

SEPA Environmental Checklist

City of Sumner
MA-02 Alternative 1

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies:

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals:

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the [supplemental sheet for nonproject actions \(part D\)](#). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected

geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B–Environmental Elements–that do not contribute meaningfully to the analysis of the proposal.

A. Background [\[HELP\]](#)

- 1) *Name of proposed project, if applicable:*
MA-02: Amend the Comprehensive Plan Map for 166th Ave/SE Urban Growth Area (UGA)
Alternative 1 – City of Sumner Proposal
- 2) *Name of applicant:*
City of Sumner
- 3) *Address and phone number of applicant and contact person:*
Chrissanda Walker, Associate Planner
Community Development
[City of Sumner](#)
1104 Maple St.
Sumner, WA 98390
253.299.5523 – Phone
253.299.5529 – Fax
Chrissandaw@sumnerwa.gov
- 4) *Date checklist prepared:*
March 28, 2025
- 5) *Agency requesting checklist:*
City of Sumner
- 6) *Proposed timing or schedule (including phasing, if applicable):*
December 2025
- 7) *Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.*
Future development may occur under the proposed designations.
- 8) *List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.*
An applicant for redesignation of 7 parcels has prepared a SEPA checklist for a smaller redesignation boundary.
See Exhibit C: Traffic Technical memo and Exhibit D: Water and Sewer Analysis Tech memo for evaluation of alternatives of the proposed redesignation.

- 9) *Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.*

There are no known building or construction applications at this time.

- 10) *List any government approvals or permits that will be needed for your proposal, if known.*

Planning Commission recommendations and City Council consideration and decision on Comprehensive Plan Amendment.

- 11) *Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)*

The proposal amends the Comprehensive Plan map designation from the current Low Density Residential-2 (LDR-2) to Medium Density Residential (MDR) designation for 10 parcels in Sumner's Southeast Urban Growth Area (UGA) and amends the Comprehensive Plan map designation from the current Low Density Residential-2 (LDR-2) to Interchange Commercial (IC) designation for 4 parcels (adjacent to existing IC zone). This is an alternative that would create more consistent designations across the SE UGA compared to a private amendment application that would redesignation a few of the parcels under common ownership by Orton Apartments LLC.

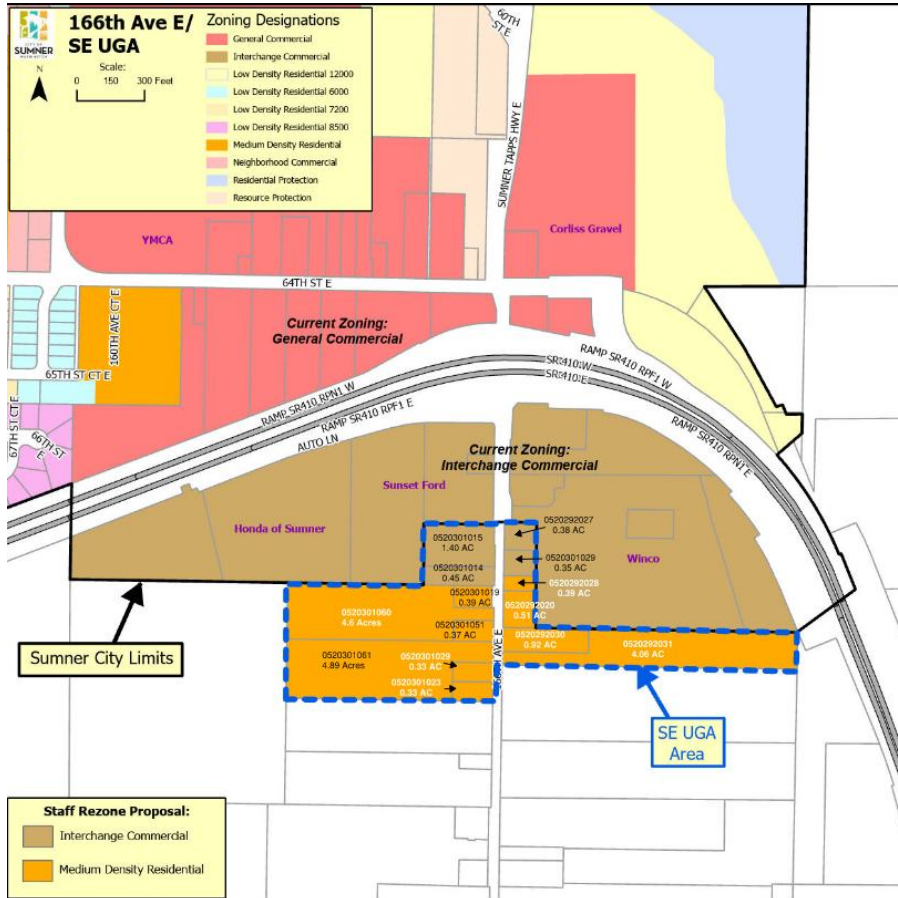
- 12) *Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the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

Parcel numbers include:

520292020
520292027
520292028
520292029
520292030
520292031
520301014
520301015
520301019
520301023
520301029
520301051
520301060
520301061

The location of properties is noted on the map in **Exhibit 1**.

Exhibit 1: MA-02 SE UGA Alternative 1



Commented [CW1]: Updated map per JM

B. Environmental Elements [\[HELP\]](#)

1. Earth [\[help\]](#)

a. General description of the site:

(circle one): Flat, rolling, hilly, steep slopes, mountainous, other _____

b. What is the steepest slope on the site (approximate percent slope)?

Per USDA Soil Survey Slope: 0 to 3 percent.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

Puyallup fine sandy loam. See Appendix A.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

To the east outside of the property boundary and close to the 410 freeway are steep slopes above 40%.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

Not applicable. This is a non-project proposal.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Erosion may occur during future clearing or construction activities allowed under the proposed designation (or existing designation). Development will be subject to applicable stormwater standards and temporary erosion and sediment control plans.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

If the area were annexed to the city and the zoning were Medium Density Residential to implement the same named land use designation, impervious surfaces could equal up to 90% of the property.

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

Future development would be required to provide landscaping and to design stormwater facilities to meet stormwater standards.

2. Air [\[help\]](#)

- a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

During construction there could be dust. During operation, cars associated with MDR uses could produce tailpipe emissions.

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

Commercial uses to the north do not produce stationary emissions; mobile emission sources would include vehicles on SR 410 and at the commercial businesses.

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

Dust control measures would be required during construction. Vehicles would meet state emission standards.

3. Water [\[help\]](#)

- a. Surface Water: [\[help\]](#)

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

Salmon Creek borders the eastern property in the SE UGA.

- 2) *Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.*

If the site is developed for uses consistent with MDR, they will be subject to critical areas ordinance requirements for buffers.

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

There are mapped wetlands to the west per Pierce County GIS information, and Puyallup Valley Wetlands per State Department of Fish and Wildlife Priority Habitats and Species maps on the west and east sides of the properties. See Appendix B.

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

This is a non-project action. Withdrawals or diversions are not anticipated. The Southeast UGA is served by public water systems.

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

The proposed redesignation area does not appear to be in a mapped 100-year floodplain.

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

This is a non-project action. There are no known planned discharges.

b. Ground Water: [\[help\]](#)

- 1) *Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.*

Groundwater withdrawal is unlikely. The Southeast UGA is served by public water systems.

- 2) *Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.*

This is a non-project action. There are no known planned discharges. See Sewer and Water Analysis (Exhibit D) for the evaluation of alternatives and recommended mitigations upon project action.

c. Water runoff (including stormwater):

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

Future development may create impervious surfaces that could result in runoff but development is subject to stormwater regulations to address water quality and flow.

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

See C.1)

- 3) *Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.*

See C.1)

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

Application of stormwater management regulations.

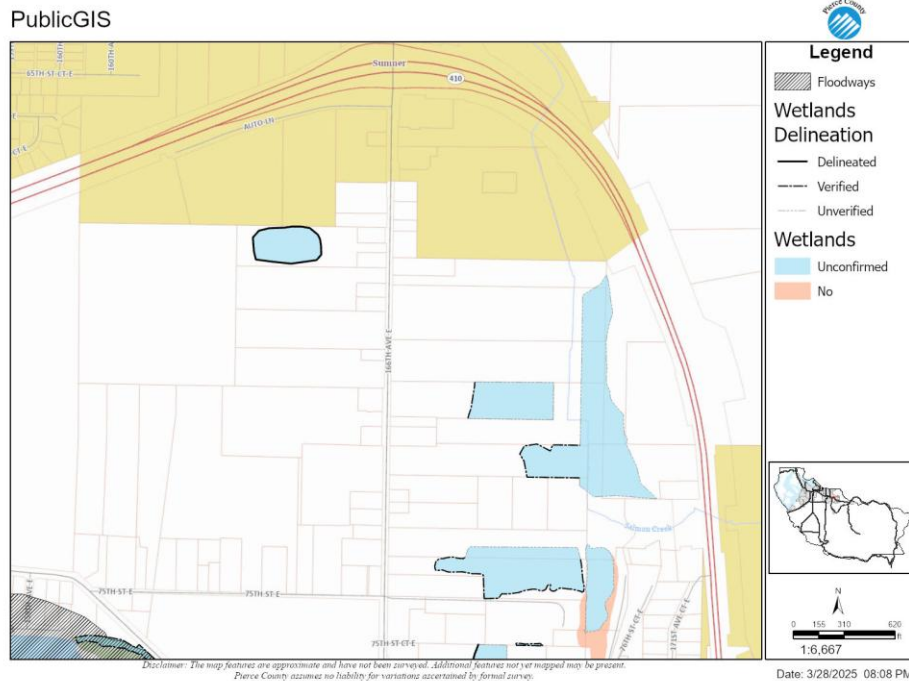
4. Plants [\[help\]](#)

- a. Check the types of vegetation found on the site:

☐ deciduous tree: alder, maple, aspen, other
☐ evergreen tree: fir, cedar, pine, other
☐ shrubs
☐ grass
☐ pasture
☐ crop or grain
☐ Orchards, vineyards or other permanent crops.
☐ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
☐ water plants: water lily, eelgrass, milfoil, other
☐ other types of vegetation

In residential areas, ornamental plants, shrubs and trees are anticipated. There is a mapped wetland: 1.86 acres per Pierce County GIS on the west side of the proposed redesignation area.

PublicGIS



Priority Habitats and Species include mapped wetlands in a different configuration. Wetland review may be needed. See Appendix B.

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

Not applicable to this non-project application.

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

Priority habitats and species note waterfowl concentrations and wetlands. Threatened and endangered species are not specified. See Appendix B.

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

Future development would be subject to landscaping requirements and critical areas regulations.

- e. List all noxious weeds and invasive species known to be on or near the site.

Not known. Future development would be subject to SEPA review and may address this topic.

5. Animals [\[help\]](#)

- a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site.

Examples include:

birds: hawk, heron, eagle, songbirds, other:

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

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

It is anticipated that there are aquatic species in Salmon Creek to the east. Priority Habitats and Species identify waterfowl concentrations. See Appendix B.

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

Priority habitats and species note waterfowl concentrations and wetlands. Threatened and endangered species are not specified. See Appendix B.

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

There is a Pacific Flyway, a migratory route for birds in Western Washington including Pierce County. Priority habitats and species note waterfowl concentrations.

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

Future development would be subject to critical areas regulations including fish and wildlife habitat conservation areas.

- e. List any invasive animal species known to be on or near the site.

Not known. Future development would be subject to SEPA review and may address this topic.

6. Energy and Natural Resources [\[help\]](#)

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

It is anticipated that future development would use electric power, and other forms of energy available to the sites.

- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

Not applicable to this non-project action. If land is annexed, future development would be subject to building and energy codes as well as zoning standards in 18.32.030.D Solar Access Requirements applicable to the MDR zone.

- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

Not applicable to this non-project action. However, future development would be subject to building and energy codes.

7. Environmental Health [\[help\]](#)

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

- 1) *Describe any known or possible contamination at the site from present or past uses.*

Not applicable to this non-project action.

- 2) *Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.*

Not applicable to this non-project action.

- 3) *Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.*

Not applicable to this non-project action.

- 4) *Describe special emergency services that might be required.*

Future residential uses are not anticipated to require special emergency services.

- 5) *Proposed measures to reduce or control environmental health hazards, if any:*

Not applicable to this non-project action.

b. Noise

- 1) *What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?*

Traffic noise exists from SR 410.

- 2) *What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.*

During construction there would be noise from typical equipment to build residential structures.

- 3) *Proposed measures to reduce or control noise impacts, if any:*

Compliance with noise standards in SMC 8.14 would be required if site is developed under City zoning.

8. Land and Shoreline Use [\[help\]](#)

- a. *What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.*

Homes/housing with agricultural uses.

- b. *Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?*

The land is not considered agricultural land of long-term commercial significance. It is in the UGA. Land immediately to the southeast in the Rural area is considered of long-term commercial significance as is land to the west of the land use designation proposal area. See 8.e below.

- 1) *Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:*

No. See 8.b.

- c. *Describe any structures on the site.*

Single family homes and barns/agricultural structures. There is also one auto dealer use as well. See [Exhibit 2](#).

Exhibit 2: Existing and Proposed Land Use

Current Comprehensive Plan Designation	Proposed	Current Land Use	Tax Parcel Number
LDR-2	MDR	SINGLE FAMILY DWELLING	520292020

Commented [LG2]: This was in the files with "TBD" - should it all be MDR?

Commented [CW3R2]: It was still under discussion, but we will rezone 4 parcels to IC and the remaining to MDR

LDR-2	TBD-IC	SINGLE FAMILY DWELLING	520292027
LDR-2	MDR	VACANT LAND UNDEVELOPED	520292028
LDR-2	TBD-IC	SINGLE FAMILY DWELLING	520292029
LDR-2	MDR	SINGLE FAMILY DWELLING	520292030
LDR-2-IC	MDR	SINGLE FAMILY DWELLING	520292031
LDR-2	TBD-IC	SINGLE FAMILY DWELLING	520301014
LDR-2	TBD-IC	AUTO DLR NEW AND USED RETAIL	520301015
LDR-2	TBD-MDR	SINGLE FAMILY DWELLING	520301019
LDR-2	MDR	SINGLE FAMILY DWELLING	520301023
LDR-2	MDR	SINGLE FAMILY DWELLING	520301029
LDR-2	TBD-MDR	SINGLE FAMILY DWELLING	520301051
LDR-2	MDR	CU FARM & AGRI RCW 84.34 CURRENT USE	520301060
LDR-2	TBD-MDR	SINGLE FAMILY DWELLING	520301061

Source: City of Sumner, 2025; Pierce County Assessor, 2025.

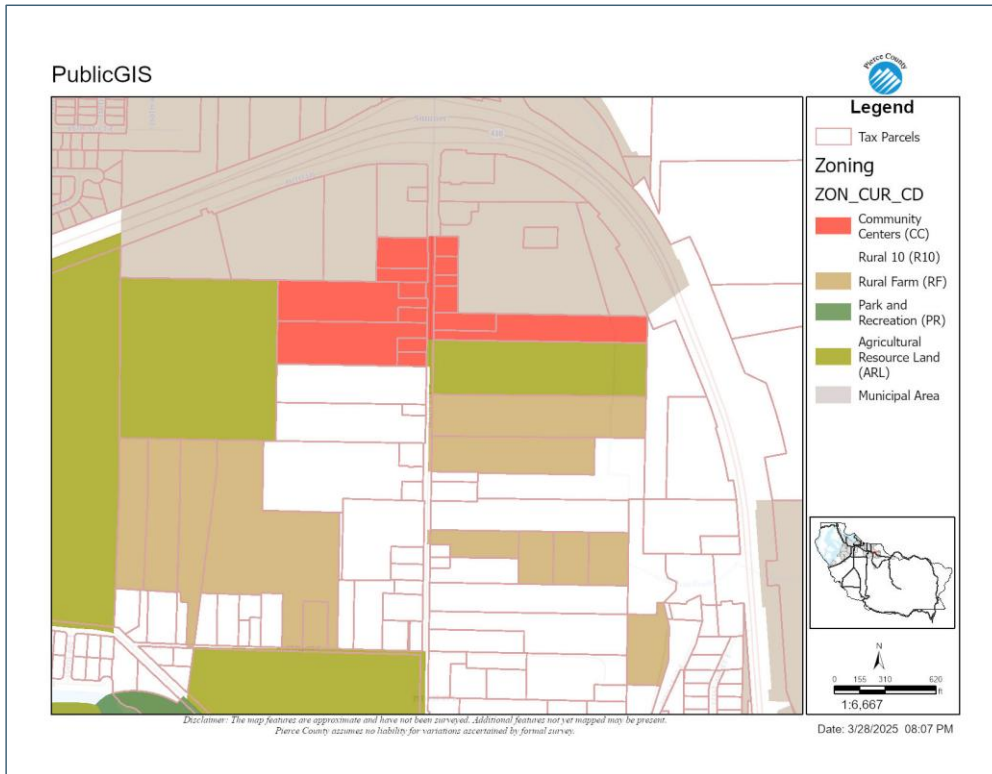
d. Will any structures be demolished? If so, what?

Future development would likely remove existing structures.

e. What is the current zoning classification of the site?

The site is in the unincorporated UGA and subject to County zoning of Community Centers. See [Exhibit 3](#).

Exhibit 3: Pierce County Zoning Map



Source: Pierce County GIS, 2025.

f. What is the current comprehensive plan designation of the site?

Under Sumner's Comprehensive Plan designations include Low-Density Residential and Interchange Commercial.

g. If applicable, what is the current shoreline master program designation of the site?

Not applicable.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

There appear to be wetlands and fish and wildlife habitat conservation areas (Salmon Creek and associated habitat).

The site is also in a mapped aquifer recharge area.¹ It is in a high liquefaction area.²

i. Approximately how many people would reside or work in the completed project?

Not applicable to this non-project action. The City will prepare a land capacity evaluation as part of evaluating the application and others in the 2025 docket.

j. Approximately how many people would the completed project displace?

Existing single family households would likely be displaced by future new construction.

k. Proposed measures to avoid or reduce displacement impacts, if any:

The City's Comprehensive Plan policies address anti-displacement measures.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The City's proposal would create a consistent development pattern of MDR.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

MDR adjacent to agricultural land of long-term commercial significance would be similar to or less intense than the Community Centers applied by Pierce County. County agricultural zoning would continue on properties outside the Sumner SE UGA.

9. Housing [\[help\]](#)

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

This is a non-project action. The City will prepare a land capacity evaluation as part of evaluating the application and others in the 2025 docket. A gross calculation without reductions for infrastructure or critical areas (if confirmed) and a market factor is: 16.6 acres x [22 units per acre](#) = 365 units.

¹ See: <https://sumnerwa.gov/wp-content/uploads/2020/11/Critical-Areas-Aquifer-Resource-Map.pdf>.

² See: <https://sumnerwa.gov/wp-content/uploads/2020/11/Critical-Areas-Seismic-Hazard-Map.pdf>.

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

There are 11 existing dwellings according to Assessor Records. Other properties have agriculture or auto dealer uses.

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

If property is annexed it will be developed based on City code standards for the MDR zone which is intended to provide for a range of housing types.

10. Aesthetics [\[help\]](#)

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

The MDR zone allows for buildings of 35 feet in height.

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

There are no protected views. There are views throughout the valley of Mount Rainier.

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

Not applicable.

11. Light and Glare [\[help\]](#)

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

Future development would be residential in nature with lighting in buildings and parking areas. It is not anticipated that there would be light and glare impacts.

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

There is no specific proposal for development at this time.

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

There is no specific proposal for development at this time.

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

Future development would be reviewed under SEPA or code standards to avoid light and glare impacts.

12. Recreation [\[help\]](#)

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

No recreation facilities about the properties. There are some City of Sumner or Pierce County recreation facilities in the general vicinity.

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

No recreation displacement is anticipated.

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

The City has a Parks, Recreation, and Open Space Plan and a park impact fee.

13. Historic and cultural preservation [\[help\]](#)

- a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

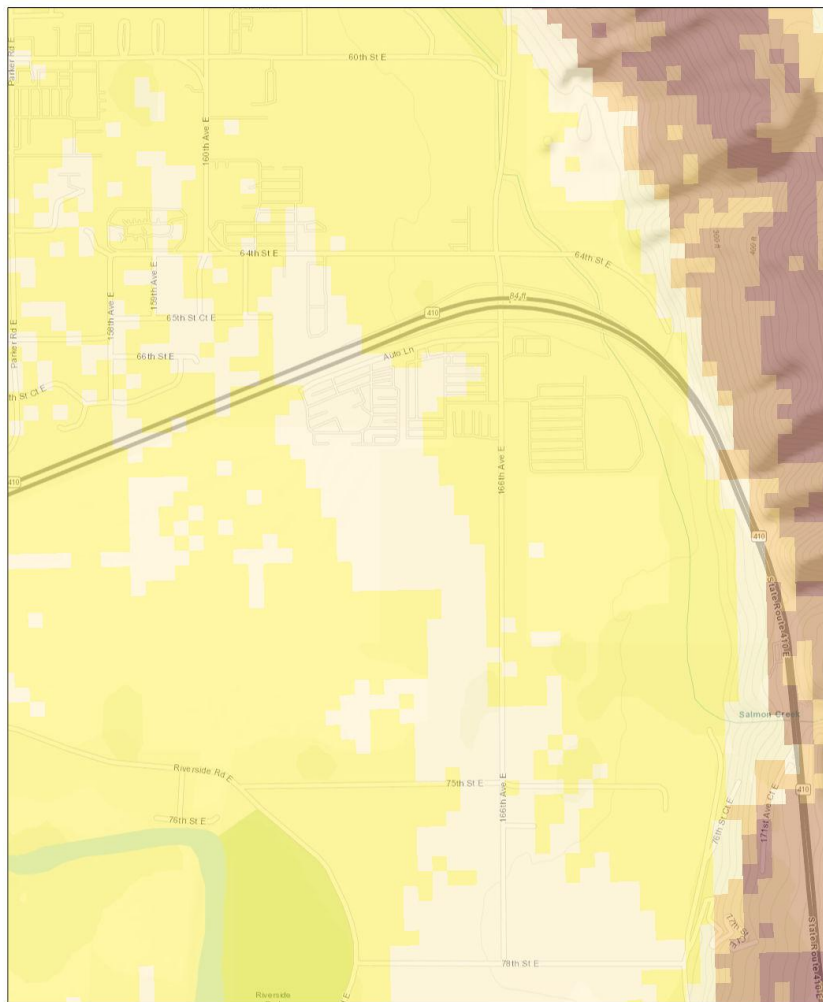
There are no inventoried or designated sites upon review of the Department of Archaeology and Historic Preservation WISAARD tool.

- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

There are no known cultural features. However, the area is considered to have a high likelihood of archaeological resources. See [Exhibit 4](#).

Exhibit 4: Predictive Model of Archaeological Resources

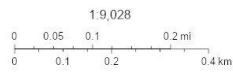
MA02-1 Vicinity



3/28/2025

Environmental Factors with Archaeological Resources Results

- 1 - Survey Contingent Upon Project Parameters: Low Risk (Color: Brick Red)
- 2 - Survey Contingent Upon Project Parameters: Moderately Low Risk (Color: Burnt Orange)
- 3 - Survey Recommended: Moderate Risk (Color: Orange)
- 4 - Survey Highly Advised: High Risk (Color: Pale Yellow)
- 5 - Survey Highly Advised: Very High Risk (Color: Brightest Yellow/Canary Yellow)



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeBCO, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Source: Department of Archaeology and Historic Preservation, 2025.

- c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

Review of Department of Archaeology and Historic Preservation WISAARD tool.

- d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

State laws address Inadvertent Discovery of Human Skeletal Remains on Non-Federal and Non-Tribal Land in the State of Washington (RCWs 68.50.645, 27.44.055, and 68.60.055)

The City implements the historic preservation chapter of SMC 18.39.

14. Transportation [\[help\]](#)

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

166th Ave E is the primary road serving the subarea. SR 410 lies to the north.

- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

Transit service is not available.³

- c. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

Future development will be subject to the City's concurrency management system and levels of service as well as transportation impact fees. If future development would reduce levels of service improvements may be required. Additionally frontage improvements may be required.

³ See: <https://piercetransit.org/system-map/>.

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

Not applicable.

- e. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

This is a non-project action, at project level proposals would need to submit their own traffic reports upon application. See Exhibit C: Traffic Technical memo for information provided evaluating the alternatives.

- f. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

It is not anticipated that future MDR development would affect or be affected by movement of agricultural products.

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

Future development will be subject to the City's concurrency management system and levels of service as well as transportation impact fees.

15. Public Services [\[help\]](#)

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

Future development would generate new residents that may increase the demand for schools. Fire and police protection would also be required.

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

Application of the City's levels of service and capital facilities plan.

16. Utilities [\[help\]](#)

- a. Circle utilities currently available at the site:

☒ electricity, ☒ natural gas, ☒ water, refuse service, telephone, ☒ sanitary sewer, ☒ septic system,
other _____

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

This is a non-project action and no utilities are proposed. Per Water and Sewer Analysis (Exhibit D) recommendations for future development include upsizing to ensure capacity and replacing to ensure longevity.

C. Signature [\[HELP\]](#)

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

Signature: Brayden Shannon
Name of signee Brayden Shannon
Position and Agency/Organization Assistant Planner, City of Sumner
Date Submitted: 07-28-2025

D. Supplemental sheet for nonproject actions [\[HELP\]](#)

(IT IS NOT NECESSARY to use this sheet for project actions)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

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

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

See B.2, B.3, and B.7.

Proposed measures to avoid or reduce such increases are:

See B.2, B.3, and B.7.

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

See B.4 and B.5.



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

See B.4 and B.5.

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

See B.6.

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

See B.6.

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

See B.3, B.8, B.12, B.13.

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

See B.3, B.8, B.12, B.13.

5) *How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?*

See B.8.

Proposed measures to avoid or reduce shoreline and land use impacts are:

See B.8. The City is preparing a policy and land use consistency and land capacity evaluation for the 2025 docket.

6) *How would the proposal be likely to increase demands on transportation or public services and utilities?*

See B.14, B.15, and B.16.

Proposed measures to reduce or respond to such demand(s) are:

See B.14, B.15, and B.16.

7) *Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.*

The proposal would improve consistency in designations between the City and County. It would create a consistent pattern of density abutting a commercial center. Future development will comply with City, County, State, and Federal laws regarding environmental protection.

Appendix A: Soils Report



United States
Department of
Agriculture

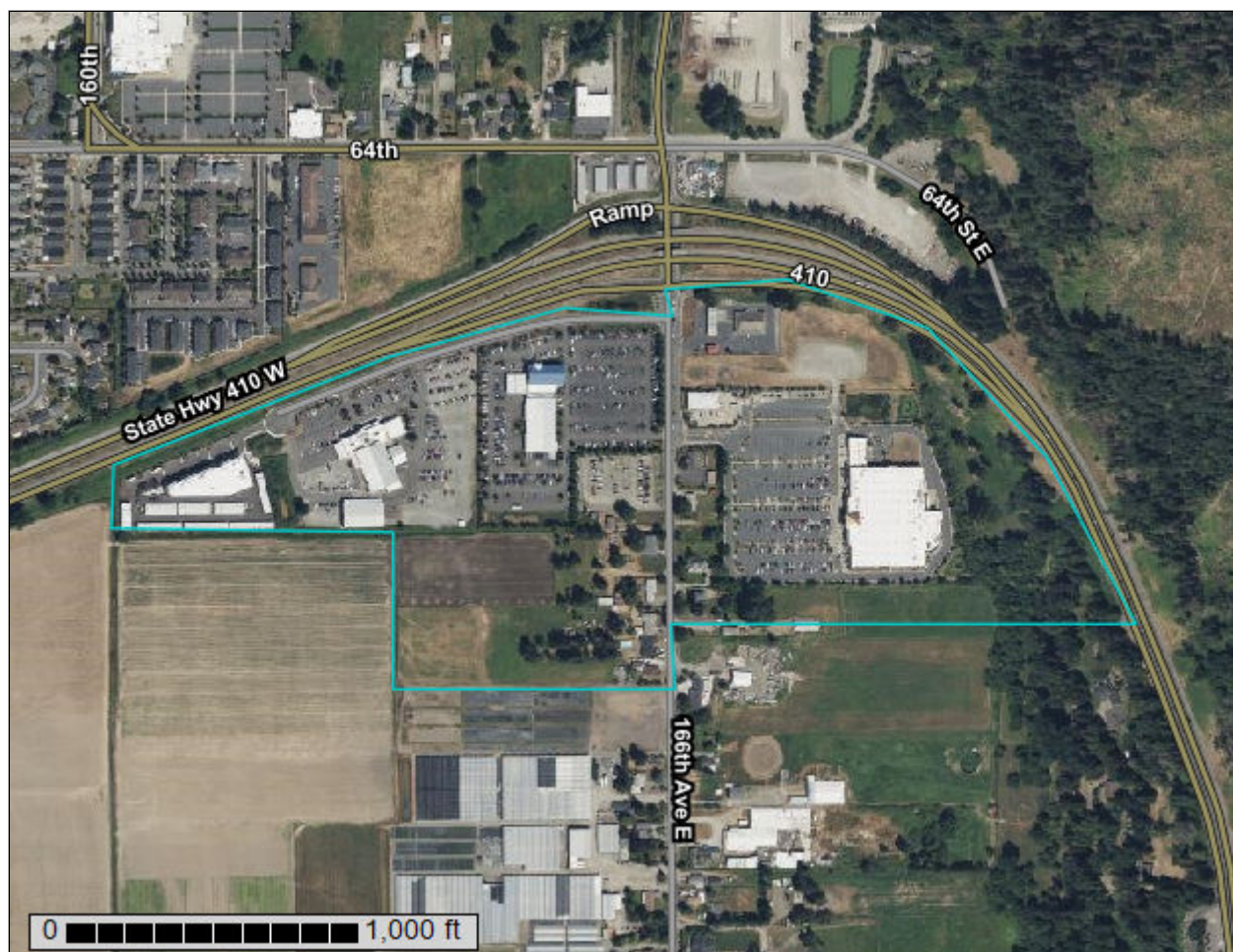
NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Pierce County Area, Washington

SE UGA



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Preface	2
How Soil Surveys Are Made	5
Soil Map	8
Soil Map.....	9
Legend.....	10
Map Unit Legend.....	11
Map Unit Descriptions.....	11
Pierce County Area, Washington.....	13
6A—Briscot loam.....	13
31A—Puyallup fine sandy loam.....	14
42A—Sultan silt loam.....	15
47F—Xerochrepts, 45 to 70 percent slopes.....	16
References	18

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Pierce County Area, Washington
Survey Area Data: Version 20, Aug 27, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 31, 2022—Aug 8, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
6A	Briscot loam	0.0	0.0%
31A	Puyallup fine sandy loam	63.6	92.3%
42A	Sultan silt loam	3.2	4.6%
47F	Xerochrepts, 45 to 70 percent slopes	2.1	3.1%
Totals for Area of Interest		68.9	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The

delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Pierce County Area, Washington

6A—Briscot loam

Map Unit Setting

National map unit symbol: 2hrc
Elevation: 20 to 250 feet
Mean annual precipitation: 30 to 55 inches
Mean annual air temperature: 48 to 50 degrees F
Frost-free period: 160 to 210 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Briscot, drained, and similar soils: 95 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Briscot, Drained

Setting

Landform: Flood plains
Parent material: Alluvium

Typical profile

H1 - 0 to 11 inches: loam
H2 - 11 to 38 inches: stratified fine sand to silt loam
H3 - 38 to 60 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 1.98 in/hr)
Depth to water table: About 12 to 35 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 11.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: B/D
Ecological site: F002XA007WA - Puget Lowlands Wet Forest
Forage suitability group: Seasonally Wet Soils (G002XN202WA)
Other vegetative classification: Seasonally Wet Soils (G002XN202WA)
Hydric soil rating: Yes

Minor Components

Briscot, undrained

Percent of map unit: 5 percent
Landform: Flood plains
Other vegetative classification: Seasonally Wet Soils (G002XN202WA)
Hydric soil rating: Yes

31A—Puyallup fine sandy loam

Map Unit Setting

National map unit symbol: 2hq9
Elevation: 0 to 390 feet
Mean annual precipitation: 35 to 60 inches
Mean annual air temperature: 50 degrees F
Frost-free period: 170 to 200 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Puyallup and similar soils: 85 percent
Minor components: 2 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Puyallup

Setting

Landform: Terraces, flood plains
Parent material: Alluvium

Typical profile

H1 - 0 to 13 inches: ashy fine sandy loam
H2 - 13 to 29 inches: loamy fine sand
H3 - 29 to 60 inches: fine sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: About 48 to 79 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 6.6 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: A
Ecological site: F002XA008WA - Puget Lowlands Riparian Forest
Forage suitability group: Droughty Soils (G002XN402WA)
Other vegetative classification: Droughty Soils (G002XN402WA)
Hydric soil rating: No

Minor Components

Briscot, undrained

Percent of map unit: 2 percent

Custom Soil Resource Report

Landform: Depressions

Other vegetative classification: Seasonally Wet Soils (G002XN202WA)

Hydric soil rating: Yes

42A—Sultan silt loam

Map Unit Setting

National map unit symbol: 2hqx

Elevation: 0 to 200 feet

Mean annual precipitation: 35 to 55 inches

Mean annual air temperature: 50 degrees F

Frost-free period: 150 to 200 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Sultan and similar soils: 85 percent

Minor components: 8 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sultan

Setting

Landform: Flood plains

Parent material: Alluvium

Typical profile

H1 - 0 to 14 inches: ashy silt loam

H2 - 14 to 23 inches: silt loam

H3 - 23 to 60 inches: stratified sand to silty clay loam

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)

Depth to water table: About 18 to 24 inches

Frequency of flooding: Occasional

Frequency of ponding: None

Available water supply, 0 to 60 inches: High (about 9.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: C/D

Ecological site: F002XA008WA - Puget Lowlands Riparian Forest

Forage suitability group: Seasonally Wet Soils (G002XN202WA)

Other vegetative classification: Seasonally Wet Soils (G002XN202WA)

Hydric soil rating: No

Minor Components

Briscot, undrained

Percent of map unit: 6 percent

Landform: Depressions

Other vegetative classification: Seasonally Wet Soils (G002XN202WA)

Hydric soil rating: Yes

Puget

Percent of map unit: 2 percent

Landform: Depressions

Other vegetative classification: Wet Soils (G002XN102WA)

Hydric soil rating: Yes

47F—Xerochrepts, 45 to 70 percent slopes

Map Unit Setting

National map unit symbol: 2hr5

Elevation: 0 to 980 feet

Mean annual precipitation: 30 to 50 inches

Mean annual air temperature: 45 to 46 degrees F

Frost-free period: 100 to 150 days

Farmland classification: Not prime farmland

Map Unit Composition

Xerochrepts and similar soils: 99 percent

Minor components: 1 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Xerochrepts

Setting

Landform: Valley sides

Parent material: Sandy and gravelly outwash and/or glacial till

Typical profile

H1 - 0 to 6 inches: gravelly sandy loam

H2 - 6 to 40 inches: gravelly sandy loam

H3 - 40 to 60 inches: very gravelly sandy loam

Properties and qualities

Slope: 45 to 70 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 5.95 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 5.4 inches)

Custom Soil Resource Report

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: A

Hydric soil rating: No

Minor Components

Coastal beaches

Percent of map unit: 1 percent

Landform: Alluvial cones

Hydric soil rating: No

References

- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. September 18, 2002. Hydric soils of the United States.
- Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
- National Research Council. 1995. Wetlands: Characteristics and boundaries.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580
- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.
- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084>

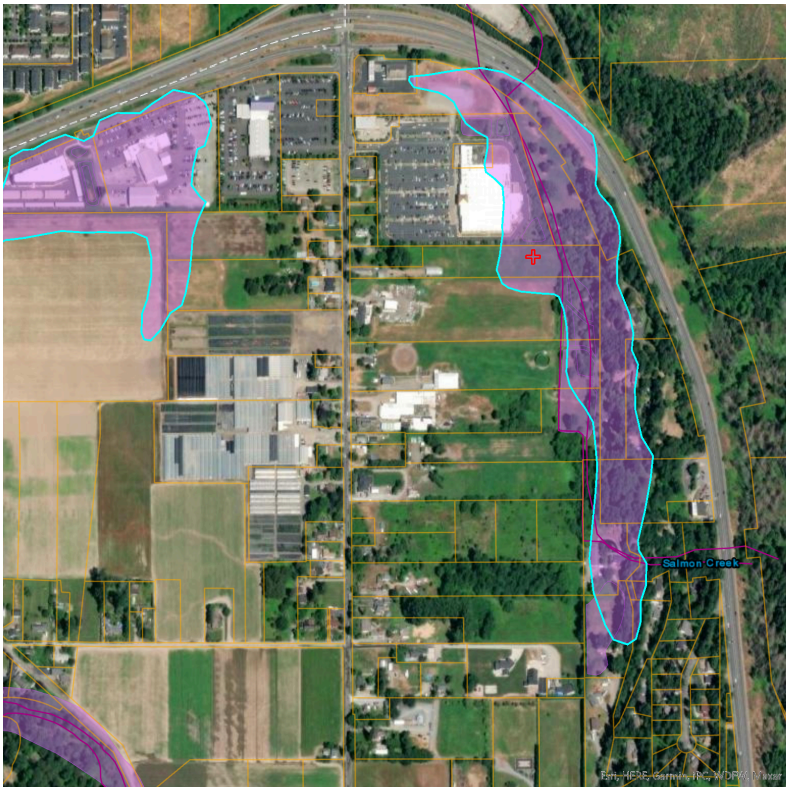
Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

Appendix B: PHS Report



Report Date: 03/28/2025

PHS Species/Habitats Overview:

Occurrence Name	Federal Status	State Status	Sensitive Location
Waterfowl Concentrations	N/A	N/A	No
Wetlands	N/A	N/A	No

PHS Species/Habitats Details:

Waterfowl Concentrations	
Priority Area	Regular Concentration
Site Name	PIERCE COUNTY - FARM
Accuracy	1/4 mile (Quarter Section)
Notes	SMALL WATERFOWL CONCENTRATION AREAS, AGRICULTURAL.
Source Record	902563
Source Dataset	PHSREGION
Source Name	NAUER, DON WDW
Source Entity	WA Dept. of Fish and Wildlife
Federal Status	N/A
State Status	N/A
PHS Listing Status	PHS LISTED OCCURRENCE
Sensitive	N
SGCN	N
Display Resolution	AS MAPPED
ManagementRecommendations	http://wdfw.wa.gov/publications/pub.php?id=00026
Geometry Type	Polygons

Wetlands	
Priority Area	Aquatic Habitat
Site Name	LOWER PUYALLUP RIVER VALLEY WETLANDS
Accuracy	1/4 mile (Quarter Section)
Notes	LOWER PUYALLUP RIVER VALLEY WETLANDS
Source Record	902559
Source Dataset	PHSREGION
Source Name	NAUER, DON WDW
Source Entity	WA Dept. of Fish and Wildlife
Federal Status	N/A
State Status	N/A
PHS Listing Status	PHS Listed Occurrence
Sensitive	N
SGCN	N
Display Resolution	AS MAPPED
ManagementRecommendations	http://www.ecy.wa.gov/programs/sea/wetlands/bas/index.html
Geometry Type	Polygons

DISCLAIMER: This report includes information that the Washington Department of Fish and Wildlife (WDFW) maintains in a central computer database. It is not an attempt to provide you with an official agency response as to the impacts of your project on fish and wildlife. This information only documents the location of fish and wildlife resources to the best of our knowledge. It is not a complete inventory and it is important to note that fish and wildlife resources may occur in areas not currently known to WDFW biologists, or in areas for which comprehensive surveys have not been conducted. Site specific surveys are frequently necessary to rule out the presence of priority resources. Locations of fish and wildlife resources are subject to variation caused by disturbance, changes in season and weather, and other factors. WDFW does not recommend using reports more than six months old.