Welcome to Web Soil Survey (WSS)

Web Soil Survey (WSS) provides soil data and information produced by the National Cooperative Soil Survey. It is operated by the USDA Natural Resources Conservation Service (NRCS) and provides access to the largest natural resource information system in the world. NRCS has soil maps and data available online for more than 95 percent of the nation's counties and anticipates having 100 percent in the near future. The site is updated and maintained online as the single authoritative source of soil survey information.

Soil surveys can be used for general farm, local, and wider area planning. Onsite investigation is needed in some cases, such as soil quality assessments and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center or your NRCS State Soil Scientist.

Four Basic Steps

1. Define.

Use the Area of Interest tab to define your area of interest.
Stevens County, Washington
59—Colville silt loam, drained

Map Unit Setting
- Elevation: 1,400 to 2,000 feet
- Mean annual precipitation: 17 to 19 inches
- Mean annual air temperature: 45 to 46 degrees F
- Frost-free period: 100 to 125 days

Map Unit Composition
- Colville and similar soils: 80 percent
- Minor components: 12 percent

Description of Colville

Setting
- Landform: Depressions
- Parent material: Mixed alluvium

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): Moderately low to moderately high (0.14 to 0.57 in/hr)
- Depth to water table: About 24 to 48 inches
- Frequency of flooding: Occasional
- Frequency of ponding: None
- Calcium carbonate, maximum content: 35 percent
- Maximum salinity: Nonsaline to very slightly saline (0.0 to 4.0 mmhos/cm)
- Sodium adsorption ratio, maximum: 10.0
- Available water capacity: High (about 12.0 inches)

Interpretive groups
- Farmland classification: All areas are prime farmland
- Land capability classification (irrigated): 3w
- Land capability (nonirrigated): 3w
- Hydrologic Soil Group: C

Typical profile
- 0 to 17 inches: Silt loam
- 17 to 27 inches: Silty clay loam
- 27 to 60 inches: Silty clay loam

Minor Components

Bridgeson
- Percent of map unit: 4 percent
- Landform: Flood plains
### Properties and Qualities Ratings

#### Soil Chemical Properties
- Available Water Capacity
- Available Water Storage
- Available Water Supply, 0 to 100 cm
- Available Water Supply, 0 to 150 cm
- Available Water Supply, 0 to 25 cm
- Available Water Supply, 0 to 50 cm

#### Soil Erosion Factors
- Bulk Density, 15 Bar
- Bulk Density, One-Tenth Bar
- Bulk Density, One-Third Bar

#### Soil Physical Properties
- Linear Extensibility
- Organic Matter
- Percent Clay
- Percent Sand
- Percent Silt
- Plasticity Index
- Saturated Hydraulic Conductivity (Ksat)
- Saturated Hydraulic Conductivity (Ksat), Standard Classes
- Surface Texture
- Water Content, 15 Bar
- Water Content, One-Third Bar

### Soil Map

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

**Description**

Organic matter is the plant and animal residue in the soil at various stages of decomposition. The estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of organic matter in a soil can be maintained by returning crop residue to the soil. Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms. An irregular distribution of organic carbon with depth may indicate different episodes of soil deposition or soil formation. Soils that are very high in organic matter have poor engineering properties and subside upon drying.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

### Tables — Organic Matter — Summary By Map Unit

**Summary by Map Unit — Stevens County, Washington (WA065)**

<table>
<thead>
<tr>
<th>Map unit symbol</th>
<th>Map unit name</th>
<th>Rating (percent)</th>
<th>Acres in AOI</th>
<th>Percent of AOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>59</td>
<td>Colville silt loam, drained</td>
<td>2.50</td>
<td>2.0</td>
<td>41.6%</td>
</tr>
<tr>
<td>173</td>
<td>Pkone silt loam, drained</td>
<td>3.50</td>
<td>2.6</td>
<td>55.2%</td>
</tr>
<tr>
<td>229</td>
<td>Stevens silt loam, 8 to 15 percent slopes</td>
<td>3.50</td>
<td>0.2</td>
<td>3.2%</td>
</tr>
</tbody>
</table>

**Totals for Area of Interest**

|                  | 4.8 | 100.0% |

### Rating Options — Organic Matter

- **Units of Measure:** percent
- **Aggregation Method:** Dominant Component
- **Component Percent Cutoff:** None Specified
- **Tie-break Rule:** Higher
- **Interpret Nulls as Zero:** No
Tables — Yields of Non-Irrigated Crops (Component): Spring wheat (Bu) — Summary By Map Unit

<table>
<thead>
<tr>
<th>Map unit symbol</th>
<th>Map unit name</th>
<th>Rating</th>
<th>Acres in AOI</th>
<th>Percent of AOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>59</td>
<td>Colville silt loam, drained</td>
<td>43.48</td>
<td>2.0</td>
<td>41.6%</td>
</tr>
<tr>
<td>39</td>
<td>Peone silt loam, drained</td>
<td>44.44</td>
<td>2.6</td>
<td>55.2%</td>
</tr>
<tr>
<td>29</td>
<td>Stevens silt loam, 8 to 15 percent slopes</td>
<td>35.00</td>
<td>0.2</td>
<td>3.2%</td>
</tr>
</tbody>
</table>

Total for Area of Interest

These are the estimated average yields per acre that can be expected of selected nonirrigated crops under a high level of management. In any given year, yields may be higher or lower than those indicated because of variations in rainfall and other climatic factors.

In the database, some states maintain crop yield data by individual map unit component and others maintain the data at the map unit level. Attributes are included in this application for both, although only one or the other is likely to contain data for any given geographic area. This attribute uses data maintained at the map unit component level.

The yields are actually recorded as three separate values in the database. A low value and a high value indicate the range for the soil component. A "representative" value indicates the expected value for the component. For these yields, only the representative value is used.
Preface

[Text content of the Preface]

[Image of an aerial view of the area mentioned in the Preface]
Questions?