



Lacey City Council Worksession Agenda

Refer to the bottom of the agenda for meeting information.

Tuesday, March 24, 2026

6:00 PM

Council Chambers and Online

1. Call to Order

2. Roll Call

3. Land Acknowledgement

We, the City of Lacey, are on the ancestral land of the Tribal People of the Treaty of Medicine Creek, including the Nisqually Indian Tribe and Squaxin Island Tribe. We acknowledge and remember those Tribal People not recognized today who were absorbed or relocated into other tribes for survival. We recognize the ancestors and their descendants who are still here. We recognize and respect the Tribal People of the Treaty of Medicine Creek as the traditional stewards of this land since time immemorial and their role today in taking care of these lands in perpetuity. We recognize and have the responsibility to call attention to the histories of dispossession, forced removal, and abridged treaty rights that allowed our nation, state, and city to develop as they have today. We recommend that community members read the Medicine Creek Treaty of 1854.

4. Approval of the Agenda

5. Public Comment

Refer to the bottom of the agenda for instructions on how to provide public comment.

6. Agenda Items

A. Employee Recognition

Rick Walk, City Manager

B. McKinney Building Removal

Jennifer Burbidge, Parks, Culture and Recreation Director

Erin Quinn Valcho, Museum Curator

C. Transportation and Facilities Project Briefing

D'Andra Buchanan, Engineering Construction Manager

D. Council Reports

City Council

7. Adjourn

Meeting Information:

Attendance (Remote or In-Person)

The public may attend the meeting in-person, or you may view or listen to the meeting using one of the following platforms:

In-Person: Council Chambers at Lacey City Hall
420 College Street SE, Lacey, WA 98503

Zoom: https://us02web.zoom.us/webinar/register/WN_gL3TIFHNSOW-FVJKw6N52A

Website: <https://cityoflacey.org/government/public-meetings/>

Facebook: <https://www.facebook.com/cityoflacey>

YouTube: https://www.youtube.com/watch?v=b_OqKbpjdVw

Phone: (888) 788-0099 or (877) 853-5247 (Webinar ID 878 4058 9372)

Verbal Public Comment

Each speaker is limited to three minutes. Comments are welcome on matters connected to City business or specific agenda items.

Prior to starting your comments, please provide your:

- a. Name
- b. City of residence or connection to the City
- c. Topic or subject matter of your comments

Those wishing to provide verbal public comment may do so in-person or by Zoom:

In-Person: Use the sign-up sheet located in the Council Chambers.

Zoom: Preregister using the following Zoom link no later than two hours prior to the meeting:
https://us02web.zoom.us/webinar/register/WN_gL3TIFHNSOW-FVJKw6N52A

Instructions and access details will be provided once registration is complete.

Written Public Comment

Public comments may also be submitted by email to PublicComment@cityoflacey.org. The commenting period will close two hours before the meeting time. Written comments will be provided to the City Council electronically prior to the meeting. Comments will not be addressed during the Council meeting; however, comments received will be added to the official record.



STAFF REPORT

Council Worksession

March 24, 2026

Subject: McKinney Building
To: Lacey City Council
Prepared by: Erin Quinn Valcho, Museum Curator
Jenny Wilson, Senior Parks Planner
Department Director: Jen Burbidge, Parks, Culture, & Recreation Director
Reviewed By: Not Applicable
Final Review: Rick Walk, City Manager

ugr

JW

JB

RW

Purpose: Briefing

Recommendation: Review only. Forward to upcoming Lacey City Council meeting agenda for action.

Brief: The McKinney Building was acquired by the City in 2001. Despite earlier stabilization efforts, the building has continued to deteriorate. Situated within the Lake Lois Habitat Reserve and surrounded by sensitive habitats, redevelopment options are limited. A historic preservation review found it no longer retains sufficient integrity for preservation or listing. Parks Board and Historical Commission recommend demolition while honoring the site's history with a historic interpretive marker.

Alternatives:

1. Approve the recommendation to demolish the McKinney Building and install a historic interpretive marker to recognize Lacey's resort era.
2. Direct staff to pursue a Request for Proposal to seek a partnership for rehabilitation and use of the building.
3. No change: Continue as is.
4. Some other option not contemplated in the above.

Prior Review:

Not Applicable - Date

Select a Meeting Type - Date

Advisory Board Recommendation(s):

Parks, Culture, and Recreation Board - November 5, 2025 [LINK](#)

Historical Commission - December 17, 2025 [LINK](#)

Fiscal Impact:

Budgeted Item: No

Amount: Cost of demolition and historic marker Funding Source: TBD

Project Code: TBD

Attachments:

1. Historic Preservation Consultant Report
2. Critical Areas Report

Policy or Legal Alignment:

1. [LMC 16.53](#)
2. [LMC 14.33](#)
3. Mitigation of Historic Properties (Historical Commission Policy)

Background:

The City of Lacey acquired the McKinney Building in 2001. In 2002, City staff recommended the building for demolition; however, the Lacey Historical Commission advocated for preservation, and the City committed \$50,000 to stabilize the structure. Despite these efforts, and without dedicated preservation funding, the building has continued to deteriorate. According to a historic preservation review and city staff evaluation, the building is structurally unsound and at risk of collapse. Its highly visible location has also made it vulnerable to vandalism.

Historic Context

Built in 1931, the McKinney Building originally functioned as a café and rest stop associated with the Lake Lois Resort, serving travelers along Highway 99. It also served as the family dwelling for the McKinney family; Lois McKinney lived there until her death in 1998. The McKinney Building is among the few remaining structures from the resort era in Lacey and Thurston County.

Consultant Assessments**Historic Preservation Review**

In 2025, Drayton Archeology conducted historic property research, inventory documentation, and a historic register eligibility assessment of the McKinney Building to assist in the City's planning efforts. The report concluded that, despite its historic associations, the building does not retain sufficient physical integrity to convey its historical significance and is not eligible for the local, state, or National Register of Historic Places due to:

- Severe deterioration due to vandalism, environmental exposure, and lack of funding for repairs.
- Loss of or heavily altered key architectural elements, including the original arrangement, and design of windows, doors, and exterior materials.
- Structural distress, with the roof near collapse.
- Removal of associated resort cabins, gas pumps, and other contextual features, which has severely impacted the property's integrity of setting and association.

Although it is not eligible for local, state, or national registers, the building was fully documented and photographed to preserve the history of the site for public benefit in accordance with City policy. The information has been uploaded to the Washington State Department of Archaeology and Historic Preservation's digital repository, ensuring the information is retained and publicly accessible.



Development Considerations

Critical Areas Assessment

A 2024 Critical Areas Report identified several sensitive resources surrounding the McKinney Building:

- Woodland Creek - Type F stream, 200-foot buffer.
- Lake Lois - Category II wetland, 110-foot buffer.
- Oregon white oaks – More than 30 mature trees, designated a Priority Habitat by the Washington State Department of Fish and Wildlife.

Due to the proximity of Woodland Creek and its required buffer, development is not possible on the west side of the building (see figure 2, page 17). The east side has fewer stream and wetland constraints, but Oregon white oaks are scattered throughout the site, including near the building. Because of their slow growth, value to native wildlife, and designation as a priority habitat, the loss of these oaks to development should be avoided.

In 2025 an arborist assessment evaluated fourteen large Oregon white oaks near the building, all were determined to be healthy, long-term trees rated as *good* or *very good* condition. The Lacey Municipal Code (LMC 14.33) requires protection of priority habitats and mitigation when impacts are unavoidable.

Zoning Summary

Lake Lois Habitat Reserve is zoned [Open Space Institutional](#) (OS-I). This zoning designation intends to protect and preserve natural areas and open spaces that provide long-term benefits as civic or public-use spaces. Some permitted uses within OS-I include;

- Parks and greenways for both active and passive recreation.
- Government buildings or offices such as city halls, fire stations, schools, libraries, museums, or churches.

Trail System Impacts

A natural-surface trail runs along the east side of the McKinney Building, connecting a trailhead at Pacific Avenue to Lake Lois and continuing behind the structure. A local boy scout troop constructed a portion of the trail.

Solutions Considered

Partnership

The City could pursue a partnership to rehabilitate the property through a Request for Proposal process. Options could include a long-term lease or sale of a buildable portion of the property to provide commercial or retail character to the building (assuming it is salvageable).

Staff believe this option is unlikely due to the poor condition of the building, costs and environmental limitations.

Demolition and Mitigation

Demolish the McKinney Building and honor the site's significance by installing a historic interpretive marker.



Staff Recommendation: Demolition and Mitigation

Staff recommends demolition and mitigation for the following reasons:

- **Historic Significance**
The building does not retain sufficient physical integrity to convey its historical significance.
- **Incompatibility with Habitat Reserve Goals**
The McKinney Building is located within the Lake Lois Habitat Reserve, which is intended to protect and conserve natural environments, ecosystems, and associated wildlife. Retaining or repurposing the building would likely require expanded infrastructure such as access, parking, or utilities—development that conflicts with the goals of a habitat reserve.
- **Structural Deterioration and Safety Concerns**
The building is in poor condition and continues to deteriorate. Planning for demolition now is preferable to waiting until the structure becomes precarious or requires emergency demolition.
- **Limited Feasible Reuse or Partnerships**
While a partnership might offset costs, the site's environmental constraints and the building's poor condition make such an arrangement costly and unlikely.
- **Ongoing Vandalism and Maintenance Burden**
In the 24 years since its acquisition, the building has been subject to recurring vandalism, resulting in ongoing impacts to facilities and parks maintenance staff as well as the City's budget.
- **Capital and Operational Costs**
The investment required to rehabilitate the building for public use, combined with ongoing operational costs, is prohibitive, and no funding sources have been identified.
- **Trail Impacts**
Development of the site would likely require removing and rerouting a community-built trail.

This option addresses safety and maintenance concerns, honors the history of the McKinney family and Lake Lois Resort, and allows the City to refocus resources while preserving and enhancing the natural habitat.

The Historical Commission and Parks, Culture, and Recreation Board took formal action to recommend demolition and to honor the site's history with a historic interpretive marker. A budget request for the demolition and historic marker will be submitted for consideration in the 2027 budget.



**Historic Preservation Consultant Services for Three Historic Properties, Lacey,
Thurston County, Washington**



Prepared By:

Stephen F. Austin, MA

Prepared For:

**Erin Quinn Valcho, Museum Curator
Lacey Parks, Culture and Recreation Department
420 College Street SE
Lacey, Washington 98503**

Drayton Report: 0524L

July 28, 2025

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July 28, 2025

Dear Ms. Quinn Valcho,

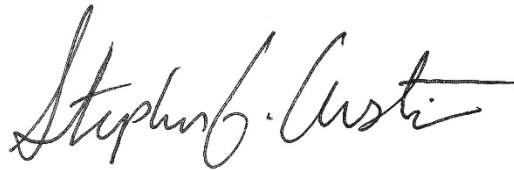
RE: Historic Preservation Consultant Services for Three Historic Properties

The following report provides a summary of our findings pursuant to the contract agreement to conduct historic property research, inventory documentation, and eligibility assessment for three historic-age properties on behalf of the City of Lacey. The established purpose and scope of the project directed Drayton Archaeology (Drayton) to document the subject properties to assist the City in its long-term planning efforts. This work was conducted in accordance with the City's goals for historic preservation and in compliance with state and federal standards for cultural resource management.

As a result, three historic-age properties—the Long Lake House, McKinney Building, and Jacob Smith House—were documented using the Department of Archaeology and Historic Preservation's (DAHP) Historic Property Inventory Forms (HPIF), with recommendations for eligibility based on the National Register of Historic Places evaluation criteria established by the National Park Service, which serve as the standard in historic preservation. A detailed accounting of our findings is provided in the subsequent pages. All properties have been added to the Washington Information System for Architectural and Archaeological Records Data (WISAARD) under **project number 2025-03-01512**. The full review for each property inventory is located in Appendix A.

We appreciate the opportunity to support the City of Lacey in its efforts to document and preserve its historic properties. Please do not hesitate to contact us should you require any additional information

Sincerely,

A handwritten signature in black ink, reading "Stephen F. Austin". The signature is fluid and cursive, with the first name "Stephen" and last name "Austin" clearly legible.

Stephen F. Austin, M.A.,

Deputy Principal Investigator, Drayton Archaeology

HISTORIC PROPERTY INVENTORY FORMS

Jacob Smith House: 4500 Intelco Loop SE, Lacey, WA 98503

The Jacob Smith House is recommended eligible for inclusion in the National Register of Historic Places based on its high level of architectural integrity and historical significance as the oldest surviving house in Thurston County (Lacey Parks 2025). A National Register Nomination Form was prepared for the Jacob Smith House in October 1986 by Shanna Stevenson, but it was not formally listed on the NRHP. The house and its associated buildings were subsequently listed in the Washington Heritage Register in February 1988; the Jacob Smith House was determined eligible under Criterion C for its architectural significance.

Built in 1859, the house is a one-and-one-half-story Folk Victorian structure with Greek Revival design elements. According to historic photographs taken in 1890 and 1940, the house had undergone the addition of a full-width porch and an associated water tower. A detached garage was built circa 1950 and rebuilt c. 1996-1997, connecting the tower and main house via an open-air breezeway (Photos 1–3).



Photo 1. View of the Jacob Smith House, west façade, with water tower, taken c. 1990s.



Photo 2. View of rear elevation, entire roof removed, taken in 1997.



Photo 3. View from southeast of main façade with porch and east façade, taken in February 2025.

After several years of vandalism, the City of Lacey entered into a contract in 1990 with the property owner to develop the adjacent land in exchange for the restoration of the Jacob Smith House. However, restoration efforts were delayed until 1996 and were completed in the summer of 1997. Alterations to the property during its restoration included:

- Rehabilitation of its front façade and porch, including its posts and decorative brackets.
- Reconstruction of its steeply pitched side-gabled roof with cedar shingles, matching the historic roofing material.
- Retention of its original fenestration, with some windows restored, while others in the rear were replaced with vinyl frames of a similar type and pattern.
- Replacement of its exterior cladding with historically appropriate wooden clapboards to match the original material.
- Reconstruction of its water tower in the same design and location as the original.
- Reconstruction and remodeling of the detached garage into a two-story garage-apartment.
- Restoration of the two brick chimneys, maintaining their original placement and materials.

The restoration appears to have been conducted in keeping with the house's original design and successfully preserves the majority of its original components and features. While the rear additions diminish the integrity of the house's overall design, it appears to retain adequate integrity of location, design, workmanship, feeling, association, and setting.

Set on a southwest–northeast axis, the house is a one-and-one-half-story, side-gabled Victorian Folk construction with Greek Revival stylistic elements. The structure has a rectangular footprint and sits on a raised foundation, with horizontal wood lap siding painted in a light, neutral tone (Photo 4).



Photo 4. An early image of the Jacob Smith House.

It is characterized by its symmetrical façade, hall-and-parlor interior plan, moderately pitched side-gabled roof sheathed in wood shingles, boxed eaves with a prominent cornice and frieze, multi-pane double-hung wooden sash windows, and wood lap siding. Two red brick chimneys project from the ridgeline. A full-width front porch extends across the façade, supported by evenly spaced square wooden posts with decorative brackets. The porch roof is an extension of the primary roof form. A large water tower, reportedly constructed between 1890 and 1940, is attached to the main house via a modern walkway addition built circa 2003 (City of Lacey 2012).

The main elevation (southwest) features a centrally placed wooden pedestrian door with a four-panel design, flanked on each side by two symmetrically positioned double-hung windows with multi-pane upper sashes. The porch roof is hipped and clad in the same wood shingles. Decorative brackets connect the roof to the evenly spaced square wooden posts. The front steps leading up to the porch are concrete and are accessed via a symmetrical walkway with metal railings (Photo 5).



Photo 5. View of main façade (south), taken in February 2025.

The west façade contains a prominent small bay window capped with a hipped roof, near the center of the elevation. It features three large fixed-pane windows with a decorative scalloped valance along the upper sash of the central window. Two other wooden framed windows include a single-light lower sashes in its gable end and a double-hung sash windows on its south corner near the main porch. The east elevation contains a single multi-pane attic window centered in the gable end, and two evenly spaced, double-hung sash windows with multi-pane upper sashes and single-light lower sashes (Photos 6 and 7).



Photo 6. View of the east façade with water tower and detached garage. Taken February 2025.



Photo 7. View of west façade with main façade and porch, taken in February 2025.

The rear (northwest) elevation includes a covered walkway connecting the main dwelling to the water tower and detached garage. A prominent, square, tower-like addition rises from the rear, clad in the same horizontal wood siding and featuring a shed roof with a louvered vent at the peak. The attached two-story rear addition has a gabled roof and modern vinyl windows. A covered breezeway, supported by square wooden posts, connects the garage to the main dwelling. This passageway has a shed-style roof that extends from the main garage volume, maintaining visual continuity with the primary structure. The breezeway includes a secondary entrance with a single-pane glass door (Photo 8).



Photo 8. Water tower and detached garage apartment with breezeway, taken in 2025.

The attached garage apartment addition is a two-story structure extending from the rear of the primary dwelling. The garage portion is a single-story volume clad in the same horizontal wood lap siding as the main house. Two metal garage doors are symmetrically placed on its east façade. The apartment portion is a two-story, gable-roofed volume, with fenestration consisting of vinyl single- and double-hung windows. The rear elevation of the apartment features an additional entrance and a series of modern vinyl windows (Photos 9 and 10).



Photo 9. View of modified garage-apartment and breezeway, taken in 2025.



Photo 10. Modern vinyl windows on garage-apartment's rear (west) façade, taken in 2025.

Summary: Jacob Smith House

The property consists of the c. 1859 primary dwelling, a reconstructed water tower (originally added between 1890 and 1940), and a modified rear garage apartment addition constructed c. 1997. The main house retains the highest level of integrity, while the garage addition is non-contributing due to recent alterations of its design. The water tower, although reconstructed, is consistent in design and location with its historic counterpart and is considered contributing to the historic character of the property.

The restoration appears to have been conducted in keeping with the house's original design and successfully preserves the majority of its original components and features. While the rear additions diminish the integrity of the house's overall design, it appears to possess adequate integrity of location, design, workmanship, feeling, association, and setting.

The property is recommended eligible for listing in the National Register of Historic Places under Criterion A, based on its significant association with early settlement in Thurston County. While Jacob Smith is a known historical figure, he does not rise to the level of significance necessary to merit eligibility under Criterion B. Although the building has undergone alterations to its interior and includes a modern garage addition, it still embodies the distinctive characteristics of a specific type of construction and may represent the work of a master under Criterion C. The property does not appear likely to yield information important to history or prehistory and is therefore not eligible under Criterion D.

This evaluation applies to the individual property only; it is not being considered as part of a historic district.

Long Lake House: 2802 Boat Launch Street

The Long Lake House is situated on the western shore of Long Lake, now within the city limits of Lacey, Washington. Reportedly constructed in 1947, the single-family dwelling is a Minimal Traditional style dwelling, likely built by the original owners of the Linger Longer Resort, Alexander (Alex) Beattie Brown and his wife, Lulu Mae Mitchell Brown (Thurston County Assessor, 2025). Alex and Lulu Mae Brown reportedly purchased the Long Lake property around 1944 and remained its owners until Alex Brown's death (City of Lacey 2025). The property was operated as the Linger Longer Resort for over two decades (The Daily Olympian 1964, 1973). The couple owned the property for about 20 years.

The house and its adjacent property were sold to James R. Floyd between 1962 and 1973 (Metsker Map 1973). Following the death of Alex Brown in 1965, his children entered negotiations to sell the resort to Thurston County (The Daily Olympian 1967). The sale included ten acres of land, 190 feet of waterfront, the subject residence, and an outdoor kitchen. In 1974, Thurston County purchased 3.14 acres from James R. and Marcella Floyd for expansion associated with the development of the Thurston County Fairgrounds. The Long Lake House remained in the Floyds' name until 2022 when the City of Lacey acquired the property.

The resort period in Lacey's history began roughly around 1910 with the opening of Frank Mullen's property to visitors. Known as Pattison Lake, the property developed into a resort and offered swimming and boating with rental cabins for visitors. By the 1920s, nearly 20 lakeside resorts were established around Chambers, Long, Pattison, Hicks, and Lois lakes.

The house features a side-gabled roof with asphalt shingles, wood shingle siding, two front-facing gabled dormers, and an exterior red brick chimney on the west elevation. The exterior is clad in horizontal wood shingles painted red with white trim accents. The structure sits on a poured concrete foundation with a partially-exposed basement, accessed via a recessed doorway on the north elevation (Photo 11).



Photo 11. View of main façade (east) and north façade, taken in 2025.

The primary façade (east) contains the main entrance—a single wooden door within a projecting entry wing, now boarded over—accessed by a small concrete stoop with two concrete steps. A secondary basement entrance is located partially below ground, adjacent to the main entrance on the east elevation; it is also boarded over. Fenestration includes multiple boarded-over windows that likely contained fixed panes in the two gable dormers. A large picture window, located to the left of the entrance, is similarly boarded over. A large, full-stack brick chimney dominates the south façade. Two boarded-over window openings on this elevation may have originally contained double-hung sash windows (Photos 12 and 13).



Photo 12. View of main (east) façade, note infill of windows and doors. Taken in 2025.



Photo 13. View of south façade, note full chimney, and main (east) façade. Taken in 2025.

The west (rear) elevation features the two-story main massing and the single-story wing (north). The portion of the house on the left side of this elevation, contains two boarded-over window openings. A single chimney, constructed of red brick, protrudes from the roof ridge near the center of the structure. The two-story section has a shed roof which projects from the original gable roofline. This section contains three evenly spaced window openings on the upper level and two on the lower level, all of which are boarded up.

The original section of the house, on the left side of the elevation, features a steeply pitched gable roof with minimal eave overhangs. A small attic vent is positioned within the gable end. Three window openings on this portion are covered with plywood, obscuring their original configuration. Moss and organic debris are visible along the roof surface, particularly along the lower edges (Photo 14).



Photo 14. View of rear (west) façade, taken in 2025.

The detached garage is located northwest of the main house. It is a single-story structure with a front-gabled roof clad in asphalt shingles. Its exterior mirrors the house, with red-painted wood shingles and white trim. A large modern metal vehicle garage door is the main entry. A pedestrian door and four windows on the east elevation are boarded over (Photo 15).



Photo 15. Detached garage on north side of the house, view from west, taken in 2025.

Summary: Long Lake House

While the house is currently shuttered and the associated buildings of the resort are no longer extant, the individual dwelling and associated garage retains integrity of design, location, materials, workmanship, feeling, and setting. The loss of its contemporary resort construction has degraded its integrity of association.

The property includes the c. 1947 primary dwelling and a detached single-car garage. All related resort-era outbuildings and features once associated with the Linger Longer Resort are no longer extant. These changes preclude the dwelling from being considered as part of a historic district.

The property is recommended individually eligible for listing in the National Register of Historic Places under Criterion A based on its significant association with early tourism and recreation in Thurston County. The property does not rise to the level of significance necessary to merit eligibility under Criterion B. Although unoccupied and shuttered, the house retains adequate integrity and embodies the distinctive characteristics of a specific type of construction under Criterion C. The property does not appear likely to yield information important to history or prehistory and is thus not eligible for listing under Criterion D.

McKinney Building: 6426 Pacific Ave SE, Lacey, WA 98503

The McKinney Building is located on the Lake Lois Habitat Reserve in Lacey, Washington. Reportedly constructed in 1931, the building appears to be a False Front-style commercial construction. The building was a café and rest stop for travelers passing through Lacey along Highway 99, and a dwelling for the McKinney family. Lois McKinney resided in the building until her death in 1998. In 2001, the City of Lacey acquired the building and the associated land. The McKinney House is one of the last standing structures of the resort era in Lacey and Thurston County.

Visual inspection of the property reports that the building is in a state of decay. In 2002, the building was recommended for demolition, but the Lacey Historical Commission sought to preserve the structure and as a result the City committed \$50,000 dollars to stabilize the structure. In 2013, students from Saint Martin's University created site plans "to assist in the planning and future development of the Lake Lois Park and Habitat Reserve" (Photo 16).



Photo 16. View of main (south) façade and east façade, taken in 1987.

Since that time, the structure's roof has deteriorated and is now at risk of collapse. The building is currently shuttered and structurally unsound. Modifications to its exterior design, material

degradation, and the loss of original fenestration elements have significantly diminished its integrity of materials, workmanship, and feeling.

The loss of its historic setting—defined as the physical environment and character in which the property played its historical role—further undermines its integrity. As the National Park Service notes, “setting refers to the character of the place in which the property played its historical role. It involves how, not just where, the property is situated and its relationship to surrounding features and open space” (NPS 1995:15).

Similarly, integrity of association is compromised. According to the NPS, a property “retains association if it is the place where the event or activity occurred and is sufficiently intact to convey that relationship to an observer” (NPS 1995:15). The loss of associated gas pumps, seven resort cabins, and other defining features of the Lake Lois Resort has significantly diminished the property’s integrity of setting and association.

To be considered eligible for listing in the National Register under Criterion A, a property must retain a sufficient assemblage of original features—such as primary resort structures (e.g., cabins, café, or store), original circulation patterns, signage, landscape features, and possibly intact gas pumps—to convey the historic function and spatial organization of the resort complex. In the absence of these elements, the remaining structure does not adequately reflect the character or context of the original resort environment.

The primary (south) façade features a prominent stepped false-front parapet with stucco-finished columns and plywood siding. Its main entrance—a set of double-leaf doors—has been boarded over to prevent vandalism. The doors are flanked by large window openings, which are also infilled. The remains of a porch awning are located directly above the doors and narrow windows, all of which are now boarded (Photo 17).



Photo 17. Current condition (2025) of the McKinney House, boarded over windows and doors.

The east and west elevations are clad in horizontal wood siding, now weathered and marked by graffiti and staining. The east elevation includes multiple boarded-over window openings and a secondary door, which is also boarded. The west elevation features additional window openings, now covered, and an exterior electrical fixture mounted near the upper wall. A stucco column centered on each façade visually divides the building between the commercial and residential sections. The rear (north) elevation continues the horizontal wood siding and features a simple, flat-roofed profile. All window openings on this elevation are infilled with plywood (Photos 18–20).



Photo 18. View of east façade and rear (north) façade, taken in 2025.



Photo 19. West façade with boarded up windows, view from southwest, taken in 2025.



Photo 20. View of rear (north) façade and east façade. Taken in 2025.

Summary: McKinney Building

Constructed in 1931, the building served as a combination rest stop, café, and family residence, forming part of the Lake Lois Resort complex. It is one of the last surviving structures from the area's resort era. Despite its historical associations, the McKinney Building does not retain sufficient physical integrity to convey its historical significance.

The structure has experienced severe deterioration due to vandalism, lack of maintenance funding, and environmental exposure. Key architectural elements such as original fenestration and exterior materials have been lost or heavily altered. The roof is near collapse, and all elevations exhibit signs of structural distress. Additionally, the demolition of the associated resort cabins, gas pumps, and other contextual features has severely impacted the property's integrity of setting and association. The McKinney Building is not evaluated as part of a historic district due to the loss of all other structures historically associated with the Lake Lois Resort.

While the property is significant for its association with the Lake Lois Resort and the history of tourism in Thurston County, the property lacks the necessary physical integrity to merit eligible for listing in the National Register of Historic Places under Criterion A. The property does not rise to the level of significance necessary to merit eligibility under Criterion B. The building is not eligible under Criterion C due to decay and replacement of its materials. The property does not

appear likely to yield information important to history or prehistory and is thus not eligible for listing under Criterion D.

CONCLUSIONS AND RECOMMENDATIONS

Drayton Archaeology (Drayton) was retained by the City of Lacey to conduct a review of three previously identified historic-age properties located within the city limits of Lacey in Thurston County, Washington. Initiated by the City of Lacey's Parks, Culture, and Recreation Department, the purpose of this inventory and assessment is to generate information to inform future planning decisions regarding these properties.

The subject properties include:

- **Jacob Smith House:** Built in 1859, the house is a one-and-one-half-story Folk Victorian residence with Greek Revival design elements. The house and its associated buildings were listed in the Washington Heritage Register in 1988. After years of vandalism, the City of Lacey entered into a development contract to facilitate its restoration, which was completed in the summer of 1997.
- **Long Lake House:** Constructed in 1947, this single-family dwelling is likely a Minimal Traditional-style structure, originally part of the Linger Longer Resort. The property was later owned by James R. and Marcella Floyd and remained in their name until 2022, when it was acquired by the City of Lacey.
- **McKinney Building:** Built in 1931 in the False Front commercial style, this building served as a café, rest stop, and residence associated with the Lake Lois Resort. Lois McKinney, for whom the lake is named, lived in the building until her death in 1998.

The project scope included formal documentation and evaluation of the three properties using the National Register of Historic Places (NRHP) criteria for eligibility. Drayton's architectural historian prepared Historic Property Inventory Forms (HPIFs) for each property and provided eligibility recommendations for local, state, and national registers. This work involved background research, field investigation, and preparation of this report along with three completed HPIFs.

Eligibility Summary and Recommendations

- **Jacob Smith House** is recommended **eligible for listing in the National Register under Criteria A and C**. The property is significant for its association with early settlement in Thurston County (Criterion A) and as a representative example of Folk Victorian architecture with Greek Revival elements (Criterion C). Despite rear additions, the house retains sufficient integrity of location, design, materials, workmanship, feeling, and setting.
- **Long Lake House** is also recommended **eligible under Criteria A and C**. It is historically significant for its association with early tourism and recreation in Thurston County (Criterion A) and is an intact example of Minimal Traditional residential construction

(Criterion C). While currently unoccupied and shuttered, the dwelling retains its original design and materials.

- **McKinney Building** is recommended **not eligible for listing under any National Register criteria**. Although it has historical associations with roadside commerce and resort development (Criterion A), the building has suffered significant deterioration and lost a large degree of its physical integrity. Loss of original materials, extensive vandalism, structural instability, and the absence of associated resort structures have severely diminished its integrity of design, materials, workmanship, setting, and association. As such, it no longer conveys its historical significance.

All three historic-age buildings were formally documented on Historic Property Inventory Forms, uploaded to DAHP's WISAARD system. The forms are included in Appendix A.

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APPENDIX A: HISTORIC PROPERTY INVENTORY FORMS

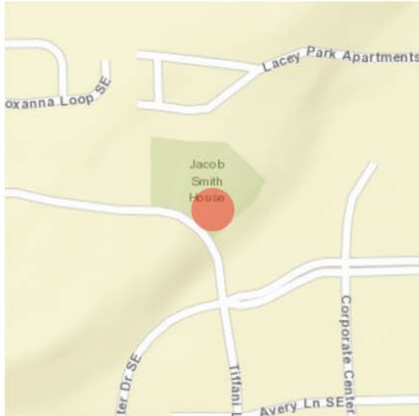


Historic Property Report

Historic Name: Smith, Jacob, House

Property ID: 19967

Location



Address: 4500 Intelco Loop SE, Lacey, WA

Tax No/Parcel No: 58050000500

Plat/Block/Lot: SMITH HOUSE BSP TRACT A

Geographic Areas: Thurston County, LACEY Quadrangle, Thurston County Certified Local Government, Lacey Certified Local Government, T18R01W32, Congressional District 10, 22

Information

Number of stories:

Construction Dates:

Construction Type	Year	Circa
Built Date	1859	☐
Remodel	1996	☒

Historic Use:

Category	Subcategory
Domestic	Domestic - Single Family House
Domestic	Domestic - Single Family House

Historic Context:

Category
Architecture
Agriculture

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Historic Property Report

Historic Name: Smith, Jacob, House

Property ID: 19967

Architect/Engineer:

Category	Name or Company
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Registers:

Register Type	Listed Date	Removed Date	Period of Significance	Level of Significance	Criteria
Washington Heritage Register	2/26/1988		-	Local	A

Thematics:

Local Registers and Districts

Name	Date Listed	Notes
------	-------------	-------

Project History

Project Number, Organization, Project Name	Resource Inventory	SHPO Determination	SHPO Determined By, Determined Date
2011-08-00143, , Assessors Data Project: Thurston County Commercial		Not Determined	
2021-09-06106, , Architect File 2		Survey/Inventory	
2025-03-01512, , Historical Resources Assessment for Three Historic Properties for the City of Lacey, Lacey Museum		Survey/Inventory	

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Historic Property Report

Historic Name: Smith, Jacob, House

Property ID: 19967

Photos



SE Elevation



075 Garage facine SE for perspective.jpg



070 Garage facing SE.jpg



065 Tower Side Window facing E through walkway.jpg



060 Tower Office Entrance CloseUp.jpg



055 Tower Office Entrance facing SW.jpg

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Historic Property Report

Historic Name: Smith, Jacob, House

Property ID: 19967



050 SW Bay Window CloseUp.jpg



045 SW Bay Window facing NE.jpg



040 Front Single Pane Windows.jpg



035 Porch trim CloseUp.jpg



030 Back of Add-on facing NE.jpg



025 Back parking area, Add-on facing SW.jpg

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Historic Property Report

Historic Name: Smith, Jacob, House

Property ID: 19967



021 Roof of house.jpg



020 Perspective facing SW.jpg



015 View facing W.jpg



010 View facing N.jpg



005 Front Facade facing NW.jpg



Zoom_cadastral.JPG

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Historic Property Report

Historic Name: Smith, Jacob, House

Property ID: 19967



The_Olympian_1998_09_05_41.jpg



The_Olympian_1997_07_21_15 page C1.jpg



The_Olympian_1996_10_25_29 page C3.jpg



The_Olympian_1996_03_12_7.jpg



The_Olympian_1995_01_29_21.jpg



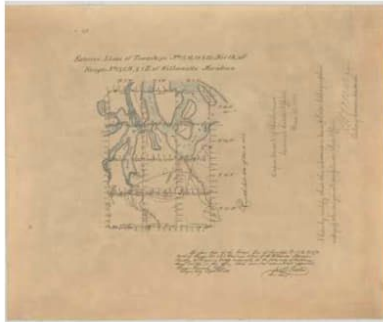
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Historic Property Report

Historic Name: Smith, Jacob, House

Property ID: 19967



EXT_027_A.jpg



1969_historic-aerials.JPG



088 Viewshed S.jpg



087 View facing SE CloseUp Mt Rainier.jpg



086 Viewshed facing SE.jpg



085 Viewshed facing E.jpg

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Historic Property Report

Historic Name: Smith, Jacob, House

Property ID: 19967



080 Garage Vehicle Entrance facing SW.jpg



Register Image



Register Image



Register Image



Register Image



Register Image

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Historic Property Report

Historic Name: Smith, Jacob, House

Property ID: 19967



Register Image



Register Image



Register Image



Register Image



Register Image



Register Image

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Historic Property Report

Historic Name: Smith, Jacob, House

Property ID: 19967



Register Image



jpg2pdf.pdf



Register nomination form



Original HPI form(s)



Historic Property Report

Historic Name: Smith, Jacob, House

Property ID: 19967

Inventory Details - 1/1/1900

Common name:

Date recorded: 1/1/1900

Field Recorder:

Field Site number: 1156

SHPO Determination

Detail Information

Styles:

Period	Style Details
Early 20th Century Revivals (1900-1940)	Greek Revival

Surveyor Opinion

Property appears to meet criteria for the National Register of Historic Places: No



Historic Property Report

Historic Name: Smith, Jacob, House

Property ID: 19967

Inventory Details - 4/12/1988

Common name:

Date recorded: 4/12/1988

Field Recorder: K H Krafft

Field Site number: 1156

SHPO Determination

Detail Information

Characteristics:

Category	Item
Structural System	Wood - Balloon Frame
Form Type	Single Dwelling - Side Gable
Roof Material	Asphalt/Composition
Plan	Rectangle
Cladding	Wood - Clapboard
Foundation	Concrete - Poured
Roof Type	Gable

Styles:

Period	Style Details
Early 20th Century Revivals (1900-1940)	Greek Revival
No Style	No Style

Surveyor Opinion

Property appears to meet criteria for the National Register of Historic Places: No

Property is located in a potential historic district (National and/or local): No

Significance narrative: The Jacob Smith House is a significant example of the vernacular domestic architecture built by pioneer settlers in the region. The house, constructed of cedar planks, is one of the few extant examples in Thurston County of a side-gabled cottage reflecting the Greek Revival idiom. It is the oldest structure known to be standing in the Lacey area. According to a county-wide historic resources survey conducted by the State Office of Archaeology and Historic Preservation in 1985, few well preserved examples of the vernacular Greek Revival style remain in the County, none in the Lacey area. It should be noted that a road (a portion of which appears to remain in front of the house) once transected the property diagonally and appears to have intersected the old Ruddell Road which in turn connected to routes to Nisqually and Steilacoom.

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Historic Property Report

Historic Name: Smith, Jacob, House

Property ID: 19967

Physical description: The Jacob Smith House is distinguished by several noteworthy 19th century features; one-and- one half story side-gabled vernacular form with greek Revival stylistic elements, symmetrical facade with hall-and-parlor interior plan, boxed eaves with prominent cornice and frieze, one story full width porch with hipped roof supported by pieced posts decorated by sawn brackets, central entry with transom and sidelights, 6/6 multi-pane double-hung wooden sash windows. Interior altered after it suffered extensive deterioration, it was extensively renovated.

Bibliography: Thurston County Assessor's Records
National Register of Historic Places Registration Form prepared By Shanna Stevenson,
Olympia, Wa, May 1987



Historic Property Report

Historic Name: Smith, Jacob, House

Property ID: 19967

Inventory Details - 7/1/2011

Common name:

Date recorded: 7/1/2011

Field Recorder: Artifacts Consulting, Inc.

Field Site number: 74690000100

SHPO Determination

Detail Information

Characteristics:

Category	Item
Cladding	Wood
Structural System	Wood - Platform Frame

Surveyor Opinion

Property appears to meet criteria for the National Register of Historic Places: No

Significance narrative: Data included on this historic property inventory form (HPI) detail stemmed from County Assessor building records imported by the Washington State Department of Archaeology of Historic Preservation (DAHP) into WISAARD in 2011. This upload reduces data entry burden on community volunteers and historical societies participating in the survey and inventory of their communities. The intent of this project is directed specifically to facilitating community and public involvement in stewardship, increasing data accuracy, and providing a versatile planning tool to Certified Local Governments (CLGs).

Project methodology entailed use of the University of Washington's State Parcel Database (<http://depts.washington.edu/wagis/projects/parcels/development.php>) to provide the base parcel layer for CLGs. Filtering of building data collected from each county trimmed out all properties built after 1969, as well as all current, previously inventoried properties. Translation of building data descriptors to match fields in HPI allowed the data upload. Calculation of point locations utilized the center of each parcel. Data on this detail provides a snapshot of building information as of 2011. A detailed project methodology description resides with DAHP. Project team members: Historic Preservation Northwest, GeoEngineers, and Artifacts Consulting, Inc. (project lead).

Physical description: The building at 4500 Intelco Loop SE, Lacey, is located in Thurston County. According to the county assessor, the structure was built in 1859 and is a clubhouse. The 1.5-story building has a platform frame structural system. The walls of the other form are clad principally in wood.



Historic Property Report

Historic Name: Smith, Jacob, House

Property ID: 19967

Inventory Details - 9/27/2023

Common name:

Date recorded: 9/27/2023

Field Recorder: Michael Houser

Field Site number:

SHPO Determination

Detail Information

Surveyor Opinion

Property appears to meet criteria for the National Register of Historic Places: No



Historic Property Report

Historic Name: Smith, Jacob, House

Property ID: 19967

Inventory Details - 3/10/2025

Common name:

Date recorded: 3/10/2025

Field Recorder: Stephen Austin

Field Site number:

SHPO Determination

Detail Information

Characteristics:

Category	Item
Foundation	Post & Pier
Form Type	Single Dwelling
Roof Type	Gable - Side
Roof Material	Asphalt/Composition
Cladding	Wood - Clapboard
Plan	Square

Styles:

Period	Style Details
Late Victorian Period (1860-1900)	Folk Victorian

Surveyor Opinion

Property appears to meet criteria for the National Register of Historic Places: Yes

Significance narrative: The Jacob Smith House is recommended eligible for inclusion in the National Register of Historic Places based on its high level of architectural integrity and its historical significance as the oldest surviving house in Thurston County (Lacey Parks, 2025). Constructed in 1859, the house is a one-and-one-half-story Folk Victorian residence with Greek Revival design elements. Additions to the original design occurred during the historic period, including the full-width front porch and an associated water tower, likely constructed between 1890 and 1940. A detached garage, originally built circa the 1950s and rebuilt in the late 1990s, now connects the tower and main house via an open-air breezeway. A National Register Nomination Form was prepared for the Jacob Smith House in October 1986 by Shanna Stevenson; however, it was not formally listed on the NRHP. The house and its associated buildings were listed in the Washington Heritage Register in February 1988, where it was determined eligible under Criterion C for its architectural significance. In 1998, it was listed on the City of Lacey's Register of Historic Places (Lacey Parks, 2025). Following several decades of disrepair, the City of Lacey entered a contract in 1990 with the property owner to develop the adjacent land in exchange for restoration of the Jacob Smith House. Restoration efforts began in 1996 and were completed in the summer of 1997. Alterations to the property during this restoration included:

- Rehabilitation of the front façade and porch, including posts and decorative brackets;

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Historic Property Report

Historic Name: Smith, Jacob, House

Property ID: 19967

- Reconstruction of the steeply pitched side-gabled roof with cedar shingles, replicating the historic roofing material;
- Retention of original fenestration, with some windows restored and others in the rear replaced with vinyl frames of similar type and pattern;
- Replacement of the exterior cladding with historically appropriate wooden clapboards;
- Reconstruction of the water tower in the same design and location as the original;
- Reconstruction and remodeling of the detached garage into a two-story garage-apartment; and
- Restoration of the two brick chimneys, maintaining their original placement and materials.

The restoration appears to have been conducted in keeping with the house's original design and successfully preserves the majority of its historic features and materials. While the alteration of the detached garage diminishes the overall integrity of design, the Jacob Smith House retains sufficient integrity of location, design, materials, workmanship, feeling, association, and setting.

The property is recommended eligible for listing in the National Register of Historic Places under Criterion A, due to its significant association with early settlement in Thurston County. While Jacob Smith is a documented historical figure, he does not rise to the level of individual significance required for eligibility under Criterion B. Although the building has undergone interior alterations and the addition of a modern garage structure, it retains the distinctive characteristics of its type and period, and may represent the work of a master, supporting eligibility under Criterion C. The property is not recommended eligible under Criterion D, as it does not appear likely to yield important information related to history or prehistory.

Born in 1814 in Pennsylvania, Jacob Smith married Priscilla Fearnley in Indiana in 1837. Prior to emigrating to Washington Territory around 1850, the Smiths had four children while living in Indiana. In 1851, the family traveled the Oregon Trail and settled on Whidbey Island in 1852, where Jacob claimed land under the Donation Land Claim Act. While living there, the Smiths had two more daughters—one of whom was the second Euro-American child born on Whidbey Island. Smith served as a home guard during the Indian War and as Sergeant at Arms during the first Territorial Legislature. The family remained on Whidbey Island until February 1858, when Jacob sold his land to James Henry Swift for either \$3,000 or \$3,500 (Weaver 1996).

On November 23, 1857, Jacob Smith purchased the Donation Land Claim of James T. Phillips, a fellow Oregon Trail migrant who had patented 320 acres in the southeast quarter of Section 32 and the southwest quarter of Section 33 in September 1850. Smith purchased the land from Phillips for \$1,800 and later expanded the property to more than 440 acres through additional acquisitions. He primarily raised sheep and wheat, establishing a prosperous and productive farm (Basse 1936:46–55).

The property overlooked Chambers Prairie, home to some of the earliest Euro-American settlers in what is now Lacey. These included members of the Chambers family, Nathan Eaton, the Pattison family, Stephen Ruddell, Gallatin Hartsock, Joseph Conner, Archibald McMillan, Urban East Hicks, and Henry Parsons. By the 1850s, Chambers Prairie had become the civic center of the Lacey area, containing a schoolhouse, cemetery, and voting precinct. It remained central until the 1880s–1890s, when development shifted northward with the arrival of the Tacoma, Olympia, and Grays Harbor Railroad (Weaver 1996).

Construction on the Jacob Smith House began in 1858, by which time the Smiths had six children; their seventh may have been born around the time the house was completed in 1859. Contemporary accounts and comparisons suggest that the house was notably large for its time and significantly larger than other dwellings in the area. In 1860, the house hosted the wedding of the Smiths' eldest daughter, Cordelia Jane, to Nathaniel Crosby of



Historic Property Report

Historic Name: Smith, Jacob, House

Property ID: 19967

Tumwater—nephew of early settler Clanrick Crosby and owner of the now-preserved Crosby House. Another family wedding occurred in 1877 when Ellen Smith married Frank Pontius (Weaver 1996).

Jacob Smith continued farming until his death in 1879, after which the property passed to his son. Over the years, several additions were made to the house, including a full-width front porch and a square water tower constructed between 1890 and 1940. The farm remained in the Smith family until 1955, when it was purchased by Robert Wohleb, son of noted Olympia architect Joseph Wohleb. The Wohleb family used the house as a country retreat for several decades.

In 1985, Elizabeth Wohleb, widow of Robert Wohleb, sold the property to Seattle-based developer Michael Mastro. That year, Shanna Stevenson of the Olympia Historic Preservation Office prepared a National Register nomination form for the Jacob Smith House. The nomination moved through local and state review in 1986–1987 and was submitted by the Office of Archaeology and Historic Preservation (OAHP) to the Advisory Council on Historic Preservation. Although the property was not formally listed on the National Register of Historic Places, it was added to the Washington Heritage Register. In October 1987, Lacey City Manager Greg Cuoio reported on the proposed development of the land south of the Jacob Smith House. Plans included dedicating 2.5 acres for public park space and contributing \$150,000 toward the renovation of the house. As part of the approved Lacey Corporate Center Plan, Mastro agreed to rehabilitate the Jacob Smith House as a condition of development approval.

However, the house was neglected for the next five years. In 1995, the City of Lacey filed suit against Mastro for failing to fulfill his development agreement (Jones 1996). In April 1996, Mastro deeded the house to Kaiser and Caroline Huber, who began restoration work with planner Randy Orth and builder John Bever (Thompson 1996). Prior to the restoration, the house had suffered extensive deterioration, including a collapsed or heavily damaged roof, rotted walls and floors, broken or missing windows and doors, and a severely deteriorated water tower.

Years of neglect and vandalism had left the structure in severe disrepair, requiring comprehensive rehabilitation. Contractors began with structural repairs, including the replacement of rotten beams and reinforcement of the foundation. Incompatible building materials from earlier alterations—such as mismatched lumber and inconsistent roofing—had to be corrected. The interior was modernized while period-appropriate fixtures and lamps were sourced where possible (The Olympian 1996, C3).

By July 1997, after more than 8,000 hours of labor and \$175,000 in expenses, the restoration was completed. Although modernized for functional use, the house retained its original architectural style. The restored Jacob Smith House was made available for rentals, receptions, and community events (The Olympian, July 21, 1997, C1).

The rehabilitation included full structural and exterior restoration. New siding was installed, the roof was replaced with cedar shingles resembling the original, and the front porch was reconstructed with decorative brackets and railings. Windows were either restored or replaced with vinyl frames that matched the historic appearance. The water tower was rebuilt on its original footprint and connected to the main house and garage via a breezeway. The detached garage was remodeled into a two-story garage-apartment.

The restoration project received the Ron Rowe Award for architectural renovation from the Lacey Rotary Club and was widely celebrated as a successful preservation of one of the region's oldest homes (The Olympian 1998).

In October 1999, the Lacey Historic Commission formally recognized the Jacob Smith House during a ceremony commemorating its placement on the Lacey Historic Register.

In December 2002, the Lacey City Council approved the purchase of the house and adjacent Parcel A for \$395,000 and appropriated an additional \$50,000 for



Historic Property Report

Historic Name: Smith, Jacob, House

Property ID: 19967

improvements. Ongoing restoration continued over the next year, including floor refinishing and general maintenance. The newly renovated garage-apartment was leased to residential tenants. Additional improvements and maintenance occurred in the following years, with design input provided by students from Saint Martin's University in 2011.

Physical description:

The property is located at 4500 Intelco Loop SE, Lacey, WA 98503, north of Yelm Highway SE in South Lacey, Washington within the southeast quarter of Section 32, Township 18 North, Range 1 West of the Willamette Meridian. The southeast quarter of Section 32 and the southwest quarter of Section 33. Set on a southwest-northeast axis, the house is a Victorian Folk construction is a one-and-one-half story side-gable cottage type with Greek Revival stylistic elements. The structure has a rectangular footprint and sits on a raised foundation with horizontal wood lap siding painted in a light, neutral tone.

It is characterized by its symmetrical façade, hall-and-parlor interior plan, moderately pitched side-gabled roof sheathed in wood shingles, boxed eaves with prominent cornice and frieze, multi-pane double-hung wooden sash window, and wood lap siding. Two red brick chimneys protrude from the ridge line. A full-width front porch extends across the façade, supported by evenly spaced square wooden posts with decorative brackets. The porch roof is an extension of the primary roof form. A large water tower, reportedly constructed between 1890 to 1940, was attached to the main house via a modern walkway addition.

Its main elevation (southwest) consists of a centrally placed wooden pedestrian door with a four-panel design, flanked on each side by two symmetrically positioned double-hung windows with multi-pane upper sashes. The porch roof is hipped and clad in the same wood shingles. Its decorative porch brackets connect the roof with evenly spaced square wooden posts. The front steps leading up to the porch are concrete, accessed via a symmetrical walkway with metal railings.

The west façade contains a prominent small bay window capped with a hipped roof, near the center of the elevation. It features three large fixed-pane windows with a decorative scalloped valance along the upper sash of the central window. Two other wooden framed windows include a single-light lower sashes in its gable end and a double-hung sash windows on its south corner near the main porch. The east elevation contains a single multi-pane attic window centered in the gable end, and two evenly spaced, double-hung sash windows with multi-pane upper sashes and single-light lower sashes.

The rear (northwest) elevation includes a series of later additions, including a covered walkway connecting the main dwelling to an auxiliary structure. A prominent, square tower-like addition rises from the rear, clad in the same horizontal wood siding, and featuring a shed roof with a louvered vent at the peak. The attached two-story rear addition has a gabled roof with modern vinyl windows. A covered breezeway, supported by square wooden posts, connects the garage to the main dwelling. This passageway has a shed-style roof extending from the main garage volume, maintaining visual continuity with the primary structure. The breezeway features a secondary entrance with a single-pane glass door.

The attached garage apartment addition is a two-story construction extending from the rear of the primary dwelling. The garage section is a single-story section clad in the same horizontal wood lap as the main house. Two metal garage doors are symmetrically open on its east façade. The apartment section is a two-story, gable-roofed volume with fenestration consisting of vinyl single and double-hung windows. The rear elevation of the apartment features an additional entrance and a series of modern vinyl windows.



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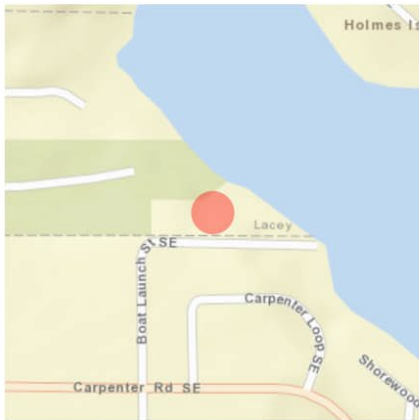


Historic Property Report

Historic Name: Linger Longer Resort - House

Property ID: 494113

Location



2802 BOAT LAUNCH ST SE OLYMPIA, WA 98503

Address: 2802 BOAT LAUNCH ST SE, LACEY, WA 98503

Tax No/Parcel No: 11827121900

Plat/Block/Lot: 27-18-1W L2 & SL ADJ S 154F LY E OF RD EX RD & W8

Geographic Areas: Thurston County, LACEY Quadrangle, T18R01W27, Congressional District 10, 22

Information

Number of stories:

Construction Dates:

Construction Type	Year	Circa
Built Date	1947	☒

Historic Use:

Category	Subcategory
Domestic	Domestic - Single Family House
Domestic	Domestic - Single Family House

Historic Context:

Category
Architecture

Architect/Engineer:

Category	Name or Company
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Historic Property Report

Historic Name: Linger Longer Resort - House

Property ID: 494113

Thematics:

Local Registers and Districts

Name	Date Listed	Notes
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Project History

Project Number, Organization, Project Name	Resource Inventory	SHPO Determination	SHPO Determined By, Determined Date
2011-08-00144, , Assessors Data Project: Thurston County 2		Not Determined	
2021-09-06106, , Architect File 2		Survey/Inventory	
2025-03-01512, , Historical Resources Assessment for Three Historic Properties for the City of Lacey, Lacey Museum		Survey/Inventory	

Historic Property Report

Historic Name: Linger Longer Resort - House

Property ID: 494113

Photos

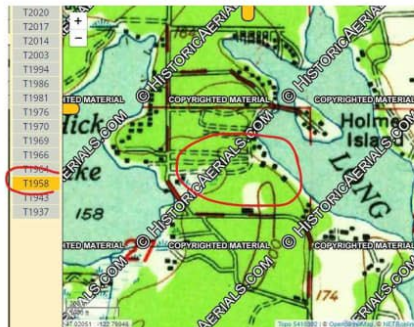


2802 Boat Launch St SE OLYMPIA, WA 98503

2802BoatLaunchSt_Lacey1.jpg



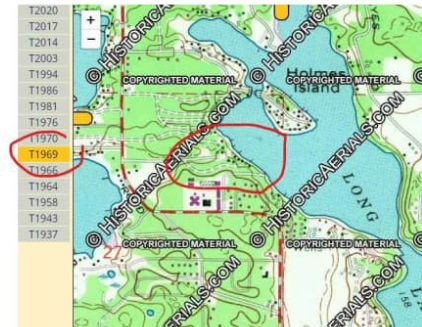
2802BoatLaunchSt_Lacey8_LingerLongerResort2.jpg



2802BoatLaunchSt_Lacey6.jpg



2802BoatLaunchSt_Lacey8_LingerLongerResort3.jpg



2802BoatLaunchSt_Lacey7.jpg



2802BoatLaunchSt_Lacey5.jpg



Historic Property Report

Historic Name: Linger Longer Resort - House

Property ID: 494113

FROM HISTORICAL
Township 18 N., Range 1 W., Kyro, Union Mills, Hicks
Lake, Long Lake, Holmes Island
From Thurston County 1971, Washington
Published by The C. H. H. Co. in 1971
View All The Images in Thurston County 1971



2802BoatLaunchSt_Lacey4.jpg

FROM HISTORICAL
Township 18 N., Range 1 W., Kyro, Union Mills, Kyro,
Patterson Lake, Hicks
From Thurston County 1971, Washington
Published by The C. H. H. Co. in 1971
View All The Images in Thurston County 1971



2802BoatLaunchSt_Lacey3.jpg

FROM HISTORICAL
Page 031, Union Mills, Kyro, Hicks Lake, Long Lake,
Patterson Lake
From Thurston County 1962, Washington
Published by The C. H. H. Co. in 1962
View All The Images in Thurston County 1962



2802BoatLaunchSt_Lacey2.jpg



070 SE corner of garage.jpg



065 Garage.jpg



060 Lake setting facing North.jpg

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Historic Property Report

Historic Name: Linger Longer Resort - House

Property ID: 494113



055 Lake setting.jpg



050 NE Entrance to house.jpg



045 South side of house.jpg



040 West side of garage with house.jpg



035 CloseUp of basement access.jpg



030 NE corner of house.jpg

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Historic Property Report

Historic Name: Linger Longer Resort - House

Property ID: 494113



025 NW corner of house.jpg



020 Front east side of house.jpg



015 SE corner of house.jpg



010 Back west side of house.jpg



005 Driveway approach from SW.jpg



2802BoatLaunchSt_Lacey8_LingerLongerResort5.jpg

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Historic Property Report

Historic Name: Linger Longer Resort - House

Property ID: 494113

ITEM #103293
Page 031, Union Mills, Kyrro, Hicks Lake, Long Lake,
Patterson Lake
From Thurston County 1902, reprinted
Published by Thos. C. Warner in 1942
View all the images in Thurston County 1902



2802BoatLaunchSt_Lacey2.jpg

ITEM #103294
Township 18 N., Range 1 W., Union Mills, Kyrro,
Patterson Lake, Hicks
From Thurston County 1913, reprinted
Published by Thos. C. Warner in 1973
View all the images in Thurston County 1913



2802BoatLaunchSt_Lacey3.jpg

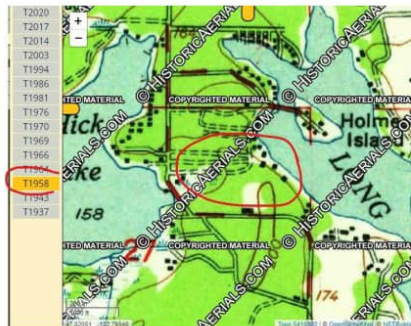
ITEM #103295
Township 18 N., Range 1 W., Kyrro, Union Mills, Hicks
Lake, Long Lake, Holmes Island
From Thurston County 1913, reprinted
Published by Thos. C. Warner in 1973
View all the images in Thurston County 1913



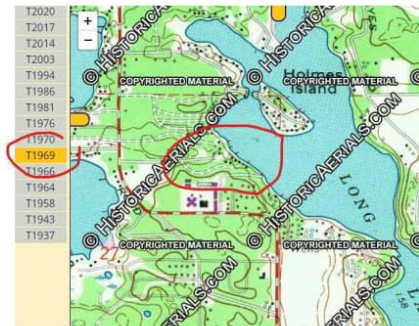
2802BoatLaunchSt_Lacey4.jpg



2802BoatLaunchSt_Lacey5.jpg



2802BoatLaunchSt_Lacey6.jpg



2802BoatLaunchSt_Lacey7.jpg



Historic Property Report

Historic Name: Linger Longer Resort - House

Property ID: 494113



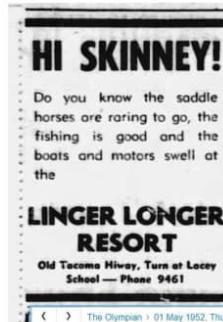
2802BoatLaunchSt_Lacey8_LingerLongerResort.jpg



2802BoatLaunchSt_Lacey8_LingerLongerResort2.jpg



2802BoatLaunchSt_Lacey8_LingerLongerResort3.jpg



2802BoatLaunchSt_Lacey8_LingerLongerResort4.jpg



2802BoatLaunchSt_Lacey8_LingerLongerResort5.jpg



2802BoatLaunchSt_Lacey_The_Daily_Olympian_Sun_Feb_5_1967_.pdf



Historic Property Report

Historic Name: Linger Longer Resort - House

Property ID: 494113

Inventory Details - 7/1/2011

Common name:

Date recorded: 7/1/2011

Field Recorder: Artifacts Consulting, Inc.

Field Site number: 11827121900

SHPO Determination

Detail Information

Characteristics:

Category	Item
Foundation	Concrete - Poured
Form Type	Single Dwelling
Roof Type	Gable
Roof Material	Asphalt/Composition
Cladding	Wood

Surveyor Opinion

Significance narrative: Data included on this historic property inventory form (HPI) detail stemmed from County Assessor building records imported by the Washington State Department of Archaeology of Historic Preservation (DAHP) into WISAARD in 2011. This upload reduces data entry burden on community volunteers and historical societies participating in the survey and inventory of their communities. The intent of this project is directed specifically to facilitating community and public involvement in stewardship, increasing data accuracy, and providing a versatile planning tool to Certified Local Governments (CLGs).

Project methodology entailed use of the University of Washington's State Parcel Database (<http://depts.washington.edu/wagis/projects/parcels/development.php>) to provide the base parcel layer for CLGs. Filtering of building data collected from each county trimmed out all properties built after 1969, as well as all current, previously inventoried properties. Translation of building data descriptors to match fields in HPI allowed the data upload. Calculation of point locations utilized the center of each parcel.

Data on this detail provides a snapshot of building information as of 2011. A detailed project methodology description resides with DAHP. Project team members: Historic Preservation Northwest, GeoEngineers, and Artifacts Consulting, Inc. (project lead).

Physical description: The house at 2802 Boat Launch Street SE, Lacey, is located in Thurston County. According to the county assessor, the structure was built in 1947 and is a single family dwelling. The 1.5-story building has a gable roof clad in asphalt composition. The walls of the single-family form are clad principally in wood. The unspecified style building sits on a poured concrete foundation. There is a wood frame garage built in 1947 on the property.

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Historic Property Report

Historic Name: Linger Longer Resort - House

Property ID: 494113

Inventory Details - 11/29/2023

Common name:

Date recorded: 11/29/2023

Field Recorder: Michael Houser

Field Site number:

SHPO Determination



Historic Property Report

Historic Name: Linger Longer Resort - House

Property ID: 494113

Inventory Details - 3/10/2025

Common name:

Date recorded: 3/10/2025

Field Recorder: Stephen Austin

Field Site number:

SHPO Determination

Detail Information

Characteristics:

Category	Item
Foundation	Concrete - Poured
Form Type	Single Dwelling - WWII Era Cottage
Roof Type	Gable
Roof Material	Asphalt/Composition
Cladding	Wood - Shingle

Styles:

Period	Style Details
Modern Movement (1930-1970)	Minimal Traditional

Surveyor Opinion

Property appears to meet criteria for the National Register of Historic Places: Yes

Significance narrative: The house located at 2802 Boat Launch Street sits on the western shore of Long Lake, now within the city limits of Lacey, Washington. Constructed in 1947, the single-family dwelling is a Minimal Traditional-style house likely built by Alexander (Alex) Beattie Brown and his wife, Lulu Mae Mitchell Brown—owners of the Linger Longer Resort, which they operated for approximately 20 years (The Daily Olympian 1964). The house and its adjacent property were sold to James R. Floyd between 1962 and 1973 (Metsker Map, 1973). Following the sale of the Linger Longer Resort property, Thurston County purchased 3.14 acres from James R. and Marcella Floyd for expansion associated with the development of the Thurston County Fairgrounds. The house remained in the Floyds' name until 2022, when the City of Lacey acquired the property. Although currently shuttered and with no surviving resort buildings, the house retains individual integrity of design, location, materials, workmanship, feeling, and setting. The property is recommended eligible for listing in the National Register of Historic Places under Criterion A for its significance to early tourism and recreation in Thurston County. It does not rise to the level of significance required for eligibility under Criterion B. Despite being unoccupied, the house retains sufficient architectural integrity and embodies the distinctive characteristics of a specific type of construction under Criterion C. The property is not likely to yield information important to history or prehistory and is therefore not eligible under Criterion D.

Alex B. Brown was born in Bothwell, Scotland, near Glasgow, in 1885. By age 15, he was

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Historic Property Report

Historic Name: Linger Longer Resort - House

Property ID: 494113

employed as a steelworker (Scotland Census 1891 & 1901). He later immigrated to the United States, settling in Great Falls, Montana (National Archives 1918). After a period living in Alder, Pierce County, Washington, he married Lulu Mae Mitchell on June 1, 1908, in Tacoma (Pierce County 1908).

Lulu Mae was born in Mandan, North Dakota, in 1888 but moved with her family to Montana (Find-A-Grave 2013). After their marriage and before World War I, the Browns returned to Great Falls, where Alex worked at the Anaconda Copper Mine (National Archives 1918). By 1930, the family had moved to Pierce County, Washington, where they remained until relocating to Long Lake (Find-A-Grave 2013).

By the late 1940s, the Browns had established the Linger Longer Resort, a nine-acre recreational destination featuring a community kitchen with wooden picnic tables, five cabins, and a three-bedroom residence (The Daily Olympian 1964). When Brown purchased the Long Lake property around 1944, it was densely forested. Working with his son, Alex Jr., he cleared the land, hiring a bulldozer to remove tree stumps and using the harvested lumber to build the kitchen and picnic tables (The Daily Olympian 1948). The resort served both vacationers and Thurston County residents, hosting union groups, church organizations, and families (The Olympian, August 7, 1953, p.9; August 12, 1953, p.10). Newspaper reports also identified the resort as a popular fishing location, offering trout, perch, crappie, and catfish (The Olympian, August 1953, p.12; April 27, 1955, p.17). The Linger Longer Resort operated for more than 20 years as a popular event venue and fishing resort (The Daily Olympian 1964). In 1964, as Alex Brown Sr.'s health declined, efforts began to sell the property. Following his death in 1965, his children—Alex Jr. and Josephine—and their spouses entered negotiations to sell the resort to Thurston County (The Daily Olympian 1967). A November 1966 editorial in The Olympian described the Linger Longer as a potential public park, stating, “as additional state and Federal matching funds become available, and during future budget periods, we hope to purchase the Linger Longer property and to develop both parks” (The Olympian, November 27, 1966, p.5). The eventual sale included ten acres of land, 190 feet of waterfront, the residence at 2802 Boat Launch Street, and an outdoor kitchen. Following the acquisition, Thurston County demolished all the resort’s cabins. The purchase was jointly funded by Thurston County Parks and Recreation (25%), the State Interagency Committee for Outdoor Recreation (25%), and the federal Bureau of Outdoor Recreation (50%) (The Daily Olympian 1973a). Shortly afterward, the County proposed creating a supervised public swimming area and installing a mobile home on the property for an on-site caretaker (The Daily Olympian 1974b).

To accommodate increased public use, the County purchased additional land south of Long Lake Park to expand the Thurston County Fairgrounds (The Olympian, June 20, 1973, p.6). This included approximately ten acres from John A. Rupp, designated for parking, and 3.14 acres from James R. Floyd, intended for future expansion of an arena. A 1973 Metsker’s map shows that Floyd owned part of the former Linger Longer Resort tract, including the residence. A newspaper report quoting Thurston County Commissioner George Yantis stated, “In purchasing the piece from Floyd,...we cut off his remaining property — his home site — from access to the county road” (The Olympian, June 20, 1973, p.6).

James Richard “Dick” Floyd (1928–2003) and his wife, Marcella Floyd (1927–2021), moved to Olympia in 1957. Before relocating, Floyd worked as a pharmacist and owned a pharmacy in Moscow, Idaho. In Olympia, he first worked at the Medical Center Pharmacy on Capitol Way. He and Marcella later operated two Med-Arts Pharmacies, which they ran together for more than 20 years (The Olympian 2003).

It is possible that the Boat Launch Street residence initially served as a seasonal home for the Floyds. City directories from 1960 list their primary residence as 2105 South Fir Street, Olympia (Polk 1960). The Boat Launch Street property remained in the Floyd



Historic Property Report

Historic Name: Linger Longer Resort - House

Property ID: 494113

family until the City of Lacey acquired it from the Marcella Floyd Trust on June 22, 2022 (Thurston County Assessor 2025). J.R. "Dick" Floyd passed away in 2003, and Marcella Floyd in 2021 (The Olympian 2003, 2022). The property is currently unoccupied and mothballed.

Physical description:

The property is located on the south shore of Long Lake, approximately 2,000 feet east of Carpenter Road Southeast, within Section 27 of Township 18 North, Range 1 West, in Lacey, Washington. The house is accessed from the west through Long Lake Park. Oriented on an east-west axis, the house is a one-and-a-half-story Minimal Traditional-style dwelling with a detached garage and an outbuilding.

The house features a side-gabled roof with asphalt shingles, wood shingle siding, two front-facing gabled dormers, and an exterior red brick chimney on the west elevation. The exterior is clad in horizontal wood shingles painted red with white trim. The structure sits on a poured concrete foundation with a partially exposed basement, accessed via a recessed doorway on the north elevation.

The primary (east) façade contains the main entrance, a single wooden door set within a projecting entry wing, now boarded over. Access is via a small concrete stoop with two steps. A secondary basement entrance is situated partially below grade, adjacent to the main entrance; it is also boarded. Fenestration on this elevation includes multiple boarded-over window openings, likely once containing fixed panes within the dormers. A large picture window to the left of the entry is also boarded. A full-height brick chimney defines the south façade, which also contains two additional window openings—possibly originally double-hung sash types—now boarded over.

The west (rear) elevation includes both the two-story main massing and a single-story north wing. On the left side of this elevation are two boarded window openings. A red brick chimney protrudes from the roof ridge near the center. The two-story section includes a shed roof projecting from the original gable form, with three evenly spaced upper-story window openings and two on the lower level, all of which are boarded. The original section of the house features a steeply pitched gable roof with minimal eave overhangs. A small attic vent is centered within the gable end. Three window openings on this elevation are also covered with plywood, obscuring their original configuration. Moss and organic debris are visible along the roof surface, particularly near the lower edges.

Garage:

The detached garage is located northwest of the main house. It is a single-story structure with a front-gabled roof clad in asphalt shingles. The exterior matches the main house, featuring red-painted wood shingles and white trim. A large modern metal roll-up door provides vehicle access. A pedestrian door and four windows on the east elevation are boarded over.

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Historic Property Report

Historic Name: Linger Longer Resort - House

Property ID: 494113

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Thurston County Assessor

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Historic Property Report

Historic Name: Linger Longer Resort - House

Property ID: 494113

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1948 The Olympian. September 9, p. 17.
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1953 The Olympian. August 12, p. 10.
1953 The Olympian. August 19, p. 12.
1955 The Olympian. April 27, p. 17.
1964 The Olympian. July 1, p. 15.
1966 The Olympian. November 27, p. 5.
2003 James Richard "Dick" Floyd Obituary. The Olympian. July 7.
2022 Marcella (Sally) Floyd Obituary. The Olympian. January 9.

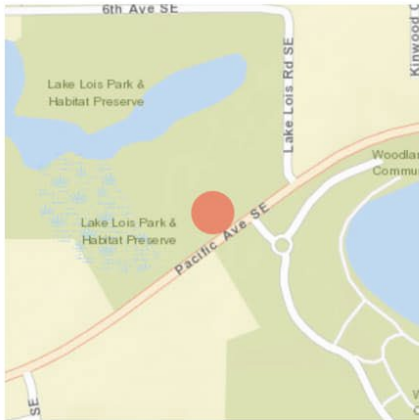


Historic Property Report

Historic Name: Lake Lois Resort

Property ID: 19914

Location



Address: Pacific Ave SE, Lacey, WA 98503

Tax No/Parcel No: 48204200100

Plat/Block/Lot: Fleetwood Acres Lots 42-44

Geographic Areas: Thurston County, LACEY Quadrangle, T18R01W15, Congressional District 10, 22

Information

Number of stories:

Construction Dates:

Construction Type	Year	Circa
Built Date	1931	☐

Historic Use:

Category	Subcategory
Commerce/Trade	Commerce/Trade - Restaurant
Commerce/Trade	Commerce/Trade - Restaurant

Historic Context:

Category
Entertainment/Recreation

Architect/Engineer:

Category	Name or Company
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Historic Property Report

Historic Name: Lake Lois Resort

Property ID: 19914

Thematics:

Local Registers and Districts

Name	Date Listed	Notes
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Project History

Project Number, Organization, Project Name	Resource Inventory	SHPO Determination	SHPO Determined By, Determined Date
2025-03-01512, , Historical Resources Assessment for Three Historic Properties for the City of Lacey, Lacey Museum		Survey/Inventory	

Monday, July 14, 2025

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Historic Property Report

Historic Name: Lake Lois Resort

Property ID: 19914

Photos



SE Elevation



McKinney Lois Yearbook Olympia HS 1931.jpg



McKinney Building3 northeast corner showing side detail.jpg



Road Widening The_Olympian_1992_02_24_14.jpg



McKinney Building4 west side facing northeast.jpg



McKinney Building2 back of building, view facing southwest.jpg



Historic Property Report

Historic Name: Lake Lois Resort

Property ID: 19914



McKinney Building1.2 east corner of front facade closeup, view facing west.jpg



McKinney Building1.1 front facade closeup, view facing north.jpg



McKinney Building1 front facade, view facing north.jpg



McKinney Building Pre Widening of Pacific Avenue.jpg



McKinney Building 2002 Lacey Museum.jpg



McKinney Building 1993, Lacey Museum.jpg

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Historic Name: Lake Lois Resort

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McKinney Building 2017 Lacey Museum.jpg



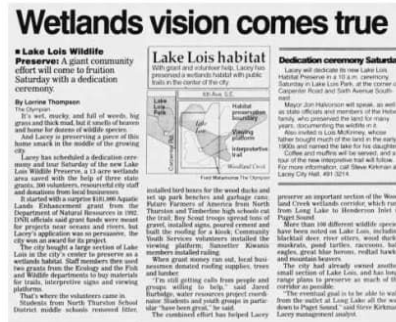
Lois McKinney.jpg



Interior, 2006.jpg



McKinney Building 1939 WA ST Archives.jpg



Lake Lois Habitat Dedication
The_Olympian_1995_03_02_15.jpg



Including Resort Sign, ca 1940.tif



Historic Property Report

Historic Name: Lake Lois Resort

Property ID: 19914



Lois McKinney House Apr 29 1987 (2).jpg



Fire The_Daily_Olympian_1930_12_27_1.jpg



Exterior, 2002.tif



Exterior side, 2002.tif



Exterior from Pacific, 1993.tif



Exterior from Pacific, 1993.jpg



Historic Property Report

Historic Name: Lake Lois Resort

Property ID: 19914



Fire The_Daily_Olympian_1930_12_27_6.jpg



Original HPI form(s)



Historic Property Report

Historic Name: Lake Lois Resort

Property ID: 19914

Inventory Details - 1/1/1900

Common name: (#34-862)

Date recorded: 1/1/1900

Field Recorder:

Field Site number: 1102

SHPO Determination

Detail Information

Surveyor Opinion

Property appears to meet criteria for the National Register of Historic Places: No

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Historic Property Report

Historic Name: Lake Lois Resort

Property ID: 19914

Inventory Details - 6/11/1987

Common name: (#34-862)
Date recorded: 6/11/1987
Field Recorder: M.L. Stilson
Field Site number: 1102

SHPO Determination

Detail Information

Characteristics:

Category	Item
Foundation	Concrete - Poured
Plan	Rectangle
Cladding	Wood - Clapboard
Cladding	Stucco
Structural System	Wood - Balloon Frame
Roof Material	Asphalt/Composition - Rolled

Styles:

Period	Style Details
Early 20th Century Revivals (1900-1940)	Spanish - Mediterranean

Surveyor Opinion

Property appears to meet criteria for the National Register of Historic Places: No

Property is located in a potential historic district (National and/or local): No

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Historic Property Report

Historic Name: Lake Lois Resort

Property ID: 19914

- Significance narrative:** According to Lois McKinney, her parents Alva & Elva McKinney were from Helena, Montana. They were persuaded to come to Washington by Mr. McKinney's brother who operated a large resort at Lake Wilderness near Black Diamond in King County. He had identified the Lake Lois location near Lacey and on Olympia Highway 99. Alva and Elva McKinney came to the lake to operate the resort in the summers beginning in 1931. Mr. For a time they returned to Montana during the winter where McKinney worked for a Montana Power plant and Mrs. McKinney was a teacher. They named the lake and the resort for their only child, Lois, who continues to live at the resort.
- The three acre lake which is 200 feet deep with a gravel bottom is spring fed with a outlet to Woodland Creek. The lake had fine fishing and swimming. The McKinney worked for a Montana Power plant and Mrs. McKinney was a teacher. They name the lake and the resort for their only child, Lois, who continues to live at the resort.
- The tree acre lake which is 20 feet deep with a gravel bottom is spring fed with an outlet to Woodland Creek. The lake had fine fishing and swimming. The McKinney's had some 970 feet of frontage along Old Highway 99 and eventually came to live permanently at the resort. They first built a cafe farther east from the present location, which had a soda fountain, groceries, candy, punch boards, slot machines, a dance floor with a piano and a gas station. This burned sometime in the mid 1930's. Mrs. McKinney then built the present cafe in a design. The McKinney's lived in the rest of the building. The Lake Lois Barbecue operated into the 1940's and offered groceries, cigarettes and candy besides the cafe.
- The resort also had seven cabins and the soldiers from Fort Lewis were the main renters although overnight accommodation was available.
- Physical description:** This rectangular, one-story former cafe and resort rests on a poured concrete foundation. The double wall, wood frame structural system is covered with clapboard cladding except for the front (south) facade which is covered with stucco. This stucco cladding seems to be later. The roof is flat and covered with tarpaper. On the front facade there is a partial brick coping. There is a brick chimney in the middle of the roof. The fenestration is symmetric. The front facade's windows are large, fixed wood sash, plate glass windows. There are four of these, the two on the outside edges larger than those inside. The windows on the east and west are 9 over 1, double-hung, wood sash. The front entry is on the south facade. It is protected by a flat roof canopy supported by 4 x 4 posts and chains fastened to the south walls above. The main tentry is double doors, each with a large central pane.
- The front facade is a simplified mission style, lacking only the semi-circular, crowning arch. The typical mission parapet and coping is present.
- The ex-cafe is set close to Pacific Avenue. Farther from the road, in a state of extreme disrepair are four cabins. These cabins are set all in a row, connected by carports which are continuations of a common low pitched gable roof. The cabins have drop cladding. They are one over one, double-hung, wood sash windows. Each cabin has a gable roofed porch. The porch roofs are supported by 4 x 4 posts. Some of these cabins no longer have roofs. at some distance northeast of these cabins, is another, slightly larger. It is the only cabin with plumbing.
- also on the property is a well house. This property is outside the Lacey City Limits.
- Bibliography:** Shanna Stevenson, Lacey, Olympia and Tumwater



Historic Property Report

Historic Name: Lake Lois Resort

Property ID: 19914

Inventory Details - 3/10/2025

Common name: McKinney Building

Date recorded: 3/10/2025

Field Recorder: Stephen Austin

Field Site number:

SHPO Determination

Detail Information

Characteristics:

Category	Item
Foundation	Concrete - Poured
Form Type	Western False Front
Roof Type	Flat with Parapet
Cladding	Wood - Clapboard

Styles:

Period	Style Details
Early 20th Century American Movements (1900-1940)	Commercial

Surveyor Opinion

Property appears to meet criteria for the National Register of Historic Places: No

Significance narrative: The McKinney Building, located at 6426 Pacific Avenue SE, Olympia, Washington, stands within the Lake Lois Habitat Reserve in Lacey. Reportedly constructed in 1931, the building exhibits characteristics of False Front commercial-style architecture. It originally served multiple purposes: a café and rest stop affiliated with the Lake Lois Resort, a waystation for travelers along Highway 99, and a residence for the McKinney family. Lois McKinney remained in the building until her death in 1998. In 2001, the City of Lacey acquired the structure and the surrounding land. Today, the McKinney Building remains one of the few surviving structures from Lacey's resort era.

A visual inspection indicates the building is in an advanced state of deterioration due to prolonged neglect and vandalism. Although demolition was recommended in 2002, the Lacey Historical Commission intervened, committing \$50,000 toward stabilizing the structure. In 2013, students from Saint Martin's University developed architectural plans for potential reuse of the site (City of Lacey 2014).

Despite these efforts, the building's condition has worsened. The roof is severely deteriorated and at risk of collapse. The structure is now shuttered and deemed structurally unsound. Interior modifications have removed most original features, exterior alterations, material loss, and the disappearance of original fenestration have eroded its integrity of materials, workmanship, and feeling. The removal of associated resort elements—including gas pumps and seven cabins—has further diminished its integrity of setting and association.

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Historic Property Report

Historic Name: Lake Lois Resort

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Although the property is historically significant for its ties to the Lake Lois Resort and the history of tourism in Thurston County, it lacks the physical integrity required for listing in the National Register of Historic Places under Criterion A. It also does not meet the threshold of significance under Criterion B. The building is ineligible under Criterion C due to extensive material loss and alteration, and it does not appear likely to yield important historical or archaeological information under Criterion D.

Named for Lois McKinney—the only child of Elva and Alva McKinney—the Lake Lois Resort, also known as the Lake Lois Auto Park, included the Lake Lois Barbecue, a grocery store, gas station, and candy shop. Situated on the lake and along Highway 99 (present-day Pacific Avenue), it catered to both vacationers and travelers.

During the early to mid-twentieth century, Lacey was recognized as a resort destination, with most area lakes hosting at least one shoreline resort. While larger establishments like Mullen's featured dance halls, diving platforms, and other entertainment facilities, Lake Lois offered a more rustic retreat centered on its spring-fed, 20-foot-deep, three-acre lake—ideal for fishing and swimming.

In the mid-1920s, Charles McKinney—Lois's uncle—managed a large resort at Lake Wilderness near Black Diamond in King County. In 1926, he convinced his brother Alva and sister-in-law Elva to relocate from Helena, Montana, and establish a new resort on what was then Woodland Lake (now Lake Lois) (Stevenson 1987). Their daughter, Lois, born in 1912, became the namesake of both the lake and the resort.

The McKinney family initially operated the resort seasonally, returning to Helena for winter employment. Known both as the Lake Lois Resort and Lake Lois Auto Park, the property featured a café, gas station, grocery store, candy shop, and seven rental cabins. The original café—located farther east than the existing structure—included a soda fountain, groceries, punch boards, slot machines, a dance floor with a piano, and a gas station. In 1930, the building was destroyed by fire (The Daily Olympian, December 27, 1930).

In 1931, Alva McKinney built the current structure, with the front housing the café and the rear serving as the family residence. Soldiers from Fort Lewis often rented cabins for extended stays. Alva died in 1935, just nine years after founding the resort, but Elva and Lois continued operating the property into the 1940s. Both also worked at the nearby Lacey School.

In 1995, the Lake Lois Wildlife Preserve was formally dedicated (Thompson 1995). At the time, five of the original seven cabins remained, though all were in poor condition and were later demolished. Lois McKinney continued living in the main building until her death in 1998 (Stevenson 1987).

In 2001, the City of Lacey acquired the McKinney Building and 17.56 acres from the McKinney Estate as part of the Woodland Creek Open Space Corridor and Lake Lois Habitat Reserve. A January 2002 inspection deemed the building "dangerous" and recommended demolition. However, the Lacey Historical Commission successfully lobbied for its preservation, prompting the City to invest approximately \$50,000 in stabilization (City of Lacey 2019).

Despite this intervention, repeated acts of vandalism between 2003 and 2008 led to the



Historic Property Report

Historic Name: Lake Lois Resort

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building's closure. In 2013, Saint Martin's University's Senior Civil Engineering Design class developed site and architectural plans proposing an interpretive center within the structure and a nearby parking area. Nevertheless, ongoing inspections have since recommended demolition due to the continued deterioration of the building's structural elements.

Physical description:

The property is located north of Pacific Avenue SE, approximately 1,400 feet east of its intersection with Carpenter Road SE, within the northwest corner of Section 22, Township 18 North, Range 01 West. Set on a north-south axis, the building is a single-story, False-Front-style commercial building characterized by its rectangular footprint and front-gabled roof concealed by a parapet façade. A red brick chimney, partially obscured by the false front, rises above the roofline at the center of the building. The structure exhibits visible deterioration, including peeling paint, water damage, and structural distress.

The primary (south) façade features a prominent stepped false-front parapet, with stucco-finished columns and plywood siding. Its main entrance, a set of double-leaf doors, has been boarded over due to repeated vandalism. The doors are flanked by large window openings, which are also infilled with plywood. The remnants of a porch awning are located directly above the entrance and narrow flanking windows, all of which are now boarded over.

The east and west elevations are clad in horizontal wood siding, now weathered and exhibiting signs of neglect, including graffiti and staining. The east elevation contains multiple boarded-over window openings and a secondary entry door, also boarded shut. The west elevation includes additional window openings, all of which are infilled, and features an exterior electrical fixture mounted near the upper wall. A stucco column at the midpoint of each side elevation visually divides the building between its commercial and residential sections.

The rear (north) elevation continues the use of horizontal wood siding and features a simple flat-roofed profile. All window openings on this façade are covered with plywood, and no original fenestration is visible.



Historic Property Report

Historic Name: Lake Lois Resort

Property ID: 19914

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APPENDIX B: GLOSSARY OF ARCHITECTURAL TERMS

Balloon Frame – A method of wood-frame construction where the wall studs extend continuously from the foundation to the roof, with intermediate floors nailed to them.

Bay Window – A window assembly that projects outward from the main wall of a building, typically forming a polygonal or rectangular recess inside.

Board-and-Batten – A siding system consisting of wide vertical boards with narrow wooden strips (battens) covering the joints between them.

Boxed Eaves – A roof detail where the eaves are enclosed on the underside with soffits or fascia boards. This feature gives a building a finished appearance and protects structural components from the elements.

Breezeway – A roofed passageway, open or enclosed, that connects two separate structures such as a house and a garage. It allows movement between buildings while providing some shelter from the elements.

Casement Window – A window that is hinged on one side and opens outward or inward like a door, often operated with a crank.

Chimney – A vertical structure that vents smoke or combustion gases from fireplaces, stoves, or heating systems. Historically constructed from brick or stone and often considered a prominent architectural element.

Clapboard – Long, narrow boards installed horizontally with overlapping joints to clad the exterior of a building. Also known as weatherboard or lap siding.

Cornice – The decorative, projecting element located at the junction where a wall meets the roofline. It can be simple or elaborately detailed, often used in Greek Revival and other classical styles.

Cross-Gable – A roof design where two or more gable roof sections intersect, often forming an L- or T-shaped plan. It adds visual interest and complexity to a building's form.

Dormer – A roofed projection from a sloped roof that typically includes a window.

Eave – The part of a roof that overhangs the walls of a building. It can be open or boxed and may include soffits and fascia.

Façade – The exterior face of a building, typically the front or principal elevation, which is often the most architecturally detailed and publicly visible side. It includes the arrangement of architectural elements such as doors, windows, trim, and cladding, and plays a central role in defining the building's style, symmetry, and overall character.

False Front – A façade that extends vertically beyond or conceals the actual roofline to give a commercial building a more imposing or stylistically unified appearance. Common in the late 19th to early 20th-century vernacular commercial architecture.

Fenestration – The arrangement, design, and proportion of windows and other openings on a building's exterior.

Frieze – A horizontal band or panel located just below the cornice and above the wall plane in classical architecture. In vernacular or revival styles, it may be plain or decorated and helps visually define the eaves.

Gable Dormer – A vertically projecting roof feature with its own gabled roof, typically housing a window. It provides light and ventilation to upper-story or attic spaces while adding complexity to the roofline.

Hall-and-Parlor Plan – A domestic floor plan consisting of two rooms placed side-by-side: the “hall” (a public or multifunctional room) and the “parlor” (a more private or formal space). Common in early American vernacular architecture.

Hip Roof – A roof where all sides slope downwards to the walls, usually with a gentle pitch. Unlike gable roofs, it has no vertical ends.

Lap Siding – Horizontal wood or composite boards that overlap one another to create a water-shedding exterior cladding. Often used interchangeably with clapboard, though the term “lap” can refer to modern variants.

Minimal Traditional Style – An architectural style popular from the 1930s to the 1950s, characterized by modest, simplified interpretations of earlier traditional forms. Features typically include low-pitched gabled roofs, minimal ornamentation, and small front porches or stoops.

Parapet – A low wall or extension of the façade that rises above the roofline, often found on flat-roofed or false-front buildings. It can serve decorative, structural, or fire-protection functions.

Portico – A roofed entrance porch supported by columns or piers, often leading to the main entry of a building. It is common in classical and revival styles.

Post and Beam – A structural system that uses heavy timber posts and horizontal beams to support floors and roofs. Often visible in barns and historic buildings.

Sash Window – A window made of one or more movable panels, or “sashes,” which hold panes of glass and slide either vertically (as in double-hung) or horizontally.

Side-Gabled Roof – A roof style in which two pitched roof sections slope down from a central ridge, with the gable (triangular wall section) positioned on the building's sides. Common in vernacular and traditional house forms.



CRITICAL AREAS REPORT

December 10, 2024



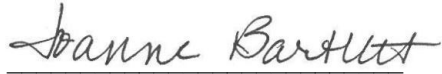
Lake Lois Habitat Reserve *City of Lacey Washington*

Prepared for
City of Lacey
Attn: Jenny Wilson
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Phone (360) 412-3184

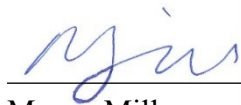
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SIGNATURE PAGE

The information in this report was compiled and prepared under the supervision and direction of the undersigned.



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APPENDICES

Appendix A	– Routine Onsite Wetland Determination Data Forms
Appendix B	– Wetland Rating Form for Western Washington
Appendix C	– Routine Determination Method and Plant Indicator Rating Definitions

INTRODUCTION

Ecological Land Services, Inc. (ELS) has completed this critical areas report on behalf of the City of Lacey for a portion of Thurston County Parcels Nos. 48204200000, 48203600000, 48203600000, and 48204200000, hereinafter referred to as the study area. The study area is located north of Pacific Avenue SE in Lacey, Washington, within a portion of Section 15, Township 18, Range 1 West of the Willamette Meridian (Figure 1). This report has been prepared in accordance with the *Lacey Municipal Code (LMC), Title 14- Buildings and Construction, Chapter 14.28.280 Wetland buffers--Standard Buffer Zone Widths and Chapter 14.33.117 Performance Standards for Specific Habitats* (2024).

METHODOLOGY

WETLAND METHODOLOGY

The site was evaluated for the presence of wetlands using the Routine Determination Method according to the U.S. Army Corps of Engineers' 1987 Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers' Wetland Delineation Manual (Environmental Laboratory 1987); Western Mountains, Valleys, and Coast Region (Version 2.0) (Corps 2010). The Routine Determination Method and defining wetland criteria are discussed further in Appendix C. Wetlands are regulated as "Waters of the United States" by the U.S. Army Corps of Engineers (Corps) and as "Waters of the State" by the Washington Department of Ecology (Ecology), and locally by the City of Lacey.

ORDINARY HIGH WATER MARK METHODOLOGY

The ordinary high water mark (OHWM) of the onsite stream, Woodland Creek, was delineated following *WAC 173-22-030* and using guidance from the Washington State Department of Ecology (Ecology) publication *Determining the Ordinary High Water Mark for Shoreline Management Act Compliance in Washington State* (Ecology Publication No. 16-06-029).

ELS biologists conducted a site visit on October 4, 2024, to make determinations regarding presence or absence of critical areas on and within 300 feet of the study area. Prior to conducting the site visits, ELS reviewed current and historic aerial photographs and consulted online databases for soil, wetland, topography, priority habitat, and habitat conservation areas. ELS biologists identified and delineated one wetland (Lake Lois), one stream (Woodland Creek), and numerous Oregon white oak (*Quercus garryana*) trees within the study area (Figure 2). The diameter at breast height (DBH) of each oak was measured and recorded. The wetland boundaries were delineated using consecutively numbered fluorescent flags labeled "WETLAND DELINEATION". The main indicators used to discern the boundaries of the onsite wetlands were changes in vegetation, breaks in topography, and the presence of hydrology. Vegetation, soil, and hydrology information was collected at four test plots to confirm the onsite wetland boundary (Figure 2). Consecutively numbered fluorescent orange flags were used to mark the east OHWM of Woodland Creek before the channel disperses into Lake Lois. The wetland boundary, OHWM, test plot locations, and Oregon white oak trees were mapped using a handheld GPS unit to show the extent of critical areas within the study area (Figure 2). The offsite wetland boundary was approximated using online databases, topography, and aerial imagery (Figure 9). The offsite stream channel was mapped based on the Washington Department of Fish and Wildlife (WDFW) Priority Habitats and Species (PHS) and Statewide Washington Integrated Fish Distributions (SWIFD) maps (Figures 6 and 8).

STUDY AREA DESCRIPTION

The approximately 10.37-acre study area is located within the southeast portion of the Lake Lois Habitat Reserve (Reserve) in Lacey, Washington (Figure 2). The study area is predominantly forested with walking trails throughout (Photoplate 3). There is an existing, vegetated storm pond within the south portion of the study area. The storm pond outlets to a culvert at the south end of the pond; however, it is not known where the culvert leads to (Figure 2; Photoplate 3). An existing, vacant building is located east of the storm pond, and it is accessed by Pacific Avenue SE. Lake Lois is situated along the north and west boundaries of the study area and extends offsite to the north and west (Photoplates 1 and 2). Woodland Creek originates from the south and flows north into the study area from a dual culvert located underneath Pacific Avenue SE. The onsite channel of Woodland Creek is largely engineered with the large culvert and rip rap before it disperses into Lake Lois (Photoplate 2). Numerous Oregon white oak trees are located within the forested portion of the study area. Topography slopes down south to north and east to west from the forested areas down to the depressional area where Lake Lois and Woodland Creek are located. The study area is bound by Lake Lois Road SE to the east, Pacific Avenue SE to the south, and the remaining areas of the Reserve to the west and north (Figure 2).

VEGETATION

The majority of the study area is forested save the emergent and flooded portions of Lake Lois. The plant indicator status following the plant scientific name is defined by the *National Wetland Plant List Indicator Rating Definitions* (Corps 2012) and can be found in Appendix C.

WETLAND VEGETATION

Lake Lois is an emergent and forested unit. Vegetation observed at the test plots within Lake Lois consisted of **herbs**: reed canarygrass (*Phalaris arundinacea*, FACW), devil's beggartick (*Bidens frondosa*, FACW), spotted ladythumb (*Persicaria maculosa*, FACW), wild mint (*Mentha canadensis*, FACW), broadleaf cattail (*Typha latifolia*, OBL), climbing nightshade (*Solanum dulcamara*, FAC), spotted water hemlock (*Cicuta maculata*, OBL), and bog yellowcress (*Rorippa palustris*, OBL).

UPLAND VEGETATION

Species observed within the upland test plots included **trees**: bitter cherry (*Prunus emarginata*, FACU), bigleaf maple (*Acer macrophyllum*, FACU), Douglas fir (*Pseudotsuga menziesii*, FACU), and Oregon ash (*Fraxinus latifolia*, FACW); **shrubs**, Oso berry (*Oemleria cerasiformis*, FACU), salmonberry (*Rubus spectabilis*, FAC), tall Oregon grape (*Mahonia aquifolium*, FACU), and oceanspray (*Holodiscus discolor*, FACU); **herbs**: English ivy (*Hedera helix*, FACU), licorice fern (*Polypodium glycyrrhiza*, UPL), and lady fern (*Athyrium cyclosorum*, FAC).

SOILS

The Natural Resources Conservation Service (NRCS) maps the soils within the study area as (NRCS 2024A; Figure 3):

- Alderwood gravelly sandy loam, 8 to 15 percent slopes (2)
- Bellingham silty clay, 0 to 3 percent slopes (14)

- Spanaway gravelly sandy loam, 0-3 percent slopes (110)
- Yelm fine sandy loam, 0-3 percent slopes (126)
- Water (129)

Alderwood gravelly sandy loam soils are moderately well drained and are found on glacially modified hills and ridges. They are formed from glacial drift and outwash over dense glaciomarine deposits. The depth to water table is about 18 to 37 inches below ground surface (BGS). Bellingham silty clay soils are described as poorly drained and are found in depressions at elevations of 20 to 600 feet. These soils formed in loess, alluvium and lacustrine sediments. They have a depth to water table of 0 to 12 inches BGS. Spanaway gravelly sandy loam soils are somewhat excessively drained and are found on glacial outwash terraces and plains. They are formed from glacial outwash. The depth to water table is more than 80 inches BGS. Yelm fine sandy loam soils are moderately well drained and are found in relict glacial lacustrine lakes and drainageways on terraces. They are formed from glacial outwash. The depth to water table is about 18-36 inches BGS. Alderwood gravelly sandy loam, Spanaway gravelly sandy loam, and Yelm fine sandy loam are not classified as hydric. Bellingham silty clay loam is classified as hydric. (NRCS 2024)¹

WETLAND SOILS

Soil evaluated in the wetland revealed one to three layers consisting of silt, gravelly silt loam, and sandy loam textures. The surface layers had black (10YR 2/1), and very dark gray (10YR 3/1) matrix chromas. The subsurface layer had dusky red (2.5YR 3/2), dark reddish gray (2.5YR 4/1), and weak red (2.5YR 5/2) matrix chromas. One of the profiles had one percent dark yellowish brown (10YR 4/4) redoximorphic concentrations in the subsurface layer. Soils in the wetland test plots met hydric soil indicator Hydrogen Sulfide (A4; TP1 TP3).

UPLAND SOILS

Soils evaluated in non-wetland areas revealed one to two layers consisting of gravelly silt loam and cobbly sandy loam textures. The surface layer had black (10YR 2/1) and very dark brown (10YR 2/2) matrix chromas. The subsurface layer had very dusky red (2.5YR 2.5/2) matrix chromas with no redoximorphic features in any of the layers. The profiles in the upland test plots did not meet the hydric soil criterion because their matrix chromas were too high or there were no redoximorphic features (Appendix A).

HYDROLOGY

LANDSCAPE POSITION

The Washington State Department of Ecology's Water Quality Atlas (DOE 2024) maps the study area within the west portion of Watershed Resource Inventory Area (WRIA) 13 – Deschutes, 12-digit Hydrologic Unit Code (HUC): 171100190502- Woodland Creek -Frontal Henderson Inlet.

WETLANDS

Lake Lois is a depressional system with seasonally and permanently flooded hydroperiods. Woodland Creek flows through the west portion of Lake Lois and contributes to wetland

¹ Areas mapped as hydric soils do not necessarily mean that an area is or is not a wetland—hydrology, hydrophytic vegetation, and hydric soils must all be present to classify an area as a wetland.

hydrology. Additional water sources include direct precipitation, a seasonally high perched water table, and runoff from surrounding uplands. Hydrology was observed in the wetlands as Inundation Visible on Aerial Imagery (B7) Geomorphic Position (D2), FAC Neutral Test (D5), and Hydrogen Sulfide (A4) during the site visit.

STREAMS

Woodland Creek originates from the south and enters the study area from a dual culvert located beneath Pacific Avenue SE. It dissipates into Lake Lois onsite and re-channelizes offsite west of the study area. The channel was dry at the time of the site visit and consisted of a gravel and cobble substrate.

UPLAND

The upland test plots did not contain water and there was no evidence of wetland hydrology.

CRITICAL AREA, HABITAT AND SPECIES OVERVIEW²

U.S. FISH AND WILDLIFE SERVICES, NATIONAL WETLANDS INVENTORY

The National Wetlands Inventory (NWI) map shows a freshwater forested and shrub wetland in the east portion of the study area and a freshwater pond in the north portion (Figure 4, NWI 2024). The forested and shrub unit extends offsite to the east and the freshwater pond unit extends offsite to the north and west. ELS biologists generally agree with the mapping because the onsite wetlands and Woodland Creek were identified in approximately the same location as the NWI mapped wetlands and stream.

THURSTON COUNTY CRITICAL AREA INVENTORY

The Thurston County Critical Areas map (TCCA) shows an unverified wetland along the north and east boundaries of the study area, a stream entering the south portion, and a FEMA floodplain spanning Lake Lois (Figure 5, Thurston County 2024). More Preferred Gopher indicator soils are mapped along the south boundary and Less Preferred Soils are mapped between Lake Lois and the More Preferred Soils. ELS biologists generally agree with the TCCA map because Lake Lois and Woodland Creek are shown in approximately the same location.

WDFW PRIORITY HABITATS AND SPECIES

The WDFW PHS map indicates freshwater forested and shrub wetlands spanning the west boundary of the study area and Wood duck (*Aix sponsa*) breeding area throughout the entire study area (Figure 6, WDFW 2024). There is also coho, winter steelhead, chum, and resident coastal cutthroat mapped in Woodland Creek. Big brown bat (*Eptesicus fuscus*), little brown bat (*Myotis lucifugus*), and Yuma myotis (*Myotis yumanensis*) are mapped across this township. The PHS mapping for the bat species is masked, so the specific location of bat occurrences are not identified online due to the sensitivity of the data. ELS biologists disagree with the mapping because the onsite wetlands are shown to only be in western extend, but Lake Lois spans the northern boundary as well.

² Critical areas maps should be used with discretion because they are used to gather general wetland information about a regional area and therefore are limited in accuracy for smaller areas because of their large scale.

WASHINGTON DEPARTMENT OF NATURAL RESOURCES STREAM TYPE MAP

The WDNR Stream Type Map (WDNR 2024) maps Lake Lois as x (non-typed) and fish bearing and indicates the presence of a Type F stream approximately in the same location as the other databases (Figure 5). ELS biologists generally agree with the WDNR map because Lake Lois and Woodland Creek are shown in approximately the same location.

STATEWIDE WASHINGTON INTEGRATED FISH DISTRIBUTION

The SWIFD map (NWIFC 2024) also indicates the presence of the Type F stream which roughly aligns with the location of the stream confirmed by ELS biologists during the site visit. The SWIFD map indicates Winter Steelhead (documented, presence), coho (documented, presence), Fall Chinook (gradient accessible, presence), and Fall Chum (documented, presence) as being within Woodland Creek (Figure 8).

LISTED SPECIES AND HABITATS IN THE PROJECT VICINITY

The potential presence of listed species, including fish, bird, and mammals that have a primary association with the habitat of Woodland Creek and Lake Lois was evaluated by a site visit, aerial photographs, the WDFW PHS website (WDFW 2024), the U.S. Fish and Wildlife Service, Information for Planning and Consultation (IPaC) website (USFWS 2024b), and the National Oceanic and Atmospheric Administration, Protected Resources App (NOAA 2024).

Table 1: Listed Species and Critical Habitats in the Project Vicinity

Species, ESU ¹ or DPS ²	State Status ⁴	Federal Status ³	Critical Habitat ^{5/6} in Project Vicinity
Fish			
Bull Trout (<i>Salvelinus confluentus</i>)	Candidate	Threatened	No
Puget Sound ² Steelhead (<i>Oncorhynchus mykiss</i>)	Candidate	Threatened	Yes
Reptiles and Birds			
Northwestern Pond Turtle (<i>Actinemys marmorata</i>)	Endangered	Proposed threatened	No
Marbled Murrelet (<i>Brachyramphus marmoratus</i>)	Endangered	Threatened	No
Streaked Horned lark (<i>Eremophila alpestris strigata</i>)	Endangered	Threatened	No
Yellow-billed Cuckoo (<i>Coccyzus americanus</i>)	Candidate	Threatened	No
Mammals			

Species, ESU ¹ or DPS ²	State Status ⁴	Federal Status ³	Critical Habitat ^{5/6} in Project Vicinity
Yelm Pocket Gopher (<i>Thomomys mazama yelmensis</i>)	Threatened	Threatened	No
Insects			
Monarch Butterfly (<i>Danaus plexippus</i>)	Candidate	Candidate	No

1) ESU – Evolutionarily Significant Unit.

2) DPS – Distinct Population Unit.

3) Endangered – In danger of becoming extinct or extirpated; Threatened – Likely to become endangered within the foreseeable future throughout all or a significant portion of its range and that has been formally listed as such in the Federal Register under the Federal Endangered Species Act; Sensitive – Vulnerable or declining and could become Endangered or Threatened in the state; Species of Concern – An unofficial status, the species appears to be in jeopardy, but insufficient information to support listing. State candidate species include fish and wildlife species that the Department will review for possible listing as State Endangered, Threatened, or Sensitive. A species will be considered for designation as a State Candidate if sufficient evidence suggests that its status may meet the listing criteria defined for State Endangered, Threatened, or Sensitive.

4) WDFW, PHS website 2024.

5) NOAA, 2024

6) USFWS 2024b

FISH

According to the NOAA Fisheries website, Woodland Creek provides critical habitat for steelhead salmon (NOAA 2024). According to SWIFD there is documented use of Woodland Creek by chum, coho, and steelhead; however, Woodland Creek does not provide critical habitat for chum and coho. The USFWS IPaC website report indicates that bull trout may be within the proximity of the study area, but there is no confirmed use by this species within Woodland Creek as indicated by SWIFD or PHS. None of the species identified during online research were observed during the October 2024 site visit.

REPTILES & BIRDS

The IPaC lists marbled murrelet, streaked horned lark, and yellow billed cuckoo as threatened in most of western Washington (USFWS 2024b). It also lists the northwestern pond turtle as proposed threatened, and it is listed as endangered within Washington State. (USFWS 2024a)

The marbled murrelet prefers forests with old-growth characteristics that lie within approximately one mile of marine water shorelines. Because they feed primarily on fish and invertebrates in marine shoreline habitats, the marbled murrelet is likely not present within this area.

Streaked horned lark is found in large expanses of bare or thinly vegetated land, including fields, prairies, dunes, upper beaches, airports, and similar areas with low/sparse grassy vegetation. Because the study area is mostly forested and located within a highly developed area with no suitable habitat, the streaked horned lark is likely not present within this area.

Yellow-billed cuckoo is found in deciduous riparian woodlands, including dense stands of cottonwood and willow. They often nest in willows along streams and rivers, with nearby cottonwoods serving as foraging sites. Because the study area is mostly forested and located within

a highly developed area with no suitable habitat, the yellow-billed cuckoo is likely not present within this area.

IPAC lists the northwestern pond turtle (*Actinemys marmorata*) as proposed threatened, and it is listed as endangered within Washington State. The population of northwestern pond turtles in Washington are known to inhabit ponds and lakes (WDFW 2023a). Lake Lois and Woodland Creek provide habitat for the Northwestern Pond turtle; however, the species was not observed during the site visit.

MAMMALS

IPAC lists the Yelm pocket gopher (*Thomomys mazama yelmensis*) as threatened in most of western Washington (USFWS 2024b). They are herbivores that require grasses and forbs for food and well-drained soil for burrowing. Because the study area is mostly forested and developed area with no suitable habitat, the Yelm pocket gopher is likely not present within this area.

INSECTS

The IPaC lists the monarch butterfly as a candidate species throughout the United States (USFWS 2024b). The IPaC report indicates that there are no critical habitats for these species in the vicinity of the project and there was no suitable habitat observed on or near the property.

According to US Fish and Wildlife Service Environmental Conservation Online System, Monarch butterflies can be found in fields, roadside areas, open areas, wet areas, or urban gardens; milkweed and flowering plants are needed for monarch habitat (USDA 2022). Adult monarchs feed on the nectar of many flowers, but they breed only where milkweeds are found. Showy milkweed is the dominant milkweed species in Washington, and it is common to abundant along roadsides and in riparian areas of eastern Washington. The study area consists of forested areas with an understory dominated by English ivy, with minimal flowering plants observed. Given there was also no milkweed observed in the study area, no impacts to the Monarch butterfly are anticipated due to development in the study area.

CRITICAL AREAS SUMMARY

WETLAND CATEGORIZATION & REGULATION

The onsite wetland was rated according to *Washington State Wetlands Rating System for Western Washington-2014 Update* (Version 2; Rating System) (Hruby & Yahnke 2023; Appendix B). Lake Lois was rated as a depressional wetland and scored 21 points on the rating form with 8 points for water quality, 7 points for hydrologic, and 6 points for habitat functions, making it a Category II wetland. *LMC* determines wetland buffers based on wetland category, proposed land use intensity, and habitat scores on the rating form. According to *LMC 14.28.280*, Category II wetlands with a habitat score of 6 to 7 points require a base buffer of 110 feet.

WATER TYPING

LMC 14.33.117(D)(2) specifies riparian habitat area widths (buffers) based on habitat type, measured from the edge of the OHWM. Woodland Creek meets the definition of a Type F Water according to the *WAC 222-16-030* Water typing system. According to *LMC 14.33.117(D)(2)*,

Woodland Creek requires a standard buffer of 200 feet. Where the two critical area buffers overlap, the largest will be regulated within the study area.

Table 2. Onsite Critical Areas Summary

Critical Area	Hydrogeomorphic Classification¹/ Cowardin Class²/ Water Type³	Area of Unit (acres)	Category¹	Total Buffer Width (feet)³
Lake Lois	Depressional Forested and Emergent	13.33	II	110
Woodland Creek	Type F	NA	NA	200

¹Hruby 2014

²Cowardin *et al.* 1979

³ LMC 14.28.280 & LMC 14.33.117(D)(2)

OREGON WHITE OAKS

The location and DBH of over 30 Oregon white oak trees were mapped throughout the forested portion of the study area (Figure 2). Oregon white oaks and Oregon white oak woodlands are considered a priority habitat and are regulated by WDFW and locally by the City. According to WDFW's Priority Habitats and Species List (2008), in urban or urbanizing areas west of the Cascades, priority oak habitat is defined as single oaks, stands of pure oak, or oak/conifer associations, one acre or greater in size. WDFW may also consider individual Oregon white oak trees a priority habitat when found to be particularly valuable to wildlife (i.e., contains many cavities, has a large DBH, is used by priority species, or has a large canopy). The onsite oaks were generally clustered within the conifer dominated forest, and they had a DBH ranging from five to 31 inches. Each oak with a DBH of six inches or greater meets the priority habitat criteria.

LIMITATIONS

ELS bases this report's determinations on standard scientific methodology and best professional judgment. In our opinion, local, state, and federal regulatory agencies should agree with our determinations. However, the information contained in this report should be considered preliminary and used at your own risk until it has been approved in writing by the appropriate regulatory agencies. ELS is not responsible for the impacts of any changes in environmental standards, practices, or regulations after the date of this report.

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Washington Department of Fish and Wildlife (WDFW). 2023. *Priority Habitat and Species Website*. <https://geodataservices.wdfw.wa.gov/hp/phs/>. Website accessed November 2024.

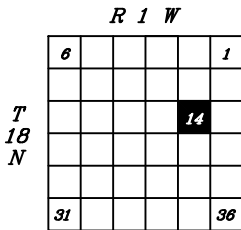
FIGURES AND PHOTOPLATES

WASHINGTON



47.0407° Latitude
-122.7962° Longitude

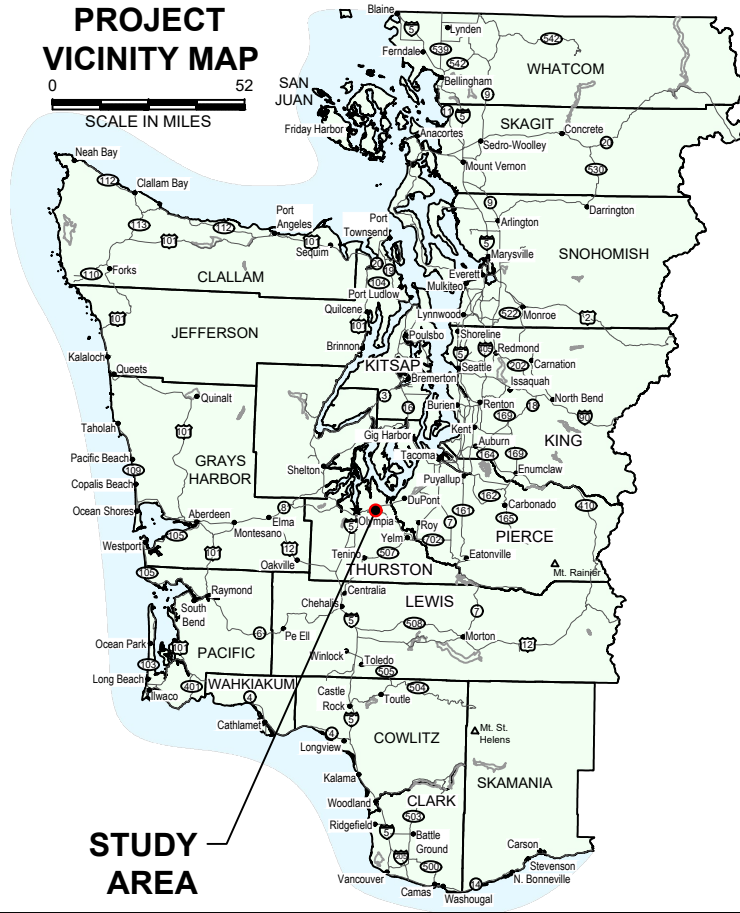
LOCATION MAP



NOTE:
Quadrangle topographic map from USGS.

PROJECT VICINITY MAP

0 52
SCALE IN MILES



STUDY AREA



Figure 1

VICINITY MAP
Lake Lois Habitat Reserve
City of Lacey

City of Lacey, Thurston County, Washington
Section 14, Township 18N, Range 01W, W.M.

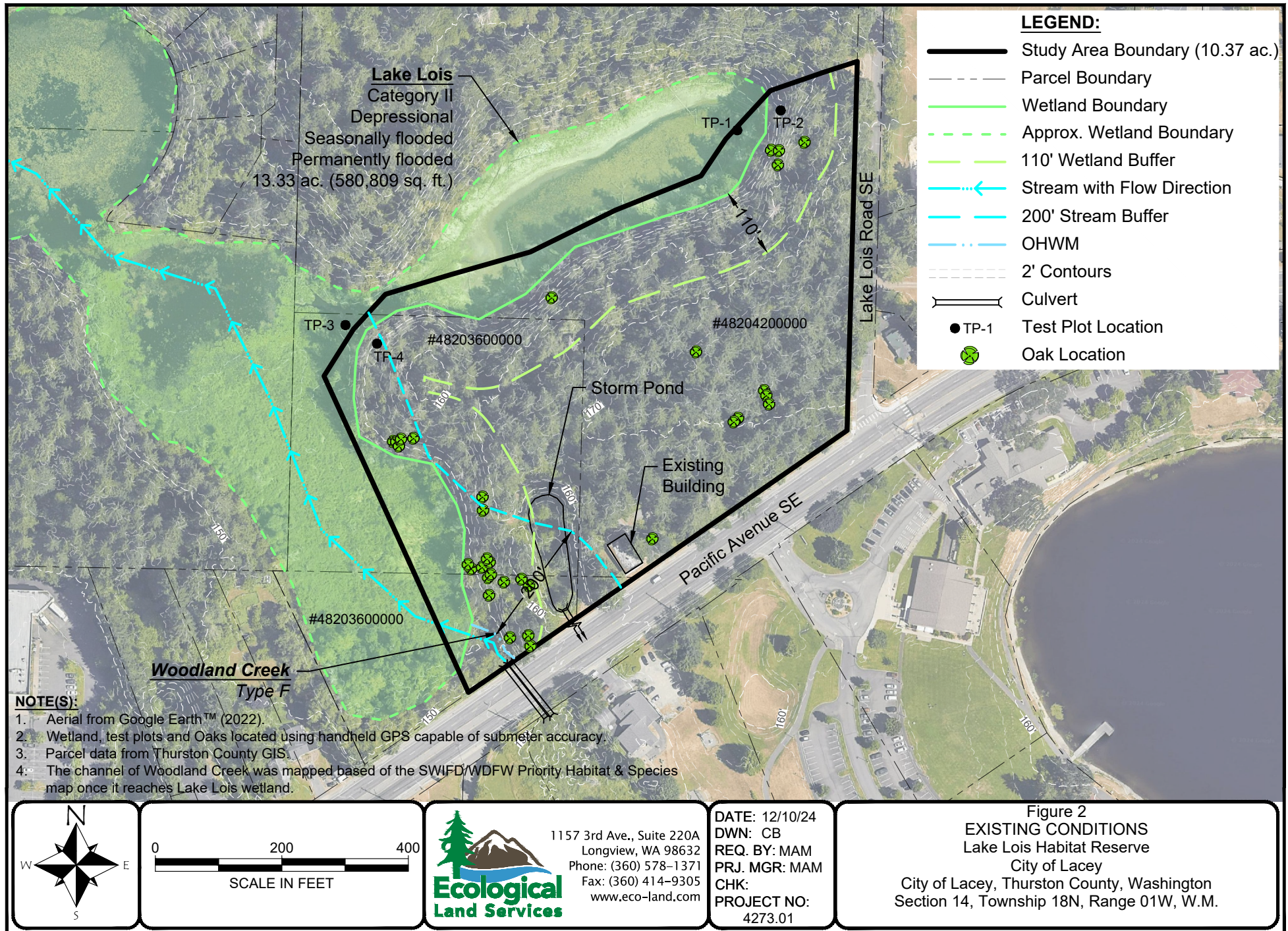
DATE: 12/10/24
DWN: CB
REQ. BY: MAM
PRJ. MGR: MAM
CHK:
PROJECT NO: 4273.01

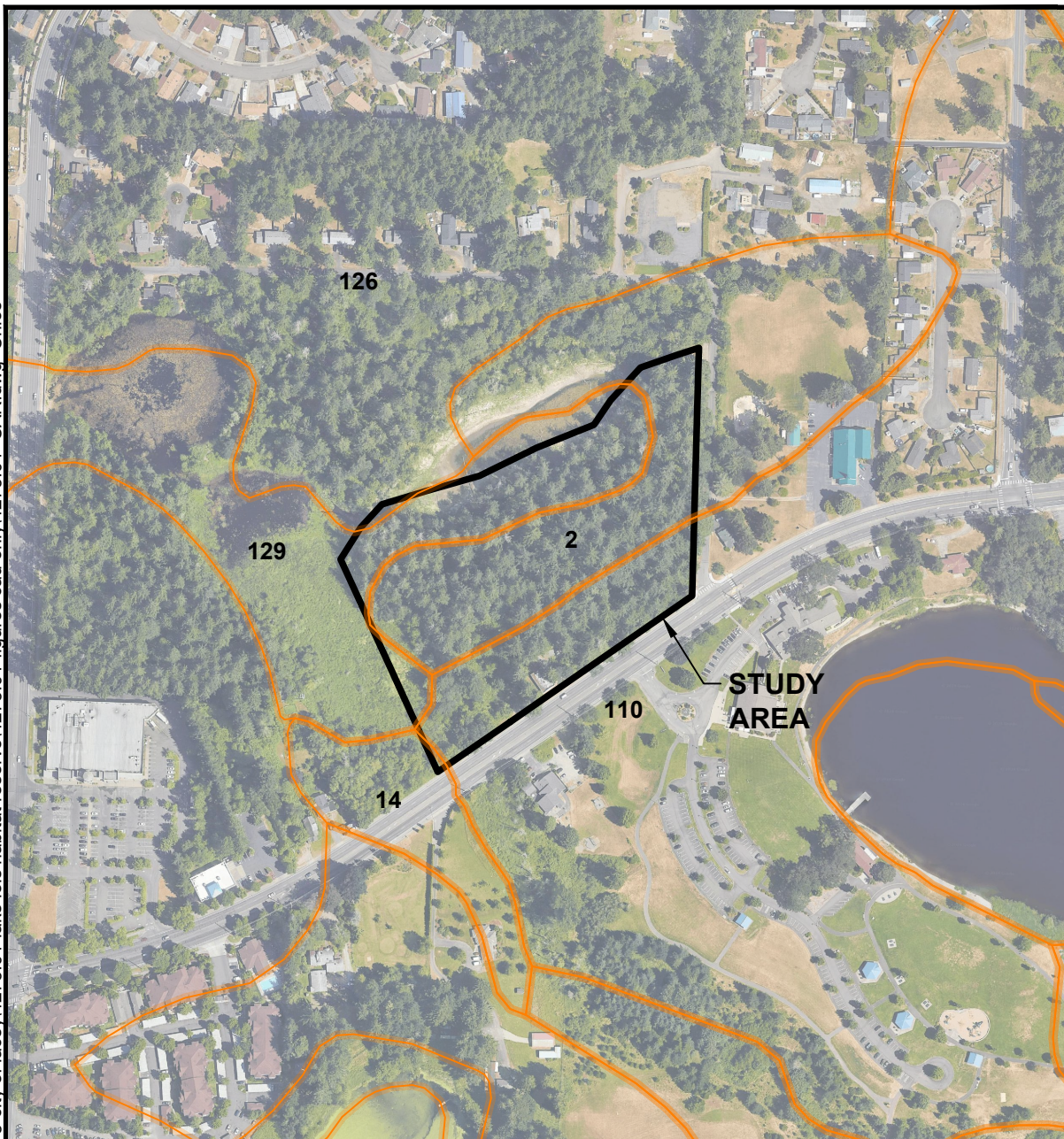
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SCALE IN FEET





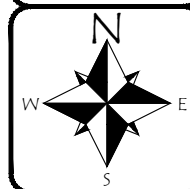


LEGEND:

- Study Area Boundary
- NRCS Soil Boundary
- 2** Alderwood gravelly sandy loam, 8 to 15 percent slopes. Not hydric.
- 14** Bellingham silty clay loam. **Hydric.**
- 110** Spanaway gravelly sandy loam, 0 to 3 percent slopes. Not hydric.
- 126** Yelm fine sandy loam, 0 to 3 percent slopes. Not hydric.
- 129** Water.

NOTE(S):

1. Map provided on-line by NRCS at web address:
<http://websoilsurvey.nrcs.usda.gov/app/>



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Figure 3
NRCS SOIL SURVEY
Lake Lois Habitat Reserve
City of Lacey
City of Lacey, Thurston County, Washington
Section 14, Township 18N, Range 01W, W.M.



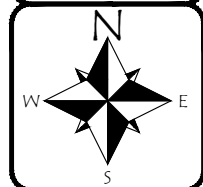
LEGEND:

- Study Area Boundary
- Wetlands**
- Freshwater Forested/Shrub Wetland
 - Freshwater Pond
 - Riverine

PSSC Palustrine, scrub-shrub, seasonally flooded.
PUBH Palustrine, unconsolidated bottom, permanently flooded.

NOTE(S):

- Map provided on-line by US Fish & Wildlife Service at web address:
<https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper>



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Figure 4
USFWS NATIONAL WETLANDS INVENTORY
Lake Lois Habitat Reserve
City of Lacey
City of Lacey, Thurston County, Washington
Section 14, Township 18N, Range 01W, W.M.

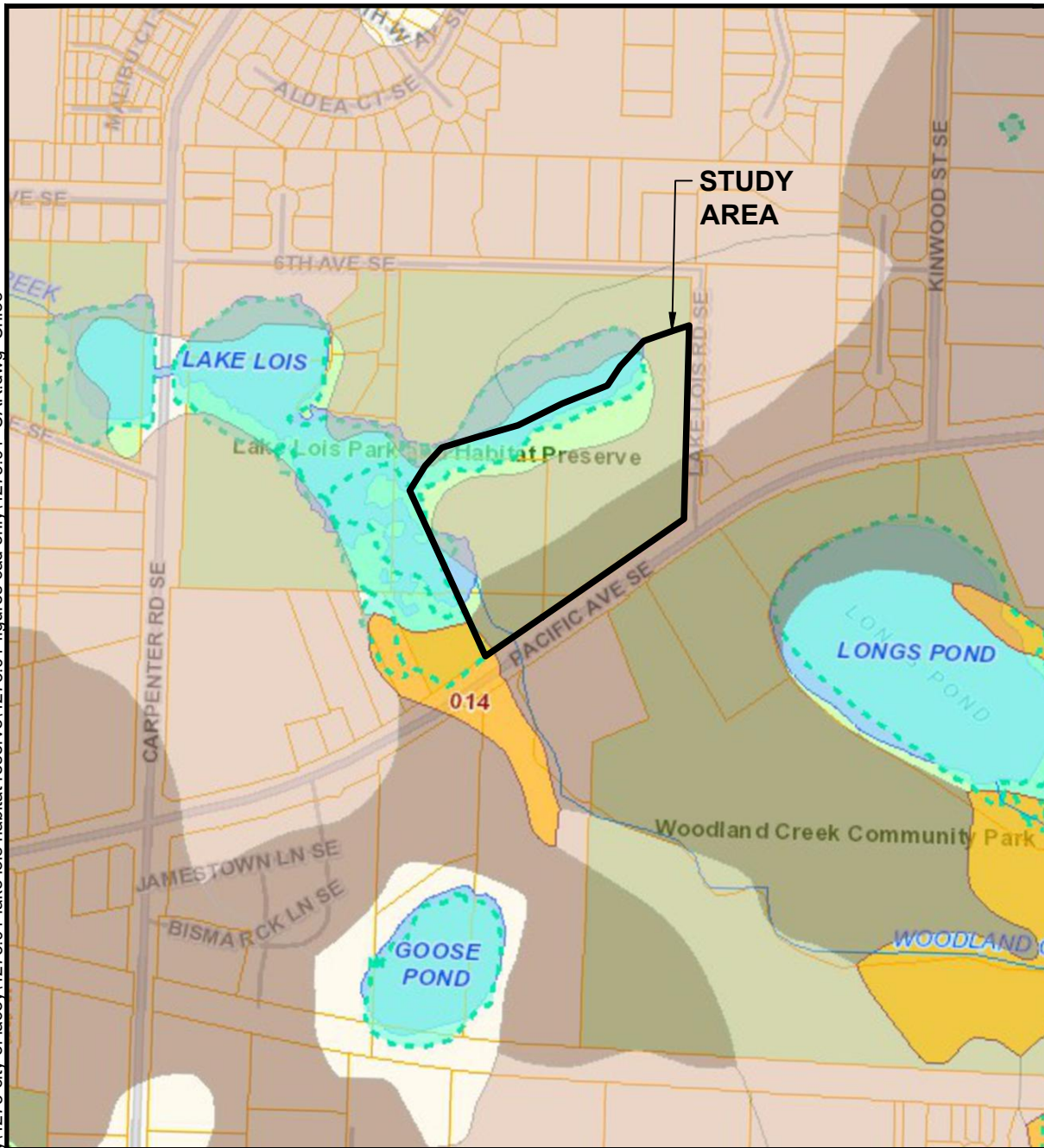


Figure 5
THURSTON COUNTY CRITICAL AREAS
 Lake Lois Habitat Reserve
 City of Lacey
 City of Lacey, Thurston County, Washington
 Section 14, Township 18N, Range 01W, W.M.

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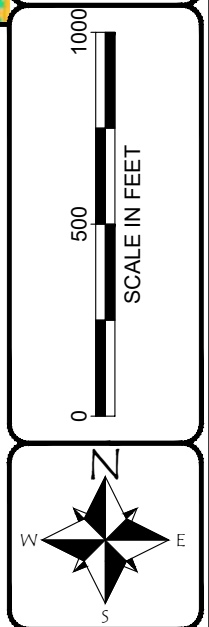
Ecological Land Services

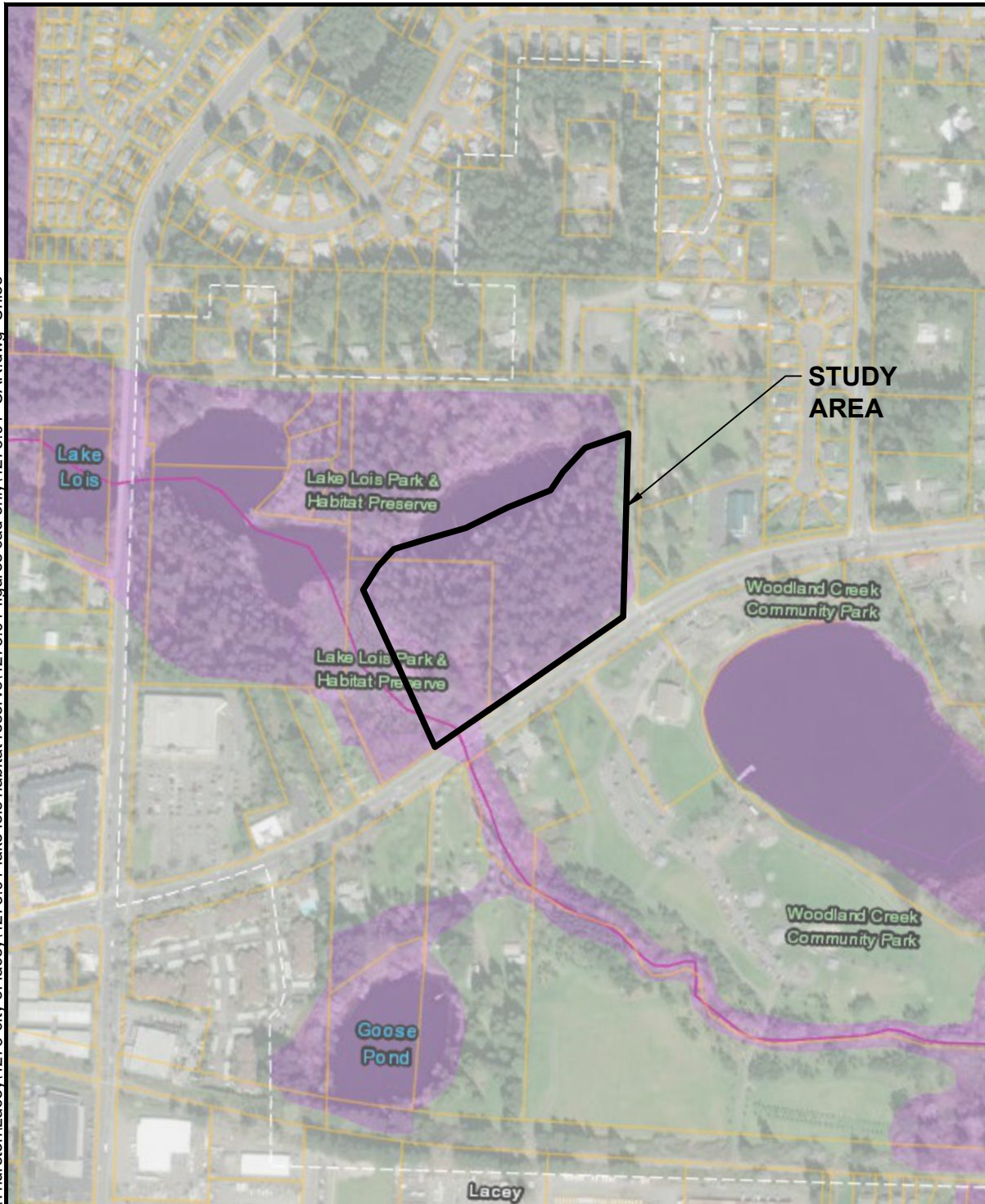
LEGEND:

- | | |
|-------------------------------|--------------------------|
| Study Area Boundary | Natural Resources |
| Wetland Delineations | Hydric Soils |
| — Verified | — Streams |
| - - Delineated | Wetlands |
| - - - Unverified | Waterbodies |
| FEMA | |
| — Floodways | |
| Gopher Indicator Soils | |
| — Less Preferred | |
| — More Preferred | |

NOTE(S):

- Map provided on-line by Thurston County at web address: <https://map.co.thurston.wa.us/>





LEGEND:

- Study Area Boundary
- Parcel Boundary
- Coho Occurrence/Migration
- Winter Steelhead Occurrence/Migration
- Fall Chum Occurrence/Migration
- Resident Coastal Cutthroat Occurrence/Migration
- Freshwater Forested/Shrub Wetland
- Wood duck Breeding Area

Big Brown Bat
Little Brown Bat
Yuma myotis

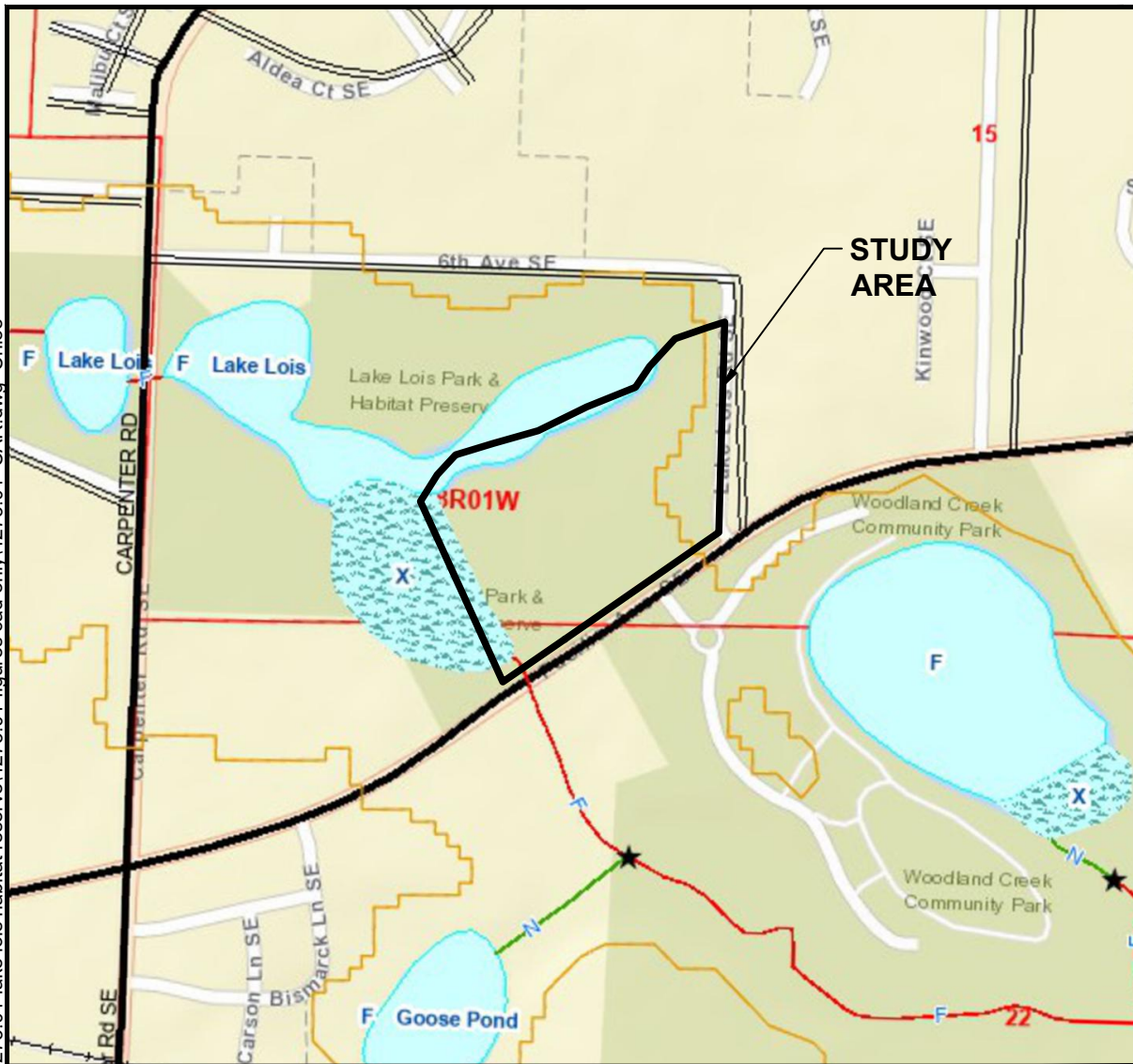
NOTE: Map provided on-line by Washington State Department of Fish & Wildlife at web address:
<http://apps.wdfw.wa.gov/phsontheweb/>



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CHK:
PROJECT NO: 4273.01

Figure 6
WDFW PRIORITY HABITATS AND SPECIES
Lake Lois Habitat Reserve
City of Lacey
City of Lacey, Thurston County, Washington
Section 14, Township 18N, Range 01W, W.M.



LEGEND:

Study Area Boundary

40-foot Contours

40 ft. Contours

Fire Shutdown Zones

Fire Shutdown Zones

Water Bodies (FP)

Other Impoundments

Open Freshwater

Subject to Inundation

Glacier / Snowfield

Wet Area

Open Saltwater

Artificial Feature

SOSEA Boundaries

SOSEA Boundaries

Water Courses (FP)

Type S

Type F

Type N, Np, Ns

U, unknown

X, non-typed per WAC 222-16

WRIA Boundaries

WRIA Boundaries

WAUs

WAUs

Trails & Railroads (FP)

Trail

Railroad

Railroad Grade

DNR Roads

Paved Road

Unpaved Road/Surface Unknown

Unpaved Road/Surface Unknown

Water Type Breaks (FP)

Public Land Survey Sections

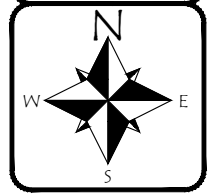
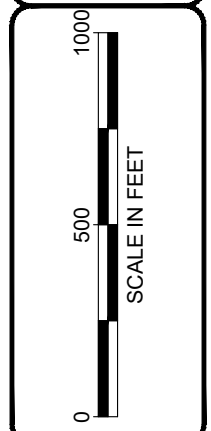
Public Land Survey Sections

Public Land Survey Townships

Public Land Survey Townships

DATE: 12/10/24
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NOTE: Map provided on-line by Washington State Department of Natural Resources at web address: <http://fortress.wa.gov/dnr/app1/Fpars/viewer.htm>

Figure 7
WDNR STREAM TYPE MAP
Lake Lois Habitat Reserve
City of Lacey
City of Lacey, Thurston County, Washington
Section 14, Township 18N, Range 01W, W.M.



LEGEND:

Study Area Boundary

Hydro DNR

DNR Flowline

Type S Waters

Type F Waters

Type N Waters

Non-Typed Waters

Water Type Unknown

WRIAs & WAUs

WRIA Boundaries

Watershed Administrative Units

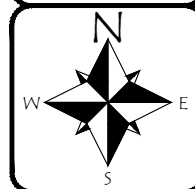
Fish Distribution

All SWIFD Listed Species

Fall Chum, Fall Chinook, Coho,

Winter Steelhead, Coastal Cutthroat,

Largemouth Bass



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Figure 8

STATEWIDE WASHINGTON INTEGRATED FISH DISTRIBUTION (SWIFD)

Lake Lois Habitat Reserve

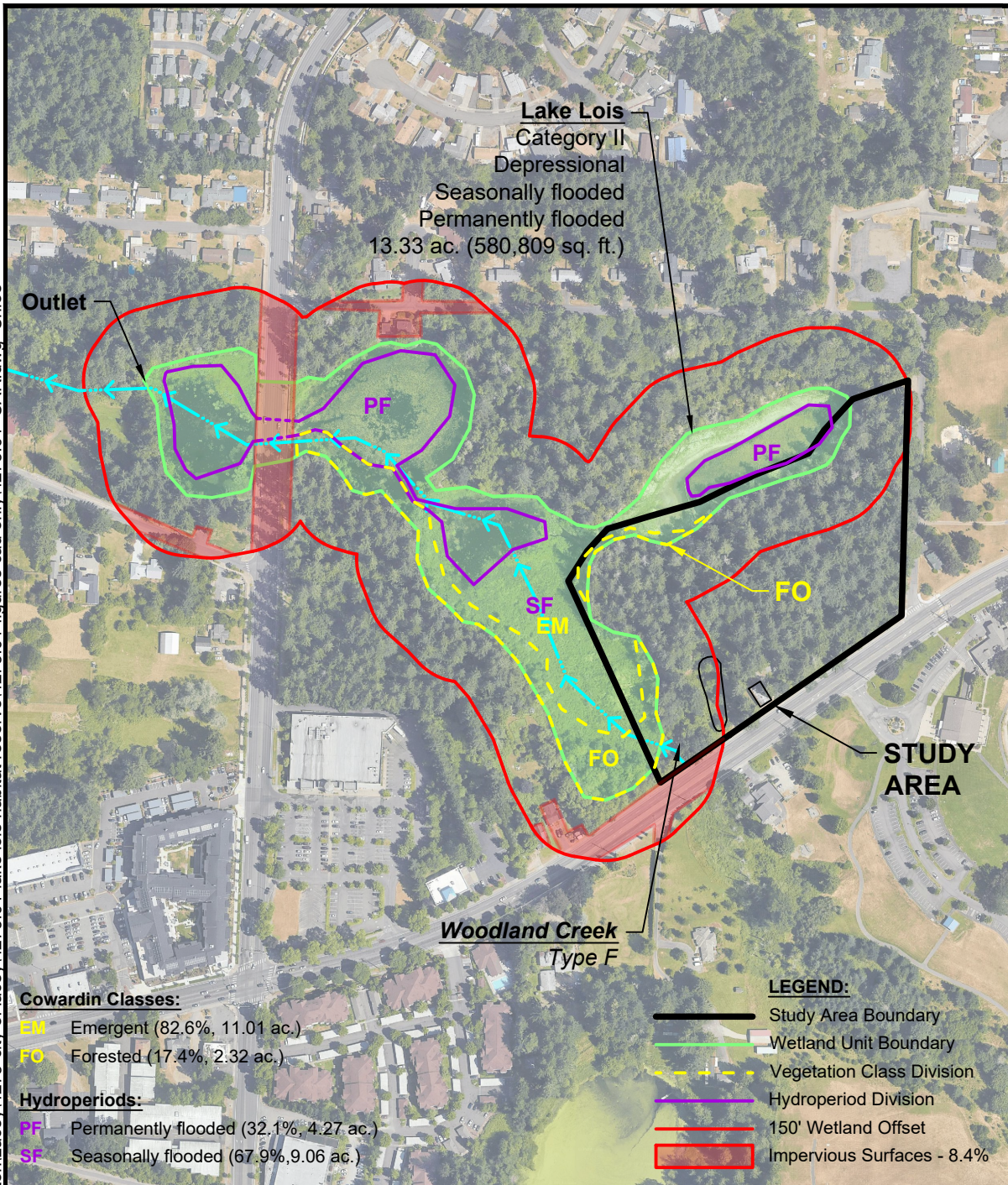
City of Lacey

City of Lacey, Thurston County, Washington
Section 14, Township 18N, Range 01W, W.M.

NOTE:

Map provided on-line by WA State Dept of Fish & Wildlife at web address: <https://geo.nwifc.org/swifd/>

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Rating Question	Description	Answer - Lake Lois
D 1.1, D 4.1	Location of Outlet	Wetland has an intermittently flowing stream
D 1.3	Distribution of persistent plants	Wetland has persistent, ungrazed plants >1/2 of area
D 1.4	Area of seasonally flooded	Area seasonally ponded >1/2 area of the wetland
D 2.2	Boundary of area w/in 150' of the wetland in land uses that generate pollutants	<10% of the area within 150' in land uses that generate pollutants
D 5.2	Boundary of area w/in 150' of the wetland in land uses that generate excess runoff	<10% of the area within 150' in land use that generate excess runoff
D 4.3	Contributing Basin-Contribution of wetland to storage in the watershed	Area of the basin is more than 100 times the area of the wetland
D 5.3	Contributing Basin covered in intensive land uses	>25% of the area of the basin covered with intensive land uses
H 1.1	Cowardin Plant Classes	Emergent, Forested
H 1.2	Hydroperiods	Permanently inundated, seasonally inundated
H 1.4	Interspersion of habitats	Moderate interspersion of habitats

Figure 9
WETLAND RATING FORM-150' OFFSET
Lake Lois Habitat Reserve
City of Lacey
City of Lacey, Thurston County, Washington
Section 14, Township 18N, Range 01W, W.M.

DATE: 12/10/24
DWN: CB
REQ. BY: MAM
PRJ. MGR: MAM
CHK:
PROJECT NO: 4273.01

1157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371
Fax: (360) 414-9305
www.eco-land.com

Ecological Land Services

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SCALE IN FEET

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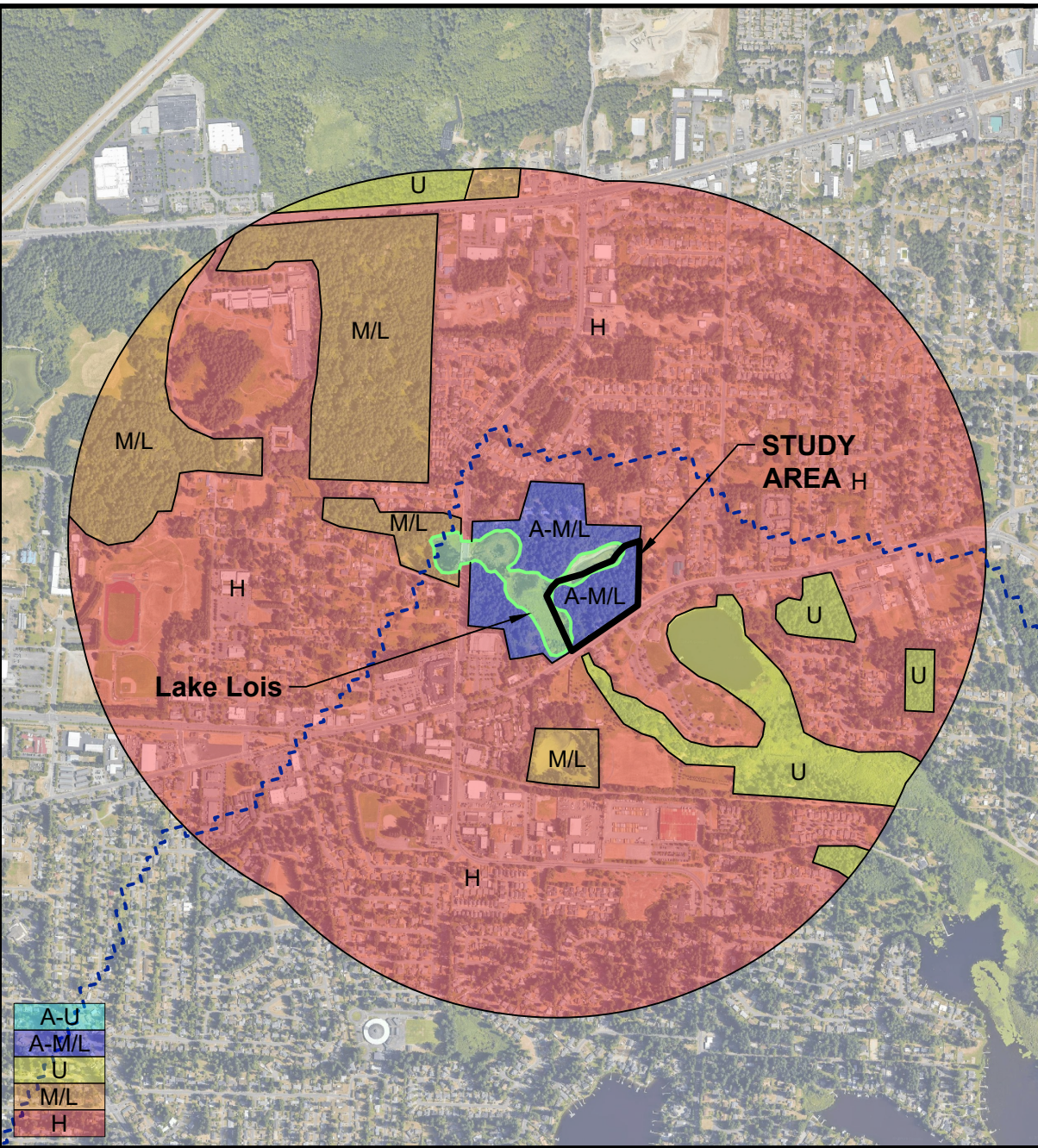
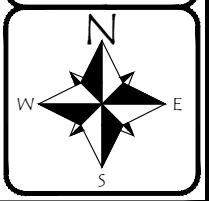
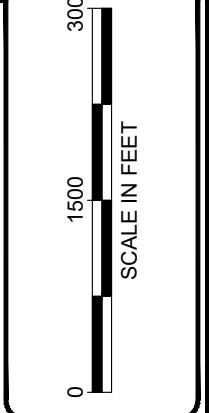


Figure 10
WETLAND RATING FORM-1 km OFFSET
 Lake Lois Habitat Reserve
 City of Lacey
 City of Lacey, Thurston County, Washington
 Section 14, Township 18N, Range 01W, W.M.

DATE: 12/10/24
 DWN: CB
 REQ. BY: MAM
 PRJ. MGR: MAM
 CHK:
 PROJECT NO:
 4273.01

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LEGEND:

- Study Area Boundary
- Wetland Unit Boundary
- Contributing Basin
560x area of Lake Lois

H2.1 Accessible Habitat

A-U	A-U (0.0%)
A-M/L	A-M/L (2.7%)

H2.2 Undisturbed Habitat

U	U (5.5%)
M/L	M/L (11.0%)

H2.3 Land Use Intensity

H	H (80.8%)
---	-----------

H 2.1. Accessible Habitat Equation

$$\% \text{ [A-U] habitat } \underline{0.0\%} + [(\% \text{ [A-M/L] intensity land uses})/2] \underline{1.4\%} = \underline{1.4\%}$$

H 2.2. Total Undisturbed Habitat Equation

$$\% \text{ [A-U]} + \% \text{ [U] habitat } \underline{5.5\%} + [(\% \text{ [A-M/L]} + \% \text{ [M/L] land uses})/2] \underline{6.9\%} = \underline{12.4\%}$$

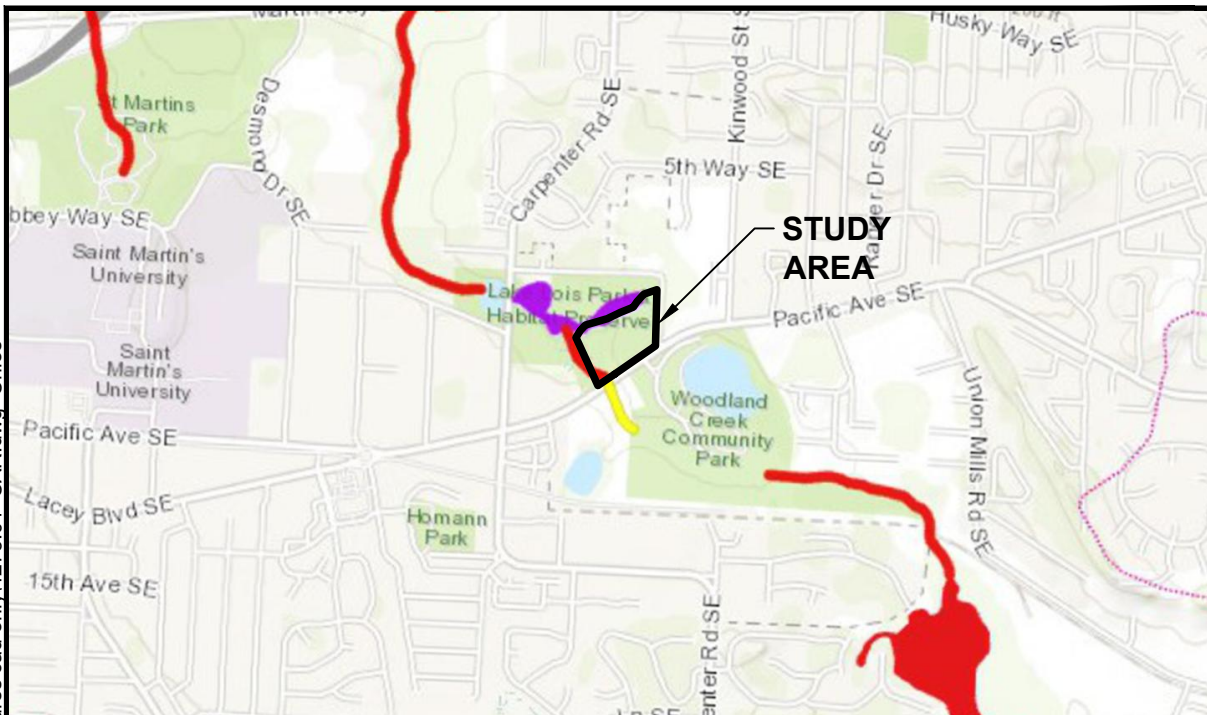


Figure 11

WETLAND RATING FORM-303(d) and TMDLs
Lake Lois Habitat Reserve
City of Lacey
City of Lacey, Thurston County, Washington
Section 14, Township 18N, Range 01W, W.M.

Assessed Waters/Sediment

Water

- Category 5 - 303d
- Category 4C
- Category 4B
- Category 4A
- Category 2
- Category 1

Sediment

- Category 5 - 303d
- Category 4C
- Category 4B
- Category 4A
- Category 2
- Category 1

Subbasins

- 12 Digit HUC Boundary

NOTE(S):

Map provided on-line by Washington State
Department of Ecology at web address:
<https://fortress.wa.gov/ecy/waterqualityatlas/map.aspx?>

DATE: 12/10/24

DWN: CB

REQ. BY: MAM

PRJ. MGR: MAM

CHK:

PROJECT NO:
4273.01

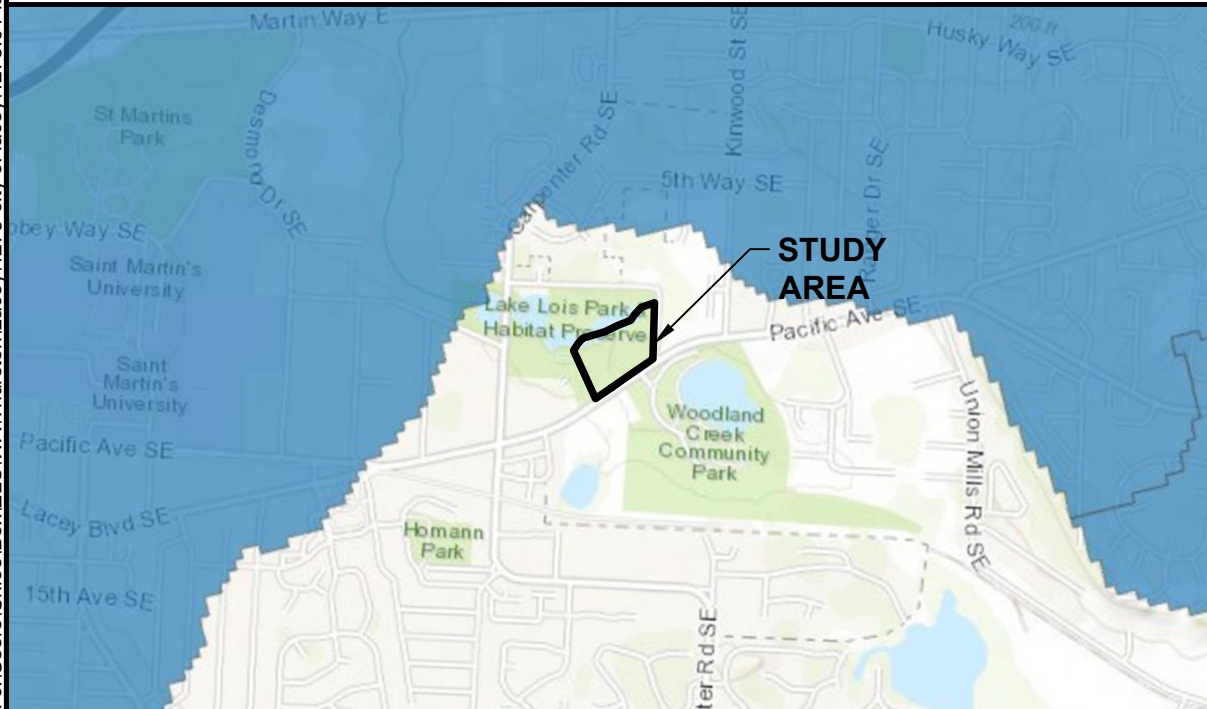
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Longview, WA 98632

Phone: (360) 578-1371

Fax: (360) 414-9305

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WQ Improvement Projects

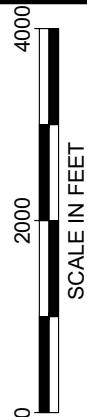
- TMDL - Approved
- 4B - Approved
- STI - Approved

ARP - Approved

- TMDL - In Development
- STI - In Development
- ARP - In Development

Subbasins

- 12 Digit HUC Boundary



SCALE IN FEET





Photo 1. Facing offsite to the west from Test Plot 1 showing the dense, emergent vegetation within Lake Lois. This portion of the wetland is seasonally inundated and does not contain hydrology during this time of the year. October 2024.



Photo 2. Facing west from Test Plot 2 showing the upland vegetation and walking path adjacent to Lake Lois. October 2024.



Photo 3. Facing northwest from the south boundary of Lake Lois in the north-central portion of the study area. This photo shows the change in topography within the wetland, and also the downed woody debris. October 2024.



Photo 4. Facing north from Test Plot 3 showing the difference in emergent species within Lake Lois. This portion of the wetland is seasonally inundated and does not contain hydrology during this time of the year. October 2024.



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DATE: 11.15.24
DWN: MAM
PRJ. MGR: MAM
PROJ.#: 4273.01

Photoplate 1 Site Photos

Lake Lois Habitat Reserve
City of Lacey, Washington
Section 14, Township 18 North, Range 1 West, W.M.



Photo 5. Facing west from Test Plot 4 showing the upland vegetation adjacent to Lake Lois. There was a large percentage of English ivy within the wetland buffer. October 2024.



Photo 7. Facing northwest from the channel of Woodland Creek in the southernmost portion of the study area. The boundary of Lake Lois is just beyond the large cobbles and brush. October 2024.



Photo 6. Facing southeast from the channel of Woodland Creek in the southernmost portion of the study area. The culverts are four feet in diameter and they span Pacific Avenue SE. October 2024.

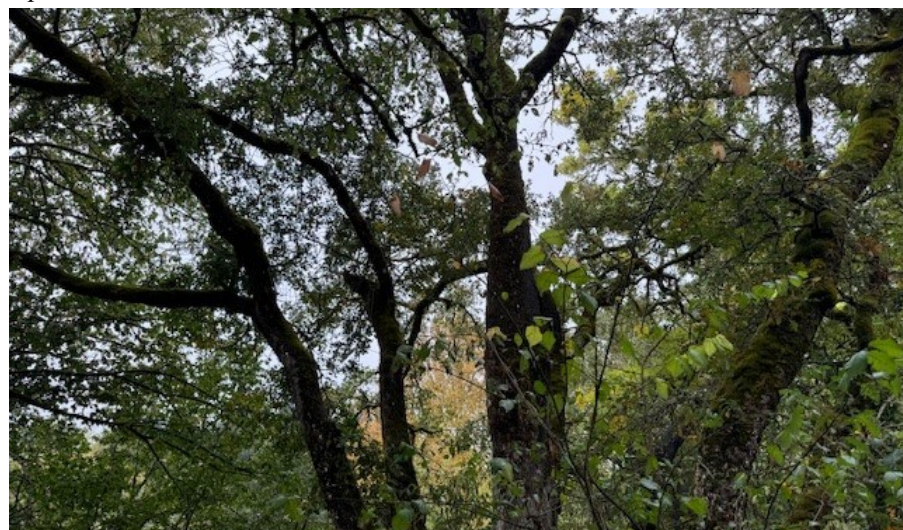


Photo 8. Taken from the forested portion of the study area showing a mature Oregon white oak tree. October 2024.



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Photoplate 2 **Site Photos**

Lake Lois Habitat Reserve
City of Lacey, Washington
Section 14, Township 18 North, Range 1 West, W.M.



Photo 9. Facing north from the west side of the vegetated storm pond. The storm-pond is vegetated with a *Carex* species and Himalayan blackberry. October 2024.



Photo 10. Facing south from the west side of the vegetated storm pond. The outlet culvert is shown in the center of the photo, on the south end of the pond. It is not known where the culvert leads to. October 2024.



Photo 11. Taken from the central portion of the site in the forest. This area is relatively undisturbed aside from the walking paths. October 2024.



Photo 12. Taken from the central portion of the site in the forest. This area is relatively undisturbed aside from the walking paths. October 2024.



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Phone: (360) 578-1371
Fax: (360) 414-9305

DATE: 11.15.24
DWN: MAM
PRJ. MGR: MAM
PROJ.#: 4273.01

Photoplate 3 Site Photos

Lake Lois Habitat Reserve
City of Lacey, Washington
Section 14, Township 18 North, Range 1 West, W.M.

APPENDIX A

ROUTINE ONSITE WETLAND DETERMINATION DATA FORMS

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys and Coast Region

Project/Site: Lake Lois Habitat Preserve City/County: City of Lacey Sampling Date: 10/04/24
 Applicant/Owner: City of Lacey State: WA Sampling Point: TP1
 Investigator(s): JC Cleary, M. Mill, J. Bartlett Section, Township, Range: S14, T18, R1W
 Landform (hillslope, terrace, etc.): terrace Local relief: (concave, convex, none): concave Slope (%): 0-4%
 Subregion (LRR): LRRa Lat: 47.04158 Long: -122.795 Datum: NAD 83
 Soil Map Unit Name: 129—Water NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No ☐ Hydric Soils Present? Yes ☒ No ☐ Wetland Hydrology Present? Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Remarks: The study area is comprised of Thurston County Tax Parcel Nos. 48204200000, 48203600000, 48203600000, and 48204200000 and is located at the Lake Lois Habitat Reserve. The majority of the study area is forested, with walking trails throughout. Lake Lois extends into the study area from the north and west. Woodland Creek flows into the south portion of the study area before dissipating into Lake Lois. Test Plot 1 was conducted in the north portion of the study area, within Lake Lois.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u> ft radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet
1. _____	%			Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	%			
3. _____	%			
4. _____	%			
50% = ____ 20% = ____	%	=Total Cover		Prevalence Index worksheet Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1= _____ FACW species _____ x 2= _____ FAC species _____ x 3= _____ FACU species _____ x 4= _____ UPL species _____ x 5= _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A= _____
Sapling/Shrub Stratum (Plot size: <u>15</u> ft. radius)				
1. _____	%			
2. _____	%			
3. _____	%			
4. _____	%			Hydrophytic Vegetation Indicators: ☐ 1 – Rapid Test for Hydrophytic Vegetation ☒ 2 – Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ 5 - Wetland Non-Vascular Plants ¹ ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5. _____	%			
50% = ____ 20% = ____	%	=Total Cover		
Herb Stratum (Plot size: <u>5</u> ft radius)				
1. <i>Bidens frondosa</i>	80%	yes	FACW	
2. <i>Phalaris arundinacea</i>	10%	no	FACW	
3. <i>Mentha canadensis</i>	5%	no	FACW	
4. <i>Solanum dulcamara</i>	5%	no	FAC	
5. _____	%			
6. _____	%			
7. _____	%			
8. _____	%			
9. _____	%			
10. _____	%			
11. _____	%			
50% = <u>50</u> 20% = <u>20</u>	100%	=Total Cover		Hydrophytic Vegetation Present? Yes ☒ No ☐
Woody Vine Stratum (Plot size: <u>15</u> ft radius)				
1. _____	%			
2. _____	%			
50% = ____ 20% = ____	%	=Total Cover		
% Bare Ground in Herb Stratum <u>0</u>%				

Remarks: The hydrophytic vegetation criteria is met because there is more than 50% dominance by FACW plant species.

SOIL

Sampling Point: TP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10	10YR 2/1	100%		%			Silt	
10-16	2.5YR 3/2	99%	10YR 4/4	1%	C	M	Gravelly Silt Loam	
		%		%				
		%		%				
		%		%				
		%		%				
		%		%				
		%		%				

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils

☐ Histosol (A1)

☐ Histic Epipedon (A2)

☐ Black Histic (A3)

☒ Hydrogen Sulfide (A4)

☐ Depleted Below Dark Surface (A11)

☐ Thick Dark Surface (A12)

☐ Sandy Mucky Minerals (S1)

☐ Sandy Gleyed Matrix (S4)

☐ Sandy Redox (S5)

☐ Stripped Matrix (S6)

☐ Loamy Mucky Mineral (F1) (except MLRA 1)

☐ Loamy Gleyed Matrix (F2)

☐ Depleted Matrix (F3)

☐ Redox Dark Surface (F6)

☐ Depleted Dark Surface (F7)

☐ Redox Depressions (F8)

☐ 2 cm Muck (A10)

☐ Red Parent Material (TF2)

☐ Very Shallow Dark Surface (TF12)

☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and Wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes☒ No☐

Remarks: Hydric soils are present due to the Hydrogen Sulfide odor being emitted by the soil within the first 12 inches.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (min. of one required; check all that apply)

Secondary Indicators (2 or more required)

☐ Surface Water (A1)

☐ High Water Table (A2)

☐ Saturation (A3)

☐ Water Marks (B1)

☐ Sediment Deposits (B2)

☐ Drift Deposits (B3)

☒ Algal Mat or crust (B4)

☐ Iron Deposits (B5)

☐ Surface Soil Cracks (B6)

☐ Inundation Visible on Aerial Imagery (B7)

☐ Sparsely Vegetated Concave Surface (B8)

☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)

☐ Salt Crust (B11)

☐ Aquatic Invertebrates (B13)

☐ Hydrogen Sulfide Odor (C1)

☐ Oxidized Rhizospheres along Living Roots (C3)

☐ Presence of Reduced Iron (C4)

☐ Recent Iron Reduction in Tilled Soils (C6)

☐ Stunted or Stressed Plants (D1) (LRR A)

☐ Other (Explain in Remarks)

☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)

☐ Drainage Patterns (B10)

☐ Dry-Season Water Table (C2)

☐ Saturation Visible on Aerial Imagery (C9)

☒ Geomorphic Position (D2)

☐ Shallow Aquitard (D3)

☒ FAC Neutral Test (D5)

☐ Raised Ant Mounds (D6) (LRR A)

☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes☐ No☐ Depth (Inches):

Water Table Present? Yes☐ No☐ Depth (Inches):

Saturation Present? Yes☐ No☐ Depth (Inches):

(Includes Capillary fringe)

Wetland Hydrology Present? Yes☒ No☐

Describe Recorded Data (Stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:Wetland hydrology is present due to the presence of algal matting, geomorphic position, and FAC Neutral Test.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys and Coast Region

Project/Site: Lake Lois Habitat Preserve City/County: City of Lacey Sampling Date: 10/04/24
 Applicant/Owner: City of Lacey State: WA Sampling Point: TP 2
 Investigator(s): JC Cleary, M. Mill, J. Bartlett Section, Township, Range: S14, T18, R1W
 Landform (hillslope, terrace, etc.): terrace Local relief: (concave, convex, none): none Slope (%): 0-4%
 Subregion (LRR): LRRa Lat: 47.04167 Long: -122.795 Datum: NAD 83
 Soil Map Unit Name: 129—Water NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☐ No ☒ Hydric Soils Present? Yes ☐ No ☒ Wetland Hydrology Present? Yes ☐ No ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Remarks: The study area is comprised of Thurston County Tax Parcel Nos. 48204200000, 48203600000, 48203600000, and 48204200000 and is located at the Lake Lois Habitat Reserve. The majority of the study area is forested, with walking trails throughout. Lake Lois extends into the study area from the north and west. Woodland Creek flows into the south portion of the study area before dissipating into Lake Lois. Test Plot 2 was conducted in the north portion of the study area.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u> ft radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet
1. <u>Acer macrophyllum</u>	30%	yes	FACU	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>14</u> (A/B)
2. <u>Pseudotsuga menziesii</u>	10%	yes	FACU	
3. _____	%			
4. _____	%			
50% = <u>20</u> 20% = <u>8</u>	40%	=Total Cover		
Sapling/Shrub Stratum (Plot size: <u>15</u> ft. radius)				
1. <u>Oemleria cerasiformis</u>	10%	yes	FACU	Prevalence Index worksheet Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1= _____ FACW species _____ x 2= _____ FAC species _____ x 3= _____ FACU species _____ x 4= _____ UPL species _____ x 5= _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A= _____
2. <u>Rubus spectabilis</u>	5%	yes	FAC	
3. <u>Mahonia aquifolium</u>	5%	yes	FACU	
4. _____	%			
5. _____	%			
50% = <u>10</u> 20% = <u>4</u>	20%	=Total Cover		
Herb Stratum (Plot size: <u>5</u> ft radius)				
1. <u>Polypodium glycyrrhiza</u>	40%	yes	UPL	Hydrophytic Vegetation Indicators: ☐ 1 – Rapid Test for Hydrophytic Vegetation ☐ 2 – Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ 5 - Wetland Non-Vascular Plants ¹ ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Hedera helix</u>	10%	yes	FACU	
3. _____	%			
4. _____	%			
5. _____	%			
6. _____	%			
7. _____	%			
8. _____	%			
9. _____	%			
10. _____	%			
11. _____	%			
50% = <u>25</u> 20% = <u>10</u>	50%	=Total Cover		
Woody Vine Stratum (Plot size: <u>15</u> ft radius)				
1. _____	%			Hydrophytic Vegetation Present? Yes ☐ No ☒
2. _____	%			
50% = ____ 20% = ____	%	=Total Cover		
% Bare Ground in Herb Stratum <u>50%</u>				

Remarks: The hydrophytic vegetation criteria is not met because there is less than 50% dominance by FAC plant species.

SOIL

Sampling Point: TP 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	10YR 2/1	100%		%			Gravelly Silt Loam	
8-16	2.5YR 2.5/2	100%		%			Gravelly Silt Loam	
		%		%				
		%		%				
		%		%				
		%		%				
		%		%				
		%		%				

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils

☐ Histosol (A1)

☐ Histic Epipedon (A2)

☐ Black Histic (A3)

☐ Hydrogen Sulfide (A4)

☐ Depleted Below Dark Surface (A11)

☐ Thick Dark Surface (A12)

☐ Sandy Mucky Minerals (S1)

☐ Sandy Gleyed Matrix (S4)

☐ Sandy Redox (S5)

☐ Stripped Matrix (S6)

☐ Loamy Mucky Mineral (F1) (except MLRA 1)

☐ Loamy Gleyed Matrix (F2)

☐ Depleted Matrix (F3)

☐ Redox Dark Surface (F6)

☐ Depleted Dark Surface (F7)

☐ Redox Depressions (F8)

☐ 2 cm Muck (A10)

☐ Red Parent Material (TF2)

☐ Very Shallow Dark Surface (TF12)

☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and Wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ☐ No ☒

Remarks: This soil profile meets none of the hydric soil indicators because of the high matrix colors.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (min. of one required; check all that apply)

Secondary Indicators (2 or more required)

☐ Surface Water (A1)

☐ High Water Table (A2)

☐ Saturation (A3)

☐ Water Marks (B1)

☐ Sediment Deposits (B2)

☐ Drift Deposits (B3)

☐ Algal Mat or crust (B4)

☐ Iron Deposits (B5)

☐ Surface Soil Cracks (B6)

☐ Inundation Visible on Aerial Imagery (B7)

☐ Sparsely Vegetated Concave Surface (B8)

☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)

☐ Salt Crust (B11)

☐ Aquatic Invertebrates (B13)

☐ Hydrogen Sulfide Odor (C1)

☐ Oxidized Rhizospheres along Living Roots (C3)

☐ Presence of Reduced Iron (C4)

☐ Recent Iron Reduction in Tilled Soils (C6)

☐ Stunted or Stressed Plants (D1) (LRR A)

☐ Other (Explain in Remarks)

☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)

☐ Drainage Patterns (B10)

☐ Dry-Season Water Table (C2)

☐ Saturation Visible on Aerial Imagery (C9)

☐ Geomorphic Position (D2)

☐ Shallow Aquitard (D3)

☐ FAC Neutral Test (D5)

☐ Raised Ant Mounds (D6) (LRR A)

☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☐ Depth (Inches):

Water Table Present? Yes ☐ No ☐ Depth (Inches):

Saturation Present? Yes ☐ No ☐ Depth (Inches):

(Includes Capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (Stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:There was no hydrology present and there were no indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys and Coast Region

Project/Site: Lake Lois Habitat Preserve City/County: City of Lacey Sampling Date: 10/04/24
 Applicant/Owner: City of Lacey State: WA Sampling Point: TP 3
 Investigator(s): JC Cleary, M. Mill, J. Bartlett Section, Township, Range: S14, T18, R1W
 Landform (hillslope, terrace, etc.): terrace Local relief: (concave, convex, none): concave Slope (%): 0-4%
 Subregion (LRR): LRRRA Lat: 47.04068 Long: -122.797 Datum: NAD 83
 Soil Map Unit Name: 129—Water NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No ☐ Hydric Soils Present? Yes ☒ No ☐ Wetland Hydrology Present? Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Remarks: The study area is comprised of Thurston County Tax Parcel Nos. 48204200000, 48203600000, 48203600000, and 48204200000 and is located at the Lake Lois Habitat Reserve. The majority of the study area is forested, with walking trails throughout. Lake Lois extends into the study area from the north and west. Woodland Creek flows into the south portion of the study area before dissipating into Lake Lois. Test Plot 3 was conducted in the northwest corner of the study area.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u> ft radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet
1. _____	%			Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	%			
3. _____	%			
4. _____	%			
50% = ____ 20% = ____	%	=Total Cover		Prevalence Index worksheet Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1= _____ FACW species _____ x 2= _____ FAC species _____ x 3= _____ FACU species _____ x 4= _____ UPL species _____ x 5= _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A= _____
Sapling/Shrub Stratum (Plot size: <u>15</u> ft. radius)				
1. _____	%			
2. _____	%			
3. _____	%			
4. _____	%			
5. _____	%			
50% = ____ 20% = ____	%	=Total Cover		
Herb Stratum (Plot size: <u>5</u> ft radius)				
1. <i>Phalaris arundinacea</i>	60%	yes	FACW	Hydrophytic Vegetation Indicators: ☐ 1 – Rapid Test for Hydrophytic Vegetation ☒ 2 – Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ 5 - Wetland Non-Vascular Plants ¹ ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <i>Persicaria maculosa</i>	20%	yes	FACW	
3. <i>Mentha canadensis</i>	15%	no	FACW	
4. <i>Typha latifolia</i>	15%	no	OBL	
5. <i>Bidens frondosa</i>	10%	no	FACW	
6. <i>Solanum dulcamara</i>	10%	no	FAC	
7. <i>Cicuta douglasii</i>	5%	no	OBL	
8. <i>Rorippa palustris</i>	5%	no	OBL	
9. _____	%			
10. _____	%			
11. _____	%			
50% = <u>70</u> 20% = <u>28</u>	140%	=Total Cover		
Woody Vine Stratum (Plot size: <u>15</u> ft radius)				
1. _____	%			Hydrophytic Vegetation Present? Yes ☒ No ☐
2. _____	%			
50% = ____ 20% = ____	%	=Total Cover		
% Bare Ground in Herb Stratum <u>0%</u>				
Remarks: The hydrophytic vegetation criteria is met because there is more than 50% dominance by FAC plant species.				

SOIL

Sampling Point: TP 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 3/1	100%		%			Sandy Loam	
4-8	2.5YR 4/1	100%		%			Sandy Loam	
8-12	2.5YR 5/2	100%		%			Sandy Loam	
		%		%				
		%		%				
		%		%				
		%		%				
		%		%				

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils

☐ Histosol (A1)

☐ Histic Epipedon (A2)

☐ Black Histic (A3)

☒ Hydrogen Sulfide (A4)

☐ Depleted Below Dark Surface (A11)

☐ Thick Dark Surface (A12)

☐ Sandy Mucky Minerals (S1)

☐ Sandy Gleyed Matrix (S4)

☐ Sandy Redox (S5)

☐ Stripped Matrix (S6)

☐ Loamy Mucky Mineral (F1) (except MLRA 1)

☐ Loamy Gleyed Matrix (F2)

☐ Depleted Matrix (F3)

☐ Redox Dark Surface (F6)

☐ Depleted Dark Surface (F7)

☐ Redox Depressions (F8)

☐ 2 cm Muck (A10)

☐ Red Parent Material (TF2)

☐ Very Shallow Dark Surface (TF12)

☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and Wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if present):

Type: Cobble
Depth (inches):12

Hydric Soil Present? Yes☒ No☐

Remarks: This soil profile meets indicator A4 due to the Hydrogen Sulfide odor being emitted by the soil within the first 12 inches.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (min. of one required; check all that apply)

Secondary Indicators (2 or more required)

☐ Surface Water (A1)

☐ High Water Table (A2)

☐ Saturation (A3)

☐ Water Marks (B1)

☐ Sediment Deposits (B2)

☐ Drift Deposits (B3)

☐ Algal Mat or crust (B4)

☐ Iron Deposits (B5)

☐ Surface Soil Cracks (B6)

☒ Inundation Visible on Aerial Imagery (B7)

☐ Sparsely Vegetated Concave Surface (B8)

☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)

☐ Salt Crust (B11)

☐ Aquatic Invertebrates (B13)

☐ Hydrogen Sulfide Odor (C1)

☐ Oxidized Rhizospheres along Living Roots (C3)

☐ Presence of Reduced Iron (C4)

☐ Recent Iron Reduction in Tilled Soils (C6)

☐ Stunted or Stressed Plants (D1) (LRR A)

☐ Other (Explain in Remarks)

☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)

☐ Drainage Patterns (B10)

☐ Dry-Season Water Table (C2)

☐ Saturation Visible on Aerial Imagery (C9)

☒ Geomorphic Position (D2)

☐ Shallow Aquitard (D3)

☒ FAC Neutral Test (D5)

☐ Raised Ant Mounds (D6) (LRR A)

☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes☐ No☐ Depth (Inches):
Water Table Present? Yes☐ No☐ Depth (Inches):
Saturation Present? Yes☐ No☐ Depth (Inches):
(Includes Capillary fringe)

Wetland Hydrology Present? Yes☒ No☐

Describe Recorded Data (Stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:Wetland hydrology is present due to the presence of indicators B7(inundation visible on aerial imagery), D2(geomorphic position), and D5 (Fac Neutral test).

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys and Coast Region

Project/Site: Lake Lois Habitat Preserve City/County: City of Lacey Sampling Date: 10/04/24
 Applicant/Owner: City of Lacey State: WA Sampling Point: TP 4
 Investigator(s): JC Cleary, M. Mill, J. Bartlett Section, Township, Range: S14, T18, R1W
 Landform (hillslope, terrace, etc.): terrace Local relief: (concave, convex, none): none Slope (%): 0-4%
 Subregion (LRR): LRR A Lat: 47.04061 Long: -122.797 Datum: NAD 83
 Soil Map Unit Name: 129—Water NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☐ No ☒ Hydric Soils Present? Yes ☐ No ☒ Wetland Hydrology Present? Yes ☐ No ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Remarks: The study area is comprised of Thurston County Tax Parcel Nos. 48204200000, 48203600000, 48203600000, and 48204200000 and is located at the Lake Lois Habitat Reserve. The majority of the study area is forested, with walking trails throughout. Lake Lois extends into the study area from the north and west. Woodland Creek flows into the south portion of the study area before dissipating into Lake Lois. Test Plot 4 was conducted in the north west corner of the study area.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u> ft radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet	
1. <i>Fraxinus latifolia</i>	30%	yes	FACW	Number of Dominant Species That Are OBL, FACW, or FAC:	<u>3</u> (A)
2. <i>Prunus emarginata</i>	10%	yes	FACU		
3. <i>Pseudotsuga menziesii</i>	10%	yes	FACU	Total Number of Dominant Species Across All Strata:	<u>7</u> (B)
4. _____	%				
50% = <u>25</u> 20% = <u>10</u>	50%	=Total Cover		Percent of Dominant Species That Are OBL, FACW, or FAC	<u>43</u> (A/B)
Sapling/Shrub Stratum (Plot size: <u>15</u> ft. radius)				Prevalence Index worksheet	
1. <i>Rubus spectabilis</i>	30%	yes	FAC	Total % Cover of:	Multiply by:
2. <i>Holodiscus discolor</i>	20%	yes	FACU	OBL species _____	x 1= _____
3. <i>Oemleria cerasiformis</i>	5%	no	FACU	FACW species _____	x 2= _____
4. _____	%			FAC species _____	x 3= _____
5. _____	%			FACU species _____	x 4= _____
50% = <u>28</u> 20% = <u>11</u>	55%	=Total Cover		UPL species _____	x 5= _____
Herb Stratum (Plot size: <u>5</u> ft radius)				Column Totals:	(A) _____ (B) _____
1. <i>Athyrium cyclosorum</i>	15%	yes	FAC	Prevalence Index = B/A= _____	
2. _____	%			Hydrophytic Vegetation Indicators: ☐ 1 – Rapid Test for Hydrophytic Vegetation ☐ 2 – Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ 5 - Wetland Non-Vascular Plants ¹ ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
3. _____	%				
4. _____	%				
5. _____	%				
6. _____	%				
7. _____	%				
8. _____	%				
9. _____	%				
10. _____	%				
11. _____	%				
50% = <u>8</u> 20% = <u>3</u>	15%	=Total Cover		Hydrophytic Vegetation Present? Yes ☐ No ☒	
Woody Vine Stratum (Plot size: <u>15</u> ft radius)					
1. <i>Hedera helix</i>	80%	yes	FACU		
2. _____	%				
50% = <u>40</u> 20% = <u>16</u>	80%	=Total Cover			
% Bare Ground in Herb Stratum <u>5%</u>					
Remarks: The hydrophytic vegetation criteria is not met because there is less than 50% dominance by FAC and FACW plant species.					

SOIL

Sampling Point: TP 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10YR 2/2	100%		%			Cobbley Sandy Loam	See Remarks Below
		%		%				
		%		%				
		%		%				
		%		%				
		%		%				
		%		%				
		%		%				

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils

☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☒ Hydrogen Sulfide (A4)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Minerals (S1)
☐ Sandy Gleyed Matrix (S4)

☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and Wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if present):

Type: Cobble
Depth (inches):12

Hydric Soil Present? Yes☐ No☒

Remarks: This soil profile meets none of the hydric soil indicators because of the high matrix colors.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (min. of one required; check all that apply)

Secondary Indicators (2 or more required)

☐ Surface Water (A1)
☐ High Water Table (A2)
☐ Saturation (A3)
☐ Water Marks (B1)
☐ Sediment Deposits (B2)
☐ Drift Deposits (B3)
☐ Algal Mat or crust (B4)
☐ Iron Deposits (B5)
☐ Surface Soil Cracks (B6)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)

☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
☐ Salt Crust (B11)
☐ Aquatic Invertebrates (B13)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Other (Explain in Remarks)

☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☒ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes☐ No☐ Depth (Inches):
Water Table Present? Yes☐ No☐ Depth (Inches):
Saturation Present? Yes☐ No☐ Depth (Inches):
(Includes Capillary fringe)

Wetland Hydrology Present? Yes☐ No☒

Describe Recorded Data (Stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:There was no hydrology present and there were no indicators of wetland hydrology.

APPENDIX B

WESTERN WASHINGTON WETLAND RATING FORMS

Wetland name or number: Lake Lois

RATING SUMMARY – Western Washington

Name of wetland (or ID #): Lake Lois Date of site visit: 10/4/2024

Rated by: M. Mill Trained by Ecology? X Yes ___ No Date of training: 03/21

HGM Class used for rating: Depressional Wetland has multiple HGM classes? ___ Y X N

NOTE: Form is not complete without the required figures (figures can be combined).

Source of base aerial photo/map: Google Earth

OVERALL WETLAND CATEGORY II (based on functions X or special characteristics ___)

1. Category of wetland based on FUNCTIONS

___ Category I – Total score = 23 - 27

X Category II – Total score = 20 - 22

___ Category III – Total score = 16 - 19

___ Category IV – Total score = 9 - 15

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
Circle the appropriate ratings				
Site Potential	(H) M L	H (M) L	H (M) L	
Landscape Potential	(H) M L	H (M) L	H M (L)	
Value	(H) M L	(H) M L	(H) M L	TOTAL
Score Based on Ratings	9	7	6	22

**Score for each
function based
on three
ratings**
(order of ratings
is not important)

9 = H, H, H

8 = H, H, M

7 = H, H, L

7 = H, M, M

6 = H, M, L

6 = M, M, M

5 = H, L, L

5 = M, M, L

4 = M, L, L

3 = L, L, L

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	Not Applicable

Wetland name or number: Lake Lois

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	9
Hydroperiods	D 1.4, H 1.2	9
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	9
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 5.2	9
Map of the contributing basin	D 4.3, D 5.3	11
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and total habitat	H 2.1, H 2.2, H 2.3	10
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	11
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	11

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and total habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R 3.1	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	R 3.2, R 3.3	

Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and total habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and total habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

HGM Classification of Wetlands in Western Washington

For questions 1-7, the criteria described must apply to the entire unit being rated.

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1-7 apply, and go to Question 8.

1. Are the water levels in the entire unit usually controlled by tides except during floods?

NO – go to 2

YES – the wetland class is **Tidal Fringe** – go to 1.1

- 1.1 Is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

NO – **Saltwater Tidal Fringe (Estuarine)**

YES – **Freshwater Tidal Fringe**

If your wetland can be classified as a Freshwater Tidal Fringe use the forms for **Riverine** wetlands. If it is Saltwater Tidal Fringe, it is an **Estuarine** wetland and is not scored. This method **cannot** be used to score functions for estuarine wetlands.

2. The entire wetland unit is flat, and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit.

NO – go to 3

YES – The wetland class is **Flats**

If your wetland can be classified as a Flats wetland, use the form for **Depressional** wetlands.

3. Does the entire wetland unit **meet all** of the following criteria?

- ___ The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size,
___ At least 30% of the open water area is deeper than 6.6 ft (2 m).

NO – go to 4

YES – The wetland class is **Lake Fringe** (Lacustrine Fringe)

4. Does the entire wetland unit **meet all** of the following criteria?

- ___ The wetland is on a slope (slope can be very gradual),
___ The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheet flow, or in a swale without distinct banks,
___ The water leaves the wetland **without being impounded**.

NO – go to 5

YES – The wetland class is **Slope**

NOTE: Surface water does not pond in these type of wetlands except occasionally in very small and shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft deep).

Wetland name or number: Lake Lois

5. Does the entire wetland unit **meet all** of the following criteria?

☐ The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,

☐ The overbank flooding occurs at least once every 2 years.

NO – go to 6

YES – The wetland class is **Riverine**

NOTE: The Riverine unit can contain depressions that are filled with water when the river is not flooding

6. Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the surface, at some time during the year? This means that any outlet, if present, is higher than the interior of the wetland.

NO – go to 7

YES – The wetland class is **Depressional**

7. Is the entire wetland unit located in a very flat area with no obvious depression and no overbank flooding? The unit does not pond surface water more than a few inches. The unit seems to be maintained by high groundwater in the area. The wetland may be ditched but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the wetland unit being scored.

NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area.

HGM classes within the wetland unit being rated	HGM class to use in rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake Fringe	Lake Fringe
Depressional + Riverine along stream within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as ESTUARINE

If you are still unable to determine which of the above criteria apply to your wetland, or if you have **more than 2 HGM classes** within a wetland boundary, classify the wetland as Depressional for the rating.

Wetland name or number: Lake Lois

DEPRESSIONAL AND FLATS WETLANDS

Water Quality Functions - Indicators that the site functions to improve water quality

D 1.0. Does the site have the potential to improve water quality?		
D 1.1. Characteristics of surface water outflows from the wetland: Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch.	points = 3 points = 2 points = 1 points = 1	2
D 1.2. The soil 2 in. below the surface (or duff layer) is true clay or true organic (use NRCS definitions). Yes = 4 No = 0		4
D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes): Wetland has persistent, ungrazed plants > 95% of area Wetland has persistent, ungrazed plants > 1/2 of area Wetland has persistent, ungrazed plants ≥ 1/10 of area Wetland has persistent, ungrazed plants < 1/10 of area	points = 5 points = 3 points = 1 points = 0	3
D 1.4. Characteristics of seasonal ponding or inundation: <i>This is the area that is ponded for at least 2 months. See description in manual.</i> Area seasonally ponded is > 1/2 total area of wetland Area seasonally ponded is ≥ 1/4 total area of wetland Area seasonally ponded is < 1/4 total area of wetland	points = 4 points = 2 points = 0	4
Total for D 1	Add the points in the boxes above	13

Rating of Site Potential If score is: X 12-16 = H 6-11 = M 0-5 = L Record the rating on the first page

D 2.0. Does the landscape have the potential to support the water quality function of the site?		
D 2.1. Does the wetland unit receive stormwater discharges?	Yes = 1 No = 0	1
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants?	Yes = 1 No = 0	0
D 2.3. Are there septic systems within 250 ft of the wetland?	Yes = 1 No = 0	1
D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1-D 2.3? Source: <u>Waterfowl</u>	Yes = 1 No = 0	1
Total for D 2	Add the points in the boxes above	3

Rating of Landscape Potential If score is: X 3 or 4 = H 1 or 2 = M 0 = L Record the rating on the first page

D 3.0. Is the water quality improvement provided by the site valuable to society?		
D 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list?	Yes = 1 No = 0	1
D 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list?	Yes = 1 No = 0	1
D 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? (Answer YES if there is a TMDL in development or in effect for the basin in which the unit is found.)	Yes = 2 No = 0	1
Total for D 3	Add the points in the boxes above	3

Rating of Value If score is: X 2-4 = H 1 = M 0 = L Record the rating on the first page

Wetland name or number: Lake Lois

DEPRESSIONAL AND FLATS WETLANDS

Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation

D 4.0. Does the site have the potential to reduce flooding and erosion?			
D 4.1. Characteristics of surface water outflows from the wetland:			
Wetland is a depression or flat depression with no surface water leaving it (no outlet)	points = 4	2	
Wetland has an intermittently flowing stream/ditch, OR highly constricted permanently flowing outlet	points = 2		
Wetland is a flat depression (question 7 on key), whose outlet is a permanently flowing ditch	points = 1		
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0		
D 4.2. <u>Depth of storage during wet periods</u> : Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part.			
Marks of ponding are 3 ft or more above the surface or bottom of outlet	points = 7	7	
Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet	points = 5		
Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet	points = 3		
The wetland is a "headwater" wetland	points = 3		
Wetland is flat but has small depressions on the surface that trap water	points = 1		
Marks of ponding less than 0.5 ft (6 in)	points = 0		
D 4.3. <u>Contribution of the wetland to storage in the watershed</u> : Estimate the ratio of the area of upstream basin contributing surface water to the area of the wetland unit itself.			
The area of the basin is less than 10 times the area of the unit	points = 5	0	
The area of the basin is 10 to 100 times the area of the unit	points = 3		
The area of the basin is more than 100 times the area of the unit	points = 0		
Entire wetland is in the Flats class	points = 5		
Total for D 4		Add the points in the boxes above	9

Rating of Site Potential If score is: 12-16 = H X 6-11 = M 0-5 = L Record the rating on the first page

D 5.0. Does the landscape have the potential to support hydrologic functions of the site?			
D 5.1. Does the wetland receive stormwater discharges?	Yes = 1 No = 0	1	
D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff?	Yes = 1 No = 0	0	
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)?	Yes = 1 No = 0	1	
Total for D 5		Add the points in the boxes above	2

Rating of Landscape Potential If score is: 3 = H X 1 or 2 = M 0 = L Record the rating on the first page

D 6.0. Are the hydrologic functions provided by the site valuable to society?			
D 6.1. Is <u>the unit in a landscape that has flooding problems</u> ? Choose the description that best matches conditions around the wetland unit being rated. Do not add points. <u>Choose the highest score if more than one condition is met.</u>			
The wetland captures surface water that would otherwise flow downgradient into areas where flooding has damaged human or natural resources (e.g., houses or salmon redds):			
• Flooding occurs in a sub-basin that is immediately downgradient of unit.	points = 2	2	
• Surface flooding problems are in a sub-basin farther downgradient.	points = 1		
• Flooding from groundwater is an issue in the sub-basin.	points = 1		
• The existing or potential outflow from the wetland is so constrained by human or natural conditions that the water stored by the wetland cannot reach areas that flood. <i>Explain why</i> _____	points = 0		
• There are no problems with flooding downstream of the wetland.	points = 0		
D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan?			
Yes = 2 No = 0		2	
Total for D 6		Add the points in the boxes above	4

Rating of Value If score is: X 2-4 = H 1 = M 0 = L Record the rating on the first page

Wetland name or number: Lake Lois

These questions apply to wetlands of all HGM classes.

HABITAT FUNCTIONS - Indicators that site functions to provide important habitat

H 1.0. Does the site have the potential to provide habitat?

H 1.1. Structure of plant community: Indicators are Cowardin classes and strata within the Forested class. Check the Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to meet the threshold of ¼ ac if the unit is at least 2.5 ac, or more than 10% of the unit if it is smaller than 2.5 ac.

☐ Aquatic bed	4 structures or more: points = 4
☒ Emergent	3 structures: points = 2
☐ Scrub-shrub (areas where shrubs have > 30% cover)	2 structures: points = 1
☒ Forested (areas where trees have > 30% cover)	1 structure: points = 0

If the unit has a Forested class, check if:

☐ The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/groundcover) that each cover 20% within the Forested polygon

1

H 1.2. Hydroperiods

Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland if the unit is < 2.5 ac, or ¼ ac if the unit is at least 2.5 ac to count (see text for descriptions of hydroperiods).

☒ Permanently flooded or inundated	4 or more types present: points = 3
☒ Seasonally flooded or inundated	3 types present: points = 2
☐ Occasionally flooded or inundated	2 types present: points = 1
☐ Saturated only	1 type present: points = 0

☐ Permanently flowing stream or river in, or adjacent to, the wetland

☐ Intermittently or seasonally flowing stream in, or adjacent to, the wetland

☐ **Lake Fringe wetland**

2 points

☐ **Freshwater tidal wetland**

2 points

1

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft².

Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. **Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canada thistle**

If you counted: > 19 species	points = 2
5 - 19 species	points = 1
< 5 species	points = 0

1

H 1.4. Interspersion of habitats

Decide from the diagrams below whether interspersions among Cowardin plant classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. If you have four or more plant classes or three classes and open water, the rating is always high.



None = 0 points



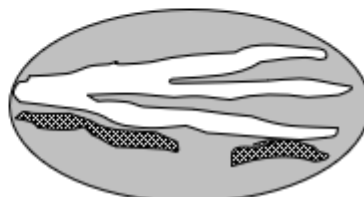
Low = 1 point



Moderate = 2 points



All three diagrams
in this row
are **High = 3 points**



2

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H 1.5. Special habitat features: Check the habitat features that are present in the wetland. The number of checks is the number of points. <u>X</u> Large, downed, woody debris within the wetland (> 4 in. diameter and 6 ft long). <u>X</u> Standing snags (dbh > 4 in.) within the wetland <u> </u> Undercut banks are present for at least 6.6 ft (2 m) and/or overhanging plants extend at least 3.3 ft (1 m) over open water or a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m) <u> </u> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (cut shrubs or trees that have not yet weathered where wood is exposed) <u>X</u> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibians) <u> </u> Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 above for the list of strata and H 1.5 in the manual for the list of aggressive plant species)	3
Total for H 1	Add the points in the boxes above 8

Rating of Site Potential If score is: 15-18 = H X 7-14 = M 0-6 = L *Record the rating on the first page*

H 2.0. Does the landscape have the potential to support the habitat functions of the site?	
H 2.1. Accessible habitat (include only habitat polygons accessible from the wetland. <i>Calculate:</i> % relatively undisturbed habitat 0% + [(% moderate and low intensity land uses)/2] <u>1.4 %</u> = <u>1.4 %</u> Total accessible habitat is: > 1/3 (33.3%) of 1 km Polygon points = 3 20-33% of 1 km Polygon points = 2 10-19% of 1 km Polygon points = 1 < 10% of 1 km Polygon points = 0	0
H 2.2. Total habitat in 1 km Polygon around the wetland. <i>Calculate:</i> % relatively undisturbed habitat <u>5.5%</u> + [(% moderate and low intensity land uses)/2] <u>6.9%</u> = <u>12.4%</u> Total habitat > 50% of Polygon points = 3 Total habitat 10-50% and in 1-3 patches points = 2 Total habitat 10-50% and > 3 patches points = 1 Total habitat < 10% of 1 km Polygon points = 0	1
H 2.3. Land use intensity in 1 km Polygon: > 50% of 1 km Polygon is high intensity land use points = (- 2) ≤ 50% of 1 km Polygon is high intensity points = 0	-2
Total for H 2	Add the points in the boxes above -1

Rating of Landscape Potential If score is: 4-6 = H 1-3 = M X < 1 = L *Record the rating on the first page*

H 3.0. Is the habitat provided by the site valuable to society?	
H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i> Site meets ANY of the following criteria: points = 2 — It has 3 or more Priority Habitats within 100 m (see next page) — It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists) — It is mapped as a location for an individual WDFW Priority Species — It is a Wetland of High Conservation Value as determined by the Department of Natural Resources data — It has been categorized as an important habitat site in a local or regional comprehensive plan, in a Shoreline Master Plan, or in a watershed plan Site has 1 or 2 Priority Habitats (listed on next page) within 100 m points = 1 Site does not meet any of the criteria above points = 0	2

Rating of Value If score is: X 2 = H 1 = M 0 = L *Record the rating on the first page*

WDFW Priority Habitats

See complete descriptions of Priority Habitats listed by WDFW, and the counties in which they can be found, in: Washington Department of Fish and Wildlife. 2008 (current year, as revised). [Priority Habitat and Species List](#).¹³³ This list was updated for consistency with guidance from WDFW.

This question is independent of the land use between the wetland unit and the Priority Habitat. All vegetated wetlands are by definition a Priority Habitat but are not included in this list because they are addressed by this rating system.

Count how many of the following Priority Habitats are within 330 ft (100 m) of the wetland unit:

- **Aspen Stands:** Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- **Biodiversity Areas and Corridors:** Areas of habitat that are relatively important to various species of native fish and wildlife. This habitat automatically counts if mapped on the PHS online map within 100m of the wetland. If not mapped, a determination can be made in the field.
- **Caves:** A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.
- **Cliffs:** Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.
- **Fresh Deepwater:** Lands permanently flooded with freshwater, including environments where surface water is permanent and often deep, so that water, rather than air, is the principal medium within which the dominant organisms live. Substrate does not support emergent vegetation. Do not select if Instream habitat is also present, or if the entire Deepwater feature is included in the wetland unit being rated (such as a pond with a vegetated fringe).
- **Herbaceous Balds:** Variable size patches of grass and forbs on shallow soils over bedrock.
- **Instream:** The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources. Do not select if Fresh Deepwater habitat is also present.
- **Nearshore:** Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and Puget Sound Nearshore.
- **Old-growth/Mature forests:** Old-growth west of Cascade crest – Stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) > 32 in. (81 cm) diameter at breast height (dbh) or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in. (53 cm) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest.

¹³³ <http://wdfw.wa.gov/publications/00165/wdfw00165.pdf>

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- ⊖ **Oregon White Oak:** Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important. For single oaks or oak stands <0.4 ha in urban areas, [WDFW's Management Recommendations for Oregon White Oak](#)¹³⁴ provides more detail for determining if they are Priority Habitats
- ⊖ **Riparian:** The area adjacent to freshwater aquatic systems with flowing or standing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.
- ⊖ **Snags and Logs:** Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 20 in. (51 cm) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in. (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.
- **Talus:** Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.
- **Westside Prairies:** Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie.

¹³⁴ <https://wdfw.wa.gov/publications/00030/wdfw00030.pdf>

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CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
SC 1.0. Estuarine wetlands Does the wetland meet the following criteria for Estuarine wetlands? — The dominant water regime is tidal, — Vegetated, and — With a salinity greater than 0.5 ppt	
Yes – Go to SC 1.1 No = Not an estuarine wetland	
SC 1.1. Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151?	Cat. I
Yes = Category I No – Go to SC 1.2	
SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? — The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 10% cover of non-native plant species. If non-native species are <i>Spartina</i> , see chapter 4.8 in the manual. — At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland. — The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.	Cat. I Cat. II
Yes = Category I No = Category II	
SC 2.0. Wetlands of High Conservation Value (WHCV) SC 2.1. Does the wetland overlap with any known or historical rare plant or rare & high-quality ecosystem polygons on the WNHP Data Explorer ? ¹³⁵	Cat. I
Yes = Category I No – Go to SC 2.2	
SC 2.2. Does the wetland have a rare plant species, rare ecosystem (e.g., plant community), or high-quality common ecosystem that may qualify the site as a WHCV? Contact WNHP for resources to help determine the presence of these elements. Yes – Submit data to WA Natural Heritage Program for determination , ¹³⁶ Go to SC 2.3 No = Not a WHCV	
SC 2.3. Did WNHP review the site within 30 days and determine that it has a rare plant or ecosystem that meets their criteria? Yes = Category I No = Not a WHCV	
SC 3.0. Bogs Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES, you will still need to rate the wetland based on its functions.</i>	
SC 3.1. Does an area within the wetland unit have organic soil horizons, either peats or mucks, that compose 16 in. or more of the first 32 in. of the soil profile? Yes – Go to SC 3.3 No – Go to SC 3.2	
SC 3.2. Does an area within the wetland unit have organic soils, either peats or mucks, that are less than 16 in. deep over bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? Yes – Go to SC 3.3 No = Not a bog	
SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? Yes = Category I bog No – Go to SC 3.4 NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that criterion by measuring the pH of the water that seeps into a hole dug at least 16 in. deep. If the pH is less than 5.0 and the plant species in Table 4 are present, the wetland is a bog.	Cat. I
SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, western red cedar, western hemlock, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AND any of the species (or combination of species) listed in Table 4 provide more than 30% of the cover under the canopy? Yes = Category I bog No = Not a bog	

¹³⁵ <https://www.dnr.wa.gov/NHPdata>

¹³⁶ https://www.dnr.wa.gov/Publications/amp_nh_sighting_form.pdf

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SC 4.0. Forested Wetlands Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as Priority Habitats? <i>If you answer YES, you will still need to rate the wetland based on its functions.</i> — Old-growth forests (west of Cascade crest): Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) that are at least 200 years of age OR have a diameter at breast height (dbh) of 32 in. (81 cm) or more. — Mature forests (west of the Cascade Crest): Stands where the largest trees are 80- 200 years old OR the species that make up the canopy have an average diameter (dbh) exceeding 21 in. (53 cm). Yes = Category I No = Not a forested wetland for this section	Cat. I
SC 5.0. Wetlands in Coastal Lagoons Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? — The wetland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks — The lagoon in which the wetland is located contains ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) — The lagoon retains some of its surface water at low tide during spring tides Yes – Go to SC 5.1 No = Not a wetland in a coastal lagoon SC 5.1. Does the wetland meet all of the following three conditions? — The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 20% cover of aggressive, opportunistic plant species (see list of species in H 1.5 in the manual). — At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. — The wetland is larger than 1/10 ac (4350 ft²) Yes = Category I No = Category II	Cat. I Cat. II
SC 6.0. Interdunal Wetlands Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer YES, you will still need to rate the wetland based on its habitat functions.</i> In practical terms that means the following geographic areas: — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 and Ocean Shores Blvd SW, including lands west of E. Oceans Shores Blvd SW. Yes – Go to SC 6.1 No = Not an interdunal wetland for rating SC 6.1. Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates H,H,H or H,H,M for the three aspects of function)? Yes = Category I No – Go to SC 6.2 SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? Yes = Category II No – Go to SC 6.3 SC 6.3. Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and 1 ac? Yes = Category III No = Category IV	Cat I Cat. II Cat. III Cat. IV
Category of wetland based on Special Characteristics If you answered No for all types, enter "Not Applicable" on Summary Form	Not Applicable

APPENDIX C

ROUTINE DETERMINATION METHOD AND PLANT INDICATOR RATING DEFINITIONS

ROUTINE DETERMINATION METHOD

The Routine Determination Method is defined according to the U.S. Army Corps of Engineers' 1987 *Wetland Delineation Manual* and the *Regional Supplement to the Corps of Engineers' Wetland Delineation Manual* (Environmental Laboratory 1987); *Western Mountains, Valleys, and Coast Region (Version 2.0)* (Corps 2010). The Routine Determination Method examines three parameters – vegetation, soils, and hydrology – to determine if wetlands exist in a given area. Hydrology is critical in determining what is a wetland, but is often difficult to assess because hydrologic conditions can change periodically (hourly, daily, or seasonally). Consequently, it is necessary to determine if hydrophytic vegetation and hydric soils are present, which would indicate that water is present for a long enough duration to support a wetland plant community. By definition, wetlands are those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

VEGETATION INDICATOR STATUS

The indicator status, following the scientific names of plant species, indicates the likelihood of the species to be found in wetlands according to the *National Wetland Plant List Indicator Rating Definitions* (Corps 2012). Listed from most likely to least likely to be found in wetlands, the indicator status categories are:

- **OBL** (obligate wetland) - occur almost always under natural conditions in wetlands.
- **FACW** (facultative wetland) - usually occur in wetlands, but occasionally found in non-wetlands.
- **FAC** (facultative) - equally likely to occur in wetlands or non-wetlands.
- **FACU** (facultative upland) - usually occur in non-wetlands, but occasionally found in wetlands.
- **UPL** (obligate upland) - occur almost always under natural conditions in non-wetlands.
- **NI** (no indicator) - insufficient data to assign to an indicator category.