October 31).

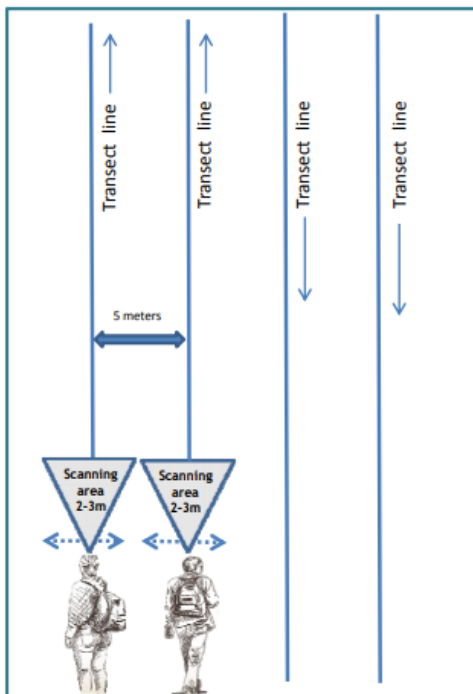
In compliance with the City of Tumwater (2018) Mazama Pocket Gopher Screening Protocols and the USFWS (2018) Mazama Pocket Gopher Screening Protocol:

- The study has occurred during the prescribed work window of June 1 to October 31.
- A qualified biologist performed the screenings that has been trained and certified by the USFWS.
- The entire property was evaluated
- Data was recorded on Mazama gopher field forms and provided in **Appendix F**.
- The areas of the property covered under the screening survey is illustrated in **Figure 2**.
- The ground was easily visible.

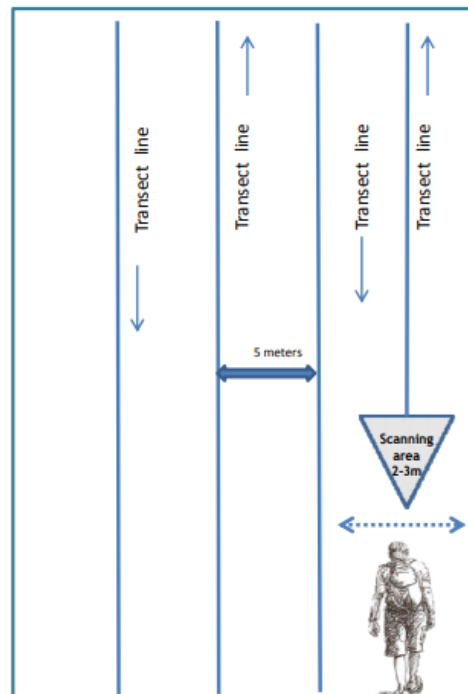
The site evaluation was conducted utilizing USFWS recommended protocol for one (1) surveyor (**Insert 1**). The search pattern had been performed along five (5) meter transects, including brushy and treed areas, examined for any evidence of mounding activity created by the Mazama pocket gopher.

Insert 1. Transect Illustrations

Protocol for two or more surveyors



Protocol for an individual surveyor



The detailed field methodology is in compliance with the City of Tumwater Code (2022) Site Inspection Protocol and Procedures: Mazama Pocket Gopher as follows:

1. The survey crew orients themselves with the layout of the property using aerial maps and strategizes their route for walking through the property.
2. Start GPS to record survey route.
3. Walk the survey transects methodically, slowly walking a straight line and scanning an area approximately two to three (2-3) meters to the left and right as you walk, looking for mounds. Transects should be no more than five (5) meters apart when conducted by a single individual.
4. If the survey is performed by a team, walk together in parallel lines approximately five (5) meters apart while you are scanning left to right for mounds.
5. At each mound found, stop, and identify it as an MPG or mole mound. If it is an MPG mound, identify it as a singular mound or a group (3 mounds or more) on a data sheet to be submitted to the County.
6. Record all positive MPG mounds, likely MPG mounds, and MPG mound groups in a GPS unit that provides a date, time, georeferenced point, and other required information in County GPS data instruction for each MPG mound. Submit GPS data in a form acceptable to the County.
7. Photograph all MPG mounds or MPG mound groups. At a minimum, photograph MPG mounds or MPG mound groups representative of MPG detections on site.
8. Photos of mounds should include one (1) that has identifiable landscape features for reference. In order to accurately depict the presence of gopher activity on a specific property, the following series of photos should be submitted to the County:
 - a. At least (1) one up-close photo to depict mound characteristics
 - b. At least one (1) photo depicting groups of mounds as a whole (when groups are encountered).
 - c. At least one (1) photo depicting gopher mounds with recognizable landscape features in the background, at each location where mounds are detected on a property
 - d. Photos can be taken with the GPS unit or a separate, camera, preferably a camera with locational features (latitude, longitude)
 - e. Photo point description or noteworthy landscape or other features to aid in relocation. Additional photos to be considered
 - f. The approximate building footprint location from at least two (2) cardinal directions.
 - g. Landscape photos to depict habitat type and in some cases to indicate why not all portions of a property require gopher screening.
9. Describe and/or quantify what portion and proportion of the property was screened, and record your survey route and any MPG mounds found on either an aerial or parcel map.
10. If MPG mounds are observed on a site, that day's survey effort should continue until the entire site is screened and all mounds present identified, but additional site visits are not required.

11. In order for the County to accurately review Critical Area Reports submitted in lieu of County field inspections the information collected in the field (GPS, data sheets, field notes, transect representations on aerial, *etc.*) shall be filed with the County. GPS information shall be submitted in a form approved by the County.

Soils known to be associated with the Mazama pocket gopher are listed in **Insert 2**.

Insert 2. Mazama pocket gopher soils

Table 1. Soils known to be associated with Mazama pocket gopher occupancy.

Mazama Pocket Gopher Preference	Soil Type
<p>More Preferred (formerly High and Medium Preference Soils)</p>	<p>Nisqually loamy fine sand, 0 to 3 percent slopes Nisqually loamy fine sand, 3 to 15 percent slopes Spanaway-Nisqually complex, 2 to 10 percent slopes Cagey loamy sand Indianola loamy sand, 0 to 3 percent slopes Spanaway gravelly sandy loam, 0 to 3 percent slopes Spanaway gravelly sandy loam, 3 to 15% slopes</p>
<p>Less Preferred (formerly Low Preference Soils)</p>	<p>Alderwood gravelly sandy loam, 0 to 3 percent slopes Alderwood gravelly sandy loam, 3 to 15 percent slopes Everett very gravelly sandy loam, 0 to 3 percent slopes Everett very gravelly sandy loam, 3 to 15 percent slopes Indianola loamy sand, 3 to 15 percent slopes Kapowsin silt loam, 3 to 15 percent slopes McKenna gravelly silt loam, 0 to 5 percent slopes Norma fine sandy loam Norma silt loam Spana gravelly loam Spanaway stony sandy loam, 0 to 3 percent slopes Spanaway stony sandy loam, 3 to 15 percent slopes Yelm fine sandy loam, 0 to 3 percent slopes Yelm fine sandy loam, 3 to 15 percent slopes</p>

3.0 BACKGROUND INFORMATION

3.1 Thurston County Geodatabase Soils

Four (4) soil types were identified on the subject property (**Table 2**). Cagey loamy sand is classified as a “More preferred” gopher soil (**Appendix B & C; Table 2**). Three (3) other ‘less preferred’ gopher indicator soils are mapped on the subject property. One (1) non-gopher indicator soil is mapped on the northwestern portion of the subject property.

Table 2. Summary of Soil Preference

Soil Unit	Gopher Soil	Preference	Comments
Mukilteo muck, drained	No	N/A	Located on northwestern corner of subject property
Cagey Loamy Sand	Yes	More Preferred	Located on northern and southeastern corner of subject property
Norma Silt Loam	Yes	Less Preferred	Located on southern and northeastern portions of the subject property
McKenna Gravelly Silt Loam, 0 to 5% slopes	Yes	Less Preferred	Located on the southwestern corner of the subject property.

3.2 WDFW Priority Habitats and Species (PHS) Database

No Mazama pocket gophers have been mapped on the subject property by the Washington Department of Fish and Wildlife (WDFW) Priority Habitat Species (PHS) database (**Appendix D**). However, the Mazama pocket gopher is mapped three thousand (3,000) feet southeast of the subejct property.

Two (2) wetlands are mapped onsite and in the immediate vicinity of the site.

4.0 FIELD RESULTS

4.1 Mazama Pocket Gopher Site Evaluation

No mound formations exhibiting characteristics created by the Mazama pocket gopher have been identified on the subject property during the Mazama pocket gopher screenings. No crescent-shaped gopher mounds with plugged, diagonal tunnels to the surface have been identified on the subject property (**Appendices A & F**). The site screening focused on the entire parcel.

Mounds created by the Mazama pocket gopher: 1) are crescent or oddly-shaped, 2) contain a plugged tunnel opening that extends diagonally underground from the mound edge, 3) exhibit a fine texture, and are 4) typically in a scattered distribution.

Mole mounds have centrally-located tunnel entrances that extend vertically below the surface, blocky texture, an in-line distribution pattern, and have a conical shape.

Table 3. Summary of Results

Site Visit	Date of Visit	Gopher Occurrence Observed	Comments
1st	29 July 2024	No	No mounds characteristic of that created by the Mazama pocket gopher have been identified on the subject property

4.2 Mazama Pocket Gopher Habitat Evaluation

Conditions on the subject property have not changed since the EnviroVector 2022 and 2023 gopher screenings.

5.0 CONCLUSION

This Mazama pocket gopher summary report was prepared to satisfy the City of Tumwater Mazama pocket gopher screening requirements and to comply with the City of Tumwater (July 2018) Mazama Pocket Gopher Screening Protocol. The site evaluations were performed on 16 June 2023, 16 July 2023, and 18 August 2023. No mounds characteristic of the Mazama pocket gopher were identified on the subject property.

Gopher indicator soils are mapped on almost the entire subject property by Thurston County database. However, the entire subject property is heavily graded by a large number of livestock. The vegetation community is dominated by European pasture grasses and other non-native plant species. No Mazama pocket gophers are mapped within three thousand ($\leq 3,000$) feet by the WDFW PHS database (**Appendix D**).

No mound formations exhibiting characteristics created by the Mazama pocket gopher have been identified on the subject property during the Mazama pocket gopher screenings. The site screening focused on the entire parcel.

If you have any questions or require further services, you can contact me at (360) 790-1559.

Sincerely,



Curtis Wambach, M.S.
Senior Biologist and Principal
EnviroVector

FIGURES

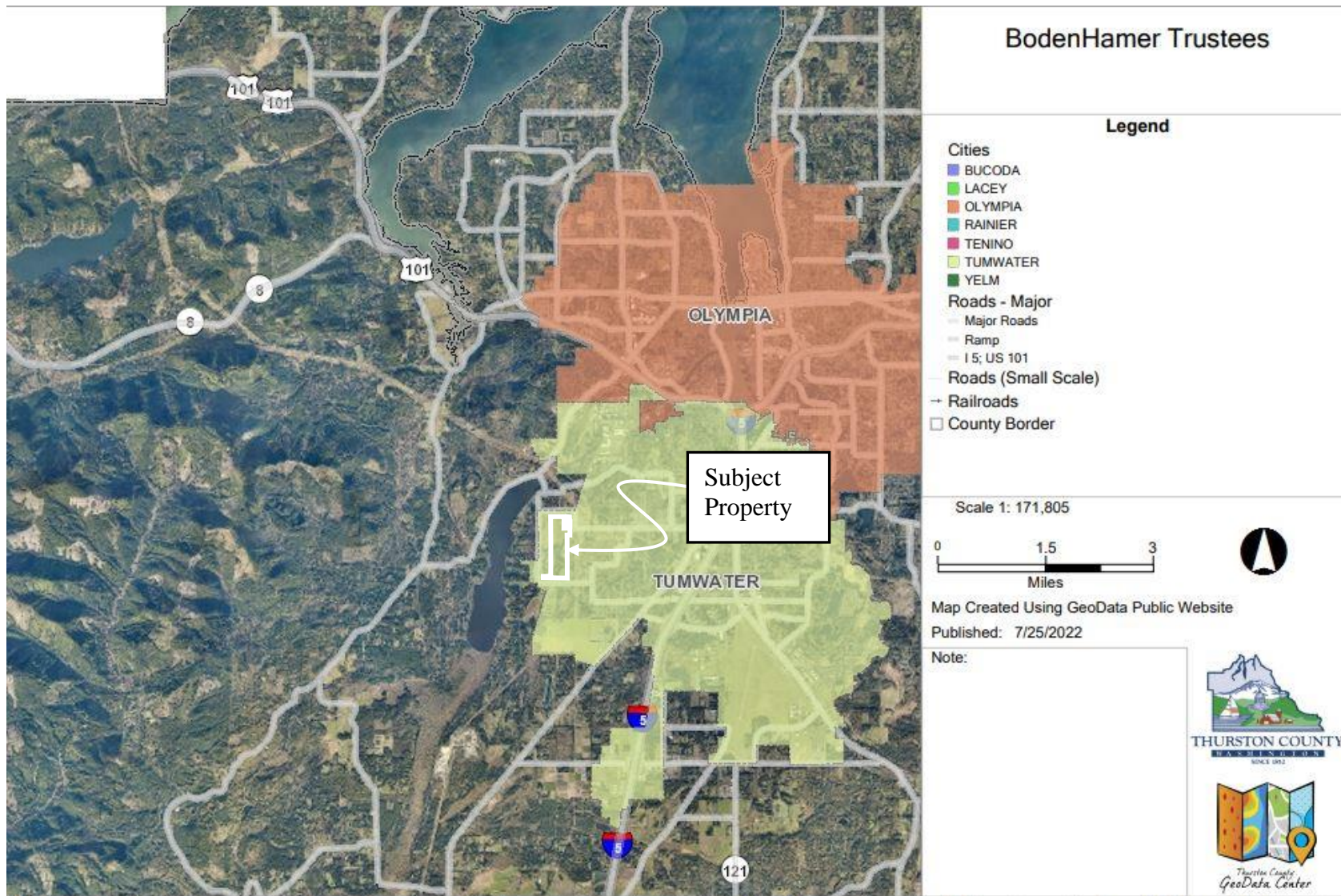


Figure 1. Vicinity Map

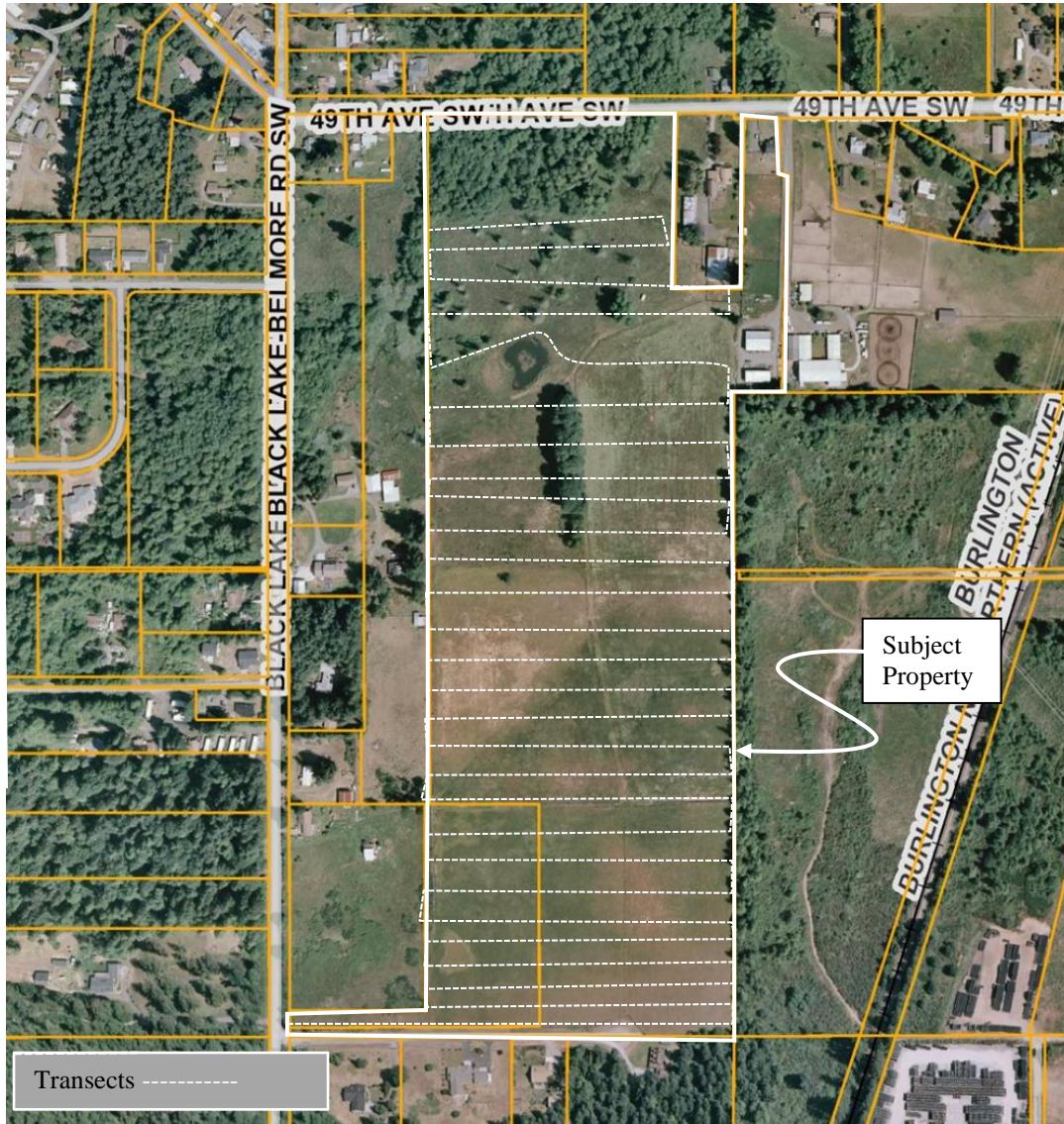


Figure 2. Transect Screening lines

Mazama Pocket Gopher Screening Protocol

APPENDIX A

Photo Documentation

First Gopher Screening (29 July 2024)



Photo 1. Short grass pasture on overcast day



Photo 2. Short grass pasture on overcast day



Photo 3. Short grass pasture on overcast day



Photo 4. Short grass pasture on overcast day



Photo 5. Short grass pasture on overcast day



Photo 6. Short grass pasture on overcast day



Photo 7. Weathered mole mound, central-vertical tunnel



Photo 8. Short grass pasture on overcast day



Photo 10. Livestock in pasture



Photo 11. Livestock in pasture



Photo 12. Delineated wetland in pasture

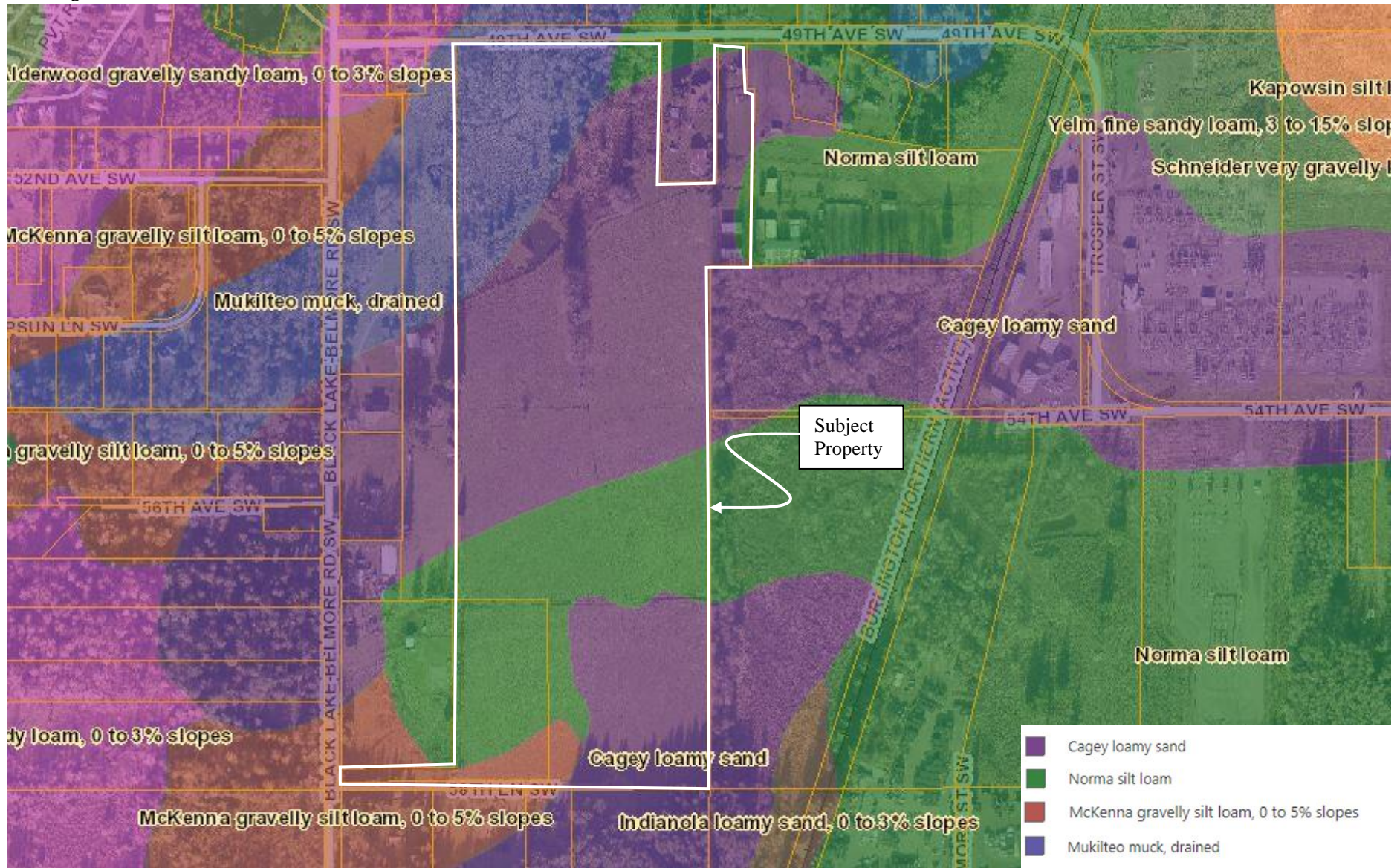


Photo 13. Pasture at access road

APPENDIX B

Thurston County Geodatabase

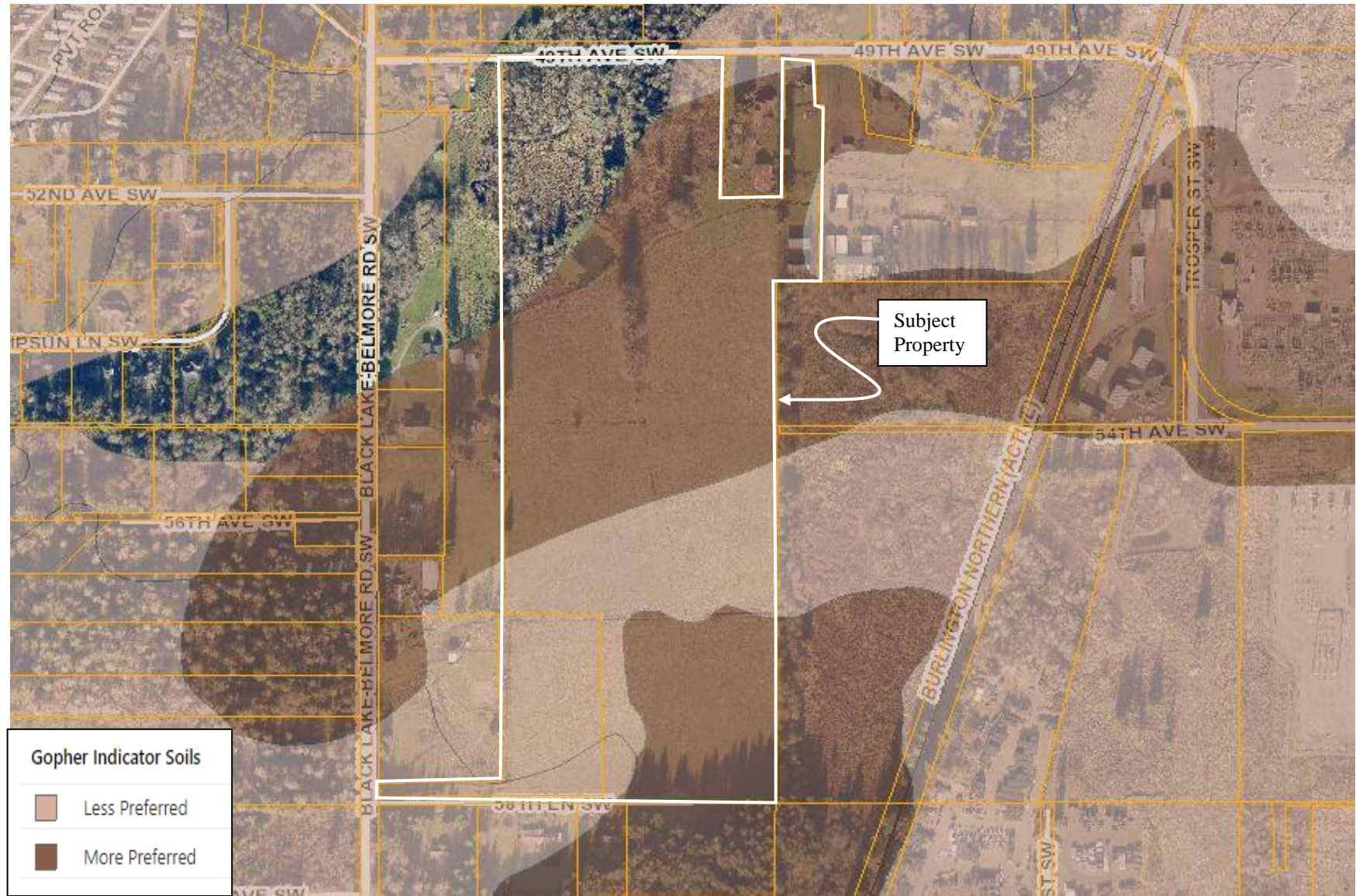
Soils



APPENDIX C

Thurston County Geodatabase

Gopher Indicator Soils

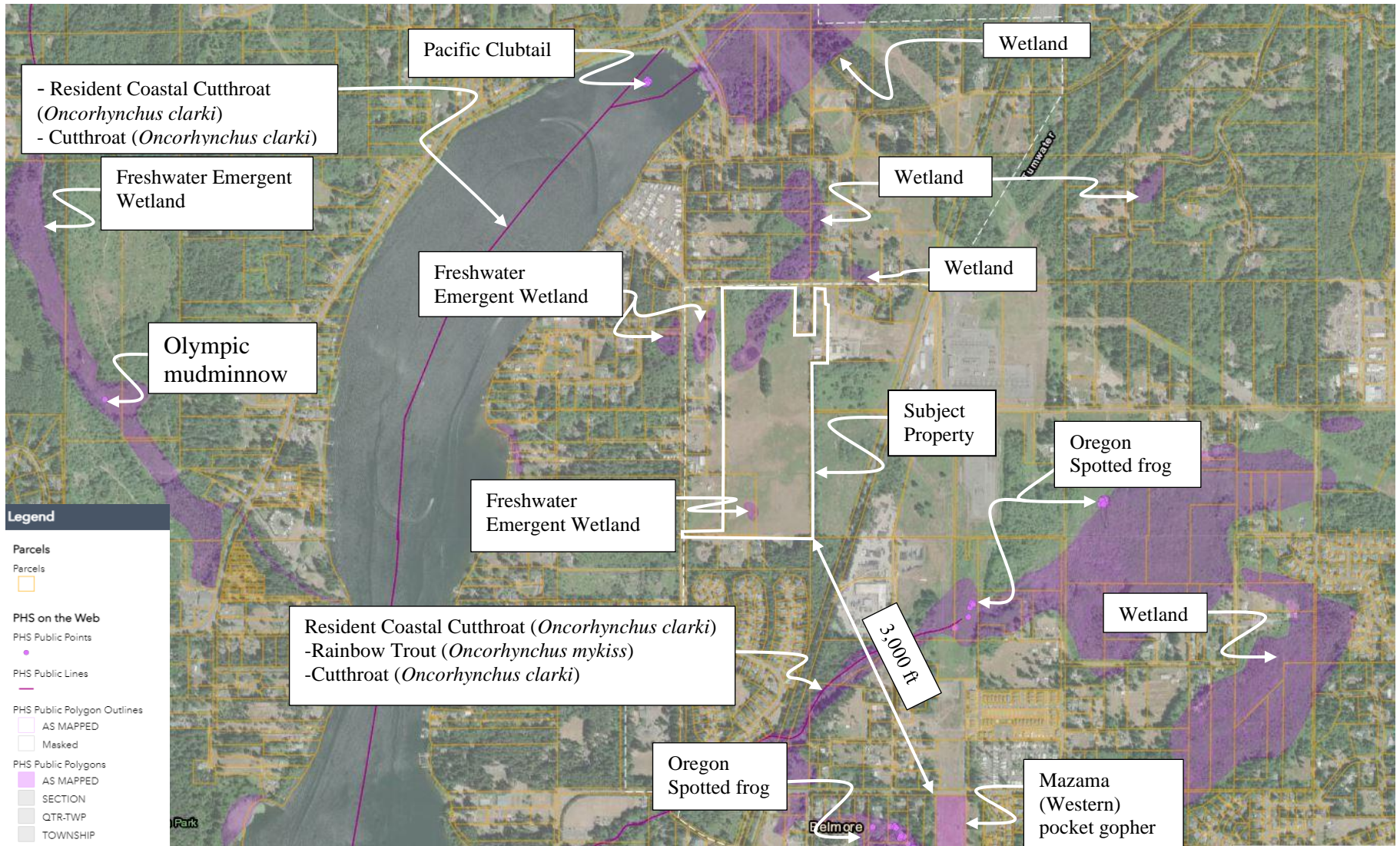


APPENDIX D

**Washington Department of
Fish and Wildlife**

Priority Habitat Species (PHS)

Database



APPENDIX E

City of Tumwater


Mazama Pocket Gopher

Screening Protocol



COMMUNITY DEVELOPMENT DEPARTMENT
ADMINISTRATIVE DETERMINATION

TOPIC: Mazama Pocket Gopher Screening

APPROVED:  DATE: 7/25/18
Michael Matlock, AICP
Community Development Director

BACKGROUND: The Mazama Pocket Gopher (MPG) became a federally listed endangered species in April 2014. This memo addresses the City regulatory structure. The Endangered Species Act (ESA) is a separate regulatory structure from the Growth Management Act, the State statute the City does implement, so compliance with City regulations does not necessarily mean an applicant complies with the ESA. While the City routinely addresses questions from property owners on how to comply with its local development regulations, it does not do so with respect to the ESA.¹ ESA compliance is the property owner's responsibility.

FINDINGS: In implementing the City's critical areas ordinance (CAO), and based on analysis prepared by qualified professionals, staff have found that projects in certain areas and with certain features lack gopher habitat, so do not require CAO review by a qualified professional. While the CAO governs these issues, the below summarizes what staff have found to date.

DETERMINATION: Based on the findings above, Tumwater summarizes assessment findings for MPG presence as follows:

1. **Geographic** – Due to lack of habitat, no properties in the City north of Troser Road have required CAO review.
2. **Vegetative Cover** – Project Sites, parcels, or portions of these sites with 30% or greater forested cover have not required CAO review, although where there are adjacent unforested and undeveloped lots exceeding 7,600 square feet (SF) in area, CAO review may be needed.
3. **Project Use Level** –
 - a. Single-family, manufactured homes, and duplexes for lots 7,600 SF or less
 - 1) New or additions to single-family, manufactured homes, and duplexes – CAO review has typically not been required on existing lots 7,600 SF

¹ For land owners seeking guidance on ESA compliance, while the City cannot assist, see USFWS Memorandum, Guidance on Trigger for an Incidental Take Permit Under Section 10(a)(1)(B) of the Endangered Species Act Where Occupied Habitat or Potentially Occupied Habitat is Being Modified, issued April 26, 2018.

or less in size. Unforested and undeveloped lots exceeding 7,600 SF may require CAO review.

- 2) Developed lots surrounded by existing development (homes, streets, storm ponds, sidewalks, etc.) that are of a similar size have not required CAO review. This would not exclude sites on the periphery areas where adjacent lands are not developed at an urban density level.
- 3) Single-family lots vested under RCW 58.17 and/or TMC 15.44.040 will likely not require CAO review.

b. Commercial/Industrial/Institutional

- 1) New or additions to buildings proposed in areas with 30% or greater forested coverage, existing impervious surfaces or significantly disturbed pervious areas (i.e. evidence of compacted gravel, formal landscape areas or other scenarios that would exclude the proposed developed area as being defined as habitat) have typically not required CAO review.

4. **Approved United States Fish and Wildlife Service (USFWS)**

Avoidance/Mitigation Strategy – Any projects that have consulted with USFWS and have a documented avoidance/mitigation strategy that is acceptable to USFWS can typically proceed with normal permitting.

5. **Site Screening** – Properties may be screened by a qualified professional. Alternately, USFWS may screen properties by arrangement between the property owner and USFWS. At least two screenings, no less than 30 days apart, between June 1 and October 31, are consistent with best available science to determine the presence or absence of MPG.

PRIOR GUIDANCE: This Administrative Determination supersedes and replaces the City's prior Administrative Determination on Mazama Pocket Gopher Screening Protocol dated October 31, 2017.

APPEAL: This code determination shall become effective on the above date. Any person affected by this determination may appeal this decision to the Tumwater Hearing Examiner pursuant to Chapter 18.62 of the Tumwater Municipal Code.

APPENDIX F

Mazama Pocket Gopher Screening Field Forms

1st Visit

<p>Site Name and Parcel #</p>	<p>Parcel #: 12832310700, 12832310800</p> <p>Project #: _____</p> <p>Site/Landowner: <u>Vista Views at Black Lake</u></p>
<p>How were the data collected? (circle the method for each)</p>	<p>Transect: Trimble <u>Garmin</u> Aerial</p> <p>Mounds <u>Trimble</u> Garmin Aerial</p> <p>Notes: _____</p>
<p>Field Team Personnel: (Indicate all staff present, CIRCLE who filled out form)</p>	<p>Name: Curtis Wambach</p> <p>Name:</p> <p>Name:</p>
<p>Others onsite (name/affiliation)</p>	
<p>Site visit # (CIRCLE all that apply)</p>	<p><u>1st</u> 2nd 3rd Unable to screen</p> <p>Notes: One out of three screening visits</p>
<p>Do onsite conditions preclude the need for further visits?</p>	<p>Yes <u>No</u></p> <p>Dense woody cover that encompasses the entire site (trees/shrubs) that appears to preclude any potential MPG use.</p> <p>Impervious Compacted Graveled Flooded</p> <p>Other _____ Notes:</p>
<p>Describe visibility for mound detection:</p>	<p>Poor Fair <u>Good</u> Notes:</p>
<p>Request mowing? (CIRCLE and DESCRIBE WHERE MOWING IS NEEDED and SHOW ON AERIAL PHOTO</p>	<p>Yes <u>No</u> N/A Notes: Site was already mowed two weeks prior</p>

Mounds observed over the whole site are characteristic of: Quantify or describe amount of each type and approx. # of mounds <i>Group = 3 mounds or more</i>	MPG Mounds	Likely MPG Mounds	Indeterminate	Likely Mole Mounds	Mole Mounds				
					15				
No MPG mounds (circle)									
MPG mounds in GPS? (CIRCLE and DESCRIBE) If MPG mounds present, entered in GPS?	None	All	Most	Some	Notes:				
Does woody vegetation onsite match aerial photo?	Yes	No	N/A			Yes No N/A			
What portion(s) of the property was screened? (CIRCLE and DESCRIBE)	All Part - describe and show on parcel map/aerial: Site consisted of maintained lawn and no structural building on site.								
Notes -	Describe, and show on parcel map/aerial if applicable:								
Team reviewed and agreed to data recorded on form? (CIRCLE, and EXPLAIN if "No")	Yes No Reviewed by initials: <u>CW</u> Notes:								