



# Custom Soil Resource Report Instructions

## City of Kelso

This handout provides guidance on how to obtain a Custom Soil Resource Report from the National Resources Conservation Service (NRCS) Web Soil Survey for inclusion in an **Abbreviated Stormwater Site Plan** application. The Custom Soil Resource Report is used to make some decisions about how to manage stormwater on a small construction site.

You will fill in some information in Section 2: Preliminary Site Survey on page 6 of the **Abbreviated Stormwater Site Plan** based on information from the Custom Soil Resource Report.

**Step: 1** Open a web browser and navigate to the NRCS Web Soil Survey Home Page located here: <https://websoilsurvey.nrcs.usda.gov/app/> and click on the green button labeled “Start WSS”:



**Step: 2** Create an area of interest (AOI) by zooming to the parcel using the zoom tool OR enter the address of the parcel in the “Quick Navigation” menu.



**Step: 3** A. Click the rectangle AOI button  then B. click and drag to outline the AOI.

**Step: 4** After creating the AOI, click the “Shopping Cart (Free)” tab.

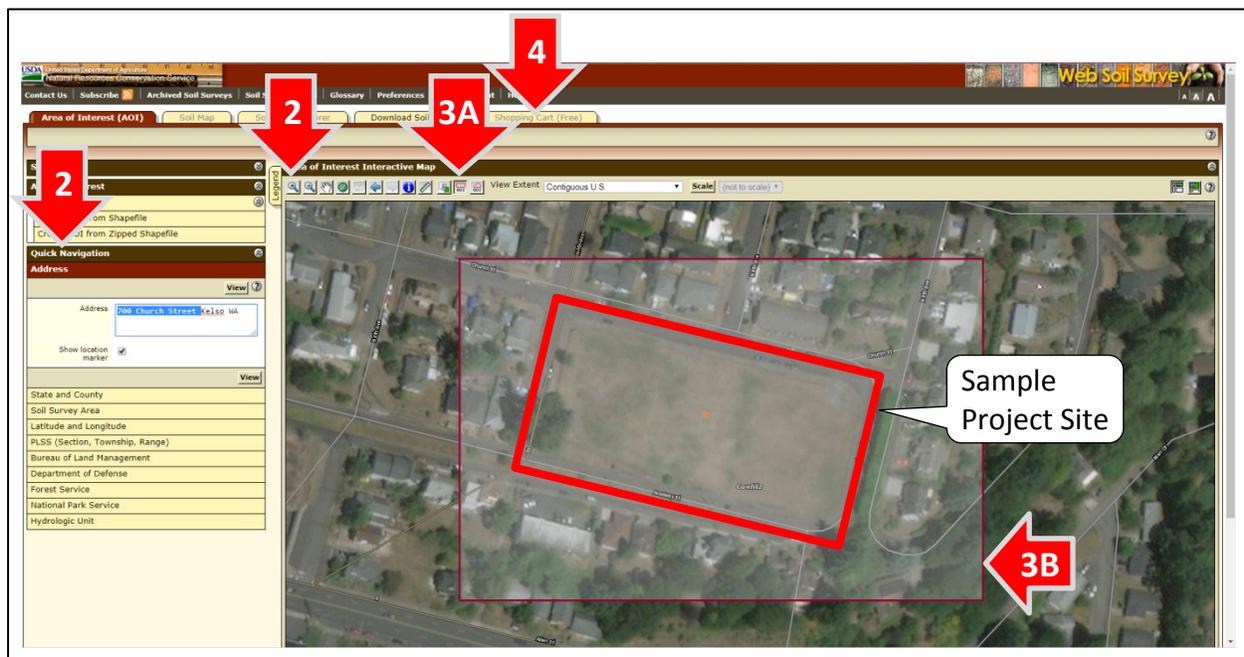


Illustration of Steps 2, 3 and 4.

Refer to the Kelso Engineering Design Manual, online at [www.kelso.gov/engineering/engineering-documents](http://www.kelso.gov/engineering/engineering-documents), for more information or clarification of stormwater requirements within Kelso. You may also contact the City of Kelso’s Engineering Department at (360) 423-6590 or at [www.kelso.gov/departments-services/engineering-department](http://www.kelso.gov/departments-services/engineering-department).

- Step: 5** Enter the site address or applicant name in the “Custom Subtitle” field.
- Step: 6** Click on the “Check Out” button.
- Step: 7** Choose “Get now” as the delivery option. Make sure your pop-up blocker is turned off, and click “OK”. The Soil Report should download automatically. Print the report to submit with the **Abbreviated Stormwater Site Plan**.

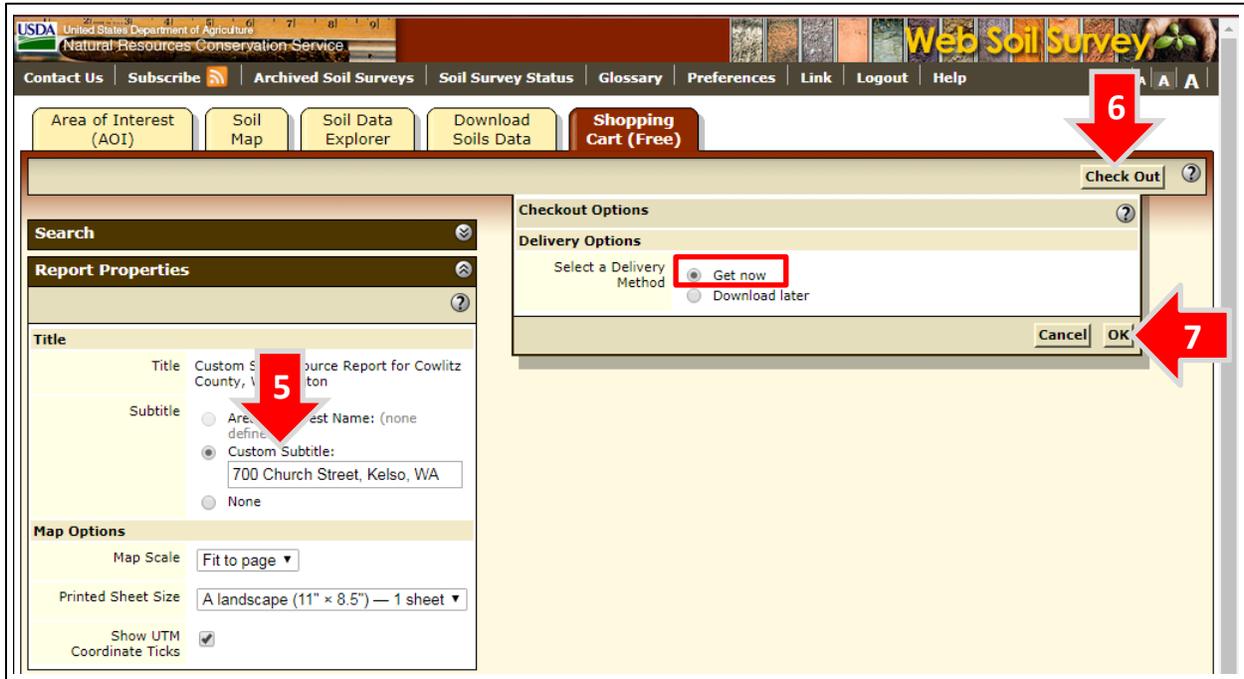
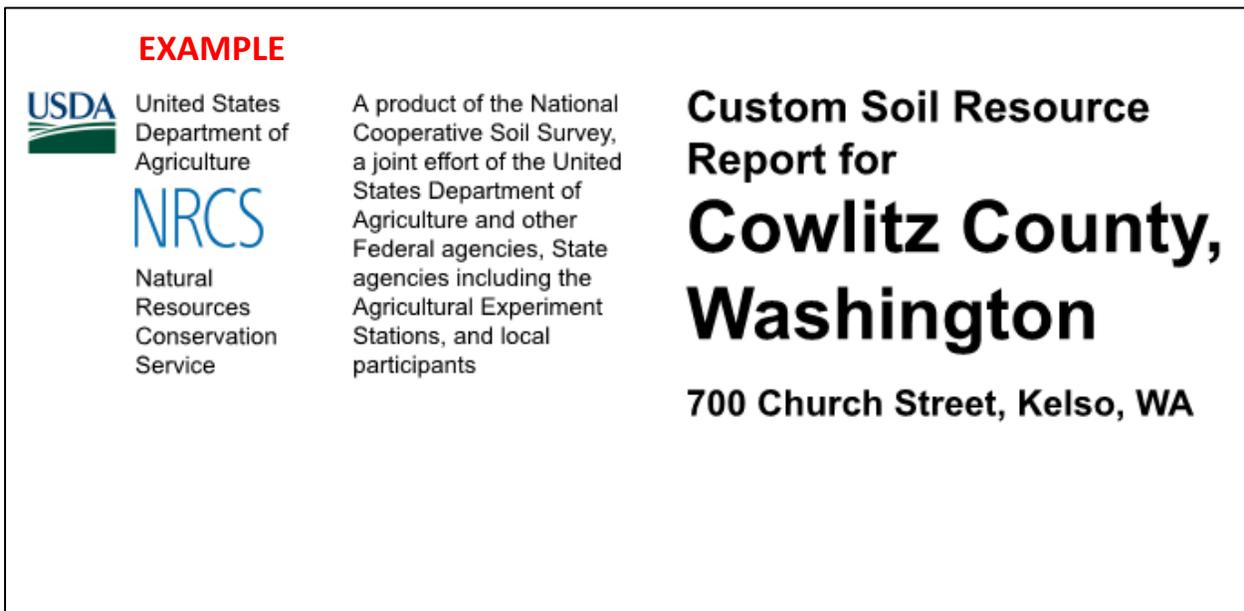


Illustration of Steps 5, 6 and 7.



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**Step: 8** Review the Custom Soil Resource Report and fill in specified information in Section 2: Preliminary Site Survey on page 6 of the **Abbreviated Stormwater Site Plan**.

- A. The Soil Map in the report shows the soil map units present in the area of interest. More than one soil type may be present on the site. Find the one or two soil types that take up the most area of the project site. *In the example below, soil type "100" takes up the most area of the example parcel.*



- B. Use the soil number(s) to locate the most common soil(s) on the site in the Map Unit Descriptions section of the report.

From this section, write down the following information for the most common soil(s) in the Custom Soil Resource Report on page 6 of the **Abbreviated Stormwater Site Plan**. *See the example on the following page.*

1. Soil Map Unit Name
2. Capacity of the most limiting layer to transmit water ( $K_{SAT}$ )
3. Hydrologic Soil Group

These soil properties affect how well the soil on the site can manage stormwater naturally through infiltration or dispersion.

**EXAMPLE**



**100—Kelso silt loam, 0 to 8 percent slopes**



**Map Unit Setting**

*National map unit symbol:* 2f11  
*Elevation:* 50 to 200 feet  
*Mean annual precipitation:* 40 to 60 inches  
*Mean annual air temperature:* 50 to 52 degrees F  
*Frost-free period:* 165 to 180 days  
*Farmland classification:* All areas are prime farmland

**Map Unit Composition**

*Kelso and similar soils:* 80 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Kelso**

**Setting**

*Landform:* Terraces  
*Parent material:* Alluvium

**Typical profile**

*H1 - 0 to 11 inches:* silt loam  
*H2 - 11 to 34 inches:* silt loam, silty clay loam  
*H2 - 11 to 34 inches:* silt loam, silty clay loam  
*H3 - 34 to 60 inches:*  
*H3 - 34 to 60 inches:*

**Properties and qualities**

*Slope:* 0 to 8 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Moderately well 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 24 to 36 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Very high (about 20.6 inches)



**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2w  
**Hydrologic Soil Group: C**  
*Other vegetative classification:* Seasonally Wet Soils (GU02XV202WA)  
*Hydric soil rating:* No

