OSTROMS MUSHROOM FARM

CITY OF LACEY, WASHINGTON

MAZAMA POCKET GOPHER SCREENING REPORT

Prepared By:

Curtis Wambach, M.S.
Senior Biologist and Principal

EnviroVector
OPTIMIZE USABLE LAND

30 August 2022

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30 August 2022

Jeff Pantier
Senior Vice President
Hatton Godat Pantier
3910 Martin Way E, Ste B
Olympia, WA 98506

Reference: Ostrom's Mushroom Farm
Subject: Mazama Pocket Gopher Screening Report

Dear Mr. Pantier:

At your request, EnviroVector has prepared this report to satisfy the City of Lacey requirements for Mazama pocket gopher screenings on the subject property (**Table 1; Figure 1**).

Table 1. Parcels Comprising Subject Property

No#	Address	Parcel Number	Map Coordinates	Area
1	8322 STEILACOOM RD SE	11814140500	Section 23 Township 18 Range 1W	33.86
1 Parcel	Total Size			33.86 acres

Permitting jurisdiction is the City of Lacey.

1.0 INTRODUCTION

1.1 Purpose

The Mazama pocket gopher is a Federally Threatened species protected under the Endangered Species Act and the City of Lacey Code. Mazama pocket gopher screenings were performed by a qualified biologist certified by the US Fish and Wildlife Service (USFWS) (**Appendix E**).

A Mazama pocket gopher screening is necessary to comply with City of Lacey Code and the Endangered Species Act.

1.2 Gopher Screening Dates

Mazama pocket gopher screenings occurred on 15 June 2022, 15 July 2022, and 24 August 2022.

2.0 METHODOLOGY

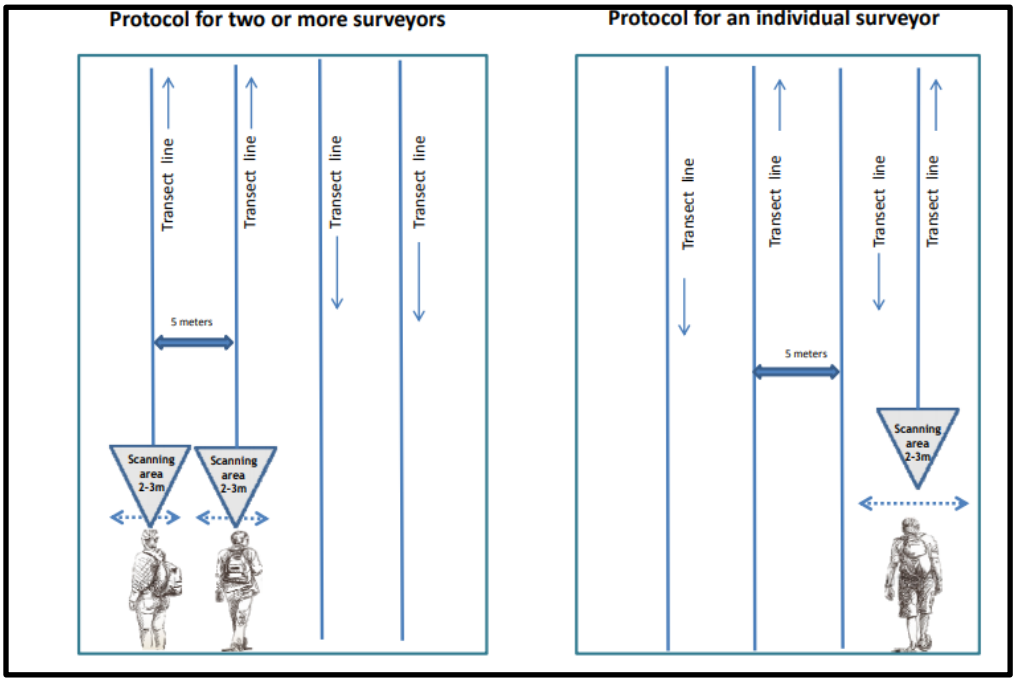
Mazama pocket gopher screenings were performed per City of Lacey recommendations for three (3) site visits in compliance with the USFWS (2018) Site Inspection Protocol and Procedures: Mazama Pocket Gopher (**Appendix E**). The screenings were preformed within the USFWS prescribed survey window (June 1st through October 31st)

In compliance with USFWS (2018) Mazama Pocket Gopher Screening Protocol Checklist:

- 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, not just the project footprint, other than densely forested areas.
- The site visited three (3) times at least thirty (30) days apart for properties containing preferred gopher soils.
- Data was recorded on datasheets 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



The detailed field methodology is in compliance with the USFWS (2018) Mazama Pocket Gopher Screening Protocol Checklist:

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 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 5 meters apart while you are scanning left to right for mounds.
5. At each mound found, stop and identify it as a MPG or mole mound. If it is a MPG mound, identify it as a singular mound or a group (3 mounds or more) on a data sheet to be submitted to the City
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 GPS data instruction for each MPG mound.
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 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 City:
    a. At least one up-close photo to depict mound characteristics
    b. At least one photo depicting groups of mounds as a whole (when groups are encountered).
    c. At least one 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 City to accurately review Critical Area Reports field notes shall be incorporated into the gopher screening report.

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
More Preferred (formerly High and Medium Preference Soils)	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
Less Preferred (formerly Low Preference Soils)	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

3.0 BACKGROUND INFORMATION

3.1 Thurston County Geodatabase Soils

Three (3) soil types are mapped on the subject property by Thurston County Geodata Center database (**Appendix B & C; Table 2**). One (1) "More Preferred" gopher indicator soil is mapped over the majority of the subject property.

Table 2. Summary of Soil

Soil Unit	Gopher Soil	Preference	Comments
Everett very gravelly sandy loam, 3 to 15% slopes	Yes	Less Preferred	Mapped on the Northwestern corner of the subject property
Spanaway gravelly sandy loam, 0 to 3% slopes	Yes	More Preferred	Mapped on the majority of the subject property
Spanaway gravelly loam	Yes	Less Preferred	Mapped on southeastern 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 has been mapped offsite approximately seven hundred seventy (770) feet southwest of the subject property.

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 indicated gopher screenings. The subject property consists of a closed and vacated mushroom farm with large buildings, hard surface, large area of stacked pallets, and other structures associated with mushroom farm operations. The site screenings focused on areas containing grass, edges of internal roads and parking, on the periphery of the site outside of the fence line, and around existing buildings.

Although the majority of the site is mapped as 'preferred gopher soils', these areas contain hard surfaces, buildings, stacks of pallets, settling ponds, and other structures associated with mushroom farm operations that are expected to discourage pocket gopher habitation. Dense forested habitat also occurs over preferred gopher soils.

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	15 June 2022	No	No mounds exhibiting characteristics created by the Mazama pocket gopher have been identified on the subject property
2nd	15 July 2022	No	
3rd	24 August	No	

4.2 Mazama Pocket Gopher Habitat Evaluation

Although the majority of the subject property is mapped as "more preferred" gopher soils, buildings, internal roads, hard surface, settling ponds, and paved parking lots occupy those areas (**Appendix A, Photos 1, 3, 6, 11, 20, 21, & 24; Appendix B; Appendix C**). Areas of European lawn grasses cover compressed angular rock and cobbles, which appear severely disturbed on historical aerial photographs (**Appendix A, Photos 2, 5, 6, 11-15, 23, & 25**). Undisturbed soils no longer occur on the subject property outside of the forested areas on the periphery.

Because of hard surface and severely disturbed soils covered by compressed rock, future habitation or occupancy by the Mazama pocket gopher is unlikely.

5.0 CONCLUSION

This Mazama pocket gopher summary report was prepared to satisfy the City of Lacey Mazama pocket gopher screening requirements and to comply with the USFWS (2018) Mazama Pocket Gopher Screening Protocol Checklist. The on-site gopher screenings were performed on 15 June 2022, 15 July 2022 and 24 August 2022. No mounds exhibiting characteristics associated with the Mazama pocket gopher were identified on the subject property.

Although the majority of the subject property is mapped as "more preferred" gopher soils, buildings, internal roads, hard surface, settling ponds, and paved parking lots occupy those areas. Areas of European lawn grasses cover compressed angular rock and cobbles, which appear severely disturbed on historical aerial photographs. Undisturbed soils no longer occur on the subject property outside of the forested areas on the periphery. A slope of rocky fill material occurs at the edge of the forested area on the northern portion of the property, indicating that the grassy areas may sit on top of as much as six (6) feet or more of fill on the northern portion of the property.

Because of hard surface and severely disturbed soils covered by compressed rock, future habitation or occupancy by the Mazama pocket gopher is unlikely.

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

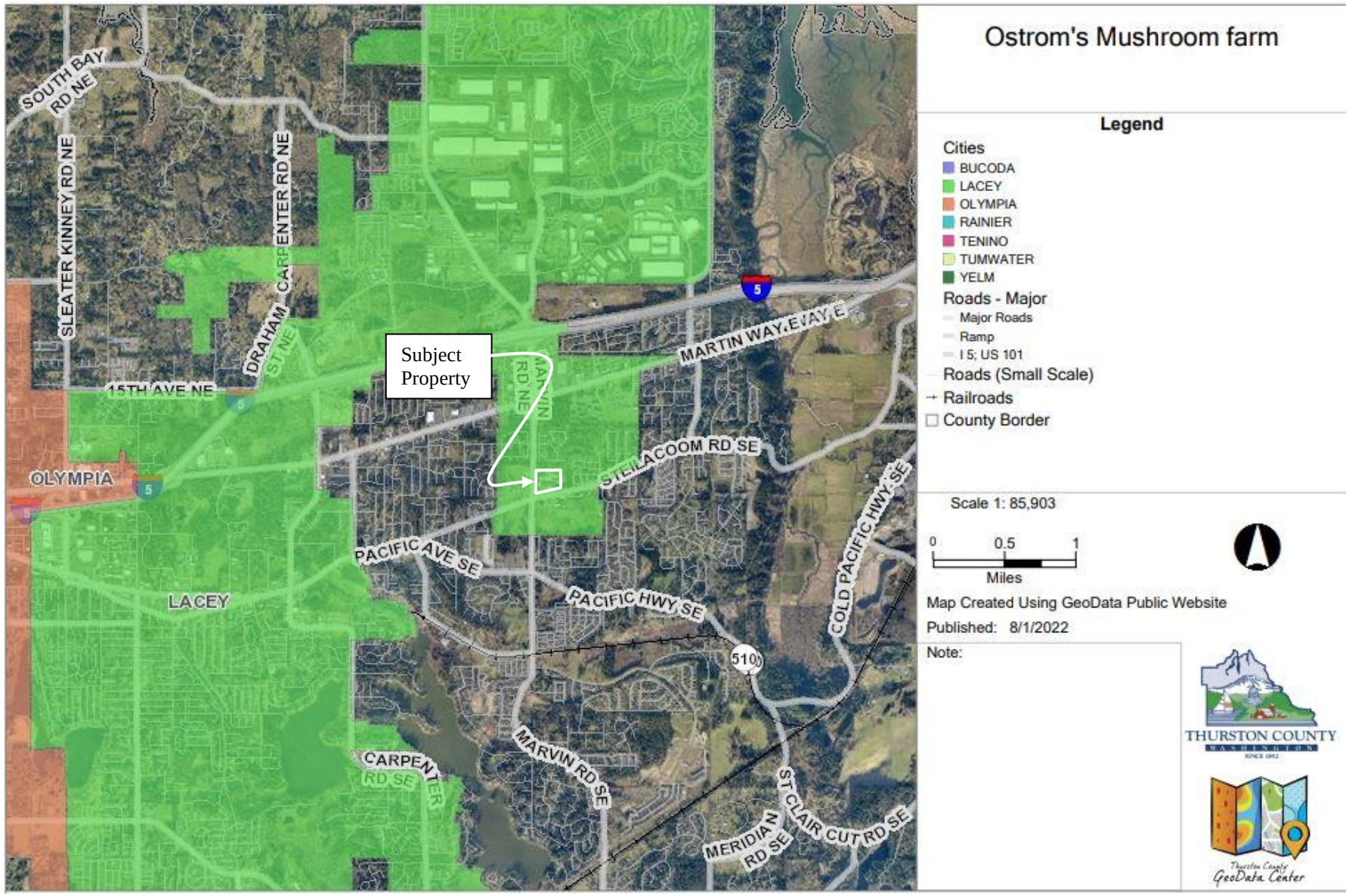


Figure 1. Vicinity Map

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Figure 2. Existing Conditions and Screening Transects

APPENDIX A

Photo Documentation

1st Gopher Screening (15 June 2022)

Photo 1. Paved & graveled internal roads

Photo 2. Grass growing over compressed rock

Photo 3. Large concrete settling pond

Photo 4. Grass growing on compressed rock

Photo 5. Grass growing on compressed rock

Photo 6. Grass growing on compressed rock

Photo 7. Himalayan blackberry dominates forested understory

Photo 8. Poison hemlock dominates forested understory in areas

Photo 9. Gravelly surface along internal road

Photo 10. Oak forests

2nd Gopher Screening (15 July 2022)

Photo 11. Abandoned buildings

Photo 12. Grass growing on compressed rock

Photo 13. Grass growing on compressed rock

Photo 14. Grass growing on compressed rock

Photo 15. Grass growing on compressed rock

Photo 16. Forested areas on northern property line

Photo 17. Forested area along eastern property line

Photo 18. Mowed poison hemlock

3rd Gopher screening (24 August 2022)

Photo 19. Former company sign by main gate

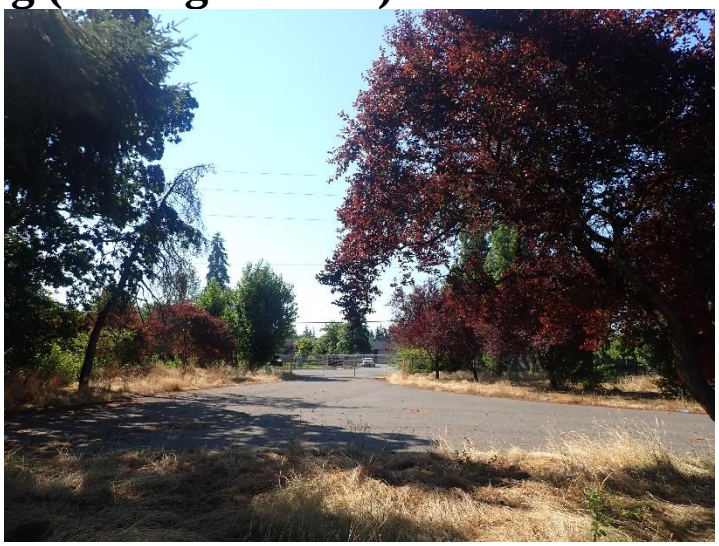


Photo 20. Gate entrance

Photo 21. Large concrete parking lot on southern part of property

Photo 22. Old mole mound with central tunnel

Photo 23. Grass growing on compressed rock

Photo 24. Large concrete parking lot on southern part of property

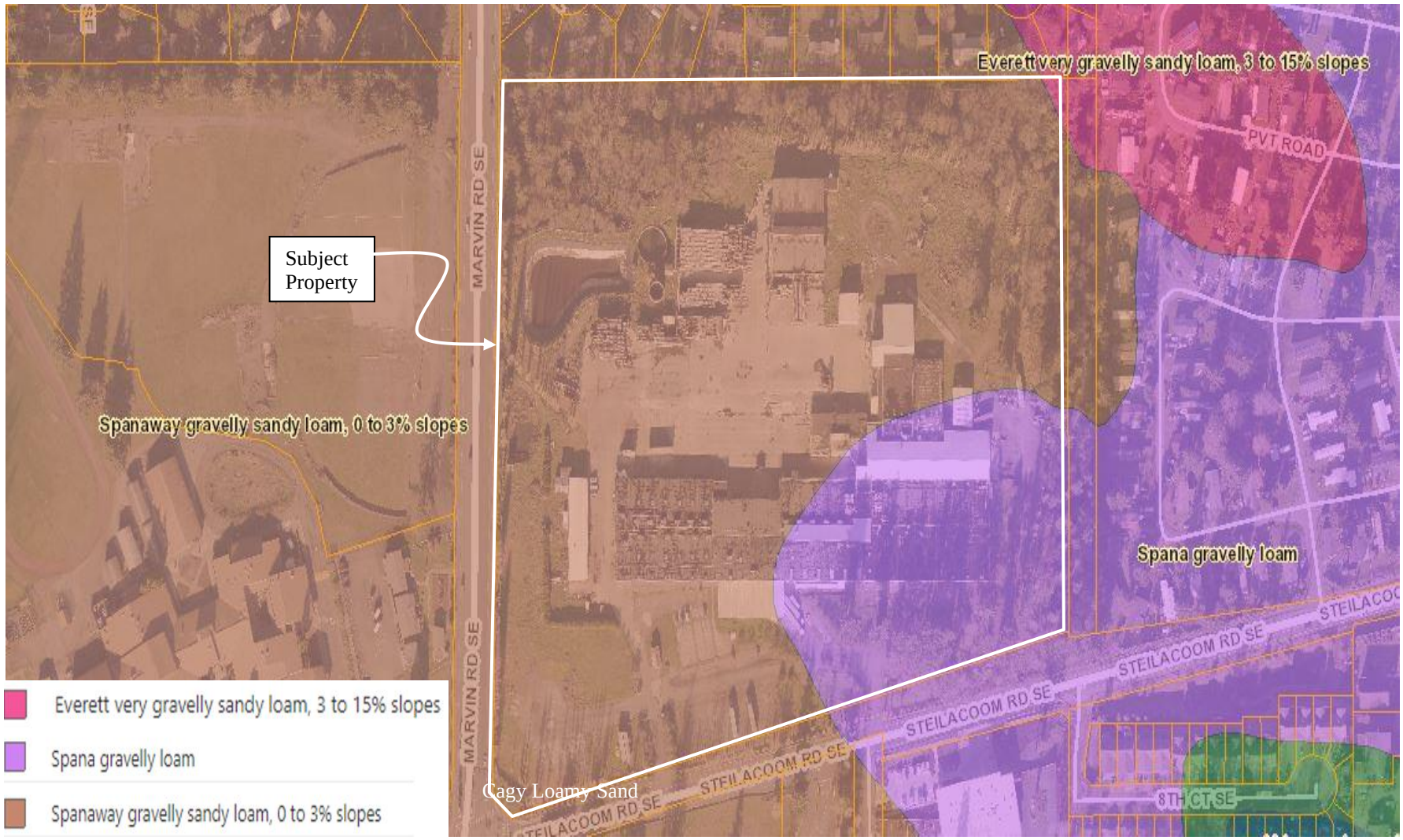
Photo 25. Grass growing on compressed rock

Photo 26. Forested areas on property periphery

APPENDIX B

Thurston County Geodatabase

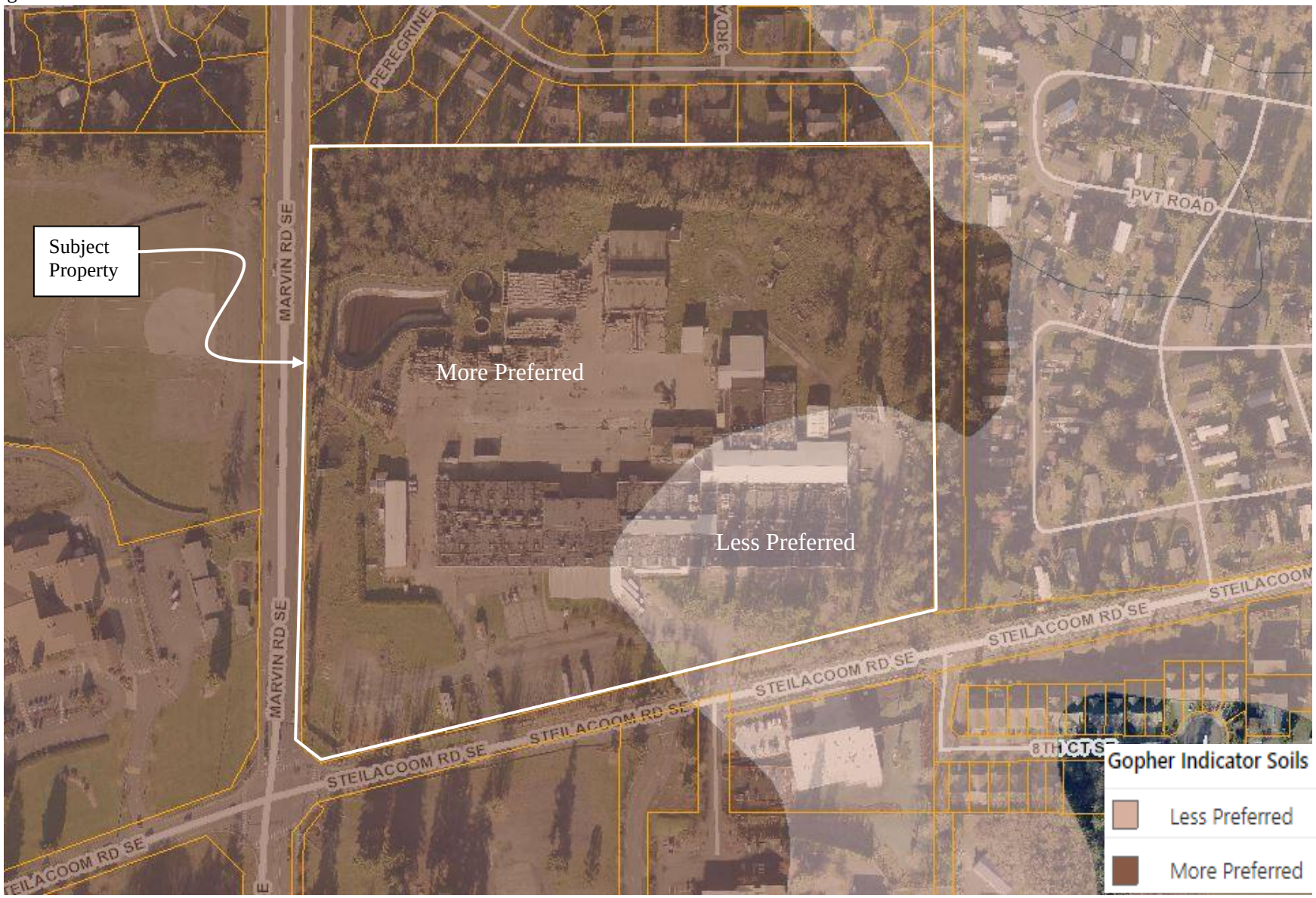
Soils


Subject Property
Everett very gravelly sandy loam, 3 to 15% slopes
Spanaway gravelly sandy loam, 0 to 3% slopes
Spana gravelly loam
Cagy Loamy Sand
MARVIN RD SE
PVT ROAD
STEILACOOM RD SE
8TH CT SE
Everett very gravelly sandy loam, 3 to 15% slopes
Spana gravelly loam
Spanaway gravelly sandy loam, 0 to 3% slopes

APPENDIX C

Thurston County Geodatabase

Gopher Indicator Soils

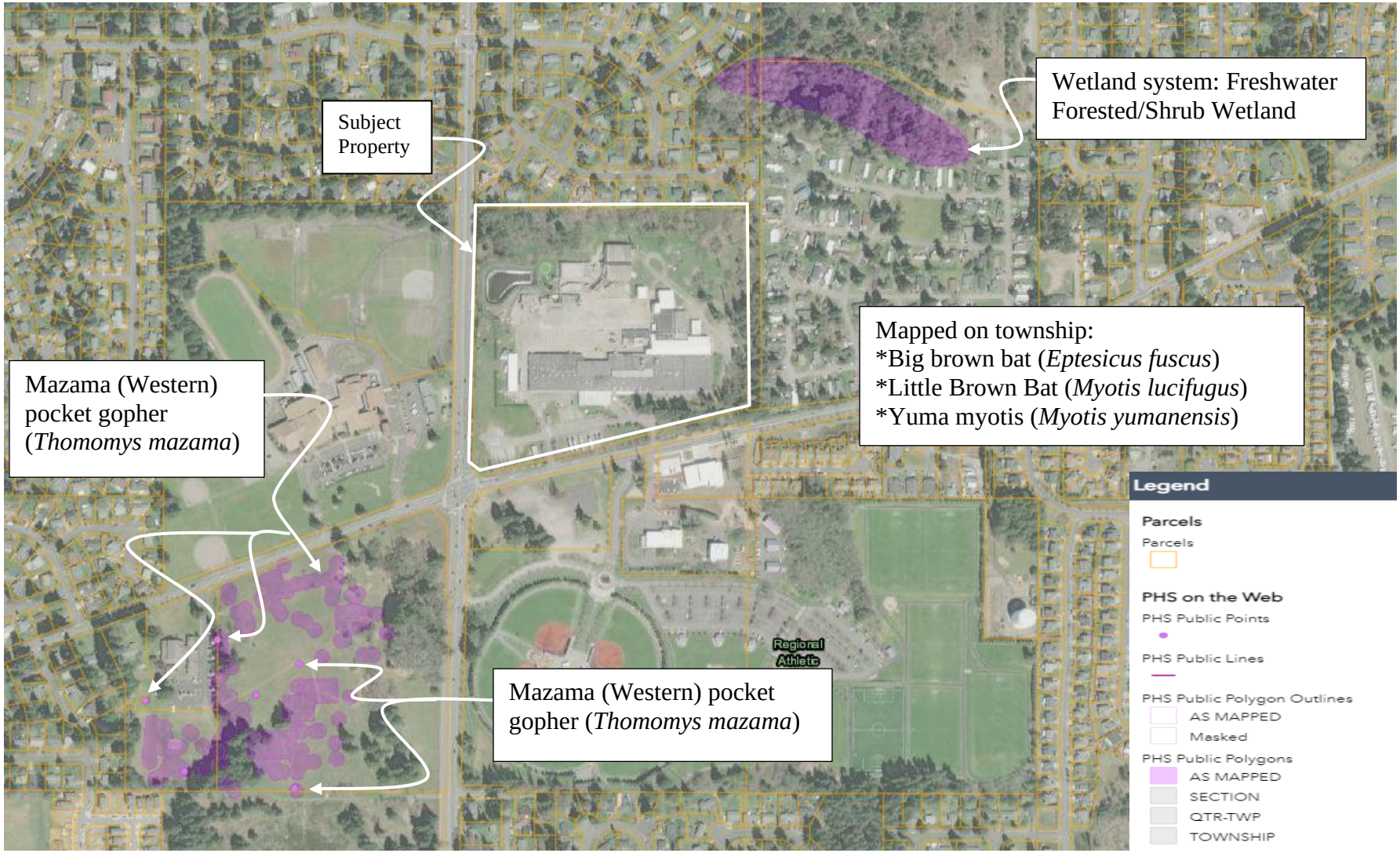

Subject Property
More Preferred
Less Preferred
MARVIN RD SE
PEREGRINE
PVT ROAD
STEILACOOM RD SE
Gopher Indicator Soils
Less Preferred
More Preferred

APPENDIX D

Washington Department of Fish and Wildlife

Priority Habitat Species (PHS)

Database


Subject Property
Wetland system: Freshwater Forested/Shrub Wetland
Mapped on township:
*Big brown bat (*Eptesicus fuscus*)
*Little Brown Bat (*Myotis lucifugus*)
*Yuma myotis (*Myotis yumanensis*)
Mazama (Western) pocket gopher (*Thomomys mazama*)
Mazama (Western) pocket gopher (*Thomomys mazama*)
Regional Athletic
Legend
Parcels
Parcels
PHS on the Web
PHS Public Points
PHS Public Lines
PHS Public Polygon Outlines
AS MAPPED
Masked
PHS Public Polygons
AS MAPPED
SECTION
QTR-TWP
TOWNSHIP

APPENDIX D

USFWS

Site Inspection Protocol and Procedures:

Mazama Pocket Gopher

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Washington Fish and Wildlife Office
http://www.fws.gov/wafwo
(360) 753-9440

Mazama Pocket Gopher Screening Protocol Checklist

- Mazama pocket gopher (MPG) determinations made during the screening season (June 1 through October 31) will assess the risk of take to the listed MPG subspecies in Thurston and Pierce Counties associated with building permit applications issued by local jurisdictions in Thurston and Pierce Counties.
- Negative determinations that allow projects to move forward will be valid through October 31st of the following calendar year.
- Positive determinations will require coordination with the U.S. Fish and Wildlife Service (Service) to address the risk of take.
- It is recommended that all jurisdictions in Thurston and Pierce Counties with building permit authorities use this protocol to ensure compliance with the federal Endangered Species Act by minimizing risk of unauthorized take.
- All valid site visits must be conducted from June 1 through October 31. Site visits outside that survey window will not be considered valid.
- A site or parcel is considered to be the entire property, not just the footprint of the proposed project. Surveys that only screen the footprint will not be accepted by the Service as evidence of indicating that the site is not occupied by MPG.
- 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.

MPG Survey Protocol Frequency Requirements (see Appendix A for soil preferences)

- ☐ Sites containing more-preferred soils will be visited three (3) times with the visits at least 30 days apart.
- ☐ Sites containing less-preferred soils and within 600 feet of a site with verified MPG occurrence will be visited three (3) times, at least 30 days apart.
- ☐ Sites containing less-preferred soils and more than 600 feet from a known MPG occurrence will be visited two (2) times, at least 30 days apart.
- ☐ Sites containing at least one type of more-preferred soils present on the parcel should be treated using the protocol for more-preferred soils.
- ☐ If MPG mounds are positively identified during a site visit, the remaining recommend site visits are not necessary to complete.

April 19, 2018 version

MPG Protocol – Determining Site Visit Frequency

- ☐ Search for the parcel on the WDFW site (https://wdfw.wa.gov/conservation/phs/maps_data/) to determine the proximity of documented MPG sites to the edge of the parcel you are screening.
- ☐ Search for the parcel to be surveyed with the NRCS soil map (https://www.nrcs.usda.gov/wps/portal/nrcs/site/soils/home/), or for Thurston County parcels look up the parcel on the Thurston GeoData Center (http://www.geodata.org/pocketgophersoils.htm) website to determine if the soils on the parcel are more-preferred or less-preferred soils for Mazama pocket gophers (Appendix A).
- ☐ Record both the MPG soil types present on the parcel and the distance from the nearest, known MPG location from the parcel boundary on the data form.
- ☐ Notify the landowner to ensure areas to be surveyed are mowed and animals are contained. Surveyor must have a clear, unobstructed view of the ground and any potential mounds present. Tall grass, shrubs, Scot's broom etc. all impede surveyor(s) ability to see and identify mounds appropriately.

MPG Protocol - Site Condition Requirements

- ☐ Identify if site conditions preclude the site from screening (see Preclusions below).
- ☐ Identify and describe site conditions for the parcel on the data form. Determine which areas of the parcel cannot be screened due to limited accessibility and/or dense understory.
- ☐ The ground should be easily visible to ensure mound observation and identification. Request mowing if necessary to ensure visibility. Wait 30 days after mowing before beginning screening.
- ☐ Determine if rain from previous days or during the survey will interfere with accurate MPG mound identification. Identify any other site challenges and record on the data sheet.

MPG Protocol – Field Visit Methodology

- ☐ Decide upon the planned route to walk the parcel.
- ☐ Start Trimble or GPS to record survey route.
- ☐ Walk the survey transects methodically, slowly walking a straight line and scanning an area approximately 2-3 meters to the left and right as your walk and look for mounds. Transects should be no more than five (5) meters apart when conducted by a single individual (Figure 1).
- ☐ If the survey is performed by a team, walk together in a single line approximately 5 meters apart while you are scanning right to left for mounds (Figure 1).

- ☐ At each mound found, stop and identify it as a MPG or mole mound, using information provided in training. If it is a MPG mound, identify it as a singular mound or a group (3 mounds or more) on the data form.
- ☐ Record all positive MPG mounds, MPG likely mounds, and MPG mound groups in a GPS unit that provides a date, time, and georeferenced point for each MPG mound.
- ☐ If possible, photograph all MPG mounds or MPG mound groups. At a minimum, photograph MPG mounds or MPG mound groups representative of MPG detections on site.
- ☐ 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.
- ☐ Send survey results and locations of all MPG mounds found to USFWS, WDFW, and local jurisdiction with building permit authority, as well as georeferenced pictures with time and date stamps. Also include copies of all completed data sheets where MPG mounds were found while screening. Contacts for USFWS and WDFW will be provided at the USFWS training.

MPG Protocol - Training and Qualifications

1. At least one person conducting screening must have completed the training by USFWS. Other person(s) can assist in mound observation, but a trained person must confirm each MPG mound identified.
2. Surveys will only be accepted if the biologist/consultant has completed the necessary training.
3. People completing MPG surveys are subject to random field checks for mound identification accuracy by USFWS.

MPG Protocol – Preclusions (conditions that would not require screening)

1. Locations west of the Black River, or on Steamboat Island peninsula.
2. Sites on less preferred MPG soils north of Interstate 5.
3. Sites submerged for 30 consecutive days or more since October 31 of the previous year.
4. Sites covered with impervious surfaces.
5. Sites that consist of slopes greater than 40 percent or that contain landslide hazard areas.
6. Sites with greater than 30 percent forested cover with dense understory and no openings.

Appendix A. Summary table of soil preference for Mazama Pocket Gopher.

Mazama Pocket Gopher Preference	Soil Type	Site Visit Frequency
More preferred	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 percent slopes	☐ Three (3) times, at least 30 days apart
Less preferred	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	☐ Sites with less-preferred soils and more than 600 feet from a known MPG occurrence will be visited two (2) times, at least 30 days apart.
	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	☐ Sites with less-preferred soils and within 600 feet of a site with verified MPG occurrence will be visited three (3) times, at least 30 days apart.

Appendix E

Datasheets

Mazama Pocket Gopher Screening Field Form Site Visit Date:15 June 2022

Site Name and Parcel #	**Parcel #: 11814140500** **Project #: _____** **Site/Landowner: Ostrom Mushroom Farm**
How were the data collected? **(circle the method for each)**	**Transect: (Trimble) Garmin Aerial** **Mounds (Trimble) Garmin Aerial** **Notes: _____**
Field Team Personnel: **(Indicate all staff present, CIRCLE who filled out form)**	**Name: Curtis Wambach** **Name: Viri Cortez** **Name:**
Others onsite (name/affiliation)	
Site visit # **(CIRCLE all that apply)**	**(1st) 2nd 3rd Unable to screen** **Notes: one out of three screening visits**
Do onsite conditions preclude the need for further visits?	**Yes (No)** **Dense woody cover that encompasses the entire site (trees/shrubs) that appears to preclude any potential MPG use.** **Impervious Compacted Graveled Flooded** **Other _____ Notes:**
Describe visibility for mound detection:	**Poor Fair (Good) Notes:**
Request mowing? **(CIRCLE and DESCRIBE WHERE MOWING IS NEEDED and SHOW ON AERIAL PHOTO**	**(Yes) No N/A Notes: Dense Himalayan blackberry and Poison hemlock were mowed**

Mounds observed over the whole site are characteristic of: **Quantify or describe amount of each type and approx. # of mounds** ***Group = 3 mounds or more***	**MPG Mounds**	**Likely MPG Mounds**	**Indeterminate**	**Likely Mole Mounds**	**Mole Mounds**
					10
	No MPG mounds (circle)				
MPG mounds in GPS? **(CIRCLE and DESCRIBE)**	**None** **All** **Most** **Some** **Notes:**				
If MPG mounds present, entered in GPS?	**Yes** **No** **N/A**				
Does woody vegetation onsite match aerial photo?	**Yes** **No - describe differences and show on parcel map/aerial:**				
What portion(s) of the property was screened? **(CIRCLE and DESCRIBE)**	**All** **Part - describe and show on parcel map/aerial:** **Portions of site are forested with dense understory, concreate parking lots and hard surfaces, and existing building.**				
Notes -	**Describe and show on parcel map/aerial if applicable:** **See Figure 2**				
Team reviewed and agreed to data recorded on form? **(CIRCLE, and EXPLAIN if "No")**	**Yes** **No** **Reviewed by initials: CW VC _____ _____ Notes:**				

Mazama Pocket Gopher Screening Field Form Site Visit Date:15 July 2022

Site Name and Parcel #	**Parcel #: 11814140500** **Project #: _____** **Site/Landowner: Ostrom Mushroom Farm**
How were the data collected? **(circle the method for each)**	**Transect: (Trimble) Garmin Aerial** **Mounds (Trimble) Garmin Aerial** **Notes: _____**
Field Team Personnel: **(Indicate all staff present, CIRCLE who filled out form)**	**Name: Curtis Wambach** **Name: Viri Cortez** **Name:**
Others onsite (name/affiliation)	
Site visit # **(CIRCLE all that apply)**	**1st (2nd) 3rd Unable to screen** **Notes: two out of three screening visits**
Do onsite conditions preclude the need for further visits?	**Yes (No)** **Dense woody cover that encompasses the entire site (trees/shrubs) that appears to preclude any potential MPG use.** **Impervious Compacted Graveled Flooded** **Other _____ Notes:**
Describe visibility for mound detection:	**Poor Fair (Good) Notes:**
Request mowing? **(CIRCLE and DESCRIBE WHERE MOWING IS NEEDED and SHOW ON AERIAL PHOTO**	**(Yes) No N/A Notes: Dense Himalayan blackberry and Poison hemlock mowed**

Mounds observed over the whole site are characteristic of: **Quantify or describe amount of each type and approx. # of mounds** ***Group = 3 mounds or more***	**MPG Mounds**	**Likely MPG Mounds**	**Indeterminate**	**Likely Mole Mounds**	**Mole Mounds**
					6
	No MPG mounds (circle)				
MPG mounds in GPS? **(CIRCLE and DESCRIBE)** **If MPG mounds present, entered in GPS?**	**None** **All** **Most** **Some** **Notes:** **Yes** **No** **N/A**				
Does woody vegetation onsite match aerial photo?	**Yes** **No - describe differences and show on parcel map/aerial:**				
What portion(s) of the property was screened? **(CIRCLE and DESCRIBE)**	**All** **Part - describe and show on parcel map/aerial:** **Portions of site are forested with dense understory; concreate parking lots, hard surfaces, and existing building.**				
Notes -	**Describe, and show on parcel map/aerial if applicable:** **See Figure 2**				
Team reviewed and agreed to data recorded on form? **(CIRCLE, and EXPLAIN if "No")**	**Yes** **No** **Reviewed by initials: CW VC _____ _____ Notes:**				

Mazama Pocket Gopher Screening Field Form Site Visit Date:24 August 2022

Site Name and Parcel #	**Parcel #: 11814140500** **Project #: _____** **Site/Landowner: Ostrom Mushroom Farm**
How were the data collected? (circle the method for each)	**Transect: (Trimble) Garmin Aerial** **Mounds (Trimble) Garmin Aerial** **Notes: _____**
Field Team Personnel: **(Indicate all staff present, CIRCLE who filled out form)**	**Name: Curtis Wambach** **Name: Viri Cortez** **Name:**
Others onsite (name/affiliation)	
Site visit # **(CIRCLE all that apply)**	**1st 2nd (3rd) Unable to screen** **Notes: one out of three screening visits**
Do onsite conditions preclude the need for further visits?	**Yes (No)** **Dense woody cover that encompasses the entire site (trees/shrubs) that appears to preclude any potential MPG use.** **Impervious Compacted Graveled Flooded** **Other _____ Notes:**
Describe visibility for mound detection:	**Poor Fair (Good) Notes:**
Request mowing? **(CIRCLE and DESCRIBE WHERE MOWING IS NEEDED and SHOW ON AERIAL PHOTO**	**Yes (No) N/A Notes:**

Mounds observed over the whole site are characteristic of: **Quantify or describe amount of each type and approx. # of mounds** ***Group = 3 mounds or more***	**MPG Mounds**	**Likely MPG Mounds**	**Indeterminate**	**Likely Mole Mounds**	**Mole Mounds**
					2
	No MPG mounds (circle)				
MPG mounds in GPS? **(CIRCLE and DESCRIBE)** **If MPG mounds present, entered in GPS?**	**None** **All** **Most** **Some** **Notes:** **Yes** **No** **N/A**				
Does woody vegetation onsite match aerial photo?	**Yes** **No - describe differences and show on parcel map/aerial:**				
What portion(s) of the property was screened? **(CIRCLE and DESCRIBE)**	**All** **Part - describe and show on parcel map/aerial:** **Portions of site are forested with dense understory, concreate parking lots, hard surfaces, and existing buildings.**				
Notes -	**Describe, and show on parcel map/aerial if applicable:** **See Figure 2**				
Team reviewed and agreed to data recorded on form? **(CIRCLE, and EXPLAIN if "No")**	**Yes** **No** **Reviewed by initials: CW VC _____ _____ Notes:**				