



Environmental Assessment
The Meier Group LLC
Mazama Pocket Gopher
Habitat Conservation Plan

Prepared for:



US Fish and Wildlife Service
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Acronyms and Abbreviations

Applicant	The legal entity applying to the USFWS for an Incidental Take Permit. The Applicant for the purposes of the Environmental Assessment is Kurt Meier, on behalf of the Meier Group, LLC.
BPA	Bonneville Power Administration
CFR	Code of Federal Regulations
EA	environmental assessment
EPA	US Environmental Protection Agency
ESA	Endangered Species Act
GMA	Growth Management Act
HCP	Habitat Conservation Plan
ITP	Incidental Take Permit
MBTA	Migratory Bird Treaty Act
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
PM ₁₀	fine particulate matter of 10 microns or less
Project	the development project
SIP	State Implementation Plan
TMC	Tumwater Municipal Code
USFWS	U.S. Fish and Wildlife Service
WAC	Washington Administrative Code
WDFW	Washington Department of Fish and Wildlife

Executive Summary

The Meier Group, LLC (Applicant) owns and plans to develop an approximately 6.4 acre property located in the City of Tumwater, Thurston County, Washington. The Applicant plans to construct a two story office building with parking and associated facilities on the site (the Project). The Applicant is aware that portions of the property are occupied by the Olympia subspecies of the Mazama pocket gopher (*Thomomys mazama pugetensis*) (pocket gopher), a species listed as threatened by the US Fish and Wildlife Service (USFWS) under the Endangered Species Act of 1973 (ESA), as amended (87 Stat. 884; 16 U.S.C. 1531 et seq.).

Section 10 of the ESA allows non-Federal applicants, under certain terms and conditions, to incidentally take threatened and endangered species that would otherwise be prohibited under Section 9. When a non-Federal landowner or other non-Federal entity wishes to proceed with an activity that is legal in all other respects, but that may result in the incidental taking of a listed species, an incidental take permit (ITP), as defined under Section 10 of the ESA, is required. Under Section 10 of the ESA, a habitat conservation plan (HCP) that meets statutory and U.S. Fish and Wildlife Service (USFWS) regulatory requirements is required to accompany an application for an incidental take permit.

The Applicant developed an HCP and submitted an application for an ITP under section 10(a)(1)(B) of the ESA. The “Meier Group LLC Mazama Pocket Gopher Habitat Conservation Plan” and its associated appendices and exhibits are hereby incorporated into this document by reference (ENVIRON 2015).

The National Environmental Policy Act (NEPA) (42 USC § 4321 et seq.) requires that Federal agencies analyze and publicly disclose the social, economic and environmental effects associated with major Federal actions (§ 4332). The issuance of an ITP under Section 10(a)(1)(B) of the ESA constitutes a Federal action subject to NEPA compliance. After considering the context and intensity of the proposed Federal action, the USFWS has prepared this environmental assessment (EA) to determine whether or not there are significant impacts associated with the Federal action. This EA analyzes the direct, indirect, and cumulative effects of the proposed action and a range of reasonable alternatives

Analyzed alternatives include:

Alternative 1 – No Action Alternative

Under the No Action Alternative, USFWS would not issue the requested ITP and the proposed HCP would not be implemented. Under this alternative, the Applicant would not construct the proposed commercial office building, and the property would be maintained in its current condition. The Applicant would not implement the proposed HCP and no habitat would be conserved and managed in perpetuity to benefit the pocket gopher. The invasive, non-native Scot’s broom currently present on the site would continue to grow unchecked on the northern half of the property, while the grassy area beneath the Bonneville Power Administration (BPA) transmission lines currently occupied by pocket gophers would continue to be periodically mowed. The habitat quality on the property would be expected to remain in its current state or

further degrade, and no conservation measures benefitting the pocket gopher would be implemented.

Alternative 2 - Proposed Action: Issuance of the Requested ITP

The Proposed Action is the issuance of the requested five year ITP based on the Applicant's HCP. Under this alternative the Applicant would develop and construct the proposed Project and implement the conservation program described in the HCP. The proposed Project would entail clearing most of the 6.4-acre property of trees, brush, degraded grassland and other vegetation in preparation for construction of a two-story commercial office building and associated parking areas. The newly constructed office building and associated parking areas would cover most of the property. The Applicant's conservation program proposes to mitigate for the impacts of incidental taking that would result from the proposed Project by permanently conserving a parcel of higher quality habitat known to be occupied by pocket gophers. The Bush Prairie Farm mitigation site is currently zoned for commercial and industrial development, and conservation of this site would reduce the threat of habitat fragmentation and provide for ongoing permanent management of this site for the benefit of the listed species.

Alternative 3 – Avoidance Alternative

An avoidance alternative would require preventing all impacts to pocket gophers that could be affected by construction or development on the Project site. Because all impacts to the listed species would be avoided under this alternative, no take would occur, no HCP would be developed and no ITP would be issued. To avoid impacts to the pocket gopher, about 2.70 acres of the property would remain undeveloped. All clearing, site preparation, construction staging, building assembly, and paving would occur within a reduced footprint sited to avoid any impacts to the listed species. Under this alternative the Applicant would not implement any HCP or long-range conservation plan to provide permanent conservation benefits for the pocket gopher or contribute to the recovery of the species.

1 Introduction

Kurt Meier, of the Meir Group, LLC (Applicant), developed a Habitat Conservation Plan (HCP) and submitted an application for an Incidental Take Permit (ITP) under section 10(a)(1)(B) of the Endangered Species Act of 1973 (ESA), as amended (87 Stat. 884; 16 U.S.C. 1531 et seq.), to the US Fish and Wildlife Service (USFWS). The HCP addresses potential impacts to the threatened Olympia subspecies of the Mazama pocket gopher (*Thomomys mazama pugetensis*) (pocket gopher) that could result from construction and development of an approximately 6.4 acre property in Thurston County, Washington.

Section 9 of the ESA prohibits “take” of species that are listed as endangered, and Section 4 provides the USFWS with the discretion to extend all or some of those protections deemed necessary and advisable to provide for the conservation of threatened species. “Take” is the attempt or action to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect” such species (16 U.S.C. § 1532). The Applicant understands that it may not be possible to avoid all impacts to pocket gophers or their habitats while engaging in development of and construction on this property as proposed, and that those impacts could therefore result in “take”.

Section 10 of the ESA provides exceptions to the section 9 take prohibitions. Section 10 (a)1(B) of the ESA authorizes the Service to permit non-Federal applicants, under certain terms and conditions, to take threatened and endangered species if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. When a non-Federal landowner or other non-Federal entity wishes to proceed with an activity that is legal in all other respects, but that may result in incidental take of a listed species, an ESA Section 10(a)(1)(B) incidental take permit (ITP) is required. Non-Federal landowners or entities that wish to apply for an ITP must submit a habitat conservation plan (HCP) that meets USFWS statutory and regulatory requirements.

The “Meier Group LLC Mazama Pocket Gopher Habitat Conservation Plan” (ENVIRON 2015) describes measures the Applicant will implement to minimize and mitigate for impacts likely to result from such take. The HCP and its associated appendices and exhibits are hereby incorporated into this document by reference.

The National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. §§ 4321 et seq.) requires that Federal agencies analyze and publicly disclose the social, economic and environmental effects associated with major Federal actions (§ 4332). The issuance of an ITP under Section 10(a)(1)(B) of the ESA is a major Federal action subject to NEPA compliance (40 CFR § 1508.18(b)).

This Environmental Assessment (EA) presents an analysis of the anticipated impacts of the proposed Federal action and a range of reasonable alternatives, including the “No Action” alternative. This document is intended to inform decision-makers and the public before decisions are made and before actions are taken. This EA was prepared using an interdisciplinary approach to address all aspects of the natural and human environment relevant to the potential impacts of the proposed Federal action including the direct, indirect, and

cumulative impacts. This document was prepared in compliance with NEPA; the President's Council for Environmental Quality (CEQ) Regulations (40 CFR Section 1500 – 1508); and the Department of the Interior's Departmental Manual (DM) for NEPA compliance, Fish and Wildlife Service (516 DM 6, 30 AM 2-3, 550 FW 1-3, 505 FW 1-5).

This draft Environmental Assessment (EA) and the Applicant's Draft HCP (ENVIRON 2015) are being made available for a 60-day public comment period in accordance with USFWS regulations and policies.

1.1 Purpose and Need

The proposed Federal action analyzed in this draft EA is the issuance of an ITP by the USFWS based on the Applicants' commitment to implement the "Meier Group LLC Mazama Pocket Gopher Habitat Conservation Plan".

The purpose of the proposed Federal action is to respond to the Applicant's application for an ITP for the proposed Covered Species related to activities that have potential to result in take, pursuant to the ESA Section 10(a)(1)(B) and its implementing regulations and policies.

The need for the proposed Federal action is due to the likelihood that activities proposed by the Applicant on properties they own will result in incidental take of Covered Species.

1.2 Project Description

The Applicant plans to develop an approximately 6.4 acre property zoned for commercial development (Parcel No. 12703130102) in the City of Tumwater, Thurston County, Washington (Figures 1 and 2). Site preparation for the proposed project (Project) will remove most of the trees, brush, invasive Scot's broom (*Cytisus scoparius*), and other vegetation for construction of a two story, approximately 80,600 square foot office building and associated facilities. Grading and excavation will disturb the Nisqually fine loamy sand soil-type found on the property. An existing retention pond will be expanded and parking areas will be paved (Figure 3). Some areas beneath the existing Bonneville Power Administration (BPA) electrical transmission lines that cross the property will not be disturbed.

The Applicant acknowledges that they will not be able to completely avoid impacts to pocket gophers present on the Project site. In order to develop the site in accordance with applicable Federal statutes and regulations, the Applicant developed an HCP and applied to the USFWS for an ITP. The HCP describes the planned development and construction activities that could result in take of pocket gophers; and proposes a conservation program intended to avoid, or to minimize and mitigate unavoidable take.

The conservation program incorporates measures intended to reduce, rectify, or compensate for the impacts likely to result from unavoidable take of the listed species including the establishment of the permanent Bush Prairie Farm conservation site that will be managed to benefit the pocket gopher. The Covered Activities and the Applicant's conservation program are more fully described in the sections dedicated to these topics in the HCP.

1.3 Regulatory Environment

For a project or activity to be otherwise lawful, it must remain in compliance with all relevant Federal, State, and local laws, regulations, and ordinances.

National Environmental Policy Act

The National Environmental Policy Act of 1969 (NEPA) as amended (42 USC § 4331 et seq.), requires that Federal agencies analyze and publicly disclose the social, economic and environmental effects associated with major Federal actions (42 USC § 4332). A major Federal action includes actions “with effects that may be major and which are potentially subject to Federal control and responsibility” (40 CFR § 1508.18). The issuance of an ITP under Section 10(a)(1)(B) of the ESA constitutes a major Federal action (40 CFR § 1508.18(b)). While NEPA does not mandate any particular result, it requires the agency to follow particular procedures in its decision-making process. The purpose of these procedures is to ensure that the agency has the best possible information to make an “intelligent, optimally beneficial decision” (Calvert Cliffs’ Coordinating Committee v. United States Atomic Energy Commission 449 F.2d 1109, D.C. Cir., 1971) and to ensure that the public is fully apprised of any environmental risks that may be associated with the proposed action.

The USFWS determined that an environmental assessment (EA) is the appropriate level of review for this proposed action. An EA consists of a concise public document that includes:

- A brief discussion of the need for the proposed federal action;
- Evidence and succinct analysis determining whether to prepare an environmental impact statement or a finding of no significant impact;
- Brief discussions of required alternatives;
- Brief discussions of the environmental impacts of the proposed action and alternatives; and
- A listing of agencies and persons consulted (40 CFR §1508.9).

Endangered Species Act

Section 9 of the ESA prohibits “take” of species that are listed as endangered, and Section 4 provides USFWS with the discretion to extend all or some of those protections deemed necessary and advisable to provide for the conservation of threatened species. Take includes harassment, harm, pursuit, hunting, shooting, wounding, killing, trapping, capturing, or collecting a listed species, or attempting to engage in any such conduct (16 USC §1538(19)). Harm is further defined in ESA implementing regulations as an act which actually kills or injures fish or wildlife, including significant habitat modification or degradation which actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including breeding, spawning, rearing, migrating, feeding or sheltering (50 C.F.R. §17.3, and §222.102).

Non-federal entities can apply for “incidental take” authorization when a project or activity does not involve a federal action and the take is incidental to, and not the purpose of, an otherwise

lawful activity (16 USC §1539(a)(1)(A-B)). Section 10 of the ESA and the USFWS implementing regulations define the circumstances under which an ITP can be issued.

Section 10(a)(2)(A)(i-iv) of the ESA requires that an applicant must submit a conservation plan that specifies:

- The impact that will likely result from such taking; and,
- What steps the applicant will take to minimize and mitigate such impacts, and the funding that will be available to implement such steps; and,
- What alternative actions to such taking the applicant considered and the reasons why such alternatives are not being utilized; and,
- Such other measures that the Service may require as being necessary or appropriate for purposes of the plan.

Section 10(a)(2)(B), provides that the Service shall issue an ITP if the USFWS finds, after opportunity for public comment, that:

- The taking will be incidental; and,
- The applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking; and,
- The applicant will ensure that adequate funding for the plan will be provided; and,
- The taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild; the measures, if any, required by the Service as being necessary or appropriate for purposes of the plan will be met; and,
- The USFWS has received such other assurances as may be required that the plan will be implemented.

The ESA provides “no surprises” assurances through the USFWS implementing regulations (50 CFR Part 17.22(b)(5), 17.32(b)(5)). These regulations assure applicants that if “unforeseen circumstances” arise, USFWS will not require the commitment of additional land, water or financial compensation or additional restrictions on the use of land, water, or other natural resources beyond what is required by the ITP and the associated HCP without the permittees’ consent. The USFWS will honor these assurances as long as a permittee is implementing the terms and conditions of the HCP and the Permit.

National Historical Preservation Act

As required by Section 106 of the National Historic Preservation Act (NHPA) of 1966, USFWS has considered the effect of its issuance of the ITP on historic properties. Historic property means any prehistoric or historic district, site, building, structure, or object included in, or eligible

for inclusion on the National Register; including artifacts, records, and remains which are related to such district, site, building, structure, or object, 16 U.S.C. Section 470(w)(5).

The issuance of an incidental take permit pursuant to section 10(a)(1)(B) of the Endangered Species Act (ESA) of 1973, is an undertaking according to NHPA. However, as defined by the ESA, the ITP only authorizes take of species that is "incidental to, and not the purpose of, the carrying out of an otherwise lawful activity" which are described in the applicant's HCP. The ITP does not authorize, allow, or cause the otherwise lawful activities that may result in take and are described in the HCP.

The ITP, i.e. the undertaking, is limited to take of threatened and endangered species. Species do not meet the definition of historic properties. On this basis, issuance of the ITP is a NHPA Section 106 undertaking with no potential to cause effect on historic properties (36 CFR 800.3.1.a) and further Section 106 review is not required.

In conclusion, the otherwise lawful activities described by the HCP are not being authorized by the FWS incidental take permit. Thus, the FWS has determined that the issuance of the incidental take permit is an undertaking that is of the type that has no potential to cause effects on historic properties (36CFR800.3.a.1). As such, no historic properties will be affected as a result of the issuance of an ITP and the FWS has no further obligation under Section 106.

If a specific covered activity in the HCP happens to be funded or implemented by the FWS, that activity will become an FWS Section 106 undertaking for which the FWS will exercise the Section 106 review and compliance process.

2 Description of the Alternatives

This EA describes the anticipated environmental impacts of the "no action" alternative and the proposed Federal action of issuing the requested ITP.

2.1 Alternative 1 – No Action

Under the No Action Alternative, USFWS would not issue the requested ITP to the Applicant and the proposed HCP would not be implemented. Under this alternative, the Applicant would not construct the proposed commercial office building, and the property would be maintained in its current condition. The Applicant would not implement the proposed HCP and no habitat would be conserved and managed in perpetuity at Bush Prairie Farm to benefit the pocket gopher. The invasive, non-native Scot's broom currently present on the site would continue to grow unchecked on the northern half of the property, while the grassy area beneath the Bonneville Power Administration (BPA) transmission lines currently occupied by pocket gophers would continue to be periodically mowed. The habitat quality on the property would be expected to remain in its current state, and no conservation measures benefitting the pocket gopher would be implemented.

2.2 Alternative 2 – Proposed Action: Issuance of the Requested ITP

The Proposed Action is the issuance of the requested five year ITP based on the Applicant's HCP. Under this alternative the Applicant would develop and construct the proposed Project and implement the conservation program described in the HCP. The proposed Project would

entail clearing most of the 6.4-acre property of trees, brush, invasive Scot's broom, degraded grassland and other vegetation in preparation for construction of a two-story commercial office building and associated parking areas. The newly constructed office building and associated parking areas would cover all of the property except the approximately 0.7 acre that would be avoided to prevent impacts to the guy-wires associated with the overhead BPA transmission lines (Figure 4). The Applicant's proposed conservation would permanently conserve the Bush Prairie Farm mitigation site. This location is currently zoned for commercial and industrial development, and the Applicant's conservation program would strip all future development and subdivision rights from this parcel to prevent future habitat fragmentation. The conservation program would include a Conservation Easement that would be held by a non-governmental third party and which would provide for ongoing permanent funding and management of this site for the benefits of the pocket gopher to the performance standards described in the HCP.

2.3 Alternative 3 – Avoidance Alternative

An avoidance alternative would require preventing all impacts to pocket gophers that could be affected by construction or development on the Project site. Because all impacts to the listed species would be avoided under this alternative, no take would occur, no HCP would be developed and no ITP would be issued. To avoid impacts to the pocket gopher all clearing, site preparation, construction staging, building assembly, and paving would occur within a reduced 3.7 acre footprint. About 2.70 acres of the Project site where pocket gophers and their habitat occur would remain undeveloped. This avoidance approach would limit the buildable area on the project site by more than 40%. Under this alternative no incidental take would occur and the Applicant would not implement the HCP or the conservation program to provide permanent conservation benefits for the pocket gopher or contribute to the recovery of the species.

3 Affected Environment and Environmental Consequences

The affected environment includes the human environment within the geographic scope of the area analyzed. An analysis of the human environment includes both the natural and physical environment and the relationship of people with that environment (40CFR §1058.14). The geographic scope of this analysis is Thurston County which includes the permit area and the range of the pocket gopher. Effects analyzed include ecological (such as climate, geology, surface and groundwater, topography, soils, surface and groundwater, vegetation, wetlands streams and shorelines, wildlife), aesthetic (noise), historic and cultural resources, economic (land use, public services, transportation, utilities), social (environmental justice), or health (air quality), whether direct, indirect, or cumulative (40CFR §1058.8).

Included in this analysis are elements of the natural and human environment that may differ among the alternatives, or for which analysis was required to demonstrate that any differences would not be significant. Elements of the natural and human environment not specifically addressed are those that would not be affected by the Proposed Action and those for which there would be no significant difference among alternatives including, but not limited to land use, water quality, fish resources, and scenic resources.

Different effects might be expected during the construction phase of the proposed project and during ongoing operation and use of the planned facilities. Where different effects are expected to occur they are described below.

3.1 Climate

3.1.1 Affected Environment

Thurston County is located in western Washington at the southern extent of Puget Sound. The area experiences cool, wet, winters and mild summers. The nearest NOAA weather monitoring station to the Project site is at the Olympia Airport (station ID GHCND: USW00024227). The reported mean annual temperature and precipitation, based on records from 1949 to 1999, was 39.25° F and 50-inches per year, respectively. The warmest and driest months generally occur in July and August, December and January are generally the coldest months, and November through February typically receive the greatest amount of precipitation. The average maximum temperature is 60.3° F and the average minimum temperature is 39.6° F (Western Regional Climate Center database 2015).

3.1.2 Environmental Consequences

3.1.2.1 No Action Alternative

Under the No Action Alternative, no building construction would occur and no resulting climate impacts would be expected.

3.1.2.2 Proposed Action

The issuance of the requested permit and construction and operation of the proposed project totaling approximately 5.7 acres (about 0.7 acres of the 6.4 acre site will be avoided due to the presence of existing transmission line support structures and guy lines) and the protection of the proposed Bush Prairie Farm conservation site are not expected to generate measurable or significant direct or indirect impacts to climate in the 774 square mile (495,360 acre) study area.

3.1.2.3 Avoidance Alternative

The construction of a project with a reduced footprint of approximately 3.7 acres that avoids impacts to pocket gophers would result in fewer impacts than expected under the proposed action, but these effects are not expected result in impacts to climate in Thurston County.

3.2 Air Quality

3.2.1 Affected Environment

The Washington State Department of Ecology and the EPA monitor air pollutants and may designate regions as being in "attainment" or "nonattainment" with respect to National Ambient Air Quality Standards (NAAQS) for certain pollutants. In the 1980's, Thurston County air quality exceeded the EPA 24-hour standard for particulate matter of ten microns or less (PM10) and was classified as a "nonattainment area". Subsequent efforts to improve air quality succeeded in achieving the NAAQS standards by 1991.

Nonattainment areas that improve air quality and meet NAAQS requirements can request re-designation as being in attainment. Re-designation requires development of an EPA-approved Maintenance State Implementation Plan (SIP) and compliance with NAAQS requirements for a 20-year period. Thurston County created an EPA-approved SIP and was designated a PM10 air quality maintenance area for PM10 in 2000. The SIP for a second 10-year period was approved by the EPA on October 3, 2013 (78 FR 47259).

Motor vehicles are the largest contributors of air pollutants in the area. Vehicle-associated pollutants include carbon monoxide, sulfur oxides and nitrogen dioxide from combustion, and fine particles from combustion and tire wear.

3.2.2 Environmental Consequences

3.2.2.1 No Action Alternative

Under the No Action Alternative, no construction or changed uses that could contribute to air pollution would occur on the Project site, and no air quality impacts would be anticipated.

3.2.2.2 Proposed Action

Development activities can temporarily impact air quality in the vicinity of construction projects from a number of sources. Examples include fine particulate matter related to heavy equipment operations; dust associated with clearing, grading or excavation activities; and odors from paving or roof sealing activities. These effects are usually short-term, but can be problematic for at-risk groups.

Construction will require the use of heavy equipment, trucks, and tools such as diesel generators and compressors. Air quality in the immediate area near the Project site could be degraded slightly, though Best Management Practices (BMPs) and state and local regulations would be expected to maintain construction-related emissions within NAAQS requirements. Construction activities may increase traffic congestion and traffic-related emissions, especially during peak periods when traffic volumes are heavy. The highest potential for indirect increases in traffic related emissions would be expected along Linderson Way SW near the Project site access point.

These impacts are expected to be temporary and to cease once site development and construction activities are complete (estimated 10 to 16 month project timeline, based largely on weather factors that could impact construction). Project construction would not be expected to significantly affect air quality in the vicinity of the project.

Operation of the proposed commercial office building would be expected to generate some additional vehicle traffic in the vicinity of the Project site. The proposed Project includes 256 parking spots for employees and visitors. Vehicles accessing these parking spaces could generate some increase in airborne pollutants, though not at levels that would be expected to exceed NAAQS requirements. No significant adverse air quality impacts would therefore be expected during operation of the new building.

3.2.2.3 Avoidance Alternative

The approximately 40% smaller available development envelope (approximately 3.7 acres) required to avoid all potential impacts to pocket gophers and their habitat would be expected to result in construction of a smaller commercial office building and associated parking and infrastructure. This reduced construction footprint would be expected to generate equivalently fewer air quality effects when compared to those anticipated under the larger (approximately 5.7 acres) Proposed Alternative.

3.3 Noise

3.3.1 Affected Environment

The Project is located within the City of Tumwater in an urban area of mixed commercial and residential uses. The Project site is zoned for General Commercial development, as is the existing commercial development to the west. Existing Single Family Medium Density residential uses surround the Project site to the north, east, and south.

Chapter 8.08 of the City of Tumwater Municipal Code (TMC), *Noise Control*, identifies sources of noise that are considered unnecessary or a nuisance. Chapter 8.08.030(G) permits "clearly audible" noise from construction activities between the hours 7:00 a.m. and 8:00 p.m. on weekdays, and between 9:00 a.m. and 8:00 p.m. on Saturdays. During all other hours and on Sundays, clearly audible and intrusive noise from construction activities, when received at a residential receiver, could be considered a noise disturbance and thus a violation of this chapter.

Chapter 18.40 of the Washington Administrative Code (WAC) titled *Environmental Performance Standards* sets maximum permissible sound level. The WAC limits are based on the land use zoning of the noise source(s) and of the receiving properties and would apply to operational noise levels.

The Project site is located about 350 feet from the centerline of Linderson Way SW and about 475 feet from the centerline of U.S. Interstate Highway 5 (I-5). There are two buildings located in the commercial area to the west. Although existing sound levels were not measured, it is likely that traffic noise from I-5 and Linderson Way SW dominate the acoustic environment in the Project vicinity and in the residential areas north, east, and south of the Project site.

3.3.2 Environmental Consequences

3.3.2.1 No Action Alternative

Under the No Action Alternative, no construction or ongoing operation of facilities would occur on the Project site, and therefore no resulting noise impacts would be anticipated.

3.3.2.2 Proposed Action

Site preparation and construction activities on the Project site would be expected to temporarily increase noise levels while development activities were underway. These increases in noise would result from a range of sources including the use of heavy equipment and activities such as site clearing, grading, paving, material delivery and assembly. Construction sounds would cease once the development activities at the Project site are completed.

Operation of the commercial office building would increase traffic by up to 256 vehicles (based on the number of available parking spaces), with the greatest increases in vehicle-related noise levels expected during the morning and evening peak-traffic periods (i.e., when employees are arriving and departing from the work site). Because the existing acoustic environment is dominated by traffic noise from I-5, and to a lesser extent, Linderson Way SW, noise from vehicle traffic resulting from the proposed action would be unlikely to result in significant noise impacts in the vicinity of the Project.

Air-handling equipment such as ventilation units would be located on the roof of the office building. Noise from operation of such equipment would not be expected to be audible at adjacent residential areas. It is unlikely that noise from operation of the facility would exceed the WAC limits adopted by the City of Tumwater.

3.3.2.3 Avoidance Alternative

The approximately 40% smaller overall size of the developable area required to avoid impacts to pocket gophers and their habitat on the project site would be expected to reduce the size of the constructed commercial office building and associated parking and infrastructure. Noise impacts under this alternative would be expected to be generated from the same construction and ongoing operations and maintenance activities, but the smaller size of the Project would be expected to generate about 40% fewer noise impacts than would be expected under the Proposed Alternative.

3.4 Geology & Soils

3.4.1 Affected Environment

Thurston County is located in the geologic area known as the Puget Trough, bordered by the Olympic Mountains and the Willapa Hills to the west and by the Cascade Mountains to the east. Geology and soils in the County reflect glaciation-associated deposition and erosion processes, especially those related to the advance and retreat of the Vashon glacier (between about 20,000 and 11,000 years ago).

The soils on the Project site are comprised of recessional and proglacial stratified Vashon Outwash sand (Walsh and others, 1987) with some silt, clay, and gravel. The Project site is located within a Class I area for geologic hazards, which generally have slopes less than 15 percent but may be greater than 15 percent in local areas of low relief and low groundwater concentration (Artim 1976a). Class I areas may include rolling uplands underlain by very stable material and are relatively free from the hazards of ground settlement (Artim 1976b). The majority of these materials are either competent bedrock or, which is likely in the area in and around the Project site, is that it has been overridden by as much as 3,000 feet of glacial ice that compacted the materials and made them denser. Materials in this area also generally have a high bearing capacity, up to 10,000 pounds per square foot and even in areas that are less compacted little to no settlement should occur with loads of 2,000 pounds or more per square foot. The Project site is also located in area that generally has low to moderate liquefaction susceptibility (Palmer and others, 1999).

Soils on the Project site consist of Nisqually fine loamy sand, with 0 to 3 percent slopes, with sandy glacial outwash as the parent material (<http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>). A typical profile consists of:

- 0 – 5 inches – loamy fine sand
- 5 – 31 inches – loamy fine sand
- 31 – 60 inches – loamy sand.

These well-draining soils are classified as belonging to Hydrologic group A. These soil types display a low runoff potential when thoroughly wet and transmit water freely through the soil. Infiltration and transmission rates are generally between about 2 and 6 inches per hour, with low water storage availability and a groundwater depth that is normally greater than 80 inches.

3.4.2 Environmental Consequences

3.4.2.1 No Action Alternative

Under the No Action Alternative, no construction or changed uses would occur on the Project site and no impacts would be expected to geologic resources or native soils.

3.4.2.2 Proposed Action

No surface or subsurface mining or other impacts to geologic resources on the Project area would be expected under the Proposed Alternative. The Project would not create any geologic hazards or increased slopes that might be susceptible to catastrophic failures.

Soils on the Project site will be exposed to clearing, grading, and excavation associated with development and construction activities. Some areas of topsoil may be removed or redistributed in the course of site preparation and development. Some soils on the Project site will be covered with impervious surfaces such as asphalt, concrete, and built structures. Topsoil from the site or from other locations may be placed onsite for landscaping purposes once construction activities are complete. The soils on the Project site are typical of the surrounding area and the loss or impacts to soils at this 6.4 acre location would not be expected to significantly alter or adversely impact the area within the scope of this analysis.

3.4.2.3 Avoidance Alternative

No mining or other impacts to geologic resources would be expected under alternative 3. The sources of effects to soil resources would be expected to be the same under this alternative as expected under the proposed action. The comparatively smaller overall size of the Project under this alternative 3 would be expected to generate approximately 40% less impact to soils when compared to the Proposed Alternative.

3.5 Vegetation

3.5.1 Affected Environment

The geology, soil type, and remnant native vegetation in the vicinity of the Project site suggest that the area was likely formerly prairie that has degraded over time. Also of note within the geographic area considered are two threatened plant species found in Thurston County, golden paintbrush (*Castilleja levisecta*) and water howellia (*Howellia aquatilis*).

The associations of bunch grasses, forbs, sedges, mosses and lichens typical of Puget Sound prairie vegetation developed during a period of relatively dry climate conditions (Crawford and Hall 1997). Native Americans relied on the food and medicinal value of many of these prairie plants and maintained prairie ecosystems by applying periodic low intensity fire. This management encouraged the growth of forbs and bunch grasses and prevented the establishment of trees and shrubs.

As glaciation effects declined and the regional climate warmed, precipitation increased, and the practice of burning the prairies ceased; successional processes transitioned native prairies to forest cover types. By the early 2000's, only about 8% of the original prairie continued to support grassland vegetation and about 2-3% was dominated by native prairie vegetation (Stinson 2005). Remnant native prairies in the region are represented by the Idaho fescue-

white-topped aster community type (Chappell and Crawford 1997). Typical plants on these intact prairie communities include Idaho fescue (*Festuca idahoensis*), forbs including common camas (*Camassia quamash*), sedges such as long-stolon sedge (*Carex inops*), and sparsely scattered shrubs such as kinnikinnick (*Arctostaphylos uva-ursi*).

Elimination of periodic burning allowed non-native invasive plants to thrive and compete with native prairie vegetation (Alverson 2014). Scot's broom (*Cytisus scoparius*) is an introduced non-native woody shrub that has successfully invaded many prairie sites and aggressively out-competes many native plant species. Other nonnative species invading Puget Sound prairies include perennial grasses such as colonial bentgrass (*Agrostis tenuis*), common velvetgrass (*Holcus lanatus*), and Kentucky bluegrass (*Poa pratensis*); perennial forbs such as hairy cats ear (*Hypochaeris radicata*), common St. Johns-wort (*Hypericum perforatum*), buckhorn plantain (*Plantago lanceolata*), and oxeye-daisy (*Chrysanthemum leucanthemum*); and annual forbs including sheep sorrel (*Rumex acetosella*) and teesdalia (*Teesdalia nudicaulis*) (Chappell and Crawford 1997).

Vegetation on the Project site could be characterized as moderately to severely degraded grassland that is being colonized by invasive non-native vegetation. Approximately half of the 6.4 acre Project site is currently covered in dense Scot's broom. The site includes small patches of mixed grasses with invading Scot's broom and a small area of Douglas fir trees. The portion of the Project site under the BPA transmission lines is comprised of native and non-native grasses and forbs likely maintained by periodic mowing (Figure 5). No functioning intact prairie plant communities are known from the Project site, though some individual plants representative of these communities may be present.

Golden paintbrush (*Castilleja levisecta*) was listed as threatened under the ESA on June 11, 1997 (62 FR 31740). The species is known from upland prairies, grasslands, and coastal bluffs (USFWS 2015). Most of the existing wild populations known to exist in Washington today occur on Whidbey and San Juan Islands. A Thurston County population exists on the Rocky Prairie Natural Area Preserve. Though the project development and conservation sites are within the presumed historical range of the species, Golden paintbrush is not known to occur on either of these sites. No critical habitat was designated for this species.

Water howellia (*Howellia aquatilis*) was listed as threatened under the ESA on July 14, 1994 (59 FR 35860), and could occur in Thurston County. The species is found in wetlands of the Puget Trough lowlands bordered by Douglas-fir dominated forests in nearby Pierce County. Confirmed water howellia occurrences reportedly include associations with Oregon ash (USFWS 2015). Because there are no wetlands with Oregon ash plant communities on these sites, occurrence of this species is considered very unlikely. No critical habitat was designated for this species.

3.5.2 Environmental Consequences

3.5.2.1 No Action Alternative

Under the No Action Alternative, the vegetation on site would likely remain in its present condition. The invasive Scot's broom would continue to grow and could spread to other locations on the site. The area under the BPA transmission lines would likely continue to be

periodically mowed, thereby reducing invasion by woody species and maintaining the mix of native and non-native grasses and low statured vegetation on this portion of the property.

3.5.2.2 Proposed Action

Most of the existing vegetation on the project site would be subject to clearing or removal during site preparation and construction under the proposed action. Approximately 0.70 acres of the existing grassy area under the BPA transmission line towers and guy-wire stanchions would not be disturbed. The removal of the moderately to severely degraded grassland, encroaching native and non-native woody vegetation, and invasive plant species would not have a significant impact to the native vegetation communities in the study area. The loss of remnant individual native prairie plants where they may persist within a matrix of invaded non-native grasslands would not constitute a significant impact to the vegetation communities of the area.

The proposed action includes management of a permanent conservation site to offset unavoidable impacts resulting from covered activities. The Bush Prairie Farm conservation site is currently operated as an active agricultural operation, and vegetation on the site consists largely of non-native crop plants which are readily consumed by the site's resident pocket gophers. Under the proposed alternative, the conservation site could continue to be managed in accordance with accepted agricultural practices recognized by the USFWS as providing a net conservation benefit and therefore specifically exempted from the take prohibitions of Section 9 of the ESA as described in the Section 4(d) Special Rule for the pocket gopher (79 FR 19790-19792). A Conservation Easement prescribing ongoing management and performance standards will require that no more than 10% of the site will consist of invasive plant species such as Scot's broom. The vegetation on the conservation site, therefore, would be maintained in its current condition and would not be significantly impacted under the proposed alternative.

3.5.2.3 Avoidance Alternative

The smaller overall size (approximately 40 % smaller) of a commercial office building and associated parking and infrastructure that could be constructed at the Project site while avoiding all potential impacts would be expected to generate vegetation effects similar, though smaller in scale, to those under the Proposed Alternative on those areas that would be cleared for development and construction. Because the degraded grassland area under the BPA transmission lines would be avoided under this alternative, this area would be expected to remain in its present condition. The expected continued periodic mowing of these areas would continue to reduce woody species invasion and maintain the mix of native and non-native grasses and low statured vegetation in that area of the property.

3.6 Fish and Wildlife

3.6.1 Affected Environment

The highly varied topography, soils, and vegetation communities in Thurston County support a wide range of fish and wildlife. The following description of fish and wildlife resources will focus primarily on species likely to occur at the project and conservation sites. Threatened and endangered species that occur within Thurston County are also briefly described.

Common wildlife species in the vicinity of the project and conservation sites include Pacific treefrog (*Pseudacris regilla*), red-tailed hawk (*Buteo jamaicensis*), American robin (*Turdus migratorius*), song sparrow (*Melospiza melodia*), black-capped chickadee (*Poecile atricapilla*), dark-eyed junco (*Junco hyemalis*), house finch (*Carpodacus mexicanus*), big brown bat (*Eptesicus fuscus*), Townsend's big-eared bat (*Corynorhinus townsendii*), deer mouse (*Peromyscus maniculatus*), vole (*Microtus* sp.), mole (*Scapanus* sp.), mountain beaver (*Aplodontia rufa*), raccoon (*Procyon lotor*), Virginia opossum (*Didelphis virginiana*), coyote (*Canis latrans*), and black-tailed deer (*Odocoileus hemionus columbianus*).

Threatened and endangered species that could occur in Thurston County include the Taylor's checkerspot butterfly (*Euphydryas editha taylori*), Oregon spotted frog (*Rana pretiosa*), bull trout (*Salvelinus confluentus*), yellow-billed cuckoo (*Coccyzus americanus*), Northern spotted owl (*Strix occidentalis caurina*), marbled murrelet (*Brachyramphus marmoratus*), streaked horned lark (*Eremophila alpestris strigata*), and the Olympia, Tenino, and Yelm subspecies of the Mazama pocket gopher (*Thomomys mazama pugetensis*, *T. m. tumuli*, and *T. m. yelmensis*, respectively). The fisher (*Martes pennanti*) is currently considered a candidate to be listed as threatened or endangered.

Table 2 lists each ESA-listed and candidate species with its respective listing status, whether critical habitat was designated for the species, and a short description of the likelihood that the species could be affected by the proposed Federal action. The project is not located within designated critical habitat for any listed species, and no critical habitats will be affected (USFWS 2014). Of the listed species that may occur in Thurston County, only the Olympia subspecies of the Mazama pocket gopher is known to or is likely to occur on the project and the conservation sites.

On April 9, 2014, USFWS listed four subspecies of Mazama pocket gophers, including the Olympia subspecies, as threatened under the ESA (79FR 19760-19796). From the listing rule:

“Pocket gophers are generalist herbivores and their diet includes a wide variety of plant material, including leafy vegetation, succulent roots, shoots, and tubers. In natural settings pocket gophers play a key ecological role by aerating soils, enriching soils with nutrients, activating the seed bank, and stimulating plant growth, though they can be considered pests in agricultural systems. In prairie and meadow ecosystems, pocket gopher activity is important in maintaining species richness and diversity.

Table 2: Federally listed species that may occur in or near the project area.

Species	Listing Status	Critical Habitat	Comments
Taylor's checkerspot butterfly	Endangered	Designated 10-03-2013 (78 FR 61505)	Occupancy has not been verified on the project and conservation sites Lack of suitable larval host plants or nectaring plants makes occurrence of this species very unlikely on these sites
Oregon spotted frog	Threatened	Proposed 08-29-2013 (78 FR 53537)	Species has only been confirmed in Black River watershed in Thurston County The project and conservation sites are not within this watershed, and are therefore unlikely to affect this species
Bull trout	Threatened	Revised 10-18-2010 (75 FR 63898)	Very limited occurrence expected in Thurston County The project and conservation sites are upland areas with no wetlands or chance to disturb bull trout or impact stream water quality important to this species
Yellow-billed cuckoo	Threatened	Designated 08-15-2014 (79 FR 48547)	Not confirmed to be breeding in the state Requires large blocks of hardwood-dominated riparian habitat for nesting Suitable habitat is not found on the project or conservation sites
Northern spotted owl	Threatened	Revised 12-04-2012 (77 FR 71875)	Requires mature conifer forest habitat types for nesting No suitable habitat is found on the project or conservation sites
Marbled murrelet	Threatened	Revised 10-05-2011 (76 FR 61599)	Requires mature conifer forest habitat types for nesting No suitable habitat is found on the project or conservation sites
Streaked horned lark	Threatened	Designated 10-03-2013 (78 FR 61505)	In Thurston County the species uses large open areas for breeding and foraging Project and conservation sites likely too small to support suitable habitat for this species
Olympia ssp. of Mazama pocket gopher	Threatened	Designated 04-09-2014 (79 FR 19711)	Occupancy has been verified on the project and the conservation sites Suitable habitat is present on several of the project development and conservation

			sites
Tenino ssp. of Mazama pocket gopher	Threatened	Designated 04-09-2014 (79 FR 19711)	The project and conservation sites are not within the range of this subspecies
Yelm ssp. of Mazama pocket gopher	Threatened	Designated 04-09-2014 (79 FR 19711)	The project and conservation sites are not within the range of this subspecies
Fisher	Candidate		Require conifer forest habitat types for denning and reproduction Suitable habitat is not found on the project or conservation sites

The Washington prairie ecosystem upon which the four Thurston/Pierce subspecies of the Mazama pocket gopher primarily depend has been reduced by an estimated 90 to 95 percent over the past 150 years, with less than 10 percent of the native prairie remaining in the south Puget Sound region today. Due to loss and degradation of gopher habitat from ongoing and future residential and commercial development, encroachment of shrubs and trees into their prairie habitats, and negative impacts from both current and future military training (for Roy Prairie and Yelm subspecies), we conclude that the threats to the habitat of the four Thurston/Pierce subspecies of the Mazama pocket gopher are significant.”

The Olympia subspecies of the Mazama pocket gopher is known to occupy the loamy sand soils at the project and conservation sites. Mazama pocket gophers live on open meadows, prairies and grassland habitats of the glacial outwash plain where there are porous, well-drained soils (Dalquest 1948). Mazama pocket gophers do not require high quality prairie, but can live in a wide range of grasslands, particularly if they include a significant component of forbs, such as clover, lupines, dandelions, false dandelions, and camas. Perennial forbs are preferred for food over grasses, and fleshy roots and bulbs, such as camas (*Camasia* spp.) are important when green vegetation is not available. The distribution and abundance of pocket gophers are greatly affected by soils. Soil characteristics that affect gophers include depth and texture, particularly rock and clay content that affects burrowing ability, permeability that can result in periodic flooding of burrows, and water-holding capacity and fertility that affect growth of plant foods. In general, pocket gophers prefer deep, light-textured, porous, well-drained soils, and do not occur in peat or heavy clay soils (Chase et al. 1982, Baker et al. 2003). The characteristics described above, i.e., vacant open meadow lots with adequate vegetation and the presence of Nisqually loamy, fine sand, prairie soils, are essential elements of suitable habitat found on portions of the Project site.

An overview of the status of the Olympia subspecies of the Mazama pocket gopher is provided in the HCP (Section 6, page 16).

3.6.2 Environmental Consequences

3.6.2.1 No Action Alternative

Under the No Action Alternative, the habitat and the vegetation on the Project site would be expected to remain in its present condition. The Douglas fir trees would continue to be available for migratory songbirds and raptors. Bats could continue to use potential roost sites such as separating bark and/or cavities. Common wildlife species such as Pacific treefrogs, red-tailed hawks, American robins, song sparrows, black-capped chickadees, dark-eyed juncos, house finches, big brown bats, Townsend's big-eared bats, deer mice, voles, moles, mountain beavers, raccoons, Virginia opossums, coyotes, and black-tailed deer would likely continue to use the existing vegetation on the Project site as cover.

Pocket gophers would likely continue to persist at low levels in the grassy area under the BPA transmission lines so long as regular mowing continues to prevent invasion of woody plants such as Scot's broom. The available size and quality of the currently occupied habitat would be degraded if the area was invaded by woody plants. Any development under the BPA transmission lines on the adjacent property would further isolate pocket gophers on the Project site.

3.6.2.2 Proposed Action

Most of the existing wildlife habitat on the 6.4 acre Project site would be removed under the proposed alternative (Figure 5). Site clearing and preparation activities would eliminate the Douglas fir trees that provide nesting, foraging, and perching sites for birds and roost sites for bats. Most of the remaining native and non-native shrubby vegetation that provides cover for other wildlife typical of the area would be removed. These habitat types and the wildlife that they support are common in the study area. The loss of these habitat patches, therefore, would not be expected to result in a significant impact to any of the common wildlife species in the area.

About 2.0 of the approximately 2.7 acres of potential pocket gopher habitat on the Project site would be lost due to site preparation and construction activities under the proposed alternative. Pocket gophers and their habitat would not be expected to persist in this area upon completion of the proposed Project. Approximately 0.70-acre of the degraded grassland area beneath the BPA transmission lines would remain undisturbed. Any pocket gophers in the remnant habitat patch may be able to survive for some period of time after project completion, though the fragmentation, loss of foraging habitat, and reproductive isolation of remaining individuals makes long-term persistence of a viable population in this area unlikely. These indirect effects, therefore, reduce the value of these remaining undisturbed areas as pocket gopher habitat over time.

The proposed action would result in permanent protection of a 2.5-acre site specifically for the benefit of the pocket gopher. The HCP proposes acquisition and subsequent extinguishment of the development rights of an offsite location near the designated critical habitat for the Olympia subspecies of Mazama pocket gopher. The proposed conservation site is currently zoned for commercial or industrial development, and could be attractive to those interested in developing commercial property near the Olympia Regional Airport. The HCP states that a Conservation Easement, management plan, and funding proposal intended to ensure ongoing and permanent

management of the property to ensure continued pocket gopher persistence will be executed prior to clearing and development activities are initiated at the Project site. By targeting occupied pocket gopher habitat adjacent to designated critical habitat for the species, the HCP proposal would expand the landscape of managed lands contributing to the long-term survival and recovery of the species.

Though portions of the Project site are known to be occupied by pocket gophers, the loss of approximately 2.7 acres of degraded grasslands in a fragmented habitat context would be mitigated by permanent conservation of an occupied site that would expand the acreage of lands managed to benefit pocket gophers under the Proposed Action. The location adjacent to designated critical habitat and removal of the potential development pressure increase the relative habitat value of the conservation site when compared to that of the Project site

3.6.2.3 Avoidance Alternative

Under the Avoidance Alternative, the habitat and the vegetation on those portions of the property that are currently under shrubby or tree canopy cover would be removed for site preparation and development, similar to the Proposed Action alternative. Site clearing and preparation activities would eliminate the Douglas fir trees that provide nesting, foraging, and perching sites for birds and roost sites for bats. Most of the remaining native and non-native shrubby vegetation that provides cover for other wildlife typical of the area would be removed.

Pocket gophers would likely persist in the grassy area under the BPA transmission lines so long as regular mowing continues to prevent invasion of woody plants such as Scot's broom. The available size and quality of the currently occupied habitat would be degraded if the area was invaded by woody plants. On-site development and any development under the BPA transmission lines on the adjacent property would further isolate pocket gophers remaining on the Project site.

Under this alternative, the Applicant would not implement the proposed conservation program intended to benefit pocket gophers. The development rights would not be extinguished on the proposed conservation site, and there are no assurances that the conservation site property would be permanently managed to support a sustainable population of pocket gophers.

3.7 Recreation

3.7.1 Affected Environment

The Project site is not operated for recreational uses, though some residents of nearby neighborhoods access the undeveloped location through unlocked gates or openings in perimeter fences. Dog-walking is the most frequently observed recreational use on the site.

3.7.2 Environmental Consequences

3.7.2.1 No Action Alternative

The existing uses would likely continue under the No Action Alternative, though the landowner could choose to restrict access to the property by locking gates and closing fence gaps at any time.

3.7.2.2 Proposed Action

The area accessed by dog-walkers and others for recreational uses would be altered as site preparation and development occur under Alternative 2. It is likely that the Project site will be fenced and access will be restricted during the construction phase, which would eliminate recreational uses on the property during this time. The site is not designated or operated as a park or open space, so the loss of access to the private property for unauthorized recreational uses under the Proposed Action is not expected significantly impact recreational opportunities in the community.

3.7.2.3 Avoidance Alternative

Recreational uses such as dog-walking on those undeveloped portions of the Project site would likely continue under the Avoidance Alternative, though the landowner could choose to restrict access to the property by locking gates and closing fence gaps at any time.

3.8 Archaeological, Historic, and Cultural

3.8.1 Affected Environment

A different but similar project was proposed at this location in 2008, and at that time the City of Tumwater Development Services Department determined that the project did not have a probable significant adverse impact on the environment (Mitigated Determination of Non-Significant, (City of Tumwater 2008). This decision was made after review of a completed environmental checklist and other information on file by the City of Tumwater. The proposed Project is similar in scope and scale as the 2008 proposed development except the size of the building was reduced to two stories from three stories. The Project site was cleared in 2008 when plans were being made to develop the property.

Typically, when a SEPA checklist is prepared, a cultural resources report is required if potential archaeological, historic, or cultural resource sites are believed to be in the area (Chris Carlson, pers. comm.). No archaeological, historic or cultural resources are known to occur on the site.

Environmental Consequences

3.8.1.1 No Action Alternative

Under the No Action Alternative, no ground disturbance or building construction will occur and, therefore no impacts would be expected to archaeological, historic, or cultural resources.

3.8.1.2 Proposed Action

The proposed Project would clear the site of all vegetation. Ground disturbance would include removal of the top two to three feet of the soil layer on most of the site. An existing retention pond would remain in place and be expanded. Approximately 0.7 acres under the BPA transmission line poles and guy-wires would not be disturbed.

Although there are no archaeological, historic or cultural resources known to occur on the site, the building permit includes conditional requirements addressing historic and cultural resources. If any cultural or historical site or artifact is found, the builder is required to: 1) immediately stop work; and 2) notify the State Historical Preservation Office and the local tribe, which for this area is the Squaxin Island Tribe (Chris Carlson, per. comm.). Under these conditions, i.e., no known

sites and the permit condition, it is anticipated that the potential to have impacts on archaeological, historic or cultural resources is very low.

3.8.1.3 Avoidance Alternative

Under the Avoidance alternative, impacts would be reduced to the approximately 40% smaller development envelope on the property sited to avoid all impacts to the listed species. Resulting effects would be similar to those for the Proposed Alternative for those portions of the Project site where ground-disturbing activities would occur.

3.9 Socioeconomics and Environmental Justice

3.9.1 Affected Environment

This section presents the potential socioeconomic and environmental justice effects of the proposed Project and includes an overview of demographic conditions in the area. This analysis assumes that most of the economic and employment effects associated with the Project would be experienced in the City of Tumwater, the nearby cities of Olympia and Lacey, and in surrounding Thurston County.

3.9.1.1 Socioeconomics

The Project site is located within the City of Tumwater. Olympia, the Washington State capital, is located about 4.5 miles north of the Project site and the City of Lacey is about 8.6 miles northeast of the site. The 2010 Census reported that Thurston County had a population of 252,264 (US Census Bureau 2010). The population of Tumwater was reported to be 17,371, Olympia had 46,478 residents, and Lacey was reported to have a population of 42,393 (US Census Bureau 2010) (Table 3). Table 3 summarizes the 2010 populations of these communities and the driving distances from the Project site. The table also summarizes other pertinent data describing the socioeconomic and environmental justice effects of the Project, such as median household income, poverty rate and unemployment rate.

	Driving Distance from Project Site (in Miles)	Population (2010) ¹	Median Household Income (2013) (in \$2014) ²	Poverty Rate (2013) ²	Unemployment Rate (2013) ²
Tumwater	0.0	17,371	\$63,527	10.60%	4.50%
Olympia	4.5	46,478	\$52,868	15.80%	6.30%
Lacey	8.6	42,393	\$59,930	10.70%	6.10%
Thurston County		252,264	\$63,388	11.70%	5.80%
Washington		6,724,540	\$60,585	13.40%	6.00%
USA		308,745,538	\$54,034	15.40%	6.20%

Sources:

¹ U.S. Census Bureau, 2010 Census. "DP-1: Demographic Profile Data." Available at (<http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>), accessed February 27, 2015.

² U.S. Census Bureau, 2009-2013 5-Year American Community Survey. "DP03: Selected Economic Characteristics." Available at (<http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>), accessed February 27, 2015.

The reported unemployment rate in Tumwater was 4.5 percent (US Census Bureau 2010) (Table 3). Olympia had an unemployment rate of 6.3 percent, while that in Lacey was 6.1 percent. These are both higher than the 5.8 percent reported in Thurston County (US Census Bureau 2013). Public administration and educational services, and health care and social assistance, are the largest industries in terms of employment in all three cities and in Thurston County as a whole (US Census Bureau 2013).

3.9.1.2 Environmental Justice

The EPA's Office of Environmental Justice offers the following definition of environmental justice:

"The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people, including racial, ethnic, or socioeconomic group should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of Federal, state, local, and tribal programs and policies."

The concept of environmental justice is rooted in the Civil Rights Act of 1964, which prohibited discrimination in Federally-assisted programs, and in Executive Order 12898, "*Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations*," issued February 11, 1994. Executive order 12898 was intended to ensure that Federal actions and policies do not result in disproportionately high adverse effects on minority or low-income populations. Environmental justice issues are mandated and regulated at the Federal level, and compliance with NEPA requires analysis of environmental justice effects. As such, environmental justice is considered part of the NEPA process.

This section presents the background for an analysis of environmental justice, which refers to the fair and equitable treatment of individuals regardless of race, ethnicity, or income level in the development and implementation of environmental management policies and actions. Therefore, the key socioeconomic parameters addressed here are local demographics, including population and race/ethnicity; and measures of social and economic well-being, including median household income and poverty rates.

Median household income and poverty rates represent widely used economic indicators of social well-being. Table 3 summarizes these socioeconomic data, as well as total population data, for the Project site and surrounding area (Tumwater, Olympia, and Lacey), Thurston County, and the State of Washington.

Median household income suggests some disparities within the county. Based on 2013 Census data (2014 dollars), median household income in Tumwater was \$63,527, while median household incomes in Olympia and Lacey were \$52,868 and \$59,930, respectively. Median household income was \$63,388 in Thurston County, and \$60,585 in Washington State.

Poverty rates represent the percentage of an area's total population living at or below the poverty threshold established by the US Census Bureau. A comparison of poverty rates in the

three cities within a 10-mile driving distance of the Project site and Thurston County as a whole suggest that while the poverty rates in Tumwater and Lacey were lower than the County, Olympia has a much higher poverty rate compared to Thurston County (Table 3). Based on 2010 Census data, the poverty rate was 10.6 percent in Tumwater, 15.8 percent in Olympia, 10.7 percent in Lacey, and 11.7 percent in Thurston County.

Similar to the analysis of poverty rates, percentages of racial and ethnic groups in each city were compared to those in Thurston County (Table 4). Where these percentages were higher than the County, the percentages are shaded gray in Table 4. Generally, the racial and ethnic makeup of the Project site and surrounding area was much less diverse than the County population. The predominant racial group in Thurston County was White (Caucasian), comprising roughly 82.4 percent of the countywide population in 2010. The largest racial group in the county was Asian, making up 5.2 percent of total population. At 6.0 percent and 8.0 percent, respectively, the percentage of Asian populations in Olympia and Lacey were higher than the County. Lacey had higher percentages of Black, Native Hawaiian, and Hispanic/Latino populations relative to Thurston County.

	2010 Population	Race						Ethnicity
		White	Black	AIAN	Asian	Native Hawaiian or OPI	Other	Hispanic or Latino ¹
Tumwater	17,371	14,769	301	201	841	90	272	1,069
		85.0%	1.7%	1.2%	4.8%	0.5%	1.6%	6.2%
Olympia	46,478	38,895	931	498	2,799	180	847	2,919
		83.7%	2.0%	1.1%	6.0%	0.4%	1.8%	6.3%
Lacey	42,393	31,446	2,302	490	3,376	722	1,102	3,886
		74.2%	5.4%	1.2%	8.0%	1.7%	2.6%	9.2%
Thurston County	252,264	207,856	6,752	3,515	13,037	1,961	5,648	17,787
		82.4%	2.7%	1.4%	5.2%	0.8%	2.2%	7.1%
Washington	6,724,540	5,196,362	240,042	103,869	481,067	40,475	349,799	755,790
		77.3%	3.6%	1.5%	7.2%	0.6%	5.2%	11.2%

¹ These may belong to any race.

ACRONYMS: AIAN - American Indian and Alaska Native; OPI - Other Pacific Islander.

GRAY – Higher than respective county.

Source: U.S. Census Bureau, 2010 Census. "DP-1: Demographic Profile Data." Available at (<http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>), accessed February 27, 2015

3.9.2 Environmental Consequences

3.9.2.1 No Action Alternative

Under the No Action Alternative the proposed Project would not be developed. No construction or new uses at the site would occur, and therefore no socioeconomic or environmental justice impacts would occur as a result of this alternative.

3.9.2.2 Proposed Action

Some socioeconomic effects would be expected in the vicinity of the Project site as a result of the proposed action. Because distinct socioeconomic effects are anticipated for the construction and operation phases of the proposed development, they are described separately below.

Site preparation, construction, and development of the proposed Project are expected to generate economic benefits to the area. Construction of the proposed Project totals an estimated \$10.4 million in direct output value of the construction industry. Some of these expenditures would reasonably be expected to be returned to the Thurston County economy in the form of additional indirect and induced economic benefits.

Project development would employ approximately 300 to 400 construction workers over the 12 to 14 month building phase. It is likely that most of these workers would reside in the nearby cities or the local area near the Project site. The construction phase would therefore be expected to generate short-term economic benefits to Tumwater and the surrounding communities.

Once construction is complete, operation and use of the new office building would be expected to generate long-term economic benefits within the local area. Initial building tenants suggest that approximately 75 permanent new jobs would be created, while another 150 employees are expected to be transferred from other work locations in the area. It is likely that most of the new long-term employees would reside or relocate to communities near the Project site. The creation of new employment opportunities would generate induced and incidental economic benefits to the local area through increased household and other spending.

The proposed Project would not be expected to disproportionately impact any group classified by race, ethnicity, national origin or income. No adverse socioeconomic or environmental justice impacts would therefore be anticipated to result from the proposed action. Socioeconomic and environmental justice impacts would therefore not be expected to significantly impact the study area.

3.9.2.3 Avoidance Alternative

The socioeconomic and environmental justice effects under the Avoidance Alternative would be similar to those expected under the Proposed Action, though at the reduced scale required by the smaller development area. Fewer short-term economic benefits would be generated because fewer construction workers would be needed over fewer construction days to develop a smaller project that avoided impacts to listed species. The smaller resulting commercial office building would also host a smaller long-term work-force.

Under this alternative, the smaller project would also not be expected to disproportionately impact any group classified by race, ethnicity, national origin or income. No adverse socioeconomic or environmental justice impacts would be anticipated.

3.10 Transportation

3.10.1 Affected Environment

Access to the Project site would be via the existing access points serving the adjacent 6500 Linderson development (Transpo Group 2007). An additional emergency access will be provided from 7th Avenue SW. The Project site is accessible by secondary roads, including Trooper Road, Capital Boulevard, Israel Road/70th Avenue, Tumwater Boulevard, and Linderson Way. One national highway, Interstate Highway 5, can be used to access these secondary roads from various directions, especially by those coming from Olympia and Lacey.

Sidewalks and pedestrian facilities currently exist on Linderson Way along the 6500 Linderson development frontage and south of Dennis Street. However, no sidewalks are provided along Linderson Way south of the Project site.

A traffic impact study for the Project conducted by The Transpo Group (2007) looked into any potential traffic-related impacts the Project would have on the roadway network in the vicinity of the Project site. The analysis in the Transpo Group (2007) report includes a description of the surrounding roadway network, an estimate of Project site-generated peak hour vehicle trips, and an evaluation of peak hour intersection operations.

3.10.2 Environmental Consequences

3.10.2.1 No Action Alternative

Under the No Action Alternative, no construction would occur on the Project site and no changes in use would be expected. No impacts to transportation infrastructure or traffic would be expected.

3.10.2.2 Proposed Action

The construction phase of the Project is projected to continue for 12 to 14 months. As described previously, approximately 300 to 400 construction workers would be employed during the development of the site. Vehicle traffic related to this influx of temporary workers would be expected to increase somewhat during the construction phase especially during peak commute times. However, because these workers would likely be commuting from throughout the surrounding communities, the current road infrastructure would be expected to accommodate this temporary increase in commuter traffic.

Trucks delivering construction material or transporting construction debris would access the Project site throughout the construction phase. Materials delivery would be expected approximately once per day on average. Fewer trips would be expected early during the development phase, increasing to an average of two trips per day as the job progresses, and then declining as the construction phase is completed. Removal of construction debris would be expected to require approximately one container trip per week during the construction phase. Based on these projections the current road infrastructure would be expected to accommodate this increase in truck traffic, and there would not be a noticeable effect on traffic volumes.

The building tenant would generate about 75 full-time additional jobs when the commercial office facility is operational. In addition, approximately 150 existing employees are planned to be transferred to this office space from other locations. Most of these 225 employees are

expected to reside in or to relocate to communities near the Project site once the facility is operational.

Access to the building will be provided on secondary roadways accessible from the surrounding communities or from Interstate Highway 5. A shuttle service is available from the Inter-City (IT) transit center to the adjacent office building. It is likely that most employees would commute via personal vehicles, carpool, or use the shuttle service or other public transportation.

Vehicle traffic would be expected to increase somewhat especially during peak commute times. Because the anticipated mix of traffic would likely be generated from throughout the surrounding communities, however, the current road infrastructure would be expected to accommodate this increase in commuter traffic. According to the Transpo Group (2007) study, the Project would “increase traffic volumes at the study intersections ranging from 1 to 5 percent. This is within the daily fluctuations typically observed in background traffic volumes and would likely not be noticeable to the average motorist. However, some specific movements, such as the eastbound left-turn movement at the Lee Street/Capitol Boulevard intersection will experience noticeable increases in traffic volumes.”

These effects of the Proposed Action on transportation facilities and traffic are not expected to be significant.

3.10.2.3 Avoidance Alternative

Transportation impacts under the Avoidance Alternative would be expected to be similar but smaller in scale to those expected under the Proposed Action. Fewer construction workers and a smaller expected workforce of permanent employees in a smaller office building would be expected to generate an equivalently smaller transportation impact.

4 Cumulative Impacts

The Council on Environmental Quality regulations for implementing NEPA requires an assessment of cumulative effects during the decision making process for federal projects. Cumulative effects are defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions” (40 CFR 1508.7). Cumulative impacts can result from individually minor but collectively significant actions that take place over a period of time.

Most of the effects of the proposed Action are expected to be temporary, and associated with Project construction. The City of Tumwater anticipated and planned for these effects in part by zoning the property for General Commercial development in accordance with its planning and zoning ordinances and in keeping with the State of Washington’s Growth Management Act. The Proposed Action is not expected to have cumulative impacts to climate, geology, and soils; air quality; noise; water resources; vegetation; historic, archeological, and cultural resources; or socioeconomics and environmental justice, as no significant Project impacts to these resources are anticipated.

Cumulative impacts could occur from the permanent degradation (loss) of suitable pocket gopher habitat. However, the HCP proposes to offset this impact by ensuring permanent conservation and ongoing management of a site that would contribute to the survival and recovery of the pocket gopher. The mitigation site acquired for pocket gopher conservation will contribute to the objective of protecting large, contiguous blocks of suitable habitat to provide for sustainable populations of pocket gophers.

5 List of Preparers

This document was prepared under the direction of the U.S. Fish and Wildlife Service. The following individuals contributed to its preparation.

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Tim Romanski	U.S. Fish and Wildlife Service, Supervisor, Conservation Planning Branch, Washington Fish and Wildlife Office	ESA and NEPA process and technical oversight
Kevin Connally	U.S. Fish and Wildlife Service, Fish and Wildlife Biologist, Washington Fish and Wildlife Office	HCP technical input and review, NEPA oversight
Kurt Meier	The Meier Group LLC, Owner	HCP oversight and approval
Craig Hansen	ENVIRON International, Senior Manager	Project Manager, senior technical review, Draft & Final EA preparation

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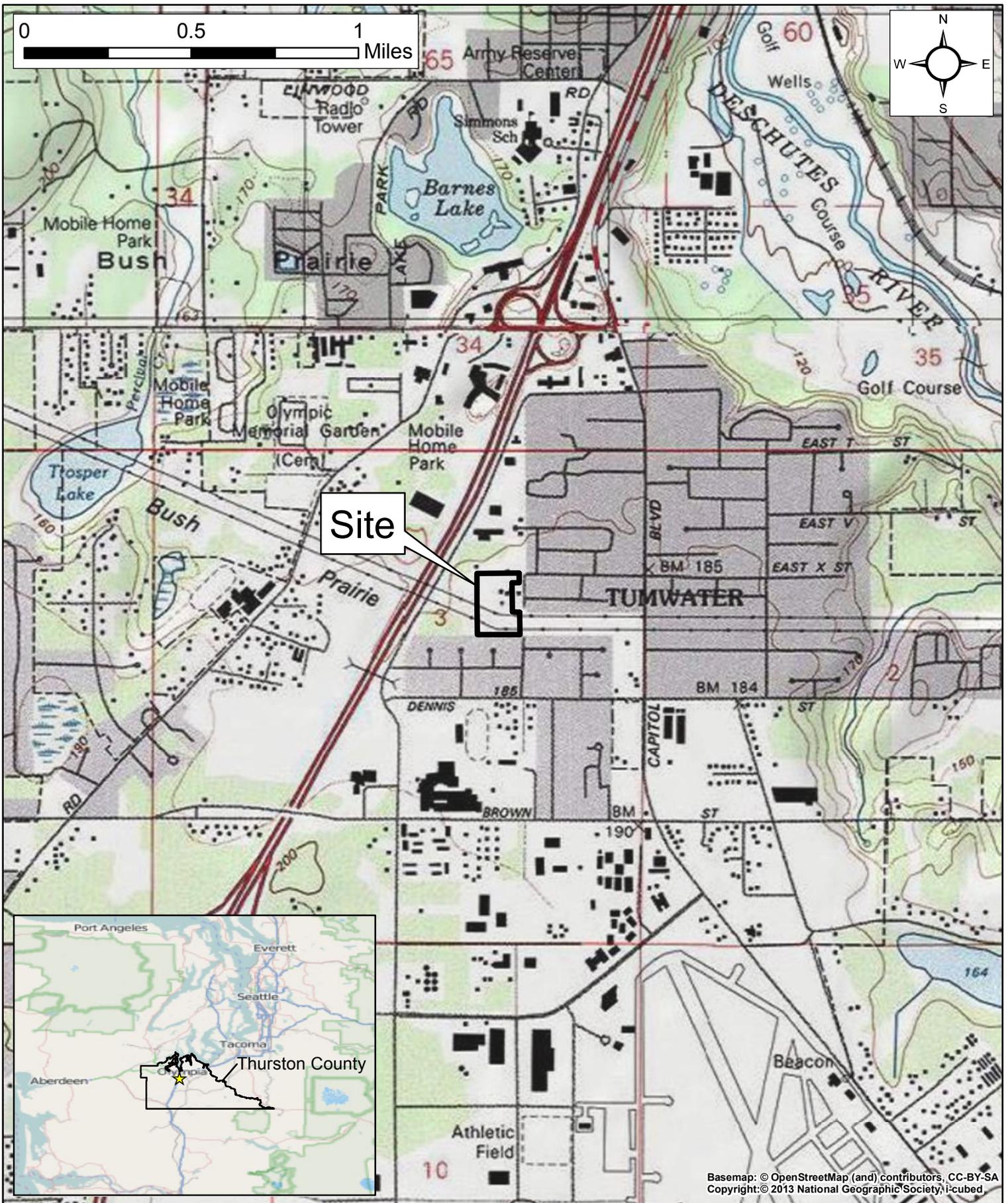
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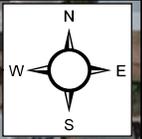
Personal Communications

- Chris Carlson, Permit Manager, Community Development, City of Tumwater. Information provide to Craig Hansen via phone on March 4, 2015.

Appendix A

Figures





Basemap: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community
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Site Boundary
Tumwater, WA

Figure
2

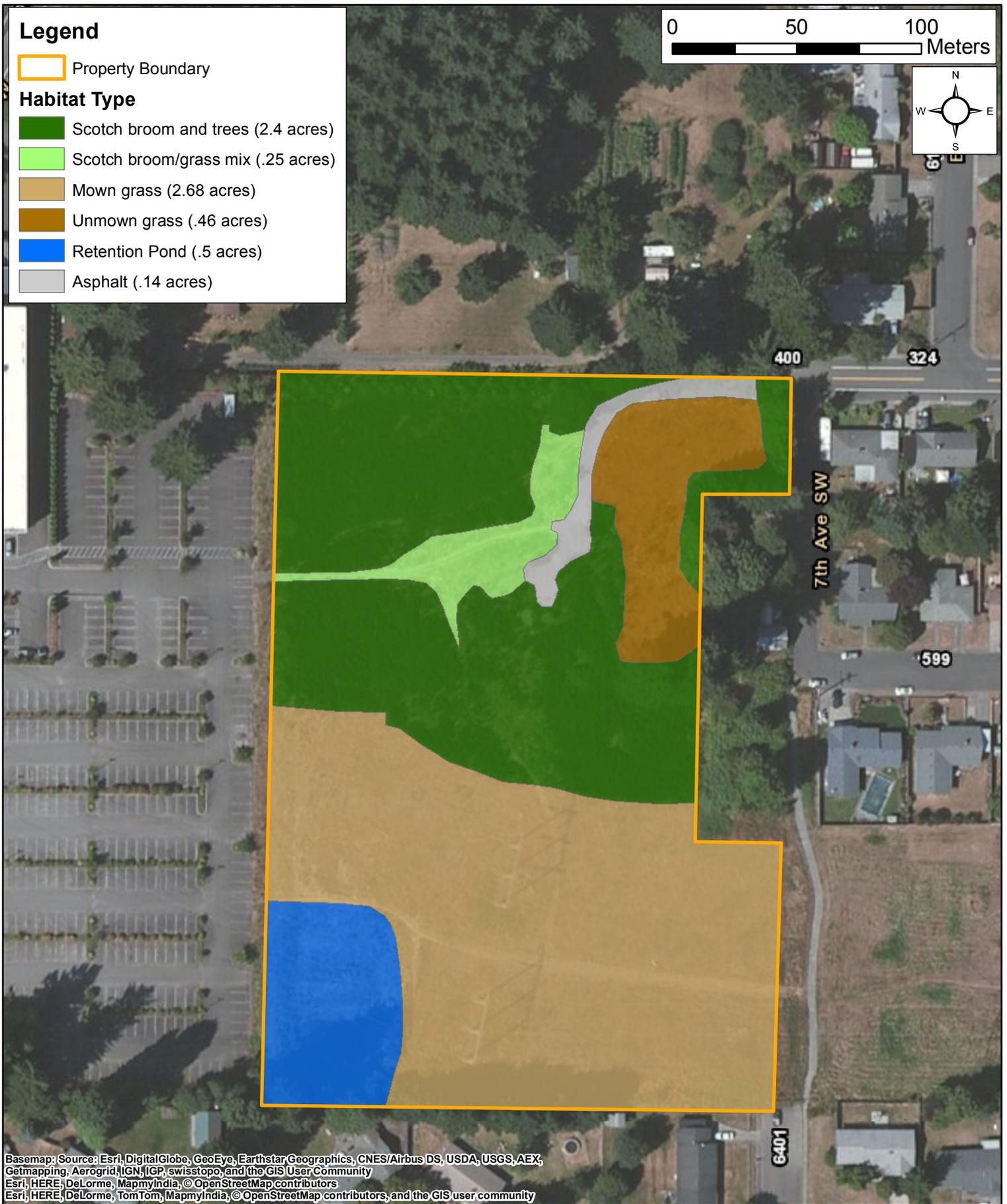
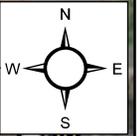
Legend

Property Boundary

Habitat Type

- Scotch broom and trees (2.4 acres)
- Scotch broom/grass mix (.25 acres)
- Mown grass (2.68 acres)
- Unmown grass (.46 acres)
- Retention Pond (.5 acres)
- Asphalt (.14 acres)

0 50 100 Meters



Basemap: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community
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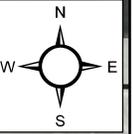


Habitat Areas
Tumwater, WA

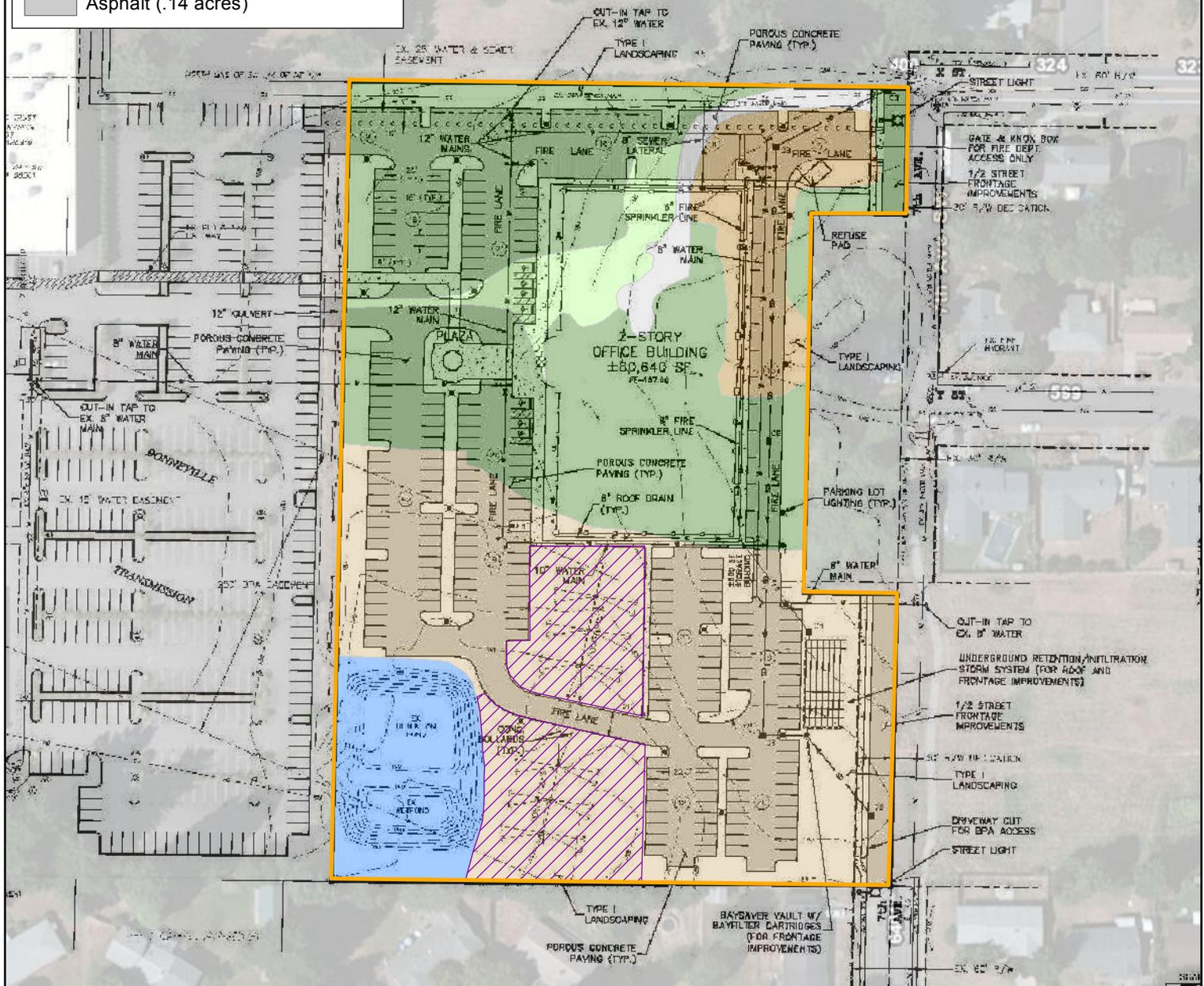
Figure
3

Legend

-  Property Boundary
 -  Unaltered Habitat (.7 acres)
- Habitat Type**
-  Scotch broom and trees (2.4 acres)
 -  Scotch broom/grass mix (.25 acres)
 -  Mown grass (2.68 acres)
 -  Unmown grass (.46 acres)
 -  Retention Pond (.5 acres)
 -  Asphalt (.14 acres)



SW 1/4 OF NE 1/4 OF SEC 3, TWP 17 N., RGE 2W, W.M.



Basemap: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

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Habitat Areas and Site Layout
Tumwater, WA

Figure
4