

MITIGATED DETERMINATION OF NON-SIGNIFICANCE

Proponent: Tahoma Valley Golf & Country Club

Description of Proposal: Golf Course Maintenance Building

Location of the Proposal: 15425 Mosman Ave SW, Yelm, WA 98597

Section/Township/Range: Section 24, Township 17 North Range 1 East

Threshold Determination: The City of Yelm as lead agency for this action has determined that this proposal does not have a probable significant adverse impact on the environment. Therefore, an environmental impact statement (EIS) will not be required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

Mitigating Measures: See Attachment A

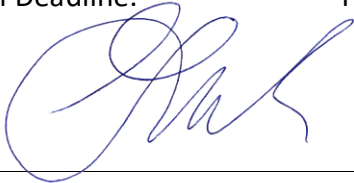
Lead agency: City of Yelm

Responsible Official: Grant Beck, Community Development Director

Date of Issue: May 13, 2021

Comment Deadline: May 27, 2021

Appeal Deadline: There is no local administrative appeal of a MDNS



Grant Beck, Community Development Director

This Mitigated Determination of Non-Significance (MDNS) is issued pursuant to Washington Administrative Code 197-11-340 (2). Comments must be submitted to Grant Beck, Community Development Department, at City of Yelm, 106 2nd St SE, Yelm, WA 98597, by May 27, 2021, at 5:00 P.M. The City of Yelm will not act on this proposal prior May 27, 2021 at 5:00 P.M.

DO NOT PUBLISH BELOW THIS LINE

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Dept. of Ecology w/checklist

ATTACHMENT A
Project Number 2020.0004

Findings of Fact

- A. This Mitigated Determination of Non Significance is based on the project as proposed and the impacts and potential mitigation measures reflected in the following documents:
- ✓ Environmental Checklist submitted January 11, 2021, prepared by Vibe Construction.
 - ✓ Yelm Pocket Gopher Survey Report dated March 2018, prepared by WHPacific
- B. The City of Yelm is identified as a Critical Aquifer Recharge Area, a designated environmentally sensitive area. Potential Impacts to groundwater quality and quantity will be mitigated through measures that meet or exceed the standards in the Stormwater Management Manual for Western Washington, as published by the Washington State Department of Ecology.
- C. The Mazama Pocket Gopher has been listed as a threatened species by the Washington Department of Fish and Wildlife since at least 2008. Yelm has protected this species through the implementation of the Critical Areas Code. In April, 2014, the U.S. Fish and Wildlife Service listed the Yelm subspecies of the Mazama Pocket Gopher as threatened under the Endangered Species Act. While the City of Yelm is not responsible for implementation or enforcement of the Endangered Species Act, it consults with the Service and provides notice to applicants that the pocket gopher is a federally protected species and a permit from the U.S. Fish and Wildlife Service may be required.
- The Yelm Pocket Gopher Survey Report showed no evidence of gophers in this area.
- D. The project proposes to have above ground fuel storage tanks on the site. The storage of oil, petroleum products, biodiesel or other biological oils must comply with the Washington State oil spill prevention and contingency regulations pursuant to WAC 173-180. The handling of dangerous waste must follow Washington State regulations detailed in WAC 173-303.

Mitigation Measures

1. A final drainage report meeting the minimum requirements of the Stormwater Management Manual for Western Washington, as published by the Washington State Department of Ecology shall be submitted with civil plan submission.
2. Proof of compliance with Washington State oil spill prevention and contingency regulations is required.
3. Proof of compliance with Washington State dangerous waste regulations is required.



City of Yelm

Fee	_____
Date Received	_____
By	_____
File No.	_____

Community Development Department ENVIRONMENTAL CHECKLIST

Instructions:

The State Environmental Policy Act (SEPA) requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. The purpose of this checklist is to provide information to help identify impacts from your proposal, to reduce or avoid impacts from the proposal if it can be done, and to help the City decide whether an EIS is required. An environmental impact statement (EIS) must be prepared for any proposal with probable significant adverse impacts on environmental quality.

This environmental checklist asks you to describe some basic information about your proposal. The City will use this checklist to determine whether the environmental impacts of your proposal are significant and require preparation of an EIS. You must answer each question accurately, carefully and to the best of your knowledge. Answer the questions briefly, but give the best description you can. In most cases, you should be able to answer the questions from your own observations or project plans without the need for experts. If you do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply". Complete answers to the questions now may avoid delays later. If the space provided is too small, feel free to attach additional sheets.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the city staff can assist you.

The checklist questions apply to all parts of your proposal even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. You may be asked to explain your answers or provide additional information for determining if there may be significant adverse impacts.

Nonproject Proposals Only:

Complete both the checklist (even though many questions may be answered "does not apply") and the **Supplemental Sheet for Nonproject Actions** (part D). For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

CITY OF YELM

ENVIRONMENTAL CHECKLIST

CITY USE ONLY

FEE: \$150.00
DATE REC'D
BY:
FILE NO.

A. BACKGROUND

1. Name of proposed project, if any:
Mosman Phase II - Golf Course Building
2. Name of applicant:
Vibe Construction
3. Address, phone number and email address of applicant and of any other contact person:
Annex Design Services, LLC info@annexdesignservicesllc.com
P.O. Box 455 Jeff Reuter
Bellevue, WA 98009 (425) 471-6401
4. Date checklist prepared:
12/30/2020
5. Agency requesting checklist:
Public Works
6. Proposed timing or schedule (including phasing, if applicable):
Building is scheduled to be built prior to the Mosman Phase II street extension.
7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.
No.
8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.
None.
9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.
No.
10. List any government approvals or permits that will be needed for your proposal, if known.
City of Yelm Administrative Site Plan Review.
City of Yelm Civil Plan Review.
City of Yelm Building Permit Review.

City of Yelm

Yelm Pocket Gopher Survey Report

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page.

Construction of a 2,400 square foot maintenance building at the Tahoma Valley Golf Course with a gravel entry and parking lot with perimeter landscaping.

Subject to City of Yelm Design Standards

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. You need not duplicate maps or detailed plans submitted with any permit applications related to this checklist.

Northern most corner of 15425 Mosman Ave SW, Yelm, WA.

B. ENVIRONMENTAL ELEMENTS

1. Earth

- a. General description of the site (circle one):
flat, **rolling**, hilly, steep slopes, mountainous, other _____
- b. What is the steepest slope on the site (approximate percent slope)?
0 - 3%
- c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.
Spanaway gravelly sandy loam.
- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.
None.
- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.
None.
- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.
No.

BMPs required

- g. About what percent of the site will be covered with impervious surfaces after project construction such as asphalt or buildings?

Subject to City of
Yelm Design Standards

Approximately 0.24% of the site will be covered with new impervious surfaces. This includes roof area, gravel sidewalks, gravel parking lot & entry drive.

- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

None.

BMPs required

2. **Air**

- a. What types of emissions to the air would result from the proposal (i.e., dust, automobile exhaust, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Automobile exhaust.

- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

None.

- c. Proposed measures to reduce or control emissions or other impacts to air, if any:

None.

3. **Water**

- a. **Surface Water**

- 1) Is there any surface water body or wetland on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds)? If yes, describe type and provide names. State what stream or river it flows into?

None.

- 2) Will the project require any work over, in, or adjacent to (within 300 feet) the described waters? If yes, please describe and attach available plans.

No.

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None.

- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No.

- 5) Does the proposal lie within a 100-year floodplain? If so, note elevation on the site plan.

No.

- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No, facility will be hooked up to the city sewer system.

b. Groundwater:

- 1) Will groundwater be withdrawn, or will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

No, facility will be connected to the city water supply.

- 2) Describe the underlying aquifer with regard to quality and quantity, sensitivity, protection, recharge areas, etc.

See report:

<https://www.thurstoncountywa.gov/sw/swdocuments/basin-wria13-c4.pdf>

- 3) Describe waste material that will be discharged into or onto the ground from septic tanks or other sources, if any (such as domestic sewage; industrial byproducts; agricultural chemicals).

None.

c. Water Runoff (including storm water):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

None, roof not included in storm water runoff calculations.

Subject to most current
ECY SMMWW

- 2) Could waste materials enter ground or surface waters? If so, generally describe.

No.

- d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

None.

Above Ground Fuel Storage Tanks Proposed - Spill & Containment Plan Required
WA state oil spill prevention & contingency regulation may be required

4. **Plants**

- a. Check or circle types of vegetation found on the site:
- ☒ deciduous tree: alder, maple, oak, aspen, other
 - ☒ evergreen tree: fir, cedar, pine, other
 - ☒ shrubs
 - ☒ grasses
 - ☒ pasture
 - ☐ crops or grains
 - ☐ wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other
 - ☐ water plants: water lily, eelgrass, milfoil, other
 - ☐ other types of vegetation

- b. What kind and amount of vegetation will be removed or altered?

2,400 square feet of grass

Site improvements include building, parking, and drive areas

- c. List threatened or endangered species known to be on or near the site.

None.

- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

8 foot planting boundary around proposed building and parking lot.

5. **Animals**

- a. Circle any birds and animals that have been observed on or near the site or are known to be on or near the site:

birds: hawk, heron, ducks, eagle, songbirds,

other: _____

mammals: deer, bear, elk, beaver, other: _____

fish: bass, salmon, trout, shellfish, other: _____

- b. List any priority, threatened or endangered species known to be on or near the site.

Soils on the site are categorized as More Preferred for the Mazama pocket gopher.

- c. Is the site part of a migration route? If so, explain.

Do not know.

- d. Proposed measures to preserve or enhance wildlife, if any:

Do not know.

Yelm Pocket Gopher Survey Report
showed no evidence of gophers in this area

6. **Energy and Natural Resources**

- a. What kinds of energy (electric, natural gas, gasoline, heating oil, wood, solar etc.) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, transportation, etc.

Electric for heating and vehicle repair.

- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.
No.
- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:
Insulated walls and roof.

7. Environmental Health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spills, of hazardous waste, that could occur as a result of this proposal? If so, describe.
No. Above Ground fuel storage tanks proposed - Spill & containment plan required WA state oil spill prevention & contingency regulation may be required
- 1) Describe special emergency services that might be required.
None.
- 2) Proposed measures to reduce or control environmental health hazards, if any:
None.
- b. Noise
- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment operation, other)?
None.
- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.
Basic construction noise during normal business hours.
- 3) Proposed measures to reduce or control noise impacts, if any:
None.

8. Land and Shoreline Use

- a. What is the current use of the site and adjacent properties?
Recreation and housing.
- b. Has the site been used for mineral excavation, agriculture or forestry? If so, describe.
No.

- c. Describe any structures on the site.
Current maintenance building that will be demolished and removed to make way for the extension of Mosman Ave to Longmire St.
- d. Will any structures be demolished? If so, what?
Yes, existing maintenance building.
- e. What is the current comprehensive plan designation of the site?
There is not one. Open Space
- f. What is the current zoning classification of the site?
P/OS.
- g. If applicable, what is the current shoreline master program designation of the site?
None.
- h. Has any part of the site been classified as a "natural resource", "critical" or "environmentally sensitive" area? If so, specify. Extremely sensitive critical aquifer recharge
No.
- i. Approximately how many people would reside or work in the completed project?
5 - 6 workers during the day.
- j. Approximately how many people would the completed project displace?
None.
- k. Proposed measures to avoid or reduce displacement impacts, if any:
None.
- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:
None. Subject to City of Yelm Design Standards

9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.
None.
- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.
None.

- c. Proposed measures to reduce or control housing impacts, if any:

None.

10. **Aesthetics**

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

16' high with metal siding, roof and doors.

- b. What views in the immediate vicinity would be altered or obstructed?

The corner of Mosman Ave and Longmire St.

- c. Proposed measures to reduce or control aesthetic impacts, if any:

The building will conform with the City of Yelm Design Guidelines.

11. **Light and Glare**

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Localized exterior building lights at night,

- b. Could light or glare from the finished project be a safety hazard or interfere with views?

No.

- c. What existing off-site sources of light or glare may affect your proposal?

None.

- d. Proposed measures to reduce or control light and glare impacts, if any:

None.

12. **Recreation**

- a. What designated and informal recreational opportunities are in the immediate vicinity?

Golf course.

- b. Would the proposed project displace any existing recreational uses? If so, describe.

No.

- c. Proposed measures to reduce or control impacts or provide recreation opportunities:

None.

13. Historic and Cultural Preservation

- a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

No.

- b. Generally describe any landmarks or evidence of historic, archeological, scientific, or cultural importance known to be on or next to the site.

None.

- c. Proposed measures to reduce or control impacts, if any:

None.

14. Transportation

- a. Identify sidewalks, trails, public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

Gravel access point on Mosman Ave.

Subject to City of
Yelm Design Standards

- b. Is site currently served by public transit? By what means? If not, what plans exist for transit service?

None.

- c. How many parking spaces would the completed project have? How many would the project eliminate?

The project would create 7 dedicated parking spaces and eliminate none.

- d. Will the proposal require any new sidewalks, trails, roads or streets, or improvements to existing sidewalks, trails, roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

No.

- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No.

- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

None, it is replacing an existing maintenance facility.

- g. Proposed measures to reduce or control transportation impacts, if any:

None.

15. **Public Services**

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe:

No.

- b. Proposed measures to reduce or control direct impacts on public services, if any.

None.

16. **Utilities**

- a. Circle utilities currently available at the site: electricity, natural gas, water refuse service, telephone, sanitary sewer septic system, other.

- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

City water and city sewer services will be required for a bathroom and eyewash/shower. Connection to the city electrical will be required for lighting and heating.

C. **SIGNATURE**

The above answers are true and complete to the best of my knowledge. I understand that the City of Yelm is relying on them to make its decision.

Signature: Jeffrey Reuter
Date Submitted: 1/11/2021

SUPPLEMENTAL ENVIRONMENTAL CHECKLIST FOR NONPROJECT ACTIONS

(Do not use this sheet for project actions.)

When answering these questions, be aware of the extent of the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

Proposed measures to avoid or reduce such increases are:

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

3. How would the proposal be likely to deplete energy or natural resources?

Proposed measures to protect or conserve energy and natural resources are:

4. How would the proposal be likely to use or affect critical or environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection, such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or natural resource areas?

Proposed measures to protect such resources or to avoid or reduce impacts are:

Yelm Pocket Gopher Survey Report for Mosman Avenue Phase 2 Project, Yelm, Thurston County, Washington

Prepared for
City of Yelm
105 Yelm Ave. W
Yelm, WA 98597

Prepared by
WHPacific
Enhancing Communities through Creative, Exceptional Service

March 20, 2018

Introduction

The City of Yelm, WA contracted WHPacific, Inc. (WHP) to conduct Mazama pocket gopher (*Thomomys mazama*) surveys and to write this associated pocket gopher survey report for the proposed Mosman Phase 2 road reconstruction and extension project. The US Fish and Wildlife Service (USFWS) and Washington Department of Fish and Wildlife (WDFW) listed Yelm Mazama pocket gopher subspecies (*T. m. yelmensis*) as potentially present in the project area due to previously mapped soil conditions,. Three Mazama Pocket gopher surveys were conducted by biologists from the Lacey, WA USFWS office and WHPacific environmental staff. No evidence of pocket gopher activity or presence was detected in the project area during these surveys.

Project Description and Need

The Mosman Phase 2 project includes reconstruction of portions of Mosman Ave SW between NW Railroad St and Solberg St SW (approximately 1,500 feet) and construction of a new road connection to Longmire St SW (approximately 500 feet) (Figures 1 and 2). The typical proposed road cross section includes two travel lanes, bike lanes, sidewalks, curbs and gutters. Other work includes storm drainage and illumination improvements and planter strips on portions of the project. The new Mosman Avenue/Longmire Street intersection will be stop controlled with turn lanes. This new roadway alignment will transverse the northwest corner of the Tahoma Valley Golf and Country Club owned by Brookdale Golf LLC.

Connecting Mosman Ave SW at Solberg St SW to Longmire St SE will provide an alternative street traveling parallel to Yelm Ave (SR 510) potentially alleviating congestion on Yelm Ave (Gray & Osborne Inc. 2011). The addition of a bike lane along Mosman Ave SW will provide a safe way for cyclists to commute through the city and access the paved Yelm-Tenino trail just SE of the project area (Figure 2).

Project Location

The project is located in the City of Yelm, Thurston County, Washington;

Section 24, Township 17 North, Range 1 East and Section 19, Township 17 North, Range 2 East in the Thompson Creek sub-basin of the Nisqually River watershed (WRIA 11), Nisqually River Hydrologic Unit (HUC 17110015).

The project area includes the northwest corner of the privately owned Tahoma Valley Golf and Country Club. The club is bounded by the Yelm-Tenino Trail to the southeast, Longmire Street SE to the northwest, and Mosman Ave SW to the northeast. A residential housing area is adjacent to the project area along the northeastern margin of Mosman Ave SW. Apartment complexes are located northeast of the western extent of the proposed alignment and single-family homes border the portion of the project area at Longmire St SE. (Photos 1 – 8).

Current Land Uses and Management

Mosman Ave SW between Railroad St SW and Solberg St SW is a two lane paved road with soft gravel shoulders and a sidewalk on the south side of the road between Edward St SW and Rice St SW, paralleling the golf course parking lot. Areas along the north side of Mosman Ave SW between Solberg St SW and Edwards St SW, and along the north side of the golf course between Solberg St SW and Longmire St SE are zoned as High density Residential (R-14). This area has both single family homes with driveways exiting on Mosman Ave SW and apartment buildings between Solberg St SW and Longmire St SE, the newest of these being an apartment complex exiting onto Longmire St SE was built in 2015 (Figure 2). The north side of Mosman Ave SW between Edwards St SW and Railroad St SW is zoned Commercial (C-1) and has single family residences with driveways that exit onto either Edwards St SW or Railroad St SW. The Tahoma Golf and Country Club is zoned as Open Space Park (P/OS) and the required right-of-way through right-of-way through the northwest corner of the golf course will result in direct impacts to at least two fairways and the maintenance shed (Gray & Osborne 2011).

Baseline Environmental Conditions, Habitats, and Habitat Conditions

The Mosman Phase 2 project area are within the Thompson Creek sub-basin of the Nisqually River Watershed (WRIA 11). Soils in the project area are mapped as Spanaway gravelly sandy loam (Figure 3) (NRCS 2017). The Spanaway soil series consists of friable, dark, well drained, soils formed on glacial outwash terraces and plains from glacial outwash and volcanic ash (NCSS 2017). Spanaway series soils are the most common prairie associated soils in Thurston County (et al.1995).

Test pits dug during a recent National Historic Preservation Act (NHPA) Sec. 106 compliance survey found that soils within the project area were consistent with those reported in the area though the area has been heavily modified by development of the golf course and residential lots. Throughout much of the golf course the upper Spanaway gravelly sandy loam has been removed by modern landscape modification but the underlying glacial outwash was encountered during subsurface sampling. In the northwestern portion of the project area, near the maintenance shed, the spanaway loam was intact. (WHPacific 2017).

Vegetation in the project area is a combination of manicured golf course grounds, public right-of-way vegetation, and private home lots with varying types of weeds, grasses, and tree species. Vegetation is mostly non-native lawn grasses (maintained and unmaintained) and non-native herbaceous species commonly found in lawns in western Washington. These include: narrowleaf plantain (*Plantago lanceolata*), clover species (*Trifolium* spp.), hairy cat's ear (*Hypochoeris radicata*), Queen Anne's lace (*Daucus carota*), and thistle species.

There is an area of taller vegetation between the golf course and the south side of Mosman Ave SW northwest of the Mosman Ave SW and Rice St SW intersection that also includes patches of Himalayan blackberry (*Rubus armeniacus*), and a fair amount Scotch Broom (*Cytisus scoparius*),

unidentified shrubs, and taller unidentified grasses. Tree species on the golf course and residential properties include unidentified horticultural deciduous species and Douglas fir (*Pseudotsuga menziesii*).

Mazama Pocket Gophers

Habitat requirements and regulatory setting

Mazama pocket gophers (pocket gophers) are endemic to western Washington, western Oregon, and a portion of northern California. In south Puget Sound pocket gophers are primarily associated with open upland prairie and savannah grasslands, and somewhat with agricultural fields and pastures (Stinson 2013, WDFW 2013). Pocket gophers seem to prefer open habitats with well-drained loamy sand or sandy loam soils with low clay content that occur in glacial outwash plains (Stinson 2013, WDFW 2013). Research on pocket gopher activity in Thurston and Pierce Counties have found pocket gopher occurrence to be positively associated with sandy loam soils and negatively associated with increasing amounts of Scot's broom (*Cytisus scoparius*), shrub cover, and percent coarse gravel (Olson 2011). While pocket gopher density has been found to be higher in sandy loam soils, they are also known occur in gravelly sandy loams, like those in part of the Mosman Phase 2 project area (Figure 3) (Stinson 2013, WDFW 2013).

Pocket gophers were once widespread in the south Puget Sound prairies but their populations have declined with the loss of suitable habitats to development, invasion by Scot's broom, and forest succession on lands that were once maintained as prairies by Native American populations prior to European settlement in the 1850's (Stinson 2013). A 1995 Washington State Natural Heritage Program study found at least 80% of prairie soils in south Puget Sound have been converted into urban areas, agricultural lands, or invaded by forests (Hall et al. 1995).

In 2001 USFWS listed eight Washington State Mazama pocket gophers as candidates for listings under the federal ESA followed by the Washington Fish and Wildlife Commission listing the Mazama pocket gopher as state threatened in 2006 (RCW 77.15.130) (Stinson 2013). Due to continuing habitat loss and declining pocket gopher populations in Thurston and Pierce Counties the USFWS listed four Thurston and Pierce County Mazama pocket gopher sub-species as threatened in 2014 (USFWS 2014a). These include the Olympia pocket gopher (*Thomomys mazama pugetensis*), Roy Prairie pocket gopher (*T. m. glacialis*), Tenino pocket gopher (*T. m. tumuli*), and Yelm pocket gopher (*T. m. yelmensis*). Critical habitat for these sub-species was designated in Thurston and Pierce Counties at the same time (USFWS 2014b). Mazama pocket gophers and prairie habitats are also protected under Washington State's Growth Management Act (RCW 36.70a) as species and habitats of local importance in Thurston County's Critical Areas Ordinances (TCC 24.25).

In order to ensure compliance with the ESA and local ordinances the USFWS and Thurston County have developed Mazama pocket gopher mound survey protocols for those areas with soils likely to support pocket gophers. These protocols take into consideration pocket gopher soil preferences, seasonality of burrowing/mound building activity, and current site conditions in determining the need and timing of surveys. Pocket gopher mounds can easily be confused with mole mounds, especially as they weather over time, so specialized training is needed to correctly identify the animal creating each mound.

[Potential for Mazama pocket gopher habitat and occupancy in the Mosman Phase 2 Project Area](#)

The 2017 USFWS guidance letter list the Spanaway gravelly sandy loam soil found in the project area as a More Preferred pocket gopher soil, prompting the need for surveys (USFWS 2017) (Appendix A). Soils in the vicinity of the proposed Mosman Phase 2 project area have largely been altered by past agricultural use and more recent golf course, residential and road development, though soils in the far northwest end of the golf course near the storage shed are made up of intact Spanaway gravelly sandy loam (WHPacific 2017).

The project area contains a mix of mostly introduced lawn grass species that are maintained by mowing. While pocket gophers are known to eat and cache some of the plant species present in the project area (e.g. hairy cat's ear and clover species) (Stinson 2013) the site's vegetation is frequently disturbed by human use and as a whole does not appear to be high quality pocket gopher habitat.

The Mosman Phase 2 project area are located in the northern half of Yelm Prairie. The WDFW Draft Mazama Pocket Gopher Recovery Plan (Stinson 2013) notes Yelm Prairie pocket gopher populations as being modest and scattered in the northern portion of the prairie and no records of pocket gophers occurring in the southern portion of the prairie, though this could be partially due to difficulties accessing private properties in the southern half of Yelm Prairie (WDFW 2013).

A review of WDFW's Priority Habitats and Species (PHS) on the Web shows the closest pocket gopher location to the project area is 0.33 miles S of the junction of Mosman Ave SW and Railroad St SW in a small field near Mill Rd (located 10/9/2013). The next closest populations are just N of Yelm Highway SE (SR510) between Mountain View Rd SE and Killion Rd SE approximately 0.5 miles NNW of the planned intersection of Mosman Ave SW and Longmire St SW (2 areas located on 9/17/2008 and one area located on 10/4/2006). Other populations are located near the 93rd Ave SE and Yelm Highway SE intersection approximately 0.9 miles NW, near SR 510 Alt between Mountain View Rd SE and Cullens Rd SE, and east of Yelm Creek, all 0.9 miles or more from the project area. (WDFW 2018) (Figure 4). Based upon the pocket gopher location data available in the WDFW PHS data base and in the 2013 recovery plan pocket gophers are not known to occur in or adjacent to the proposed Mosman Phase 2 project area.

2017 Mosman Phase 2 Mazama pocket gopher surveys

Following the 2017 USFWS guidance letter protocol (USFWS 2017, Appendix A), three Mazama pocket gopher surveys were conducted in the project area between August and October, 2017. Surveys were conducted by biologists from the Lacey, WA USFWS office accompanied by a WHPacific environmental staff member and by golf course staff. A biologist from WSDOT assisted with the September 1st survey. Survey forms and a map of the survey route are attached in Appendix B. Results from the surveys are summarized in Table 1.

Surveys were conducted by walking transects across the golf course portion of the project area followed by surveys along both sides of Mosman Ave SW between Solberg St SW and Railroad St SW. Surveys were also conducted along short sections of Solberg St SW, Rice St SW, Edward St SW, and Railroad St SW at their intersections with Mosman Ave SW. This path was walked for all three surveys.

During the August 1st survey one intermediate (unidentifiable) mound and over 24 mole mounds were seen on the golf course portion of the project area and no mounds were seen on the existing Mosman Road SE section. More than 20 mole mounds were seen in the golf course portion and none in the Mosman Road SE section of the project area on September 1st and more than 15 mole mounds were seen across the whole project area during the October 11th survey. Mole mounds were most commonly seen along the fence line between the golf course and neighboring residential properties (Photos 9 - 11). No definite or likely pocket gopher mounds were observed during any of the surveys. Survey conditions were considered good for all three surveys. No Mazama pocket gopher activity was detected in the Mosman Phase 2 project area during the three ESA compliance surveys.

Table 1: Mosman Phase 2 project Yelm pocket gopher mound survey results.

Date	Portion of Site	# of Pocket Gopher Mounds Observed	# of Inter-mediate Mounds Observed	# of Mole Mounds Observed
8/1/2017	Golf Course	0	1	24 +
	Existing Road	0	0	0
9/1/2017	Golf Course	0	0	20 +
	Existing Road	0	0	0
10/11/2017	Whole Site	0	0	15 +

Conclusions

Despite the presence of undisturbed Spanaway gravelly sandy loam soils in the northwest portion of the golf course (within required right-of-way to link Mosman Ave SW to Longmire St SE), the availability of vegetation known to be consumed by pocket gophers, and Yelm pocket gopher population occurring 0.3 and 0.5 miles away from the project area, no evidence of Yelm pocket gopher activity was seen in the project area and it is highly unlikely the project will have a direct affect Yelm pocket gophers. Because the project will remove areas with preferred pocket gopher soils, preventing the potential expansion of pocket gophers into the project area in the future, the project may have an indirect negative effect on Yelm pocket gophers. While this document is not a complete biological assessment (BA) of the Mosman Phase 2 project it does provide a preliminary recommend that any future ESA compliance documentation for this project state that at a minimum it may affect but is not likely to adversely affect Yelm pocket gophers.

References

Gray & Osborn Inc. 2011. Mosman Avenue Improvements Preliminary Engineering Report. G & O #11424. Report done for the City of Yelm, Thurston County, Washington. Parts 1 and 2 Available at: http://www.ci.yelm.wa.us/mosman_improvements/

Hall, H.L., R. Crawford, B. Stephens. 1995. Regional Inventory of Prairies in the Southern Puget Trough: Phase One. Technical Report. Washington Department of Natural Resources Natural Heritage Program. Available at: https://www.dnr.wa.gov/publications/amp_nh_prairie_inventories.pdf

Natural Resources Conservation Service (NRCS). 2017. Web Soil Survey Website: <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm> (last visited 12/12/2017).

National Cooperative Soil Survey (NCSS). 2017. Spanaway Series. Available at: https://soilseries.sc.egov.usda.gov/OSD_Docs/S/SPANAWAY.html

Olson, G.S. 2011. Mazama pocket gopher occupancy modeling. Washington Department of Fish and Wildlife, Olympia, Washington. Available at: <http://wdfw.wa.gov/publications/01352/>

Stinson, D. W. 2013. Draft Mazama Pocket Gopher Status Update and Washington State Recovery Plan. Washington Department of Fish and Wildlife, Olympia. Available at: <http://wdfw.wa.gov/publications/01449/>

Thurston County. 2018. Thurston County GeoData Center website: <http://www.geodata.org/> (last viewed 2/7/2018).

USFWS 2018. Environmental Conservation Online System (ECOS), Critical Habitat Report, interactive mapper. Available at: <https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77> (last viewed 2/8/18).

USFWS 2017. Guidance for Assessing Potential Take of Mazama Pocket Gophers in Thurston County in 2017. March 6, 2017. Washington Fish and Wildlife Office, Lacey, Washington. (Attached as Appendix C).

USFWS 2014a. Threatened Species Status for the Olympia pocket gopher, Roy Prairie pocket gopher, Tenino pocket gopher, and Yelm pocket gopher, with special rule. Final Rule. Federal Register 79: 19760 – 19796. Available at: <https://www.gpo.gov/fdsys/pkg/FR-2014-04-09/pdf/2014-07414.pdf>

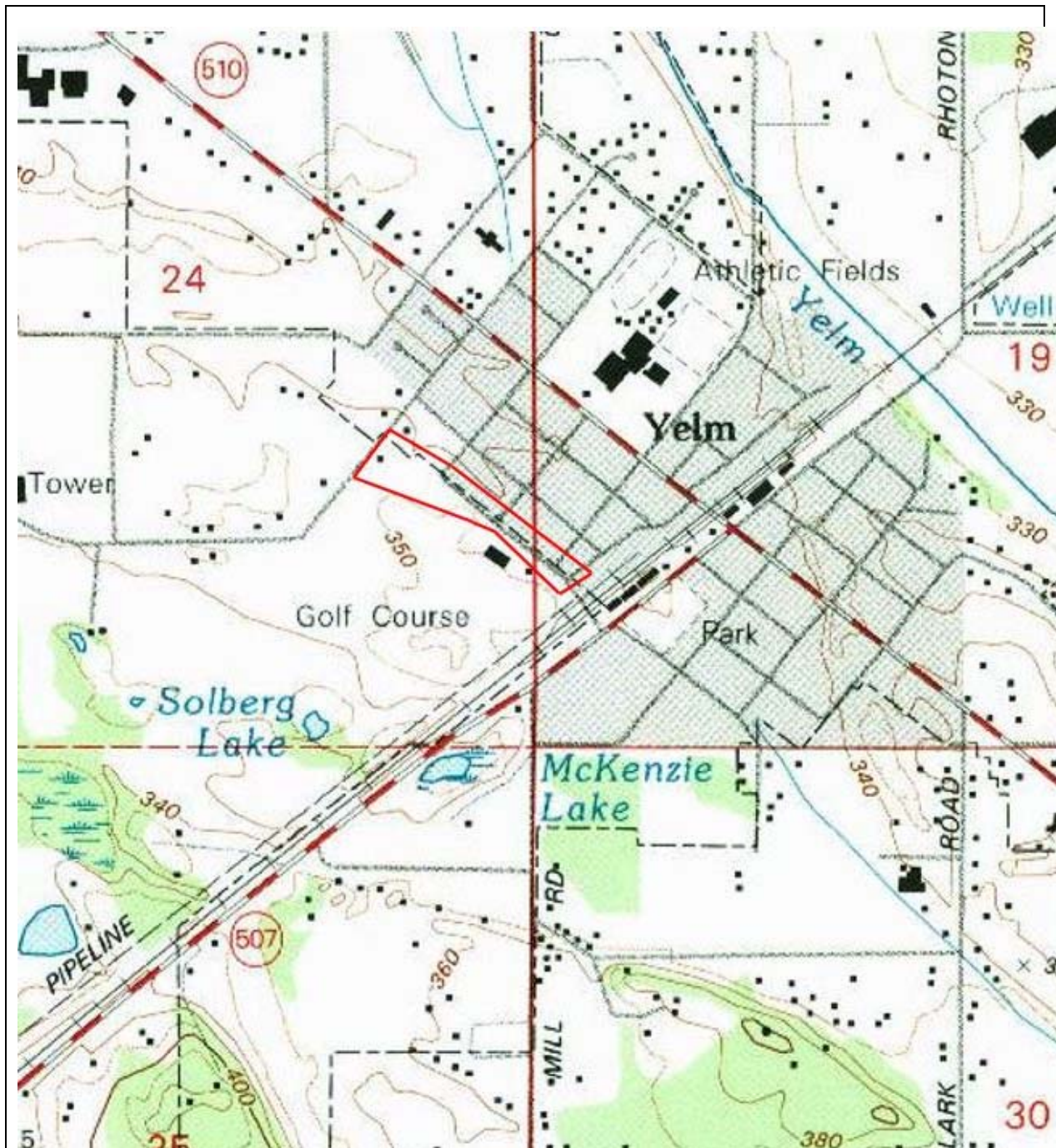
USFWS 2014b. Designation of Critical Habitat for Mazama Pocket Gophers. Final rule. Federal Register 79: 19712-19757. Available at: <https://www.gpo.gov/fdsys/pkg/FR-2014-04-09/pdf/2014-07415.pdf>

WDFW. 2018. Priority Habitats and Species (PHS) on the Web – interactive mapping website: <http://wdfw.wa.gov/mapping/phs/> (last viewed 2/8/2018).

WDFW. 2013. Mazama Pocket Gopher distributions and Habitat survey in Western Washington -2012. Summary Report. Washington Department of Fish and Wildlife. Olympia, WA. Available at: https://cascadiaprairieoak.org/wp-content/uploads/2014/03/MazamaPocketGopher2012SurveysReportFINAL_WDFW.pdf

WHPacific. 2017. Cultural Resources Survey for Mosman Ave Phase 2 Project, Thurston County, Washington. Prepared for the City of Yelm. Available upon request.

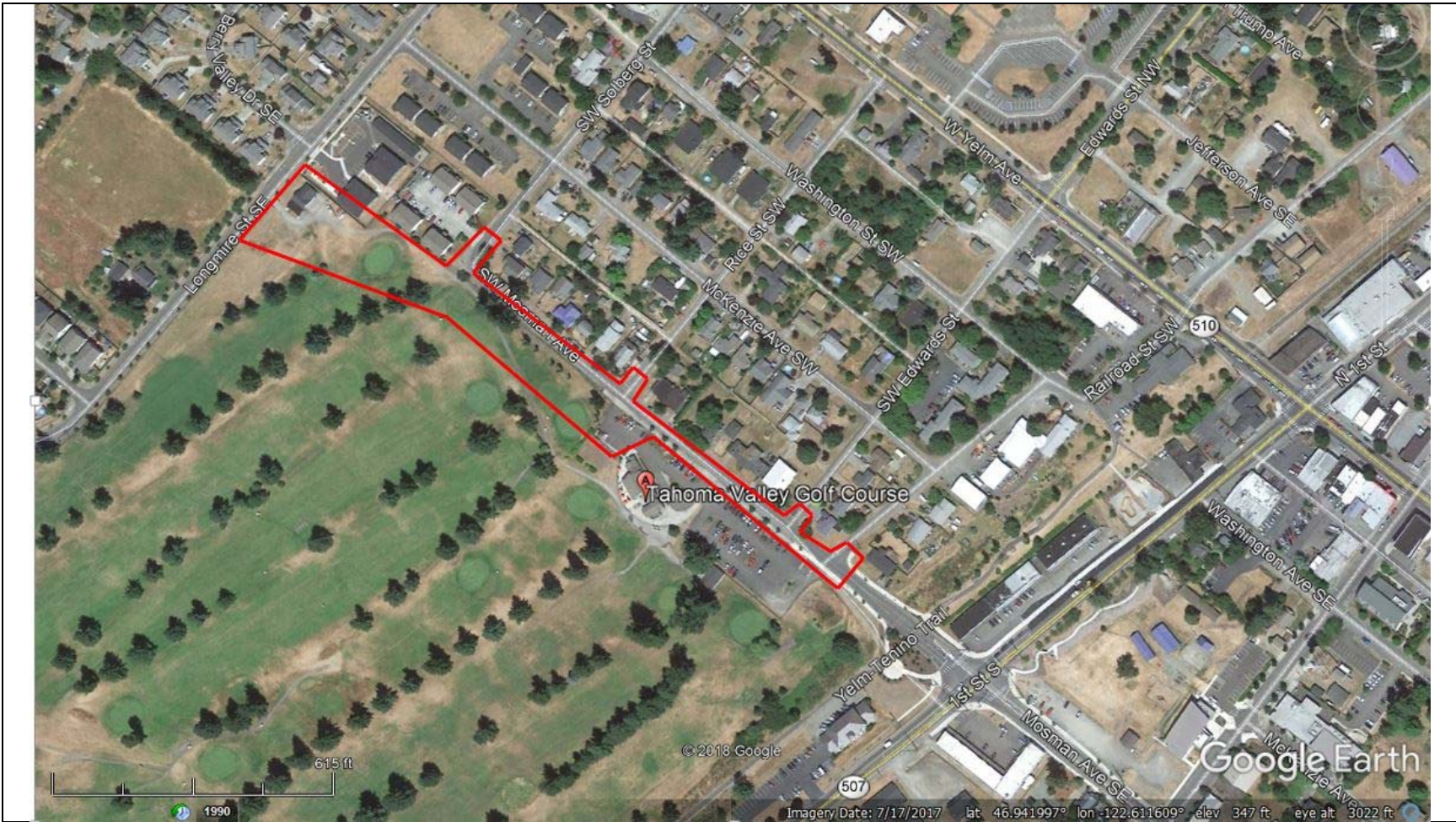
Figures



**Yelm Pocket Gopher survey area
and Project area (USGS TOPO)**

Mosman Phase 2 Yelm Pocket
Gopher Survey Report
Yelm, Thurston County, Washington

Figure 1

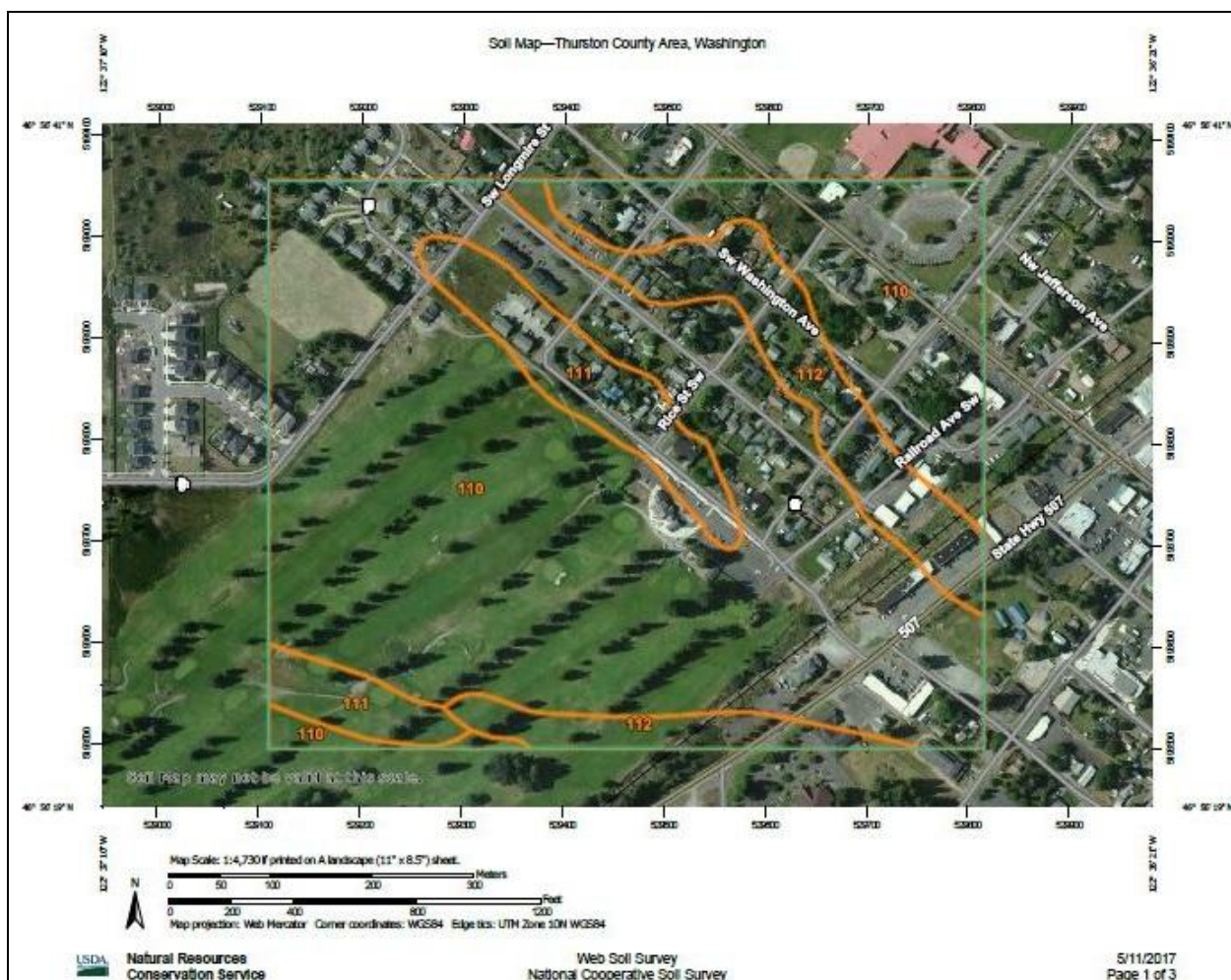


WHPacific

Yelm Pocket Gopher Survey Area

Mosman Phase 2 Yelm Pocket Gopher Survey Report
Yelm, Thurston County, Washington

Figure 2



Map Unit Legend

Thurston County Area, Washington (WA667)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
110	Spanaway gravelly sandy loam, 0 to 3 percent slopes	77.8	79.4%
111	Spanaway gravelly sandy loam, 3 to 15 percent slopes	8.4	8.5%
112	Spanaway stony sandy loam, 0 to 3 percent slopes	11.8	12.0%
Totals for Area of Interest		98.0	100.0%

WHPacific

NRCS SSURGO Soils Mapping

Mosman Phase 2 Yelm Pocket
Gopher Survey Report
Yelm, Thurston County, Washington

Figure 3

Photos



Photo 1: Looking NW along Mosman Ave SW towards Railroad St SW (Image from Google Street View)



Photo 2: Looking SE along Mosman Ave SW towards Edwards St SW and Railroad St SW (Image from Google Street View)



Photo 3: Looking NW along Mosman Ave SW towards Rice St SW (Image from Google Street View)



Photo 4: Looking NW along Mosman Ave SW towards Solberg St SW (Image from Google Street View)



Photo 5: Looking NW across Tahoma Valley Golf Course (8/1/2017)



Photo 6: Looking SE along fence line between Tahoma Valley Golf Course and Mosman Ave SW (9/13/2017 during cultural resources surveys)



Photo 7: Looking NW at the NW corner of the Tahoma Valley Golf Course (9/13/2017 during cultural resources surveys)



Photo 8: Close view of the NW end of Tahoma Valley Golf Course looking towards Longmire S SE (9/13/2017 during cultural resources survey)



Photo 9: Looking SE, mole mounds under fence line between Tahoma Valley Golf Course and apartment buildings at NW end of Mosman Ave SW (10/11/2017)



Photo 10: Looking SE, mole mounds near fence line between Tahoma Valley Golf Course's storage shed and new apartment buildings off Longmire St SE (10/11/2017)



Photo 11: Close up of one of the mole mound near the middle of Photo 10 (10/11/2018)



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Washington Fish and Wildlife Office
510 Desmond Dr. SE, Suite 102
Lacey, Washington 98503



MAR - 6 2017

Brent Butler, Resource Stewardship Director
Thurston County Planning Department
2000 Lakeridge Drive SW
Olympia, Washington 98502

Dear Mr. Butler:

Subject: Guidance for Assessing Potential Take of Mazama Pocket Gophers in
Thurston County in 2017

The Washington Fish and Wildlife Office of the U.S. Fish and Wildlife Service (Service) recommends the following approach to assess the likelihood of take of three subspecies of Mazama pocket gophers (*Thomomys mazama*) protected under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*). Unauthorized take of Mazama pocket gopher (MPG) could result from construction activities under the permitting authorities of Thurston County (County) in the absence of an incidental take permit from the Service. The recommended screening approach will assist the County in avoiding the unauthorized take of MPG. This recommendation covers the 2017 field season that runs from June 1 to October 31, consistent with previous years (2014-2016). This approach is based on the best available science incorporating the knowledge and experience developed in previous years through our partnership with the County. Our recommendation and offer of technical assistance are based on communications with your staff regarding the current number of MPG screening requests associated with building permit applications and other administrative actions (XDs). The Service is committed to providing the County with high quality technical assistance in a timely manner so the County can make informed permit decisions that avoid the unauthorized take of listed species prior to the anticipated completion of a Habitat Conservation Plan (HCP).

Our recommendation and offer of technical assistance for 2017 applies only to properties not known to be occupied by MPGs since April 2014, the date of the federal listing. We consider such screening to be an interim strategy prior to completion of the County HCP. A goal of the County HCP would be to eliminate the need for screening and delays associated with screening through a mitigated approach to the take of listed species and habitat losses.

2017 MPG Screening

Determinations made during the 2017 field season will allow most land use applications to proceed with County permitting. Determinations that allow projects to move forward will be valid through October 31, 2018. Landowners seeking County permits should be aware that it is the Service's position that engaging third party surveyors (consultants, biologists, etc.) to assess MPG presence, although not prohibited, will not substitute for the 2017 screening approach described below.

Site Visit Protocol

MPG Screening Teams will conduct field observations to determine MPG presence on sites with potential habitat. These site visits will be conducted from June 1 through October 31 as follows (See Table 1):

1. Sites with less preferred soils and more than 600 feet from a known occurrence will be visited two (2) times, at least 30 days apart.
2. 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.
3. Sites with more preferred soils will be visited three (3) times, at least 30 days apart.
4. At least one of these visits must occur in September or October.
5. Positive MPG mounds or mound clusters will be recorded via GPS.
6. Sites visits will be discontinued if pocket gopher mounds are detected.

Screening Teams

This year, in order to accommodate the number of screening requests for permit applications submitted to the County, the Service recommends the following (See Table 2):

1. A dedicated, two-person team will screen 3 days/week from June 1 through October 31. This team will conduct the majority of site visits, focusing on smaller parcels (typically less than 20 acres in size).
2. An additional screening team will focus on screening larger sites (typically 20 acres or larger).
3. A third screening team will screen on an as-needed basis, 1 day/week from September 4 through October 31 to facilitate required site visits during this late season period.

Implementation Measures

In order to make the screening schedule described above work efficiently, we recommend the following measures be implemented as part of the 2017 screening approach for the interim strategy. These are intended to reduce costs and staff time, and ensure that MPG screening requests, especially those associated with building permit applications, are screened during the screening season.

1. No soil verification will be required in conjunction with MPG field screening.

2. Field work to implement the County's Critical Areas Ordinance (CAO) prairie protocol will not be conducted by the dedicated MPG field screening team.
3. Site mowing or brushing will be required by the County to initiate first site visits, where necessary and feasible, and completed two to four weeks in advance of the site visit.
4. No further screening will be conducted in 2017 following the detection of MPG mounds on a property. The County and the landowner will subsequently be notified within two weeks as described below.
5. No additional site visit will be required if indeterminate mounds are detected if the full number of required visits by soil type has been completed (i.e. only 2 or 3 site visits maximum, as indicated by soil type below).
6. We recommend that the County prioritize building permit applications slated for construction before November 2018 over XD applications. This will help ensure that applicants that have projects ready for construction will receive necessary permits in a timely manner and initiate construction prior to October 31, 2018.

Thurston County Responsibilities

1. County staff will continue to review land use applications for County critical areas. Further screening and field review will occur on those legal lots that are:
 - a. Within 600 feet of a site known to have positive Mazama pocket gopher occurrence; or
 - b. On or within 300 feet of a soil type known to be associated with Mazama pocket gopher occupancy.
2. County staff will determine if other factors preclude the need for additional screening. Factors that would preclude additional screening for Mazama pocket gophers include, but are not limited to:
 - a. Locations west of the Black River, or on Steamboat Island peninsula.
 - b. Sites submerged for 30 consecutive days or more since October 31, 2016.
 - c. Sites covered with impervious surfaces (as defined in CAO Chapter 17.15 and Title 24).
 - d. Sites that consist of slopes greater than 40 percent, or that contain landslide hazard areas (per existing County regulations).
 - e. Sites on less preferred MPG soils north of Interstate 5.
3. Land use permit applications not excluded from further review will be scheduled, by County staff, for screening according to the protocol described in the enclosed table and the recommendations in this letter.

4. County staff will coordinate all site visits with landowners/applicants, ensure advance notification and property access, and develop site-visit schedules.
5. County will provide the schedule to the Service at least five working days in advance of the intended screening date.

Service Responsibilities

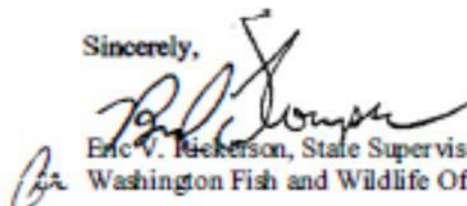
1. Service will initiate, populate, and share a tracking database for screening with the County for purposes of coordination and screening implementation.
2. Service will maintain screening field forms and MPG mound data.
3. Service will make determinations on the likelihood of unauthorized take of MPG based on field screening data, and follow up with a letter and email to the County for all determinations and follow up with a certified letter to landowners of sites with MPG mound detections.
4. Service will coordinate with County staff to implement an effective screening schedule and resolve any associated issues in a timely manner.

Thurston County landowners who know or learn that Mazama pocket gophers are present on their property and are therefore at risk of unauthorized take, can move forward with their proposed development by: 1) contacting the Service directly to discuss the review, assessment, and mitigation process most appropriate for their site(s) and proposed activities (involves development of an individual HCP); or 2) waiting to participate in the yet to be completed Thurston County HCP. Some landowners may have properties that would be of interest to conservation entities. These landowners may choose to forego development and instead seek a conservation option for their property. The Service can assist the landowner with this option.

We look forward to working cooperatively with the County to help you address your potential liability for unauthorized take under the Endangered Species Act. In addition to providing high quality technical assistance, we encourage you to complete the County HCP.

We appreciate your continued communication and conservation planning efforts with us. Please contact Curtis Tanner (360-753-4326) of my staff for further coordination on this recommended approach for 2017.

Sincerely,



Eric V. Pickerson, State Supervisor
Washington Fish and Wildlife Office

Enclosure(s)

Table 1: Summary of Site Visits by Soil Type Needed for the 2017 Mazama Pocket Gopher Review Process for Permit Applications in Thurston County. Additional Measures Apply.

Mazama Pocket Gopher Preference	Soil Type	Site Visits & Timing*
<p>More Preferred</p> <p>(formerly High and Medium preference soils)</p>	<p>Nisqually loamy fine sand, 0 to 3 percent slopes</p> <p>Nisqually loamy fine sand, 3 to 15 percent slopes</p> <p>Spanaway-Nisqually complex, 2 to 10 percent slopes</p> <p>Cagey loamy sand</p> <p>Indianola loamy sand, 0 to 3 percent slopes</p> <p>Spanaway gravelly sandy loam, 0 to 3 percent slopes</p> <p>Spanaway gravelly sandy loam, 3 to 15 percent slopes</p>	<ul style="list-style-type: none"> • 3 site visits at least 30 days apart • At least 1 visit must occur in September or October • To meet the above, 1st visit must occur no later than the last week in August
<p>Less Preferred</p> <p>(formerly Low preference soils)</p>	<p>Alderwood gravelly sandy loam, 0 to 3 percent slopes</p> <p>Alderwood gravelly sandy loam, 3 to 15 percent slopes</p> <p>Everett very gravelly sandy loam, 0 to 3 percent slopes</p> <p>Everett very gravelly sandy loam, 3 to 15 percent slopes</p> <p>Indianola loamy sand, 3 to 15 percent slopes</p> <p>Kapowsin silt loam, 3 to 15 percent slopes</p> <p>McKenna gravelly silt loam, 0 to 5 percent slopes</p> <p>Norma fine sandy loam</p> <p>Norma silt loam</p> <p>Spana gravelly loam</p> <p>Spanaway stony sandy loam, 0 to 3 percent slopes</p> <p>Spanaway stony sandy loam, 3 to 15 percent slopes</p> <p>Yelm fine sandy loam, 0 to 3 percent slopes</p> <p>Yelm fine sandy loam, 3 to 15 percent slopes</p>	<p>For property more than 600 feet from a gopher occurrence:</p> <ul style="list-style-type: none"> • 2 site visits at least 30 days apart • To meet the above, 1st visit must occur by September 30 <p>For property within 600 feet of a gopher occurrence:</p> <ul style="list-style-type: none"> • 3 site visits at least 30 days apart • To meet the above, 1st visit must occur no later than the last week in August

Enclosure to March 2017 letter.

Table 2: Summary of Recommended Screen Team Approach for the 2017 Mazama Pocket Gopher Review Process for Permit Applications in Thurston County.

Number of Screen Team Members	Screening Period	Number of Screening Days per Week	Parcel Size
2	June thru October	3	Small (typically less than 20 ac.)
3-4	June thru October	1	Large (typically larger than 20 ac.)
2-3	September and October	1	Small (typically less than 20 ac.)

Enclosure to March 2017 letter.

Appendix B

2017 USFWS Mazama Pocket Gopher Screening Field Form

Site Visit Date:

8.1.2012

Site Name and Parcel #	Parcel #: _____ Site/Landowner: <u>City of Yelm</u> <u>SW Mosman Ave Phase II</u>
How were the data collected? (circle the method for each)	Transect: <u>Trimble</u> Garmin Aerial Mounds: <u>Trimble</u> Garmin Aerial Notes: _____
Field team names: (CIRCLE who filled out form, CHECK others present or add their names)	Chris C _____ Kim F _____ Lindsay W _____ Marty A _____ Ryan M <u>X</u> Marisa W _____ Suzanne N _____ Paco R <u>X</u> Others: <u>Kara R.</u> ; <u>Jason</u> (Golf Course Superintendent)
Others onsite (name/affiliation)	
Site visit # (CIRCLE all that apply)	1 st <u>1</u> 2 nd _____ Unable to screen _____ Notes: _____
Do onsite conditions preclude the need for further visits? (CIRCLE and DESCRIBE)	Yes <u>No</u> Dense woody cover (trees/shrubs) that appears to preclude any potential MPG use Impervious _____ Compacted _____ Graveled _____ Flooded _____ Other _____ Notes: _____
Describe visibility for mound detection: (CIRCLE and DESCRIBE)	Poor Fair <u>Good</u> Notes: _____
Request mowing? (CIRCLE and DESCRIBE WHERE MOWING IS NEEDED and SHOW ON AERIAL PHOTO)	Yes <u>No</u> N/A Notes: _____

Mounds observed over the whole site are characteristic of:	MPG Mounds	Likely MPG Mounds	Indeterminate	Likely Mole Mounds	Mole Mounds
Quantify or describe amount of each type and approx. # of mounds <i>golf course portion</i> <i>Group= 3 mounds or more existing rd. row</i>	<i>111</i>	<i>111</i>	<i>1</i>		<i>24 + mounds</i>
No MPG mounds observed (circle)					
MPG mounds in Trimble GPS? (CIRCLE and DESCRIBE) If MPG mounds present, entered in Trimble GPS?	None All Most Some Notes: Yes No <u>N/A</u>				
Does woody vegetation onsite match aerial photo? (CIRCLE and DESCRIBE)	Yes No – describe differences and show on parcel map/aerial:				
What portion of the property was screened? (CIRCLE and DESCRIBE)	All Part - describe and show on parcel map/aerial:				
Notes -unique features, memory joggers, issues, potential dangers, possible ESA violations, follow-up needed, specific directions to property or access issues.	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: <i>TPM PR</i> _____ Notes:				

2017 USFWS Mazama Pocket Gopher Screening Field Form

Site Visit Date:

9/1/2017

Site Name and Parcel #	Parcel #: _____ Site/Landowner: <u>City of Gelm</u> <u>SW Massman Ave Phase II</u>
How were the data collected? (circle the method for each)	Transect: <u>Trimble</u> Garmin Aerial Mounds: <u>Trimble</u> Garmin Aerial Notes: _____
Field team names: (CIRCLE who filled out form, CHECK others present or add their names)	Chris C _____ Kim F _____ Lindsay W _____ Marty A _____ <u>Ryan M</u> X Marisa W _____ Suzanne N _____ Paco R X Others: <u>Hans P. (WSDOT)</u> <u>Kara R. (WM Pacific)</u> <u>Jason (Golf Course Superintendent)</u>
Others onsite (name/affiliation)	
Site visit # (CIRCLE all that apply)	1 st _____ <u>2nd</u> _____ Unable to screen _____ Notes: _____
Do onsite conditions preclude the need for further visits? (CIRCLE and DESCRIBE)	Yes _____ <u>No</u> _____ Dense woody cover (trees/shrubs) that appears to preclude any potential MPG use Impervious _____ Compacted _____ Graveled _____ Flooded _____ Other _____ Notes: _____
Describe visibility for mound detection: (CIRCLE and DESCRIBE)	Poor _____ Fair _____ <u>Good</u> _____ Notes: _____
Request mowing? (CIRCLE and DESCRIBE WHERE MOWING IS NEEDED and SHOW ON AERIAL PHOTO)	Yes _____ <u>No</u> _____ <u>N/A</u> _____ Notes: _____

Mounds observed over the whole site are characteristic of:	MPG Mounds	Likely MPG Mounds	Indeterminate	Likely Mole Mounds	Mole Mounds
Quantify or describe amount of each type and approx. # of mounds Group= 3 mounds or more	<i>golf course portion existing row</i>				<i>20+ mounds</i>
No MPG mounds observed (circle)					
MPG mounds in Trimble GPS? (CIRCLE and DESCRIBE)	None All Most Some				
If MPG mounds present, entered in Trimble GPS?	Yes No N/A				
Does woody vegetation onsite match aerial photo? (CIRCLE and DESCRIBE)	Yes No - describe differences and show on parcel map/aerial:				
What portion of the property was screened? (CIRCLE and DESCRIBE)	All Part - describe and show on parcel map/aerial:				
Notes -unique features, memory joggers, issues, potential dangers, possible ESA violations, follow-up needed, specific directions to property or access issues.	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 <i>[Signature]</i> _____				
	Notes:				

2017 USFWS Mazama Pocket Gopher Screening Field Form

Site Visit Date: 10-11-2017

Site Name and Parcel #	Parcel #: _____ Site/Landowner: <u>City of Yelm</u> <u>8W Mossman Ave Phase II</u>
How were the data collected? (circle the method for each)	Transect: Trimble Garmin <u>Aerial</u> Mounds: Trimble Garmin <u>Aerial</u> Notes: _____
Field team names: (CIRCLE who filled out form, CHECK others present or add their names)	Chris C _____ Kim F _____ Lindsay W _____ Marty A _____ Ryan M <u>X</u> Marisa W _____ Suzanne N _____ Paco R _____ Others: <u>Kara Randall (consultant)</u>
Others onsite (name/affiliation)	<u>Mike</u> <u>golf course superintend.</u>
Site visit # (CIRCLE all that apply)	1 st 2 nd <u>Unable to screen</u> Notes: <u>BSA</u>
Do onsite conditions preclude the need for further visits? (CIRCLE and DESCRIBE)	Yes <u>No</u> Dense woody cover (trees/shrubs) that appears to preclude any potential MPG use Impervious Compacted Graveled Flooded Other _____ Notes: _____
Describe visibility for mound detection: (CIRCLE and DESCRIBE)	Poor Fair <u>Good</u> Notes: _____
Request mowing? (CIRCLE and DESCRIBE WHERE MOWING IS NEEDED and SHOW ON AERIAL PHOTO)	Yes <u>No</u> N/A Notes: _____

Mounds observed over the whole site are characteristic of:	MPG Mounds	Likely MPG Mounds	Indeterminate	Likely Mole Mounds	Mole Mounds
Quantify or describe amount of each type and approx. # of mounds <i>Group= 3 mounds or more</i>	/	/	/	/	15+
No MPG mounds observed (circle)					
MPG mounds in Trimble GPS? (CIRCLE and DESCRIBE)	None	All	Most	Some	
If MPG mounds present, entered in Trimble GPS?	Yes	No	N/A		
Does woody vegetation onsite match aerial photo? (CIRCLE and DESCRIBE)	Yes	No - describe differences and show on parcel map/aerial:			
		Yes.			
What portion of the property was screened? (CIRCLE and DESCRIBE)	All	Part - describe and show on parcel map/aerial:			
Notes -unique features, memory joggers, issues, potential dangers, possible ESA violations, follow-up needed, specific directions to property or access issues.	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: <u> </u> <u> </u> <u> </u>		
	Notes:				



Soil Map—Thurston County Area, Washington

Soil map may not be valid at this scale.

Map Scale: 1:4,730 if printed on A landscape (11" x 8.5") sheet.

Map projection: Web Mercator Corner coordinates: WGS84 Edge ICS: UTM Zone 10N WGS84

Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

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