

June 16, 2008

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Kittitas County
CDS

Darryl Piercy
Kittitas County Community Development Services Dept.
411 N. Ruby, Suite 2
Ellensburg, WA 98926

I would like to take this opportunity to thank you for your request for additional information, specifically pertaining to a possible requirement of an Archaeological and Historical review of the Ronald Planned Unit Development proposal/subject property.

The history of the property of the coal mining and timber industry is as follows:

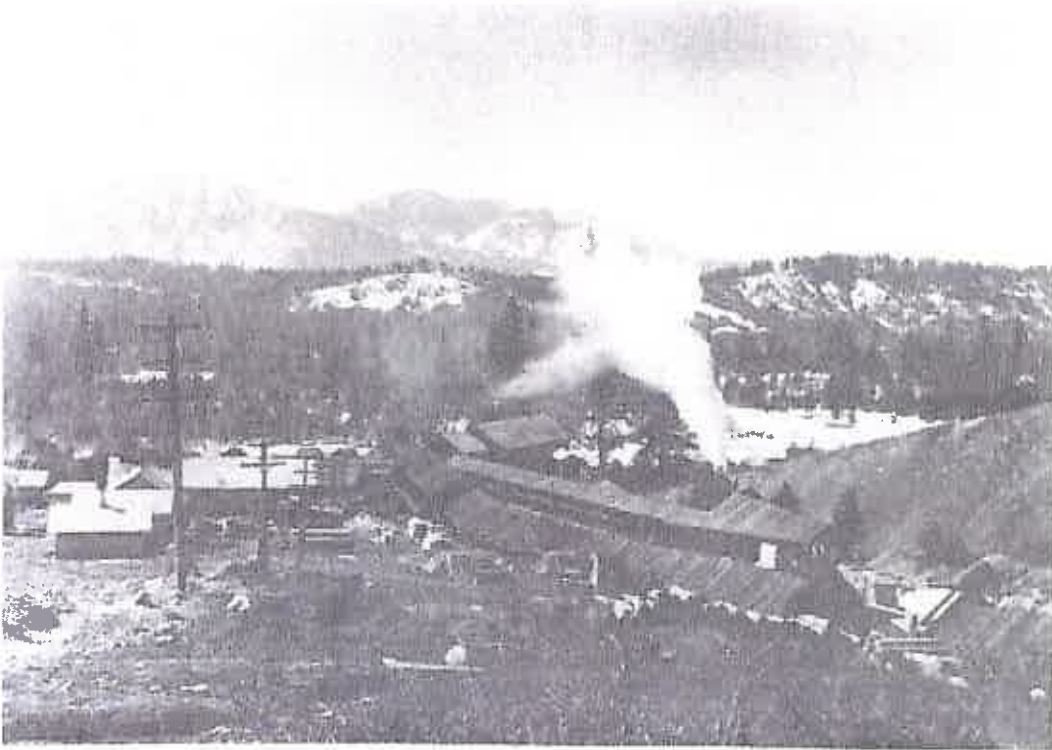
In 1889, Archie Patrick and Roslyn Coal Co. began mining on property. The property was sold and mined under different companies from 1900-1960's. It was operated by Roslyn Cascade Coal Co. during 1905-1907 and by Roslyn Fuel Co. during 1907-1932. In between 1920 and 1928 the site was not mined. At the onset of 1932, the Jonesville Coal Co. took over and continue until 1946. At one point after 1946, the site was taken over by Kittitas County for failure to pay real estate taxes. There were limited activities at the site from 1946 to 1955. The Coal mining industry started to slowly die off during the late 1960's. In 1967, Ronald Mill Site was sold to Ly-Col Veneer Co. who began manufacturing veneer sheets. In July 1974, zoning was established in Kittitas County. This was one of two sites zoned General Industrial in the county. In 1977, Alpine Veneer Co. purchased the property and continued the veneer manufacturing business at this location. The configuration of property was established in 1977 and the large veneer plant building was constructed. In 1987, Cle Elum Lake Veneer purchased the site and continued operating the plant until 1992.

As the history has pointed out, this property has been disturbed since the late 1880's via the coal mining industry and eventually transitioning into the timber industry as a mill and veneer site. At the same time, a portion of this property, which had contained the uses as described in the above history, was successfully rezoned to the Evergreen Ridge Planned Unit Development Amendment with a threshold determination of non-significance issued during that land use action (Ord. 2006-26).

Due to the past soil disturbances that have occurred on this property, we a Cultural and Historical Survey is not warranted. We are in agreement to place a condition on this proposal that would provide for an immediate stop work order for any cultural or historical significance found on the site and that the appropriate agencies be contacted.

Sincerely,


Pat Deneen



*The Number 3 mine in
Ronald is photographed
at the approach of
winter.*

Photograph courtesy of the
Rosalie Museum



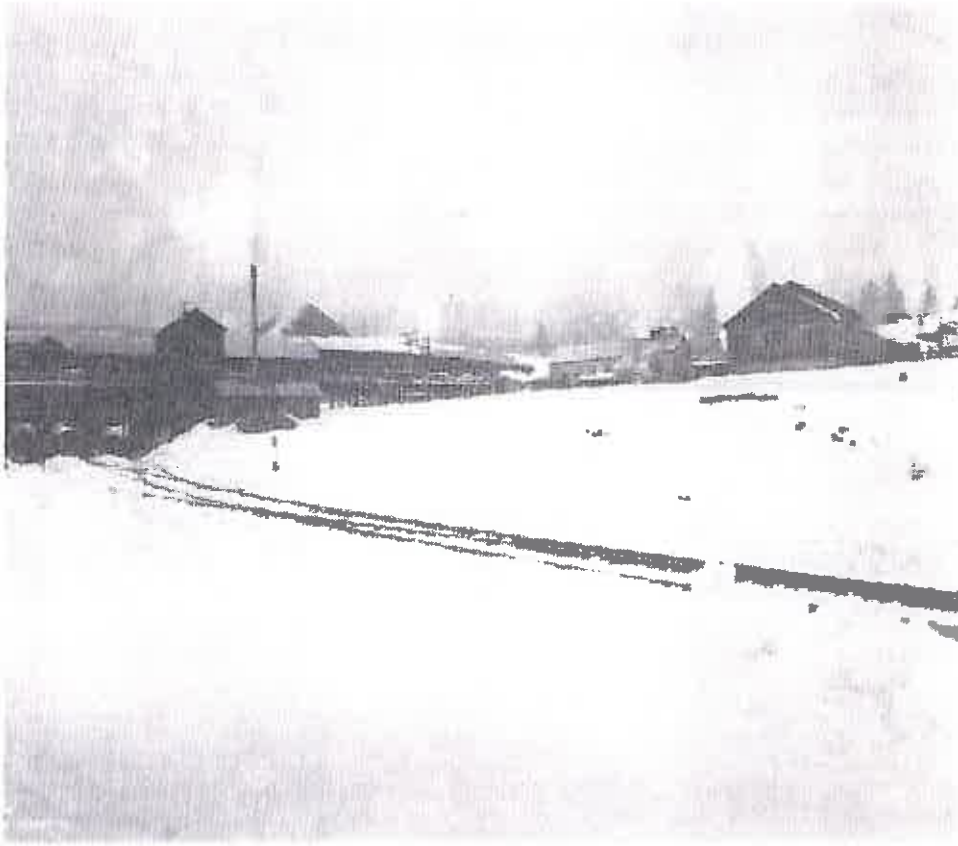
*A winter scene shows
Ronald and the Cascade
Mountains under a thick
blanket of snow.*

Photograph courtesy of the
Rosalie Museum



*This photograph shows a
portion of Lonesville in
1911.*

*Photograph courtesy of the
Rushen Museum.*



*Loaded coal cars await
movement at the tipple of
the NWL Number 5
mine in Ronald in 1929.*
Photograph courtesy of the
Massachusetts Historical
Society. Photo by Joseph C. Gurnea.



United States
Department of
Agriculture

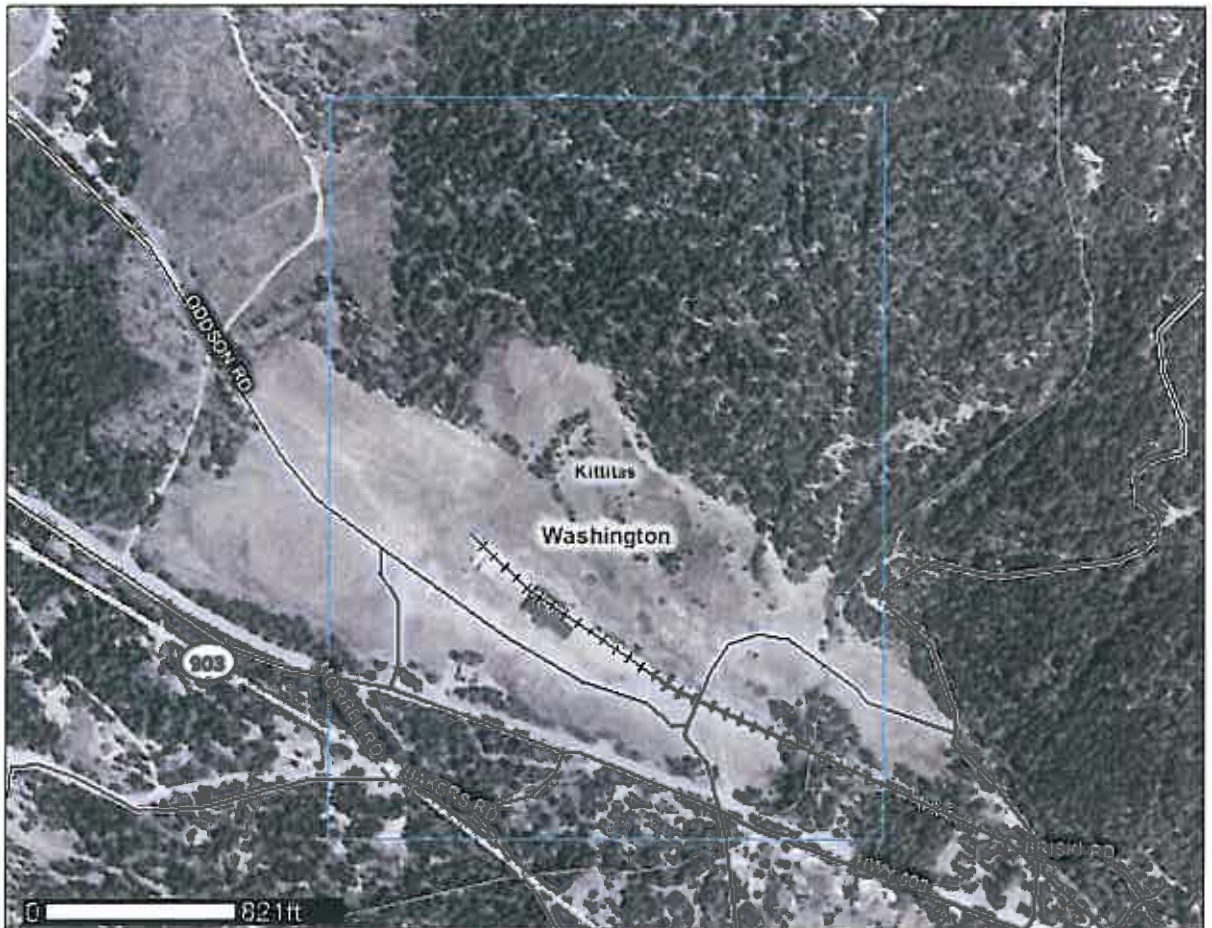


NRCS

Natural
Resources
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Service

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

Custom Soil Resource Report for Kittitas County Area, Washington



Preface

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

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

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 Soil Data Mart Web site or the NRCS Web Soil Survey. The Soil Data Mart is the data storage site for the official soil survey information.

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Contents

Preface.....	2
How Soil Surveys Are Made.....	4
Soil Map.....	6
Soil Map.....	7
Legend.....	8
Map Unit Legend.....	9
Map Unit Descriptions.....	9
Kittitas County Area, Washington Version date:2/29/2008 10:07:15 AM.....	11
137—Dumps, mine.....	11
138—Pits, mine.....	11
144—Nard ashy loam, 5 to 25 percent slopes.....	11
164—Nard ashy loam, 25 to 45 percent slopes.....	12
201—Roslyn ashy sandy loam, 0 to 5 percent slopes.....	13
213—Roslyn ashy sandy loam, moist, 3 to 25 percent slopes.....	13
References.....	15

How Soil Surveys Are Made

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

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

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

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

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

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
Legend

MAP LEGEND

- Area of Interest (AOI)
 - Area of Interest (AOI)
- Soils
 - Soil Map Units
- Special Point Features
 - Blowout
 - Borrow Pit
 - Clay Spot
 - Closed Depression
 - Gravel Pit
 - Gravelly Spot
 - Landfill
 - Lava Flow
 - Marsh
 - 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
- Special Line Features
 - Gully
 - Short Steep Slope
 - Other
- Political Features
 - Public Land Survey
 - Township and Range
 - Section
 - Municipalities
 - Cities
 - Urban Areas
- Water Features
 - Oceans
 - Streams and Canals
- Transportation
 - Rails
 - Roads
 - Interstate Highways
 - US Routes
 - State Highways
 - Local Roads
 - Other Roads
- Very Stony Spot
- Wet Spot
- Other

MAP INFORMATION

Original soil survey map sheets were prepared at publication scale. Viewing scale and printing scale, however, may vary from the original. Please rely on the bar scale on each map sheet for proper map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: UTM Zone 10N

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

Soil Survey Area: Kittitas County Area, Washington
Survey Area Data: Version 2, Feb 29, 2008

Date(s) aerial images were photographed: 7/25/1998

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

Kittitas County Area, Washington (WA637)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
137	Dumps, mine	61.9	35.9%
138	Pits, mine	0.3	0.2%
144	Nard ashy loam, 5 to 25 percent slopes	2.5	1.5%
164	Nard ashy loam, 25 to 45 percent slopes	81.9	47.4%
201	Roslyn ashy sandy loam, 0 to 5 percent slopes	21.9	12.7%
213	Roslyn ashy sandy loam, moist, 3 to 25 percent slopes	4.2	2.4%
Totals for Area of Interest (AOI)		172.7	100.0%

Map Unit Descriptions

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

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

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

Custom Soil Resource Report

where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

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

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

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

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

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

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

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

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

**Kittitas County Area, Washington Version date:2/29/2008
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137—Dumps, mine

Map Unit Setting

Elevation: 2,000 to 3,600 feet

Map Unit Composition

Dumps, mine: 100 percent

Description of Dumps, Mine

Interpretive groups

Land capability (nonirrigated): 8

138—Pits, mine

Map Unit Setting

Elevation: 1,500 to 5,700 feet

Map Unit Composition

Pits, mine: 100 percent

Description of Pits, Mine

Properties and qualities

Slope: 15 to 45 percent

Depth to restrictive feature: 0 inches to lithic bedrock

Interpretive groups

Land capability (nonirrigated): 8

144—Nard ashy loam, 5 to 25 percent slopes

Map Unit Setting

Elevation: 1,800 to 4,500 feet

Mean annual precipitation: 30 to 40 inches

Mean annual air temperature: 43 to 45 degrees F

Frost-free period: 80 to 120 days

Map Unit Composition

Nard and similar soils: 85 percent

Description of Nard

Setting

Landform: Mountain slopes

Down-slope shape: Linear

Across-slope shape: Convex

Parent material: Residuum and colluvium from sandstone and old alluvium with an influence of volcanic ash in the upper part

Properties and qualities

Slope: 5 to 25 percent

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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: About 20 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: High (about 9.7 inches)

Interpretive groups

Land capability (nonirrigated): 4e
Other vegetative classification: grand fir/pinemat manzanita (CWS338)

Typical profile

0 to 1 inches: Slightly decomposed plant material
1 to 4 inches: Ashy loam
4 to 12 inches: Ashy loam
12 to 24 inches: Loam
24 to 34 inches: Clay loam
34 to 60 inches: Clay loam

164—Nard ashy loam, 25 to 45 percent slopes

Map Unit Setting

Elevation: 1,800 to 4,800 feet
Mean annual precipitation: 30 to 40 inches
Mean annual air temperature: 43 to 45 degrees F
Frost-free period: 80 to 120 days

Map Unit Composition

Nard and similar soils: 80 percent

Description of Nard

Setting

Landform: Mountain slopes
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Residuum and colluvium from sandstone and old alluvium with an influence of volcanic ash in the upper part

Properties and qualities

Slope: 25 to 45 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: About 20 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: High (about 9.7 inches)

Interpretive groups

Land capability (nonirrigated): 7e
Other vegetative classification: grand fir/vine maple (CWS551)

Custom Soil Resource Report

Typical profile

0 to 1 inches: Slightly decomposed plant material
1 to 4 inches: Ashy loam
4 to 12 inches: Ashy loam
12 to 24 inches: Loam
24 to 34 inches: Clay loam
34 to 60 inches: Clay loam

201—Roslyn ashy sandy loam, 0 to 5 percent slopes

Map Unit Setting

Elevation: 1,900 to 2,400 feet
Mean annual precipitation: 30 to 40 inches
Mean annual air temperature: 43 to 45 degrees F
Frost-free period: 85 to 115 days

Map Unit Composition

Roslyn and similar soils: 85 percent

Description of Roslyn

Setting

Landform: Terraces
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Glacial drift with a mantle of loess and volcanic ash

Properties and qualities

Slope: 0 to 5 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 capacity: Moderate (about 8.0 inches)

Interpretive groups

Land capability (nonirrigated): 3c
Other vegetative classification: grand fir/common snowberry/pinegrass (CWS336)

Typical profile

0 to 1 inches: Moderately decomposed plant material
1 to 8 inches: Ashy sandy loam
8 to 15 inches: Ashy sandy loam
15 to 37 inches: Loam
37 to 49 inches: Gravelly loam
49 to 60 inches: Gravelly loam

213—Roslyn ashy sandy loam, moist, 3 to 25 percent slopes

Map Unit Setting

Elevation: 1,900 to 2,400 feet

Custom Soil Resource Report

Mean annual precipitation: 30 to 40 inches
Mean annual air temperature: 43 to 45 degrees F
Frost-free period: 85 to 115 days

Map Unit Composition

Roslyn, moist, and similar soils: 85 percent

Description of Roslyn, Moist

Setting

Landform: Kame terraces, terraces, valley sides
Down-slope shape: Concave, linear
Across-slope shape: Concave, convex
Parent material: Glacial drift with a mantle of loess and volcanic ash

Properties and qualities

Slope: 3 to 25 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 capacity: Moderate (about 8.5 inches)

Interpretive groups

Land capability (nonirrigated): 4e
Other vegetative classification: grand fir/vine maple (CWS551)

Typical profile

0 to 1 inches: Moderately decomposed plant material
1 to 8 inches: Ashy sandy loam
8 to 15 inches: Ashy sandy loam
15 to 37 inches: Loam
37 to 60 inches: Gravelly loam

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. <http://soils.usda.gov/>

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. <http://soils.usda.gov/>

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. <http://soils.usda.gov/>

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. <http://soils.usda.gov/>

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.glti.nrcs.usda.gov/>

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. <http://soils.usda.gov/>

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. <http://soils.usda.gov/>

Custom Soil Resource Report

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210.

Reference Page

Shideler, John C. Coal Towns of the Cascades: A Centennial History of Roslyn and Cle Elum. Arlington VA: Futurepast, 2006

Web Soil Survey. 20 June 2007. United States Department of Agriculture Natural Resources Conservation Service. 16 June 2008 <http://websoilsurvey.sc.egov.usda.gov/wssproduct/lk4pfxbkvtmjq453vwn51fp/GN_00001/Soil_Report.pdf>.