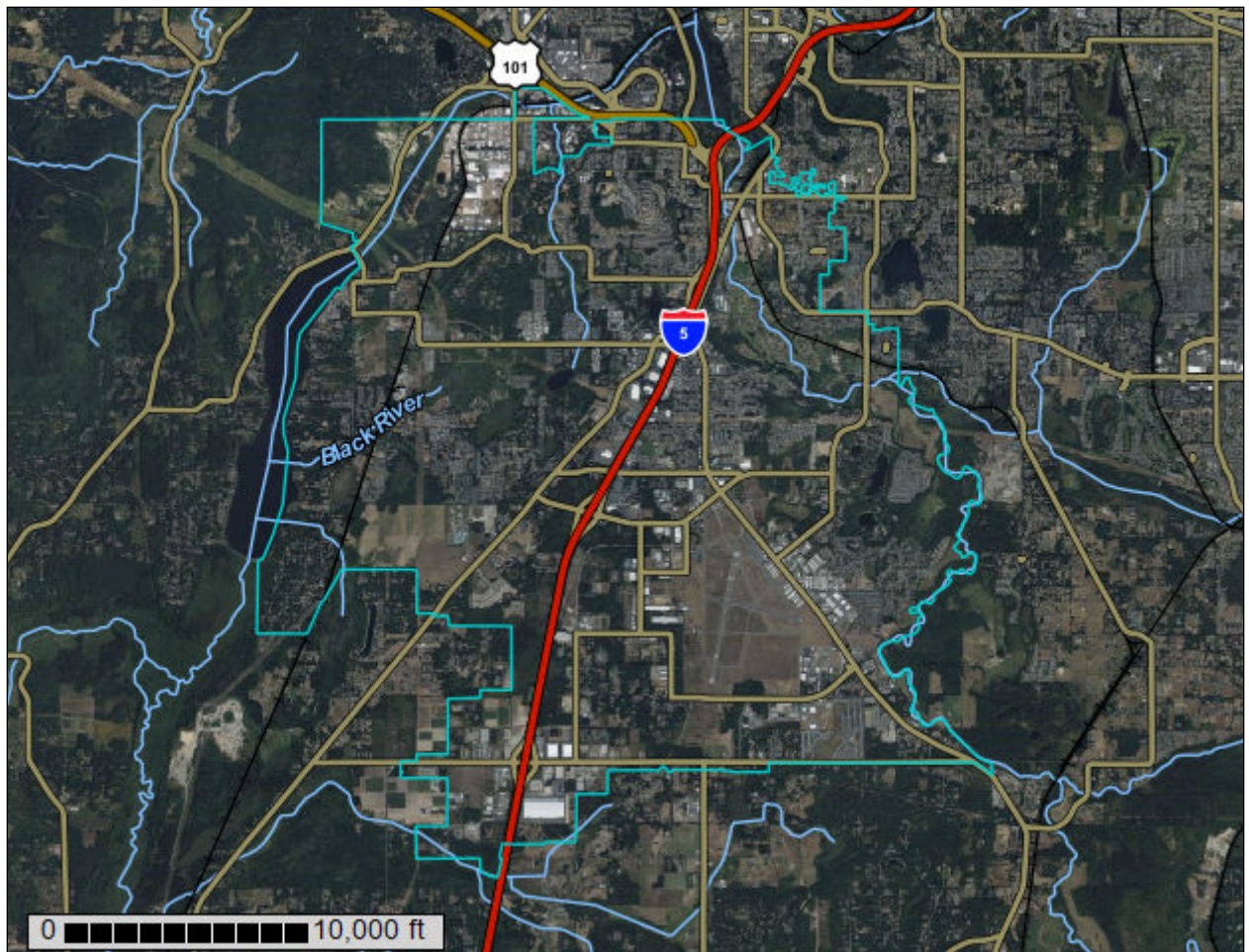




A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

# Custom Soil Resource Report for Thurston County Area, Washington



# Preface

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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](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.

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# How Soil Surveys Are Made

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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

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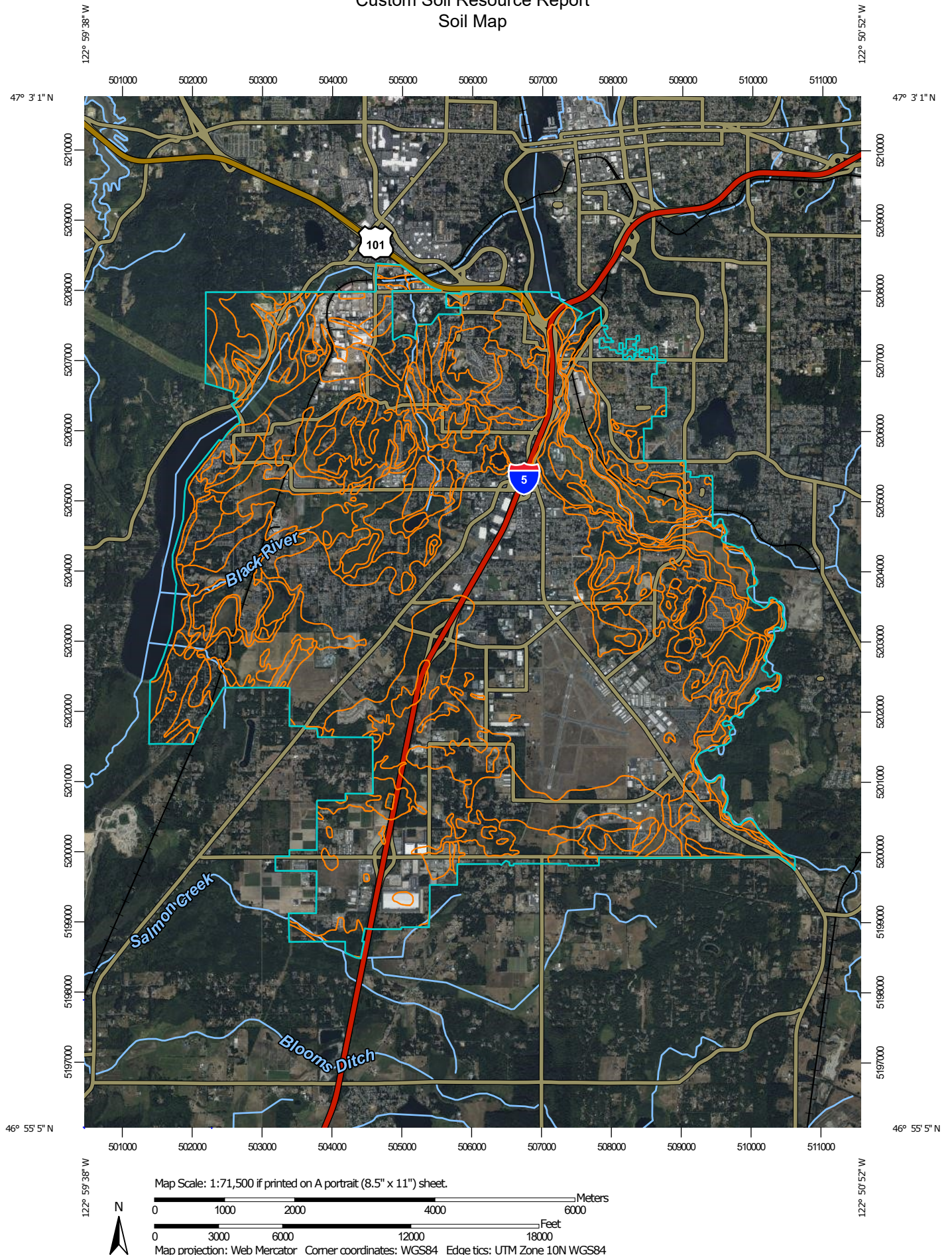
identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# 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.

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: Thurston County Area, Washington

Survey Area Data: Version 18, 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 18, 2020—Aug 14, 2023

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 |
|-----------------|-----------------------------------------------------------|--------------|----------------|
| 1               | Alderwood gravelly sandy loam, 0 to 8 percent slopes      | 173.8        | 1.2%           |
| 2               | Alderwood gravelly sandy loam, 8 to 15 percent slopes     | 321.7        | 2.2%           |
| 3               | Alderwood gravelly sandy loam, 15 to 30 percent slopes    | 36.9         | 0.3%           |
| 20              | Cagey loamy sand                                          | 2,116.9      | 14.8%          |
| 27              | Delphi very gravelly loam, 3 to 15 percent slopes         | 116.2        | 0.8%           |
| 30              | Dystric Xerochrepts, 60 to 90 percent slopes              | 20.7         | 0.1%           |
| 32              | Everett very gravelly sandy loam, 0 to 8 percent slopes   | 862.6        | 6.0%           |
| 33              | Everett very gravelly sandy loam, 8 to 15 percent slopes  | 169.6        | 1.2%           |
| 34              | Everett very gravelly sandy loam, 15 to 30 percent slopes | 29.4         | 0.2%           |
| 35              | Everett very gravelly sandy loam, 30 to 50 percent slopes | 111.8        | 0.8%           |
| 38              | Giles silt loam, 0 to 3 percent slopes                    | 16.9         | 0.1%           |
| 39              | Giles silt loam, 3 to 15 percent slopes                   | 107.4        | 0.8%           |
| 40              | Giles silt loam, 15 to 30 percent slopes                  | 8.9          | 0.1%           |
| 41              | Godfrey silty clay loam                                   | 47.4         | 0.3%           |
| 45              | Hydraquents, tidal                                        | 1.5          | 0.0%           |
| 46              | Indianola loamy sand, 0 to 5 percent slopes               | 1,432.1      | 10.0%          |
| 47              | Indianola loamy sand, 5 to 15 percent slopes              | 378.0        | 2.6%           |
| 48              | Indianola loamy sand, 15 to 30 percent slopes             | 471.5        | 3.3%           |
| 51              | Kapowsin silt loam, 3 to 15 percent slopes                | 127.7        | 0.9%           |
| 52              | Kapowsin silt loam, 15 to 30 percent slopes               | 267.5        | 1.9%           |
| 53              | Kapowsin silt loam, 30 to 50 percent slopes               | 23.0         | 0.2%           |
| 65              | McKenna gravelly silt loam, 0 to 5 percent slopes         | 159.7        | 1.1%           |
| 69              | Mukilteo muck                                             | 212.3        | 1.5%           |
| 70              | Mukilteo muck, drained                                    | 227.8        | 1.6%           |

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| Map Unit Symbol                    | Map Unit Name                                         | Acres in AOI    | Percent of AOI |
|------------------------------------|-------------------------------------------------------|-----------------|----------------|
| 73                                 | Nisqually loamy fine sand, 0 to 3 percent slopes      | 3,613.9         | 25.2%          |
| 74                                 | Nisqually loamy fine sand, 3 to 15 percent slopes     | 14.2            | 0.1%           |
| 75                                 | Norma fine sandy loam                                 | 40.5            | 0.3%           |
| 76                                 | Norma silt loam                                       | 707.2           | 4.9%           |
| 84                                 | Pilchuck loamy sand                                   | 36.3            | 0.3%           |
| 85                                 | Pits, gravel                                          | 69.4            | 0.5%           |
| 88                                 | Puget silt loam                                       | 69.2            | 0.5%           |
| 89                                 | Puyallup silt loam                                    | 293.6           | 2.1%           |
| 98                                 | Salkum silty clay loam, 8 to 15 percent slopes        | 3.6             | 0.0%           |
| 102                                | Schneider very gravelly loam, 20 to 40 percent slopes | 271.5           | 1.9%           |
| 103                                | Schneider very gravelly loam, 40 to 65 percent slopes | 386.2           | 2.7%           |
| 104                                | Semiahmoo muck                                        | 232.2           | 1.6%           |
| 106                                | Shalcar variant muck                                  | 11.4            | 0.1%           |
| 108                                | Skipopa silt loam, 3 to 15 percent slopes             | 12.7            | 0.1%           |
| 109                                | Spana gravelly loam                                   | 10.1            | 0.1%           |
| 110                                | Spanaway gravelly sandy loam, 0 to 3 percent slopes   | 21.3            | 0.1%           |
| 115                                | Sultan silt loam                                      | 213.4           | 1.5%           |
| 120                                | Tisch silt loam                                       | 25.9            | 0.2%           |
| 125                                | Xerorthents, 0 to 5 percent slopes                    | 43.8            | 0.3%           |
| 126                                | Yelm fine sandy loam, 0 to 3 percent slopes           | 423.9           | 3.0%           |
| 127                                | Yelm fine sandy loam, 3 to 15 percent slopes          | 36.4            | 0.3%           |
| 128                                | Yelm fine sandy loam, 15 to 30 percent slopes         | 33.6            | 0.2%           |
| 129                                | Water                                                 | 308.0           | 2.2%           |
| <b>Totals for Area of Interest</b> |                                                       | <b>14,319.9</b> | <b>100.0%</b>  |

## 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.

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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.

## Thurston County Area, Washington

### 1—Alderwood gravelly sandy loam, 0 to 8 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2t625  
*Elevation:* 50 to 800 feet  
*Mean annual precipitation:* 25 to 60 inches  
*Mean annual air temperature:* 48 to 52 degrees F  
*Frost-free period:* 160 to 240 days  
*Farmland classification:* Prime farmland if irrigated

#### Map Unit Composition

*Alderwood and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Alderwood

##### Setting

*Landform:* Hills, ridges  
*Landform position (two-dimensional):* Summit  
*Landform position (three-dimensional):* Crest, talus  
*Down-slope shape:* Convex, linear  
*Across-slope shape:* Convex  
*Parent material:* Glacial drift and/or glacial outwash over dense glaciomarine deposits

##### Typical profile

*A - 0 to 7 inches:* gravelly sandy loam  
*Bw1 - 7 to 21 inches:* very gravelly sandy loam  
*Bw2 - 21 to 30 inches:* very gravelly sandy loam  
*Bg - 30 to 35 inches:* very gravelly sandy loam  
*2Cd1 - 35 to 43 inches:* very gravelly sandy loam  
*2Cd2 - 43 to 59 inches:* very gravelly sandy loam

##### Properties and qualities

*Slope:* 0 to 8 percent  
*Depth to restrictive feature:* 20 to 39 inches to densic material  
*Drainage class:* Moderately well drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)  
*Depth to water table:* About 18 to 37 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Very low (about 2.7 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4s  
*Hydrologic Soil Group:* B  
*Ecological site:* F002XA004WA - Puget Lowlands Forest  
*Forage suitability group:* Limited Depth Soils (G002XS301WA), Limited Depth Soils (G002XF303WA), Limited Depth Soils (G002XN302WA)

## Custom Soil Resource Report

*Other vegetative classification:* Limited Depth Soils (G002XS301WA), Limited Depth Soils (G002XF303WA), Limited Depth Soils (G002XN302WA)  
*Hydric soil rating:* No

### Minor Components

#### Everett

*Percent of map unit:* 5 percent  
*Landform:* Moraines, eskers, kames  
*Landform position (two-dimensional):* Summit, shoulder  
*Landform position (three-dimensional):* Crest, interfluve  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

#### Mckenna

*Percent of map unit:* 5 percent  
*Landform:* Drainageways, depressions  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Linear, concave  
*Across-slope shape:* Concave  
*Hydric soil rating:* Yes

#### Shalcar

*Percent of map unit:* 3 percent  
*Landform:* Depressions  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Hydric soil rating:* Yes

#### Norma

*Percent of map unit:* 2 percent  
*Landform:* Drainageways, depressions  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Linear, concave  
*Across-slope shape:* Concave  
*Hydric soil rating:* Yes

## 2—Alderwood gravelly sandy loam, 8 to 15 percent slopes

### Map Unit Setting

*National map unit symbol:* 2t626  
*Elevation:* 50 to 800 feet  
*Mean annual precipitation:* 20 to 60 inches  
*Mean annual air temperature:* 46 to 52 degrees F  
*Frost-free period:* 160 to 240 days  
*Farmland classification:* Prime farmland if irrigated

### Map Unit Composition

*Alderwood and similar soils:* 85 percent

## Custom Soil Resource Report

*Minor components: 15 percent*

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

### Description of Alderwood

#### Setting

*Landform: Hills, ridges*

*Landform position (two-dimensional): Shoulder*

*Landform position (three-dimensional): Nose slope, tal*

*Down-slope shape: Convex, linear*

*Across-slope shape: Convex*

*Parent material: Glacial drift and/or glacial outwash over dense glaciomarine deposits*

#### Typical profile

*A - 0 to 7 inches: gravelly sandy loam*

*Bw1 - 7 to 21 inches: very gravelly sandy loam*

*Bw2 - 21 to 30 inches: very gravelly sandy loam*

*Bg - 30 to 35 inches: very gravelly sandy loam*

*2Cd1 - 35 to 43 inches: very gravelly sandy loam*

*2Cd2 - 43 to 59 inches: very gravelly sandy loam*

#### Properties and qualities

*Slope: 8 to 15 percent*

*Depth to restrictive feature: 20 to 39 inches to densic material*

*Drainage class: Moderately well drained*

*Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)*

*Depth to water table: About 18 to 37 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Available water supply, 0 to 60 inches: Very low (about 2.7 inches)*

#### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 4s*

*Hydrologic Soil Group: B*

*Ecological site: F002XA004WA - Puget Lowlands Forest*

*Forage suitability group: Limited Depth Soils (G002XS301WA), Limited Depth Soils (G002XF303WA), Limited Depth Soils (G002XN302WA)*

*Other vegetative classification: Limited Depth Soils (G002XS301WA), Limited Depth Soils (G002XF303WA), Limited Depth Soils (G002XN302WA)*

*Hydric soil rating: No*

### Minor Components

#### Indianola

*Percent of map unit: 5 percent*

*Landform: Terraces, kames, eskers*

*Landform position (three-dimensional): Tread*

*Down-slope shape: Linear*

*Across-slope shape: Linear*

*Hydric soil rating: No*

#### Everett

*Percent of map unit: 5 percent*

*Landform: Moraines, eskers, kames*

## Custom Soil Resource Report

*Landform position (two-dimensional):* Shoulder, footslope  
*Landform position (three-dimensional):* Crest, base slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

### **Shalcar**

*Percent of map unit:* 3 percent  
*Landform:* Depressions  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Hydric soil rating:* Yes

### **Norma**

*Percent of map unit:* 2 percent  
*Landform:* Drainageways, depressions  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Linear, concave  
*Across-slope shape:* Concave  
*Hydric soil rating:* Yes

## **3—Alderwood gravelly sandy loam, 15 to 30 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 2t627  
*Elevation:* 0 to 1,000 feet  
*Mean annual precipitation:* 25 to 60 inches  
*Mean annual air temperature:* 46 to 52 degrees F  
*Frost-free period:* 160 to 240 days  
*Farmland classification:* Farmland of statewide importance

### **Map Unit Composition**

*Alderwood and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Alderwood**

#### **Setting**

*Landform:* Hills, ridges  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Nose slope, side slope, talus  
*Down-slope shape:* Convex, linear  
*Across-slope shape:* Convex  
*Parent material:* Glacial drift and/or glacial outwash over dense glaciomarine deposits

#### **Typical profile**

*A - 0 to 7 inches:* gravelly sandy loam  
*Bw1 - 7 to 21 inches:* very gravelly sandy loam

## Custom Soil Resource Report

*Bw2 - 21 to 30 inches:* very gravelly sandy loam  
*Bg - 30 to 35 inches:* very gravelly sandy loam  
*2Cd1 - 35 to 43 inches:* very gravelly sandy loam  
*2Cd2 - 43 to 59 inches:* very gravelly sandy loam

### Properties and qualities

*Slope:* 15 to 30 percent  
*Depth to restrictive feature:* 20 to 39 inches to densic material  
*Drainage class:* Moderately well drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)  
*Depth to water table:* About 18 to 37 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Very low (about 2.7 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* B  
*Ecological site:* F002XA004WA - Puget Lowlands Forest  
*Forage suitability group:* Limited Depth Soils (G002XS301WA), Limited Depth Soils (G002XF303WA), Limited Depth Soils (G002XN302WA)  
*Other vegetative classification:* Limited Depth Soils (G002XS301WA), Limited Depth Soils (G002XF303WA), Limited Depth Soils (G002XN302WA)  
*Hydric soil rating:* No

### Minor Components

#### Everett

*Percent of map unit:* 5 percent  
*Landform:* Moraines, eskers, kames  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

#### Indianola

*Percent of map unit:* 5 percent  
*Landform:* Terraces, kames, eskers  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

#### Shalcar

*Percent of map unit:* 3 percent  
*Landform:* Depressions  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Hydric soil rating:* Yes

#### Norma

*Percent of map unit:* 2 percent  
*Landform:* Drainageways, depressions

*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Linear, concave  
*Across-slope shape:* Concave  
*Hydric soil rating:* Yes

## 20—Cagey loamy sand

### Map Unit Setting

*National map unit symbol:* 2nd8d  
*Elevation:* 330 to 980 feet  
*Mean annual precipitation:* 40 to 60 inches  
*Mean annual air temperature:* 50 degrees F  
*Frost-free period:* 165 to 195 days  
*Farmland classification:* Prime farmland if irrigated

### Map Unit Composition

*Cagey and similar soils:* 85 percent  
*Minor components:* 5 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Cagey

#### Setting

*Landform:* Terraces  
*Parent material:* Sandy glacial drift

#### Typical profile

*H1 - 0 to 6 inches:* loamy sand  
*H2 - 6 to 28 inches:* loamy sand  
*H3 - 28 to 60 inches:* fine sand

#### Properties and qualities

*Slope:* 0 to 4 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Moderately well drained  
*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (5.95 to 19.98 in/hr)  
*Depth to water table:* About 18 to 30 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Low (about 4.0 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* A  
*Ecological site:* F002XA005WA - Puget Lowlands Moist Forest  
*Forage suitability group:* Seasonally Wet Soils (G002XS201WA)  
*Other vegetative classification:* Seasonally Wet Soils (G002XS201WA)  
*Hydric soil rating:* No

## Minor Components

### Mckenna

*Percent of map unit:* 5 percent

*Landform:* Depressions

*Other vegetative classification:* Wet Soils (G002XS101WA)

*Hydric soil rating:* Yes

## 27—Delphi very gravelly loam, 3 to 15 percent slopes

### Map Unit Setting

*National map unit symbol:* 2nd8m

*Elevation:* 330 to 3,280 feet

*Mean annual precipitation:* 50 to 75 inches

*Mean annual air temperature:* 50 degrees F

*Frost-free period:* 165 to 195 days

*Farmland classification:* Farmland of statewide importance

### Map Unit Composition

*Delphi and similar soils:* 100 percent

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

### Description of Delphi

#### Setting

*Landform:* Till plains

*Parent material:* Continental basal till

#### Typical profile

*H1 - 0 to 8 inches:* very gravelly loam

*H2 - 8 to 13 inches:* very gravelly loam

*H3 - 13 to 48 inches:* very gravelly silt loam

*H4 - 48 to 52 inches:* extremely gravelly clay loam

#### Properties and qualities

*Slope:* 3 to 15 percent

*Depth to restrictive feature:* 40 to 55 inches to densic material

*Drainage class:* Well drained

*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)

*Depth to water table:* About 39 to 54 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water supply, 0 to 60 inches:* Moderate (about 6.0 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4s

*Hydrologic Soil Group:* B

*Ecological site:* F002XA007WA - Puget Lowlands Wet Forest

*Forage suitability group:* Droughty Soils (G001XY402WA)  
*Other vegetative classification:* Droughty Soils (G001XY402WA)  
*Hydric soil rating:* No

### **30—Dystric Xerochrepts, 60 to 90 percent slopes**

#### **Map Unit Setting**

*National map unit symbol:* 2nd8r  
*Elevation:* 0 to 3,280 feet  
*Mean annual precipitation:* 50 inches  
*Mean annual air temperature:* 50 degrees F  
*Frost-free period:* 180 days  
*Farmland classification:* Not prime farmland

#### **Map Unit Composition**

*Dystric xerochrepts and similar soils:* 85 percent  
*Minor components:* 5 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### **Description of Dystric Xerochrepts**

##### **Setting**

*Landform:* Escarpments  
*Parent material:* Colluvium and glacial till

##### **Typical profile**

*H1 - 0 to 4 inches:* very gravelly sandy loam  
*H2 - 4 to 30 inches:* very gravelly sandy loam  
*H3 - 30 to 34 inches:* very gravelly sandy loam

##### **Properties and qualities**

*Slope:* 60 to 90 percent  
*Depth to restrictive feature:* 20 to 72 inches to densic material  
*Drainage class:* Well drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 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:* Very low (about 2.1 inches)

##### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* C  
*Hydric soil rating:* No

#### **Minor Components**

##### **Skipopa**

*Percent of map unit:* 5 percent  
*Hydric soil rating:* No

### 32—Everett very gravelly sandy loam, 0 to 8 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2t629

*Elevation:* 30 to 900 feet

*Mean annual precipitation:* 35 to 91 inches

*Mean annual air temperature:* 48 to 52 degrees F

*Frost-free period:* 180 to 240 days

*Farmland classification:* Farmland of statewide importance

#### Map Unit Composition

*Everett and similar soils:* 80 percent

*Minor components:* 20 percent

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

#### Description of Everett

##### Setting

*Landform:* Kames, moraines, eskers

*Landform position (two-dimensional):* Summit, shoulder

*Landform position (three-dimensional):* Crest, interfluvium

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Parent material:* Sandy and gravelly glacial outwash

##### Typical profile

*O<sub>i</sub> - 0 to 1 inches:* slightly decomposed plant material

*A - 1 to 3 inches:* very gravelly sandy loam

*B<sub>w</sub> - 3 to 24 inches:* very gravelly sandy loam

*C<sub>1</sub> - 24 to 35 inches:* very gravelly loamy sand

*C<sub>2</sub> - 35 to 60 inches:* extremely cobbly coarse sand

##### Properties and qualities

*Slope:* 0 to 8 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Somewhat excessively drained

*Capacity of the most limiting layer to transmit water (K<sub>sat</sub>):* High (1.98 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 3.2 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4s

*Hydrologic Soil Group:* A

*Ecological site:* F002XA004WA - Puget Lowlands Forest

*Forage suitability group:* Droughty Soils (G002XS401WA), Droughty Soils (G002XF403WA), Droughty Soils (G002XN402WA)

## Custom Soil Resource Report

*Other vegetative classification:* Droughty Soils (G002XS401WA), Droughty Soils (G002XF403WA), Droughty Soils (G002XN402WA)  
*Hydric soil rating:* No

### Minor Components

#### Indianola

*Percent of map unit:* 10 percent  
*Landform:* Terraces, kames, eskers  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

#### Alderwood

*Percent of map unit:* 10 percent  
*Landform:* Hills, ridges  
*Landform position (two-dimensional):* Summit  
*Landform position (three-dimensional):* Crest, talf  
*Down-slope shape:* Convex, linear  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

## 33—Everett very gravelly sandy loam, 8 to 15 percent slopes

### Map Unit Setting

*National map unit symbol:* 2t62b  
*Elevation:* 30 to 900 feet  
*Mean annual precipitation:* 35 to 91 inches  
*Mean annual air temperature:* 48 to 52 degrees F  
*Frost-free period:* 180 to 240 days  
*Farmland classification:* Farmland of statewide importance

### Map Unit Composition

*Everett and similar soils:* 80 percent  
*Minor components:* 20 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Everett

#### Setting

*Landform:* Moraines, eskers, kames  
*Landform position (two-dimensional):* Shoulder, footslope  
*Landform position (three-dimensional):* Crest, base slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Sandy and gravelly glacial outwash

#### Typical profile

*Oi - 0 to 1 inches:* slightly decomposed plant material  
*A - 1 to 3 inches:* very gravelly sandy loam

## Custom Soil Resource Report

*Bw - 3 to 24 inches:* very gravelly sandy loam  
*C1 - 24 to 35 inches:* very gravelly loamy sand  
*C2 - 35 to 60 inches:* extremely cobbly coarse sand

### Properties and qualities

*Slope:* 8 to 15 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Somewhat excessively drained  
*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 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 3.2 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4s  
*Hydrologic Soil Group:* A  
*Ecological site:* F002XA004WA - Puget Lowlands Forest  
*Forage suitability group:* Droughty Soils (G002XS401WA), Droughty Soils (G002XF403WA), Droughty Soils (G002XN402WA)  
*Other vegetative classification:* Droughty Soils (G002XS401WA), Droughty Soils (G002XF403WA), Droughty Soils (G002XN402WA)  
*Hydric soil rating:* No

### Minor Components

#### Alderwood

*Percent of map unit:* 10 percent  
*Landform:* Hills, ridges  
*Landform position (two-dimensional):* Shoulder  
*Landform position (three-dimensional):* Nose slope, talus  
*Down-slope shape:* Convex, linear  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

#### Indianola

*Percent of map unit:* 10 percent  
*Landform:* Terraces, kames, eskers  
*Landform position (three-dimensional):* Riser  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

## 34—Everett very gravelly sandy loam, 15 to 30 percent slopes

### Map Unit Setting

*National map unit symbol:* 2t62c  
*Elevation:* 30 to 900 feet  
*Mean annual precipitation:* 35 to 91 inches

## Custom Soil Resource Report

*Mean annual air temperature:* 48 to 52 degrees F

*Frost-free period:* 180 to 240 days

*Farmland classification:* Farmland of statewide importance

### Map Unit Composition

*Everett and similar soils:* 80 percent

*Minor components:* 20 percent

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

### Description of Everett

#### Setting

*Landform:* Moraines, eskers, kames

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Parent material:* Sandy and gravelly glacial outwash

#### Typical profile

*Oi - 0 to 1 inches:* slightly decomposed plant material

*A - 1 to 3 inches:* very gravelly sandy loam

*Bw - 3 to 24 inches:* very gravelly sandy loam

*C1 - 24 to 35 inches:* very gravelly loamy sand

*C2 - 35 to 60 inches:* extremely cobbly coarse sand

#### Properties and qualities

*Slope:* 15 to 30 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Somewhat excessively drained

*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 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 3.2 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4e

*Hydrologic Soil Group:* A

*Ecological site:* F002XA004WA - Puget Lowlands Forest

*Forage suitability group:* Droughty Soils (G002XS401WA), Droughty Soils (G002XN402WA)

*Other vegetative classification:* Droughty Soils (G002XS401WA), Droughty Soils (G002XN402WA)

*Hydric soil rating:* No

### Minor Components

#### Alderwood

*Percent of map unit:* 10 percent

*Landform:* Hills, ridges

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Nose slope, side slope, talus

*Down-slope shape:* Convex, linear

*Across-slope shape:* Convex

*Hydric soil rating:* No

**Indianola**

*Percent of map unit:* 10 percent

*Landform:* Terraces, kames, eskers

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Hydric soil rating:* No

**35—Everett very gravelly sandy loam, 30 to 50 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 2t62d

*Elevation:* 30 to 900 feet

*Mean annual precipitation:* 35 to 91 inches

*Mean annual air temperature:* 48 to 52 degrees F

*Frost-free period:* 180 to 240 days

*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Everett and similar soils:* 80 percent

*Minor components:* 20 percent

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

**Description of Everett**

**Setting**

*Landform:* Moraines, eskers, kames

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Parent material:* Sandy and gravelly glacial outwash

**Typical profile**

*Oi - 0 to 1 inches:* slightly decomposed plant material

*A - 1 to 3 inches:* very gravelly sandy loam

*Bw - 3 to 24 inches:* very gravelly sandy loam

*C1 - 24 to 35 inches:* very gravelly loamy sand

*C2 - 35 to 60 inches:* extremely cobbly coarse sand

**Properties and qualities**

*Slope:* 30 to 50 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Somewhat excessively drained

*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

## Custom Soil Resource Report

*Frequency of ponding:* None

*Available water supply, 0 to 60 inches:* Low (about 3.2 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7e

*Hydrologic Soil Group:* A

*Ecological site:* F002XA004WA - Puget Lowlands Forest

*Hydric soil rating:* No

### Minor Components

#### Indianola

*Percent of map unit:* 10 percent

*Landform:* Terraces, kames, eskers

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Hydric soil rating:* No

#### Alderwood

*Percent of map unit:* 10 percent

*Landform:* Hills, ridges

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Nose slope, side slope, talf

*Down-slope shape:* Convex, linear

*Across-slope shape:* Convex

*Hydric soil rating:* No

## 38—Giles silt loam, 0 to 3 percent slopes

### Map Unit Setting

*National map unit symbol:* 2ndbv

*Elevation:* 160 to 1,640 feet

*Mean annual precipitation:* 35 to 60 inches

*Mean annual air temperature:* 50 degrees F

*Frost-free period:* 170 to 200 days

*Farmland classification:* All areas are prime farmland

### Map Unit Composition

*Giles and similar soils:* 85 percent

*Minor components:* 5 percent

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

### Description of Giles

#### Setting

*Landform:* Terraces

*Parent material:* Volcanic ash and glacial outwash

**Typical profile**

*H1 - 0 to 10 inches:* silt loam  
*H2 - 10 to 48 inches:* silt loam  
*H3 - 48 to 60 inches:* silt loam

**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):* Moderately high to high  
(0.57 to 1.98 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:* Very high (about 14.6 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 1  
*Hydrologic Soil Group:* B  
*Ecological site:* F002XA004WA - Puget Lowlands Forest  
*Forage suitability group:* Soils with Few Limitations (G002XS501WA)  
*Other vegetative classification:* Soils with Few Limitations (G002XS501WA)  
*Hydric soil rating:* No

**Minor Components**

**Yelm**

*Percent of map unit:* 3 percent  
*Landform:* Terraces  
*Hydric soil rating:* No

**Norma**

*Percent of map unit:* 2 percent  
*Landform:* Depressions  
*Other vegetative classification:* Wet Soils (G002XS101WA)  
*Hydric soil rating:* Yes

**39—Giles silt loam, 3 to 15 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 2ndbw  
*Elevation:* 160 to 1,640 feet  
*Mean annual precipitation:* 35 to 60 inches  
*Mean annual air temperature:* 50 degrees F  
*Frost-free period:* 170 to 200 days  
*Farmland classification:* Farmland of statewide importance

**Map Unit Composition**

*Giles and similar soils:* 85 percent

## Custom Soil Resource Report

*Minor components: 5 percent*

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

### Description of Giles

#### Setting

*Landform: Terraces*

*Parent material: Volcanic ash and glacial outwash*

#### Typical profile

*H1 - 0 to 10 inches: silt loam*

*H2 - 10 to 48 inches: silt loam*

*H3 - 48 to 60 inches: silt loam*

#### Properties and qualities

*Slope: 3 to 15 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 1.98 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: Very high (about 14.6 inches)*

#### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 3e*

*Hydrologic Soil Group: B*

*Ecological site: F002XA004WA - Puget Lowlands Forest*

*Forage suitability group: Soils with Moderate Limitations (G002XN602WA)*

*Other vegetative classification: Soils with Moderate Limitations (G002XN602WA)*

*Hydric soil rating: No*

### Minor Components

#### Yelm

*Percent of map unit: 5 percent*

*Hydric soil rating: No*

## 40—Giles silt loam, 15 to 30 percent slopes

#### Map Unit Setting

*National map unit symbol: 2nd8v*

*Elevation: 160 to 1,640 feet*

*Mean annual precipitation: 35 to 60 inches*

*Mean annual air temperature: 50 degrees F*

*Frost-free period: 170 to 200 days*

*Farmland classification: Farmland of statewide importance*

**Map Unit Composition**

*Giles and similar soils:* 85 percent

*Minor components:* 5 percent

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

**Description of Giles**

**Setting**

*Landform:* Escarpments

*Parent material:* Volcanic ash and glacial outwash

**Typical profile**

*H1 - 0 to 10 inches:* silt loam

*H2 - 10 to 48 inches:* silt loam

*H3 - 48 to 60 inches:* silt loam

**Properties and qualities**

*Slope:* 15 to 30 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 1.98 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:* Very high (about 14.6 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4e

*Hydrologic Soil Group:* B

*Ecological site:* F002XA004WA - Puget Lowlands Forest

*Forage suitability group:* Sloping to Steep Soils (G002XN702WA)

*Other vegetative classification:* Sloping to Steep Soils (G002XN702WA)

*Hydric soil rating:* No

**Minor Components**

**Yelm**

*Percent of map unit:* 5 percent

*Landform:* Terraces

*Hydric soil rating:* No

**41—Godfrey silty clay loam**

**Map Unit Setting**

*National map unit symbol:* 2nd8w

*Elevation:* 20 to 300 feet

*Mean annual precipitation:* 40 to 65 inches

*Mean annual air temperature:* 50 to 54 degrees F

## Custom Soil Resource Report

*Frost-free period:* 150 to 200 days

*Farmland classification:* Prime farmland if drained

### Map Unit Composition

*Godfrey, drained, and similar soils:* 85 percent

*Minor components:* 15 percent

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

### Description of Godfrey, Drained

#### Setting

*Landform:* Flood plains

*Parent material:* Alluvium

#### Typical profile

*H1 - 0 to 8 inches:* silty clay loam

*H2 - 8 to 52 inches:* silty clay

*H3 - 52 to 60 inches:* silty clay

#### Properties and qualities

*Slope:* 0 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Poorly drained

*Capacity of the most limiting layer to transmit water (Ksat):* Very low (0.00 in/hr)

*Depth to water table:* About 12 to 24 inches

*Frequency of flooding:* Occasional

*Frequency of ponding:* None

*Available water supply, 0 to 60 inches:* High (about 9.7 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4w

*Hydrologic Soil Group:* C/D

*Ecological site:* F002XA008WA - Puget Lowlands Riparian Forest

*Forage suitability group:* Seasonally Wet Soils (G002XS201WA)

*Other vegetative classification:* Seasonally Wet Soils (G002XS201WA)

*Hydric soil rating:* Yes

### Minor Components

#### Sultan

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

#### Godfrey, undrained

*Percent of map unit:* 5 percent

*Landform:* Depressions

*Other vegetative classification:* Wet Soils (G002XS101WA)

*Hydric soil rating:* Yes

#### Newberg

*Percent of map unit:* 3 percent

*Hydric soil rating:* No

#### Puget, undrained

*Percent of map unit:* 2 percent

*Landform:* Depressions

*Other vegetative classification:* Wet Soils (G002XS101WA)

*Hydric soil rating: Yes*

## **45—Hydraquents, tidal**

### **Map Unit Setting**

*National map unit symbol: 2nd90*

*Elevation: 0 to 100 feet*

*Mean annual precipitation: 20 to 30 inches*

*Mean annual air temperature: 48 to 52 degrees F*

*Frost-free period: 170 to 210 days*

*Farmland classification: Not prime farmland*

### **Map Unit Composition**

*Hydraquents, tidal, and similar soils: 100 percent*

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

### **Description of Hydraquents, Tidal**

#### **Setting**

*Landform: Tidal flats*

*Parent material: Alluvium*

#### **Typical profile**

*H1 - 0 to 6 inches: fine sandy loam*

*H2 - 6 to 60 inches: stratified fine sandy loam to silty clay loam*

#### **Properties and qualities**

*Slope: 0 to 1 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 0 inches*

*Frequency of flooding: Very frequent*

*Frequency of ponding: None*

*Maximum salinity: Moderately saline to strongly saline (8.0 to 16.0 mmhos/cm)*

*Sodium adsorption ratio, maximum: 10.0*

*Available water supply, 0 to 60 inches: High (about 10.0 inches)*

#### **Interpretive groups**

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 6w*

*Hydrologic Soil Group: B/D*

*Hydric soil rating: Yes*

## 46—Indianola loamy sand, 0 to 5 percent slopes

### Map Unit Setting

*National map unit symbol:* 2t62k  
*Elevation:* 0 to 980 feet  
*Mean annual precipitation:* 30 to 81 inches  
*Mean annual air temperature:* 48 to 50 degrees F  
*Frost-free period:* 170 to 210 days  
*Farmland classification:* Prime farmland if irrigated

### Map Unit Composition

*Indianola and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Indianola

#### Setting

*Landform:* Terraces, eskers, kames  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Sandy glacial outwash

#### Typical profile

*Oi - 0 to 1 inches:* slightly decomposed plant material  
*A - 1 to 6 inches:* loamy sand  
*Bw1 - 6 to 17 inches:* loamy sand  
*Bw2 - 17 to 27 inches:* sand  
*BC - 27 to 37 inches:* sand  
*C - 37 to 60 inches:* sand

#### Properties and qualities

*Slope:* 0 to 5 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Somewhat excessively drained  
*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (5.95 to 99.90 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 3.9 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 4s  
*Land capability classification (nonirrigated):* 4s  
*Hydrologic Soil Group:* A  
*Ecological site:* F002XA004WA - Puget Lowlands Forest  
*Forage suitability group:* Droughty Soils (G002XS401WA), Droughty Soils (G002XF403WA), Droughty Soils (G002XN402WA), Droughty Soils (G002XV402WA)

## Custom Soil Resource Report

*Other vegetative classification:* Droughty Soils (G002XS401WA), Droughty Soils (G002XF403WA), Droughty Soils (G002XN402WA), Droughty Soils (G002XV402WA)

*Hydric soil rating:* No

### Minor Components

#### Alderwood

*Percent of map unit:* 5 percent

*Landform:* Ridges, hills

*Landform position (two-dimensional):* Summit

*Landform position (three-dimensional):* Crest, talus

*Down-slope shape:* Linear, convex

*Across-slope shape:* Convex

*Hydric soil rating:* No

#### Everett

*Percent of map unit:* 5 percent

*Landform:* Eskers, moraines, kames

*Landform position (two-dimensional):* Summit, shoulder

*Landform position (three-dimensional):* Interfluve, crest

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Hydric soil rating:* No

#### Norma

*Percent of map unit:* 5 percent

*Landform:* Depressions, drainageways

*Landform position (three-dimensional):* Dip

*Down-slope shape:* Concave, linear

*Across-slope shape:* Concave

*Hydric soil rating:* Yes

## 47—Indianola loamy sand, 5 to 15 percent slopes

### Map Unit Setting

*National map unit symbol:* 2t635

*Elevation:* 0 to 980 feet

*Mean annual precipitation:* 30 to 81 inches

*Mean annual air temperature:* 48 to 50 degrees F

*Frost-free period:* 170 to 210 days

*Farmland classification:* Prime farmland if irrigated

### Map Unit Composition

*Indianola and similar soils:* 85 percent

*Minor components:* 15 percent

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

## Description of Indianola

### Setting

*Landform:* Terraces, kames, eskers  
*Landform position (three-dimensional):* Riser  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Sandy glacial outwash

### Typical profile

*Oi - 0 to 1 inches:* slightly decomposed plant material  
*A - 1 to 6 inches:* loamy sand  
*Bw1 - 6 to 17 inches:* loamy sand  
*Bw2 - 17 to 27 inches:* sand  
*BC - 27 to 37 inches:* sand  
*C - 37 to 60 inches:* sand

### Properties and qualities

*Slope:* 5 to 15 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Somewhat excessively drained  
*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (5.95 to 99.90 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 3.9 inches)

### Interpretive groups

*Land capability classification (irrigated):* 4e  
*Land capability classification (nonirrigated):* 4s  
*Hydrologic Soil Group:* A  
*Ecological site:* F002XA004WA - Puget Lowlands Forest  
*Forage suitability group:* Droughty Soils (G002XS401WA), Droughty Soils (G002XN402WA)  
*Other vegetative classification:* Droughty Soils (G002XS401WA), Droughty Soils (G002XN402WA)  
*Hydric soil rating:* No

## Minor Components

### Alderwood

*Percent of map unit:* 8 percent  
*Landform:* Hills, ridges  
*Landform position (two-dimensional):* Shoulder  
*Landform position (three-dimensional):* Nose slope, talus  
*Down-slope shape:* Convex, linear  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

### Everett

*Percent of map unit:* 5 percent  
*Landform:* Moraines, eskers, kames  
*Landform position (two-dimensional):* Shoulder, footslope  
*Landform position (three-dimensional):* Crest, base slope  
*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Hydric soil rating:* No

**Norma**

*Percent of map unit:* 2 percent

*Landform:* Drainageways, depressions

*Landform position (three-dimensional):* Dip

*Down-slope shape:* Linear, concave

*Across-slope shape:* Concave

*Hydric soil rating:* Yes

## **48—Indianola loamy sand, 15 to 30 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 2t639

*Elevation:* 0 to 980 feet

*Mean annual precipitation:* 30 to 81 inches

*Mean annual air temperature:* 48 to 50 degrees F

*Frost-free period:* 170 to 210 days

*Farmland classification:* Farmland of statewide importance

**Map Unit Composition**

*Indianola and similar soils:* 85 percent

*Minor components:* 15 percent

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

**Description of Indianola**

**Setting**

*Landform:* Terraces, kames, eskers

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Sandy glacial outwash

**Typical profile**

*Oi - 0 to 1 inches:* slightly decomposed plant material

*A - 1 to 6 inches:* loamy sand

*Bw1 - 6 to 17 inches:* loamy sand

*Bw2 - 17 to 27 inches:* sand

*BC - 27 to 37 inches:* sand

*C - 37 to 60 inches:* sand

**Properties and qualities**

*Slope:* 15 to 30 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Somewhat excessively drained

*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (5.95 to 99.90 in/hr)

*Depth to water table:* More than 80 inches

## Custom Soil Resource Report

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water supply, 0 to 60 inches:* Low (about 3.9 inches)

### Interpretive groups

*Land capability classification (irrigated):* 6e

*Land capability classification (nonirrigated):* 4e

*Hydrologic Soil Group:* A

*Ecological site:* F002XA004WA - Puget Lowlands Forest

*Forage suitability group:* Droughty Soils (G002XS401WA), Droughty Soils (G002XN402WA)

*Other vegetative classification:* Droughty Soils (G002XS401WA), Droughty Soils (G002XN402WA)

*Hydric soil rating:* No

### Minor Components

#### Alderwood

*Percent of map unit:* 8 percent

*Landform:* Hills, ridges

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Nose slope, side slope, talf

*Down-slope shape:* Convex, linear

*Across-slope shape:* Convex

*Hydric soil rating:* No

#### Everett

*Percent of map unit:* 5 percent

*Landform:* Moraines, eskers, kames

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Hydric soil rating:* No

#### Norma

*Percent of map unit:* 2 percent

*Landform:* Drainageways, depressions

*Landform position (three-dimensional):* Dip

*Down-slope shape:* Linear, concave

*Across-slope shape:* Concave

*Hydric soil rating:* Yes

## 51—Kapowsin silt loam, 3 to 15 percent slopes

### Map Unit Setting

*National map unit symbol:* 2ndbx

*Elevation:* 50 to 900 feet

*Mean annual precipitation:* 30 to 50 inches

*Mean annual air temperature:* 48 to 52 degrees F

*Frost-free period:* 150 to 220 days

## Custom Soil Resource Report

*Farmland classification:* Farmland of statewide importance

### Map Unit Composition

*Kapowsin and similar soils:* 85 percent

*Minor components:* 8 percent

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

### Description of Kapowsin

#### Setting

*Landform:* Till plains

*Parent material:* Compact basal till

#### Typical profile

*H1 - 0 to 4 inches:* silt loam

*H2 - 4 to 22 inches:* silt loam

*H3 - 22 to 30 inches:* gravelly loam

*H4 - 30 to 34 inches:* gravelly loam

#### Properties and qualities

*Slope:* 3 to 15 percent

*Depth to restrictive feature:* 20 to 40 inches to densic material

*Drainage class:* Moderately well drained

*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)

*Depth to water table:* About 12 to 24 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water supply, 0 to 60 inches:* Moderate (about 6.1 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3e

*Hydrologic Soil Group:* C/D

*Ecological site:* F002XA004WA - Puget Lowlands Forest

*Forage suitability group:* Limited Depth Soils (G002XN302WA)

*Other vegetative classification:* Limited Depth Soils (G002XN302WA)

*Hydric soil rating:* No

### Minor Components

#### Norma

*Percent of map unit:* 5 percent

*Landform:* Depressions

*Other vegetative classification:* Wet Soils (G002XS101WA)

*Hydric soil rating:* Yes

#### Skipopa

*Percent of map unit:* 3 percent

*Other vegetative classification:* Seasonally Wet Soils (G002XN202WA)

*Hydric soil rating:* No

## 52—Kapowsin silt loam, 15 to 30 percent slopes

### Map Unit Setting

*National map unit symbol:* 2ndby

*Elevation:* 50 to 900 feet

*Mean annual precipitation:* 30 to 50 inches

*Mean annual air temperature:* 48 to 52 degrees F

*Frost-free period:* 150 to 220 days

*Farmland classification:* Farmland of statewide importance

### Map Unit Composition

*Kapowsin and similar soils:* 85 percent

*Minor components:* 10 percent

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

### Description of Kapowsin

#### Setting

*Landform:* Till plains

*Parent material:* Compact basal till

#### Typical profile

*H1 - 0 to 4 inches:* silt loam

*H2 - 4 to 22 inches:* silt loam

*H3 - 22 to 30 inches:* gravelly loam

*H4 - 30 to 34 inches:* gravelly loam

### Properties and qualities

*Slope:* 15 to 30 percent

*Depth to restrictive feature:* 20 to 40 inches to densic material

*Drainage class:* Moderately well drained

*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)

*Depth to water table:* About 12 to 24 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water supply, 0 to 60 inches:* Moderate (about 6.1 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4e

*Hydrologic Soil Group:* C/D

*Ecological site:* F002XA004WA - Puget Lowlands Forest

*Forage suitability group:* Limited Depth Soils (G002XN302WA)

*Other vegetative classification:* Limited Depth Soils (G002XN302WA)

*Hydric soil rating:* No

## Minor Components

### Hoogdal

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

### Indianola

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

## 53—Kapowsin silt loam, 30 to 50 percent slopes

### Map Unit Setting

*National map unit symbol:* 2ndbz

*Elevation:* 50 to 900 feet

*Mean annual precipitation:* 30 to 50 inches

*Mean annual air temperature:* 48 to 52 degrees F

*Frost-free period:* 150 to 220 days

*Farmland classification:* Not prime farmland

### Map Unit Composition

*Kapowsin and similar soils:* 85 percent

*Minor components:* 5 percent

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

### Description of Kapowsin

#### Setting

*Landform:* Till plains

*Parent material:* Compact basal till

#### Typical profile

*H1 - 0 to 4 inches:* silt loam

*H2 - 4 to 22 inches:* silt loam

*H3 - 22 to 30 inches:* gravelly loam

*H4 - 30 to 34 inches:* gravelly loam

#### Properties and qualities

*Slope:* 30 to 50 percent

*Depth to restrictive feature:* 20 to 40 inches to densic material

*Drainage class:* Moderately well drained

*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)

*Depth to water table:* About 12 to 24 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water supply, 0 to 60 inches:* Moderate (about 6.1 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7e

## Custom Soil Resource Report

*Hydrologic Soil Group:* C/D

*Ecological site:* F002XA004WA - Puget Lowlands Forest

*Hydric soil rating:* No

### Minor Components

#### Hoogdal

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

## 65—McKenna gravelly silt loam, 0 to 5 percent slopes

### Map Unit Setting

*National map unit symbol:* 2nd9g

*Elevation:* 50 to 500 feet

*Mean annual precipitation:* 30 to 60 inches

*Mean annual air temperature:* 48 to 52 degrees F

*Frost-free period:* 150 to 180 days

*Farmland classification:* Prime farmland if drained

### Map Unit Composition

*Mckenna and similar soils:* 85 percent

*Minor components:* 15 percent

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

### Description of McKenna

#### Setting

*Landform:* Depressions, drainageways

*Parent material:* Glacial drift

#### Typical profile

*H1 - 0 to 9 inches:* gravelly silt loam

*H2 - 9 to 13 inches:* gravelly silt loam

*H3 - 13 to 36 inches:* very gravelly loam

*H4 - 36 to 40 inches:* very gravelly loam

### Properties and qualities

*Slope:* 0 to 5 percent

*Depth to restrictive feature:* 20 to 39 inches to densic material

*Drainage class:* Poorly drained

*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)

*Depth to water table:* About 0 to 6 inches

*Frequency of flooding:* None

*Frequency of ponding:* Frequent

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

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 6w

## Custom Soil Resource Report

*Hydrologic Soil Group:* D

*Ecological site:* F002XA007WA - Puget Lowlands Wet Forest

*Forage suitability group:* Wet Soils (G002XS101WA)

*Other vegetative classification:* Wet Soils (G002XS101WA)

*Hydric soil rating:* Yes

### Minor Components

#### **Bellingham, undrained**

*Percent of map unit:* 5 percent

*Landform:* Depressions

*Other vegetative classification:* Wet Soils (G002XN102WA)

*Hydric soil rating:* Yes

#### **Norma**

*Percent of map unit:* 5 percent

*Landform:* Depressions

*Other vegetative classification:* Wet Soils (G002XS101WA)

*Hydric soil rating:* Yes

#### **Skipopa**

*Percent of map unit:* 5 percent

*Other vegetative classification:* Seasonally Wet Soils (G002XN202WA)

*Hydric soil rating:* No

## 69—Mukilteo muck

### **Map Unit Setting**

*National map unit symbol:* 2nd9l

*Elevation:* 0 to 1,000 feet

*Mean annual precipitation:* 40 to 70 inches

*Mean annual air temperature:* 48 to 52 degrees F

*Frost-free period:* 150 to 250 days

*Farmland classification:* Prime farmland if drained

### **Map Unit Composition**

*Mukilteo, undrained, and similar soils:* 90 percent

*Minor components:* 10 percent

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

### **Description of Mukilteo, Undrained**

#### **Setting**

*Landform:* Depressions

*Parent material:* Herbaceous organic material

#### **Typical profile**

*Oa - 0 to 6 inches:* muck

*Oe - 6 to 60 inches:* mucky peat

#### **Properties and qualities**

*Slope:* 0 to 2 percent

## Custom Soil Resource Report

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Very 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 0 inches

*Frequency of flooding:* None

*Frequency of ponding:* Frequent

*Available water supply, 0 to 60 inches:* Very high (about 26.9 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 5w

*Hydrologic Soil Group:* B/D

*Ecological site:* R002XA003WA - Puget Lowlands Bogs and Fens

*Forage suitability group:* Wet Soils (G002XS101WA)

*Other vegetative classification:* Wet Soils (G002XS101WA)

*Hydric soil rating:* Yes

### Minor Components

#### Shalcar

*Percent of map unit:* 10 percent

*Landform:* Depressions

*Other vegetative classification:* Wet Soils (G002XS101WA)

*Hydric soil rating:* Yes

## 70—Mukilteo muck, drained

### Map Unit Setting

*National map unit symbol:* 2ndc5

*Elevation:* 0 to 1,000 feet

*Mean annual precipitation:* 40 to 70 inches

*Mean annual air temperature:* 48 to 52 degrees F

*Frost-free period:* 150 to 250 days

*Farmland classification:* Prime farmland if drained

### Map Unit Composition

*Mukilteo, drained, and similar soils:* 90 percent

*Minor components:* 10 percent

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

### Description of Mukilteo, Drained

#### Setting

*Landform:* Depressions

*Parent material:* Herbaceous organic material

#### Typical profile

*Oa - 0 to 6 inches:* muck

*Oe2 - 6 to 60 inches:* mucky peat

**Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Very 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 0 to 24 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Very high (about 26.9 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 5w  
*Hydrologic Soil Group:* B/D  
*Ecological site:* R002XA003WA - Puget Lowlands Bogs and Fens  
*Forage suitability group:* Seasonally Wet Soils (G002XS201WA)  
*Other vegetative classification:* Seasonally Wet Soils (G002XS201WA)  
*Hydric soil rating:* Yes

**Minor Components**

**Shalcar**

*Percent of map unit:* 5 percent  
*Landform:* Depressions  
*Other vegetative classification:* Wet Soils (G002XS101WA)  
*Hydric soil rating:* Yes

**Mukilteo, undrained**

*Percent of map unit:* 5 percent  
*Landform:* Depressions  
*Other vegetative classification:* Wet Soils (G002XS101WA)  
*Hydric soil rating:* Yes

**73—Nisqually loamy fine sand, 0 to 3 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 2ndc8  
*Elevation:* 160 to 1,310 feet  
*Mean annual precipitation:* 40 to 60 inches  
*Mean annual air temperature:* 50 degrees F  
*Frost-free period:* 150 to 200 days  
*Farmland classification:* Prime farmland if irrigated

**Map Unit Composition**

*Nisqually and similar soils:* 85 percent  
*Minor components:* 5 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

## Description of Nisqually

### Setting

*Landform:* Terraces

*Parent material:* Sandy glacial outwash

### Typical profile

*H1 - 0 to 5 inches:* loamy fine sand

*H2 - 5 to 31 inches:* loamy fine sand

*H3 - 31 to 60 inches:* loamy sand

### Properties and qualities

*Slope:* 0 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Somewhat excessively drained

*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 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 4.9 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3s

*Hydrologic Soil Group:* A

*Ecological site:* R002XA006WA - Puget Lowlands Prairie

*Forage suitability group:* Droughty Soils (G002XS401WA)

*Other vegetative classification:* Droughty Soils (G002XS401WA)

*Hydric soil rating:* No

## Minor Components

### Yelm

*Percent of map unit:* 3 percent

*Hydric soil rating:* No

### Norma

*Percent of map unit:* 2 percent

*Landform:* Depressions

*Other vegetative classification:* Wet Soils (G002XS101WA)

*Hydric soil rating:* Yes

## 74—Nisqually loamy fine sand, 3 to 15 percent slopes

### Map Unit Setting

*National map unit symbol:* 2ndc9

*Elevation:* 160 to 1,310 feet

*Mean annual precipitation:* 40 to 60 inches

*Mean annual air temperature:* 50 degrees F

*Frost-free period:* 150 to 200 days

## Custom Soil Resource Report

*Farmland classification:* Farmland of statewide importance

### Map Unit Composition

*Nisqually and similar soils:* 85 percent

*Minor components:* 5 percent

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

### Description of Nisqually

#### Setting

*Landform:* Terraces

*Parent material:* Sandy glacial outwash

#### Typical profile

*H1 - 0 to 5 inches:* loamy fine sand

*H2 - 5 to 31 inches:* loamy fine sand

*H3 - 31 to 60 inches:* loamy sand

#### Properties and qualities

*Slope:* 3 to 15 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Somewhat excessively drained

*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 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 4.9 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3e

*Hydrologic Soil Group:* A

*Ecological site:* R002XA006WA - Puget Lowlands Prairie

*Forage suitability group:* Droughty Soils (G002XS401WA)

*Other vegetative classification:* Droughty Soils (G002XS401WA)

*Hydric soil rating:* No

### Minor Components

#### Yelm

*Percent of map unit:* 3 percent

*Hydric soil rating:* No

#### Norma

*Percent of map unit:* 2 percent

*Landform:* Depressions

*Other vegetative classification:* Wet Soils (G002XS101WA)

*Hydric soil rating:* Yes

## 75—Norma fine sandy loam

### Map Unit Setting

*National map unit symbol:* 2ndcb  
*Elevation:* 0 to 1,000 feet  
*Mean annual precipitation:* 35 to 60 inches  
*Mean annual air temperature:* 48 to 52 degrees F  
*Frost-free period:* 150 to 200 days  
*Farmland classification:* Prime farmland if drained

### Map Unit Composition

*Norma, fine sandy loam, and similar soils:* 90 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Norma, Fine Sandy Loam

#### Setting

*Landform:* Depressions, drainageways  
*Parent material:* Alluvium

#### Typical profile

*H1 - 0 to 7 inches:* fine sandy loam  
*H2 - 7 to 25 inches:* fine sandy loam  
*H3 - 25 to 60 inches:* sandy loam

#### Properties and qualities

*Slope:* 0 to 3 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Poorly drained  
*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)  
*Depth to water table:* About 0 to 12 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* Frequent  
*Available water supply, 0 to 60 inches:* Moderate (about 8.4 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 5w  
*Hydrologic Soil Group:* A/D  
*Ecological site:* F002XA007WA - Puget Lowlands Wet Forest  
*Forage suitability group:* Wet Soils (G002XS101WA)  
*Other vegetative classification:* Wet Soils (G002XS101WA)  
*Hydric soil rating:* Yes

### Minor Components

#### Norma, silt loam

*Percent of map unit:* 5 percent

## Custom Soil Resource Report

*Landform:* Depressions

*Other vegetative classification:* Wet Soils (G002XS101WA)

*Hydric soil rating:* Yes

### **Alderwood**

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

## **76—Norma silt loam**

### **Map Unit Setting**

*National map unit symbol:* 2ndcc

*Elevation:* 0 to 1,000 feet

*Mean annual precipitation:* 35 to 60 inches

*Mean annual air temperature:* 48 to 52 degrees F

*Frost-free period:* 150 to 200 days

*Farmland classification:* Prime farmland if drained

### **Map Unit Composition**

*Norma, silt loam, and similar soils:* 90 percent

*Minor components:* 10 percent

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

### **Description of Norma, Silt Loam**

#### **Setting**

*Landform:* Depressions, drainageways

*Parent material:* Alluvium

#### **Typical profile**

*H1 - 0 to 8 inches:* silt loam

*H2 - 8 to 30 inches:* sandy loam

*H3 - 30 to 60 inches:* sandy loam

#### **Properties and qualities**

*Slope:* 0 to 3 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 0 to 12 inches

*Frequency of flooding:* None

*Frequency of ponding:* Frequent

*Available water supply, 0 to 60 inches:* Moderate (about 8.9 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 5w

*Hydrologic Soil Group:* B/D

*Ecological site:* F002XA007WA - Puget Lowlands Wet Forest

*Forage suitability group:* Wet Soils (G002XS101WA)

## Custom Soil Resource Report

*Other vegetative classification:* Wet Soils (G002XS101WA)  
*Hydric soil rating:* Yes

### Minor Components

#### **Norma, fine sandy loam**

*Percent of map unit:* 5 percent  
*Landform:* Depressions  
*Other vegetative classification:* Wet Soils (G002XS101WA)  
*Hydric soil rating:* Yes

#### **Alderwood**

*Percent of map unit:* 5 percent  
*Hydric soil rating:* No

## 84—Pilchuck loamy sand

### Map Unit Setting

*National map unit symbol:* 2nd9t  
*Elevation:* 70 to 1,970 feet  
*Mean annual precipitation:* 35 to 60 inches  
*Mean annual air temperature:* 48 to 52 degrees F  
*Frost-free period:* 160 to 210 days  
*Farmland classification:* Prime farmland if irrigated

### Map Unit Composition

*Pilchuck and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Pilchuck

#### **Setting**

*Landform:* Flood plains  
*Parent material:* Alluvium

#### **Typical profile**

*H1 - 0 to 6 inches:* loamy sand  
*H2 - 6 to 60 inches:* fine sand

#### **Properties and qualities**

*Slope:* 0 to 3 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Somewhat excessively drained  
*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (5.95 to 19.98 in/hr)  
*Depth to water table:* About 24 to 48 inches  
*Frequency of flooding:* Occasional  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Low (about 4.1 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* A  
*Ecological site:* F002XA008WA - Puget Lowlands Riparian Forest  
*Forage suitability group:* Droughty Soils (G002XS401WA)  
*Other vegetative classification:* Droughty Soils (G002XS401WA)  
*Hydric soil rating:* No

**Minor Components**

**Puget, undrained**

*Percent of map unit:* 5 percent  
*Landform:* Depressions  
*Other vegetative classification:* Wet Soils (G002XS101WA)  
*Hydric soil rating:* Yes

**Sultan**

*Percent of map unit:* 5 percent  
*Hydric soil rating:* No

**Newberg**

*Percent of map unit:* 5 percent  
*Hydric soil rating:* No

**85—Pits, gravel**

**Map Unit Composition**

*Pits:* 100 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Pits**

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 8  
*Hydric soil rating:* No

**88—Puget silt loam**

**Map Unit Setting**

*National map unit symbol:* 2nd9y  
*Elevation:* 10 to 650 feet  
*Mean annual precipitation:* 35 to 55 inches  
*Mean annual air temperature:* 48 to 50 degrees F  
*Frost-free period:* 160 to 180 days  
*Farmland classification:* Prime farmland if drained

**Map Unit Composition**

*Puget, drained, and similar soils: 85 percent*

*Minor components: 15 percent*

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

**Description of Puget, Drained**

**Setting**

*Landform: Flood plains*

*Parent material: Alluvium*

**Typical profile**

*H1 - 0 to 9 inches: silt loam*

*H2 - 9 to 60 inches: silt loam*

**Properties and qualities**

*Slope: 0 to 3 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 (0.20 to 0.57 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 12.0 inches)*

**Interpretive groups**

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 3w*

*Hydrologic Soil Group: C*

*Ecological site: F002XA008WA - Puget Lowlands Riparian Forest*

*Forage suitability group: Soils with Few Limitations (G002XS501WA)*

*Other vegetative classification: Soils with Few Limitations (G002XS501WA)*

*Hydric soil rating: Yes*

**Minor Components**

**Puget, undrained**

*Percent of map unit: 5 percent*

*Other vegetative classification: Wet Soils (G002XS101WA)*

*Hydric soil rating: Yes*

**Newberg**

*Percent of map unit: 5 percent*

*Hydric soil rating: No*

**Semiahmoo, undrained**

*Percent of map unit: 3 percent*

*Landform: Depressions*

*Other vegetative classification: Wet Soils (G002XS101WA)*

*Hydric soil rating: Yes*

**Sultan**

*Percent of map unit: 2 percent*

*Hydric soil rating: No*

## 89—Puyallup silt loam

### Map Unit Setting

*National map unit symbol:* 2nd9z

*Elevation:* 70 to 1,970 feet

*Mean annual precipitation:* 35 to 60 inches

*Mean annual air temperature:* 50 degrees F

*Frost-free period:* 170 to 200 days

*Farmland classification:* All areas are prime farmland

### Map Unit Composition

*Puyallup and similar soils:* 85 percent

*Minor components:* 10 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 10 inches:* silt loam

*H2 - 10 to 19 inches:* fine sandy loam

*H3 - 19 to 60 inches:* sand

#### Properties and qualities

*Slope:* 0 to 3 percent

*Depth to restrictive feature:* 14 to 20 inches to strongly contrasting textural stratification

*Drainage class:* Well 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:* More than 80 inches

*Frequency of flooding:* Occasional

*Frequency of ponding:* None

*Available water supply, 0 to 60 inches:* Low (about 3.2 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 3w

*Land capability classification (nonirrigated):* 3w

*Hydrologic Soil Group:* B

*Ecological site:* F002XA008WA - Puget Lowlands Riparian Forest

*Forage suitability group:* Droughty Soils (G002XS401WA)

*Other vegetative classification:* Droughty Soils (G002XS401WA)

*Hydric soil rating:* No

**Minor Components**

**Newberg**

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

**Semiahmoo, undrained**

*Percent of map unit:* 3 percent

*Landform:* Depressions

*Other vegetative classification:* Wet Soils (G002XS101WA)

*Hydric soil rating:* Yes

**Sultan**

*Percent of map unit:* 2 percent

*Hydric soil rating:* No

**98—Salkum silty clay loam, 8 to 15 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 2ndcq

*Elevation:* 200 to 1,000 feet

*Mean annual precipitation:* 40 to 70 inches

*Mean annual air temperature:* 48 to 50 degrees F

*Frost-free period:* 150 to 210 days

*Farmland classification:* Farmland of statewide importance

**Map Unit Composition**

*Salkum and similar soils:* 95 percent

*Minor components:* 5 percent

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

**Description of Salkum**

**Setting**

*Landform:* Terraces

*Parent material:* Highly weathered glacial drift

**Typical profile**

*H1 - 0 to 12 inches:* silty clay loam

*H2 - 12 to 51 inches:* silty clay

*H3 - 51 to 60 inches:* silty clay

**Properties and qualities**

*Slope:* 8 to 15 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 (0.20 to 0.57 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:* High (about 9.5 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3e

*Hydrologic Soil Group:* B

*Ecological site:* F002XA005WA - Puget Lowlands Moist Forest

*Forage suitability group:* Soils with Moderate Limitations (G001XY602WA)

*Other vegetative classification:* Soils with Moderate Limitations (G001XY602WA)

*Hydric soil rating:* No

**Minor Components**

**Scamman**

*Percent of map unit:* 5 percent

*Landform:* Terraces

*Other vegetative classification:* Seasonally Wet Soils (G003XF203WA)

*Hydric soil rating:* No

**102—Schneider very gravelly loam, 20 to 40 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 2nd7p

*Elevation:* 50 to 1,800 feet

*Mean annual precipitation:* 60 to 75 inches

*Mean annual air temperature:* 48 to 52 degrees F

*Frost-free period:* 150 to 200 days

*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Schneider and similar soils:* 100 percent

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

**Description of Schneider**

**Setting**

*Landform:* Mountains

**Typical profile**

*H1 - 0 to 6 inches:* very gravelly loam

*H2 - 6 to 32 inches:* very gravelly silt loam

*H3 - 32 to 55 inches:* extremely gravelly silt loam

*H4 - 55 to 59 inches:* unweathered bedrock

**Properties and qualities**

*Slope:* 20 to 40 percent

*Depth to restrictive feature:* 40 to 60 inches to lithic bedrock

*Drainage class:* Well 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:* More than 80 inches

## Custom Soil Resource Report

*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Low (about 4.6 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* B  
*Ecological site:* F002XA005WA - Puget Lowlands Moist Forest  
*Hydric soil rating:* No

## **103—Schneider very gravelly loam, 40 to 65 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 2nd7q  
*Elevation:* 50 to 1,800 feet  
*Mean annual precipitation:* 60 to 75 inches  
*Mean annual air temperature:* 48 to 52 degrees F  
*Frost-free period:* 150 to 200 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Schneider and similar soils:* 100 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Schneider**

#### **Setting**

*Landform:* Mountains

#### **Typical profile**

*H1 - 0 to 6 inches:* very gravelly loam  
*H2 - 6 to 32 inches:* very gravelly silt loam  
*H3 - 32 to 55 inches:* extremely gravelly silt loam  
*H4 - 55 to 59 inches:* unweathered bedrock

#### **Properties and qualities**

*Slope:* 40 to 65 percent  
*Depth to restrictive feature:* 40 to 60 inches to lithic bedrock  
*Drainage class:* Well 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:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Low (about 4.6 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* B  
*Ecological site:* F002XA005WA - Puget Lowlands Moist Forest  
*Hydric soil rating:* No

## 104—Semiahmoo muck

### Map Unit Setting

*National map unit symbol:* 2nd7r  
*Elevation:* 10 to 1,300 feet  
*Mean annual precipitation:* 4 to 70 inches  
*Mean annual air temperature:* 46 to 50 degrees F  
*Frost-free period:* 125 to 250 days  
*Farmland classification:* Prime farmland if drained

### Map Unit Composition

*Semiahmoo, drained, and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Semiahmoo, Drained

#### Setting

*Landform:* Flood plains  
*Parent material:* Herbaceous organic material

#### Typical profile

*Oa1 - 0 to 6 inches:* muck  
*Oa2 - 6 to 60 inches:* muck

#### Properties and qualities

*Slope:* 0 to 1 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Very 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 0 to 12 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Very high (about 26.9 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 5w  
*Hydrologic Soil Group:* B/D  
*Ecological site:* R002XA003WA - Puget Lowlands Bogs and Fens  
*Forage suitability group:* Wet Soils (G002XS101WA)  
*Other vegetative classification:* Wet Soils (G002XS101WA)  
*Hydric soil rating:* Yes

### Minor Components

#### Shalcar variant

*Percent of map unit:* 5 percent  
*Landform:* Depressions  
*Other vegetative classification:* Wet Soils (G002XS101WA)  
*Hydric soil rating:* Yes

**Semiahmoo, undrained**

*Percent of map unit:* 5 percent

*Other vegetative classification:* Wet Soils (G002XS101WA)

*Hydric soil rating:* Yes

**Puget, undrained**

*Percent of map unit:* 3 percent

*Landform:* Depressions

*Other vegetative classification:* Wet Soils (G002XS101WA)

*Hydric soil rating:* Yes

**Sultan**

*Percent of map unit:* 2 percent

*Hydric soil rating:* No

**106—Shalcar variant muck**

**Map Unit Setting**

*National map unit symbol:* 2nd7t

*Elevation:* 70 to 980 feet

*Mean annual precipitation:* 40 to 60 inches

*Mean annual air temperature:* 50 degrees F

*Frost-free period:* 150 to 200 days

*Farmland classification:* Prime farmland if drained

**Map Unit Composition**

*Shalcar variant and similar soils:* 85 percent

*Minor components:* 15 percent

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

**Description of Shalcar Variant**

**Setting**

*Landform:* Flood plains

*Parent material:* Organic material over alluvium

**Typical profile**

*Oa1 - 0 to 6 inches:* muck

*Oa2 - 6 to 20 inches:* muck

*H3 - 20 to 60 inches:* clay

**Properties and qualities**

*Slope:* 0 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Very poorly drained

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)

*Depth to water table:* About 0 inches

*Frequency of flooding:* Occasional

*Frequency of ponding:* Frequent

*Available water supply, 0 to 60 inches:* Very high (about 15.4 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 5w  
*Hydrologic Soil Group:* C/D  
*Ecological site:* R002XA003WA - Puget Lowlands Bogs and Fens  
*Forage suitability group:* Wet Soils (G002XS101WA)  
*Other vegetative classification:* Wet Soils (G002XS101WA)  
*Hydric soil rating:* Yes

**Minor Components**

**Sultan**

*Percent of map unit:* 5 percent  
*Hydric soil rating:* No

**Puget, undrained**

*Percent of map unit:* 5 percent  
*Landform:* Depressions  
*Other vegetative classification:* Wet Soils (G002XS101WA)  
*Hydric soil rating:* Yes

**Semiahmoo, undrained**

*Percent of map unit:* 5 percent  
*Landform:* Depressions  
*Other vegetative classification:* Wet Soils (G002XS101WA)  
*Hydric soil rating:* Yes

**108—Skipopa silt loam, 3 to 15 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 2nd7w  
*Elevation:* 490 to 980 feet  
*Mean annual precipitation:* 30 to 50 inches  
*Mean annual air temperature:* 48 to 50 degrees F  
*Frost-free period:* 160 to 200 days  
*Farmland classification:* Farmland of statewide importance

**Map Unit Composition**

*Skipopa and similar soils:* 90 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Skipopa**

**Setting**

*Landform:* Terraces  
*Parent material:* Volcanic ash over glaciolacustrine deposits

**Typical profile**

*H1 - 0 to 8 inches:* silt loam  
*H2 - 8 to 18 inches:* silt loam

## Custom Soil Resource Report

*H3 - 18 to 60 inches: clay*

### Properties and qualities

*Slope: 3 to 15 percent*

*Depth to restrictive feature: 10 to 20 inches to abrupt textural change*

*Drainage class: Somewhat poorly drained*

*Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 in/hr)*

*Depth to water table: About 12 to 24 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Available water supply, 0 to 60 inches: Low (about 5.3 inches)*

### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 4w*

*Hydrologic Soil Group: 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: No*

### Minor Components

#### Yelm

*Percent of map unit: 10 percent*

*Hydric soil rating: No*

## 109—Spana gravelly loam

### Map Unit Setting

*National map unit symbol: 2nd7x*

*Elevation: 330 to 1,640 feet*

*Mean annual precipitation: 25 to 45 inches*

*Mean annual air temperature: 48 to 52 degrees F*

*Frost-free period: 150 to 200 days*

*Farmland classification: Prime farmland if drained*

### Map Unit Composition

*Spana and similar soils: 100 percent*

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

### Description of Spana

#### Setting

*Landform: Drainageways, outwash plains*

*Parent material: Glacial outwash*

#### Typical profile

*H1 - 0 to 22 inches: gravelly loam*

*H2 - 22 to 26 inches: gravelly loam*

*H3 - 26 to 38 inches: gravelly loam*

## Custom Soil Resource Report

*H4 - 38 to 60 inches: extremely gravelly sandy loam*

### Properties and qualities

*Slope: 0 to 3 percent*

*Depth to restrictive feature: More than 80 inches*

*Drainage class: Somewhat poorly drained*

*Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)*

*Depth to water table: About 12 to 35 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Available water supply, 0 to 60 inches: Moderate (about 6.3 inches)*

### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 3w*

*Hydrologic Soil Group: B*

*Ecological site: R002XA006WA - Puget Lowlands Prairie*

*Forage suitability group: Soils with Few Limitations (G002XS501WA)*

*Other vegetative classification: Soils with Few Limitations (G002XS501WA)*

*Hydric soil rating: No*

## 110—Spanaway gravelly sandy loam, 0 to 3 percent slopes

### Map Unit Setting

*National map unit symbol: 2ndb6*

*Elevation: 330 to 1,310 feet*

*Mean annual precipitation: 35 to 65 inches*

*Mean annual air temperature: 50 degrees F*

*Frost-free period: 150 to 200 days*

*Farmland classification: Prime farmland if irrigated*

### Map Unit Composition

*Spanaway and similar soils: 100 percent*

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

### Description of Spanaway

#### Setting

*Landform: Terraces, outwash plains*

*Parent material: Volcanic ash over gravelly outwash*

#### Typical profile

*H1 - 0 to 15 inches: gravelly sandy loam*

*H2 - 15 to 20 inches: very gravelly loam*

*H3 - 20 to 60 inches: extremely gravelly sand*

### Properties and qualities

*Slope: 0 to 3 percent*

*Depth to restrictive feature: More than 80 inches*

*Drainage class: Somewhat excessively drained*

*Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)*

## Custom Soil Resource Report

*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 3.8 inches)

### Interpretive groups

*Land capability classification (irrigated):* 3s  
*Land capability classification (nonirrigated):* 3s  
*Hydrologic Soil Group:* A  
*Ecological site:* R002XA006WA - Puget Lowlands Prairie  
*Forage suitability group:* Droughty Soils (G002XS401WA)  
*Other vegetative classification:* Droughty Soils (G002XS401WA)  
*Hydric soil rating:* No

## 115—Sultan silt loam

### Map Unit Setting

*National map unit symbol:* 2ndbc  
*Elevation:* 0 to 150 feet  
*Mean annual precipitation:* 35 to 55 inches  
*Mean annual air temperature:* 48 to 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 7 inches:* silt loam  
*H2 - 7 to 60 inches:* silt loam

#### Properties and qualities

*Slope:* 0 to 3 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 to high  
(0.57 to 1.98 in/hr)  
*Depth to water table:* About 24 to 48 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):* 3w

## Custom Soil Resource Report

*Hydrologic Soil Group: C*

*Ecological site: F002XA008WA - Puget Lowlands Riparian Forest*

*Forage suitability group: Seasonally Wet Soils (G002XS201WA)*

*Other vegetative classification: Seasonally Wet Soils (G002XS201WA)*

*Hydric soil rating: No*

### Minor Components

#### **Godfrey, undrained**

*Percent of map unit: 5 percent*

*Landform: Depressions*

*Other vegetative classification: Wet Soils (G002XS101WA)*

*Hydric soil rating: Yes*

#### **Puget, undrained**

*Percent of map unit: 3 percent*

*Landform: Depressions*

*Other vegetative classification: Wet Soils (G002XS101WA)*

*Hydric soil rating: Yes*

## 120—Tisch silt loam

### Map Unit Setting

*National map unit symbol: 2nd82*

*Elevation: 50 to 1,000 feet*

*Mean annual precipitation: 20 to 60 inches*

*Mean annual air temperature: 48 to 52 degrees F*

*Frost-free period: 150 to 250 days*

*Farmland classification: Prime farmland if drained*

### Map Unit Composition

*Tisch, drained, and similar soils: 80 percent*

*Minor components: 20 percent*

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

### Description of Tisch, Drained

#### **Setting**

*Landform: Depressions, drainageways*

*Parent material: Alluvium, volcanic ash, and diatomaceous earth*

#### **Typical profile**

*H1 - 0 to 11 inches: silt loam*

*H2 - 11 to 50 inches: silt loam*

*Oa - 50 to 60 inches: muck*

#### **Properties and qualities**

*Slope: 0 to 3 percent*

*Depth to restrictive feature: More than 80 inches*

*Drainage class: Very poorly drained*

## Custom Soil Resource Report

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

*Depth to water table:* About 0 to 12 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water supply, 0 to 60 inches:* Very high (about 25.3 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 5w

*Hydrologic Soil Group:* C/D

*Ecological site:* F002XA007WA - Puget Lowlands Wet Forest

*Forage suitability group:* Wet Soils (G002XS101WA)

*Other vegetative classification:* Wet Soils (G002XS101WA)

*Hydric soil rating:* Yes

### Minor Components

#### Tisch, undrained

*Percent of map unit:* 5 percent

*Other vegetative classification:* Wet Soils (G002XS101WA)

*Hydric soil rating:* Yes

#### Everson, undrained

*Percent of map unit:* 5 percent

*Landform:* Depressions

*Other vegetative classification:* Wet Soils (G002XS101WA)

*Hydric soil rating:* Yes

#### Dupont, undrained

*Percent of map unit:* 5 percent

*Landform:* Depressions

*Other vegetative classification:* Wet Soils (G002XS101WA)

*Hydric soil rating:* Yes

#### Mckenna

*Percent of map unit:* 4 percent

*Landform:* Depressions

*Other vegetative classification:* Wet Soils (G002XS101WA)

*Hydric soil rating:* Yes

#### Giles

*Percent of map unit:* 1 percent

*Hydric soil rating:* No

## 125—Xerorthents, 0 to 5 percent slopes

### Map Unit Setting

*National map unit symbol:* 2nd87

*Elevation:* 0 to 2,620 feet

*Mean annual precipitation:* 30 to 60 inches

*Mean annual air temperature:* 39 to 50 degrees F

## Custom Soil Resource Report

*Frost-free period:* 150 to 200 days

*Farmland classification:* Not prime farmland

### Map Unit Composition

*Xerorthents and similar soils:* 100 percent

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

### Description of Xerorthents

#### Setting

*Landform:* Tidal flats

*Parent material:* Sandy and loamy cut and fill material

#### Typical profile

*H1 - 0 to 60 inches:* variable

#### Properties and qualities

*Slope:* 0 to 5 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Somewhat excessively drained

*Depth to water table:* About 24 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7s

*Hydric soil rating:* No

## 126—Yelm fine sandy loam, 0 to 3 percent slopes

### Map Unit Setting

*National map unit symbol:* 2nd88

*Elevation:* 80 to 980 feet

*Mean annual precipitation:* 30 to 60 inches

*Mean annual air temperature:* 50 degrees F

*Frost-free period:* 170 to 200 days

*Farmland classification:* All areas are prime farmland

### Map Unit Composition

*Yelm and similar soils:* 85 percent

*Minor components:* 13 percent

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

### Description of Yelm

#### Setting

*Landform:* Outwash terraces

*Parent material:* Glacial outwash

#### Typical profile

*H1 - 0 to 8 inches:* fine sandy loam

*H2 - 8 to 46 inches:* fine sandy loam

## Custom Soil Resource Report

*H3 - 46 to 60 inches: loamy sand*

### **Properties and qualities**

*Slope: 0 to 3 percent*

*Depth to restrictive feature: More than 80 inches*

*Drainage class: Moderately 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 18 to 36 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Available water supply, 0 to 60 inches: High (about 11.0 inches)*

### **Interpretive groups**

*Land capability classification (irrigated): 3w*

*Land capability classification (nonirrigated): 3w*

*Hydrologic Soil Group: B*

*Ecological site: F002XA005WA - Puget Lowlands Moist Forest*

*Forage suitability group: Seasonally Wet Soils (G002XS201WA)*

*Other vegetative classification: Seasonally Wet Soils (G002XS201WA)*

*Hydric soil rating: No*

### **Minor Components**

#### **Everson, undrained**

*Percent of map unit: 5 percent*

*Landform: Depressions*

*Other vegetative classification: Wet Soils (G002XS101WA)*

*Hydric soil rating: Yes*

#### **Norma**

*Percent of map unit: 5 percent*

*Landform: Depressions*

*Other vegetative classification: Wet Soils (G002XS101WA)*

*Hydric soil rating: Yes*

#### **Skipopa**

*Percent of map unit: 3 percent*

*Other vegetative classification: Seasonally Wet Soils (G002XN202WA)*

*Hydric soil rating: No*

## **127—Yelm fine sandy loam, 3 to 15 percent slopes**

### **Map Unit Setting**

*National map unit symbol: 2nd89*

*Elevation: 80 to 980 feet*

*Mean annual precipitation: 30 to 60 inches*

*Mean annual air temperature: 50 degrees F*

*Frost-free period: 170 to 200 days*

*Farmland classification: Farmland of statewide importance*

**Map Unit Composition**

*Yelm and similar soils: 85 percent*

*Minor components: 3 percent*

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

**Description of Yelm**

**Setting**

*Landform: Outwash terraces*

*Parent material: Glacial outwash*

**Typical profile**

*H1 - 0 to 8 inches: fine sandy loam*

*H2 - 8 to 46 inches: fine sandy loam*

*H3 - 46 to 60 inches: loamy sand*

**Properties and qualities**

*Slope: 3 to 15 percent*

*Depth to restrictive feature: More than 80 inches*

*Drainage class: Moderately 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 18 to 36 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Available water supply, 0 to 60 inches: High (about 11.0 inches)*

**Interpretive groups**

*Land capability classification (irrigated): 4e*

*Land capability classification (nonirrigated): 3e*

*Hydrologic Soil Group: B*

*Ecological site: F002XA005WA - Puget Lowlands Moist Forest*

*Forage suitability group: Soils with Moderate Limitations (G002XS601WA)*

*Other vegetative classification: Soils with Moderate Limitations (G002XS601WA)*

*Hydric soil rating: No*

**Minor Components**

**Skipopa**

*Percent of map unit: 3 percent*

*Other vegetative classification: Seasonally Wet Soils (G002XN202WA)*

*Hydric soil rating: No*

**128—Yelm fine sandy loam, 15 to 30 percent slopes**

**Map Unit Setting**

*National map unit symbol: 2nd8b*

*Elevation: 80 to 980 feet*

*Mean annual precipitation: 30 to 60 inches*

*Mean annual air temperature: 50 degrees F*

## Custom Soil Resource Report

*Frost-free period:* 170 to 200 days

*Farmland classification:* Farmland of statewide importance

### Map Unit Composition

*Yelm and similar soils:* 85 percent

*Minor components:* 2 percent

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

### Description of Yelm

#### Setting

*Landform:* Outwash terraces

*Parent material:* Glacial outwash

#### Typical profile

*H1 - 0 to 8 inches:* fine sandy loam

*H2 - 8 to 46 inches:* fine sandy loam

*H3 - 46 to 60 inches:* loamy sand

#### Properties and qualities

*Slope:* 15 to 30 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Moderately 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 18 to 36 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water supply, 0 to 60 inches:* High (about 11.0 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4e

*Hydrologic Soil Group:* B

*Ecological site:* F002XA005WA - Puget Lowlands Moist Forest

*Forage suitability group:* Sloping to Steep Soils (G002XS701WA)

*Other vegetative classification:* Sloping to Steep Soils (G002XS701WA)

*Hydric soil rating:* No

### Minor Components

#### Hoogdal

*Percent of map unit:* 2 percent

*Hydric soil rating:* No

## 129—Water

### Map Unit Composition

*Water:* 100 percent

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

**Description of Water**

**Setting**

*Landform:* Alluvial cones

# Soil Information for All Uses

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## Soil Reports

The Soil Reports section includes various formatted tabular and narrative reports (tables) containing data for each selected soil map unit and each component of each unit. No aggregation of data has occurred as is done in reports in the Soil Properties and Qualities and Suitabilities and Limitations sections.

The reports contain soil interpretive information as well as basic soil properties and qualities. A description of each report (table) is included.

## Land Classifications

This folder contains a collection of tabular reports that present a variety of soil groupings. The reports (tables) include all selected map units and components for each map unit. Land classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

## Prime and other Important Farmlands

This table lists the map units in the survey area that are considered important farmlands. Important farmlands consist of prime farmland, unique farmland, and farmland of statewide or local importance. This list does not constitute a recommendation for a particular land use.

In an effort to identify the extent and location of important farmlands, the Natural Resources Conservation Service, in cooperation with other interested Federal, State, and local government organizations, has inventoried land that can be used for the production of the Nation's food supply.

*Prime farmland* is of major importance in meeting the Nation's short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our Nation's prime farmland.

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil quality, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. The water supply is dependable and of adequate quality. Prime farmland is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. Slope ranges mainly from 0 to 6 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service.

For some of the soils identified in the table as prime farmland, measures that overcome a hazard or limitation, such as flooding, wetness, and droughtiness, are needed. Onsite evaluation is needed to determine whether or not the hazard or limitation has been overcome by corrective measures.

A recent trend in land use in some areas has been the loss of some prime farmland to industrial and urban uses. The loss of prime farmland to other uses puts pressure on marginal lands, which generally are more erodible, droughty, and less productive and cannot be easily cultivated.

*Unique farmland* is land other than prime farmland that is used for the production of specific high-value food and fiber crops, such as citrus, tree nuts, olives, cranberries, and other fruits and vegetables. It has the special combination of soil quality, growing season, moisture supply, temperature, humidity, air drainage, elevation, and aspect needed for the soil to economically produce sustainable high yields of these crops when properly managed. The water supply is dependable and of adequate quality. Nearness to markets is an additional consideration. Unique farmland is not based on national criteria. It commonly is in areas where there is a special microclimate, such as the wine country in California.

In some areas, land that does not meet the criteria for prime or unique farmland is considered to be *farmland of statewide importance* for the production of food, feed, fiber, forage, and oilseed crops. The criteria for defining and delineating farmland of statewide importance are determined by the appropriate State agencies. Generally, this land includes areas of soils that nearly meet the requirements for prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. Some areas may produce as high a yield as prime farmland if conditions are favorable. Farmland of statewide importance may include tracts of land that have been designated for agriculture by State law.

In some areas that are not identified as having national or statewide importance, land is considered to be *farmland of local importance* for the production of food, feed, fiber, forage, and oilseed crops. This farmland is identified by the appropriate local agencies. Farmland of local importance may include tracts of land that have been designated for agriculture by local ordinance.

## Report—Prime and other Important Farmlands

## Custom Soil Resource Report

| Prime and other Important Farmlands—Thurston County Area, Washington |                                                           |                                  |
|----------------------------------------------------------------------|-----------------------------------------------------------|----------------------------------|
| Map Symbol                                                           | Map Unit Name                                             | Farmland Classification          |
| 1                                                                    | Alderwood gravelly sandy loam, 0 to 8 percent slopes      | Prime farmland if irrigated      |
| 2                                                                    | Alderwood gravelly sandy loam, 8 to 15 percent slopes     | Prime farmland if irrigated      |
| 3                                                                    | Alderwood gravelly sandy loam, 15 to 30 percent slopes    | Farmland of statewide importance |
| 20                                                                   | Cagey loamy sand                                          | Prime farmland if irrigated      |
| 27                                                                   | Delphi very gravelly loam, 3 to 15 percent slopes         | Farmland of statewide importance |
| 30                                                                   | Dystric Xerochrepts, 60 to 90 percent slopes              | Not prime farmland               |
| 32                                                                   | Everett very gravelly sandy loam, 0 to 8 percent slopes   | Farmland of statewide importance |
| 33                                                                   | Everett very gravelly sandy loam, 8 to 15 percent slopes  | Farmland of statewide importance |
| 34                                                                   | Everett very gravelly sandy loam, 15 to 30 percent slopes | Farmland of statewide importance |
| 35                                                                   | Everett very gravelly sandy loam, 30 to 50 percent slopes | Not prime farmland               |
| 38                                                                   | Giles silt loam, 0 to 3 percent slopes                    | All areas are prime farmland     |
| 39                                                                   | Giles silt loam, 3 to 15 percent slopes                   | Farmland of statewide importance |
| 40                                                                   | Giles silt loam, 15 to 30 percent slopes                  | Farmland of statewide importance |
| 41                                                                   | Godfrey silty clay loam                                   | Prime farmland if drained        |
| 45                                                                   | Hydraquents, tidal                                        | Not prime farmland               |
| 46                                                                   | Indianola loamy sand, 0 to 5 percent slopes               | Prime farmland if irrigated      |
| 47                                                                   | Indianola loamy sand, 5 to 15 percent slopes              | Prime farmland if irrigated      |
| 48                                                                   | Indianola loamy sand, 15 to 30 percent slopes             | Farmland of statewide importance |
| 51                                                                   | Kapowsin silt loam, 3 to 15 percent slopes                | Farmland of statewide importance |
| 52                                                                   | Kapowsin silt loam, 15 to 30 percent slopes               | Farmland of statewide importance |
| 53                                                                   | Kapowsin silt loam, 30 to 50 percent slopes               | Not prime farmland               |
| 65                                                                   | McKenna gravelly silt loam, 0 to 5 percent slopes         | Prime farmland if drained        |
| 69                                                                   | Mukilteo muck                                             | Prime farmland if drained        |
| 70                                                                   | Mukilteo muck, drained                                    | Prime farmland if drained        |
| 73                                                                   | Nisqually loamy fine sand, 0 to 3 percent slopes          | Prime farmland if irrigated      |
| 74                                                                   | Nisqually loamy fine sand, 3 to 15 percent slopes         | Farmland of statewide importance |
| 75                                                                   | Norma fine sandy loam                                     | Prime farmland if drained        |
| 76                                                                   | Norma silt loam                                           | Prime farmland if drained        |
| 84                                                                   | Pilchuck loamy sand                                       | Prime farmland if irrigated      |
| 85                                                                   | Pits, gravel                                              | Not prime farmland               |
| 88                                                                   | Puget silt loam                                           | Prime farmland if drained        |
| 89                                                                   | Puyallup silt loam                                        | All areas are prime farmland     |
| 98                                                                   | Salkum silty clay loam, 8 to 15 percent slopes            | Farmland of statewide importance |
| 102                                                                  | Schneider very gravelly loam, 20 to 40 percent slopes     | Not prime farmland               |
| 103                                                                  | Schneider very gravelly loam, 40 to 65 percent slopes     | Not prime farmland               |
| 104                                                                  | Semiahmoo muck                                            | Prime farmland if drained        |
| 106                                                                  | Shalcar variant muck                                      | Prime farmland if drained        |
| 108                                                                  | Skipopa silt loam, 3 to 15 percent slopes                 | Farmland of statewide importance |
| 109                                                                  | Spana gravelly loam                                       | Prime farmland if drained        |

## Custom Soil Resource Report

| Prime and other Important Farmlands–Thurston County Area, Washington |                                                     |                                  |
|----------------------------------------------------------------------|-----------------------------------------------------|----------------------------------|
| Map Symbol                                                           | Map Unit Name                                       | Farmland Classification          |
| 110                                                                  | Spanaway gravelly sandy loam, 0 to 3 percent slopes | Prime farmland if irrigated      |
| 115                                                                  | Sultan silt loam                                    | All areas are prime farmland     |
| 120                                                                  | Tisch silt loam                                     | Prime farmland if drained        |
| 125                                                                  | Xerorthents, 0 to 5 percent slopes                  | Not prime farmland               |
| 126                                                                  | Yelm fine sandy loam, 0 to 3 percent slopes         | All areas are prime farmland     |
| 127                                                                  | Yelm fine sandy loam, 3 to 15 percent slopes        | Farmland of statewide importance |
| 128                                                                  | Yelm fine sandy loam, 15 to 30 percent slopes       | Farmland of statewide importance |
| 129                                                                  | Water                                               | Not prime farmland               |

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