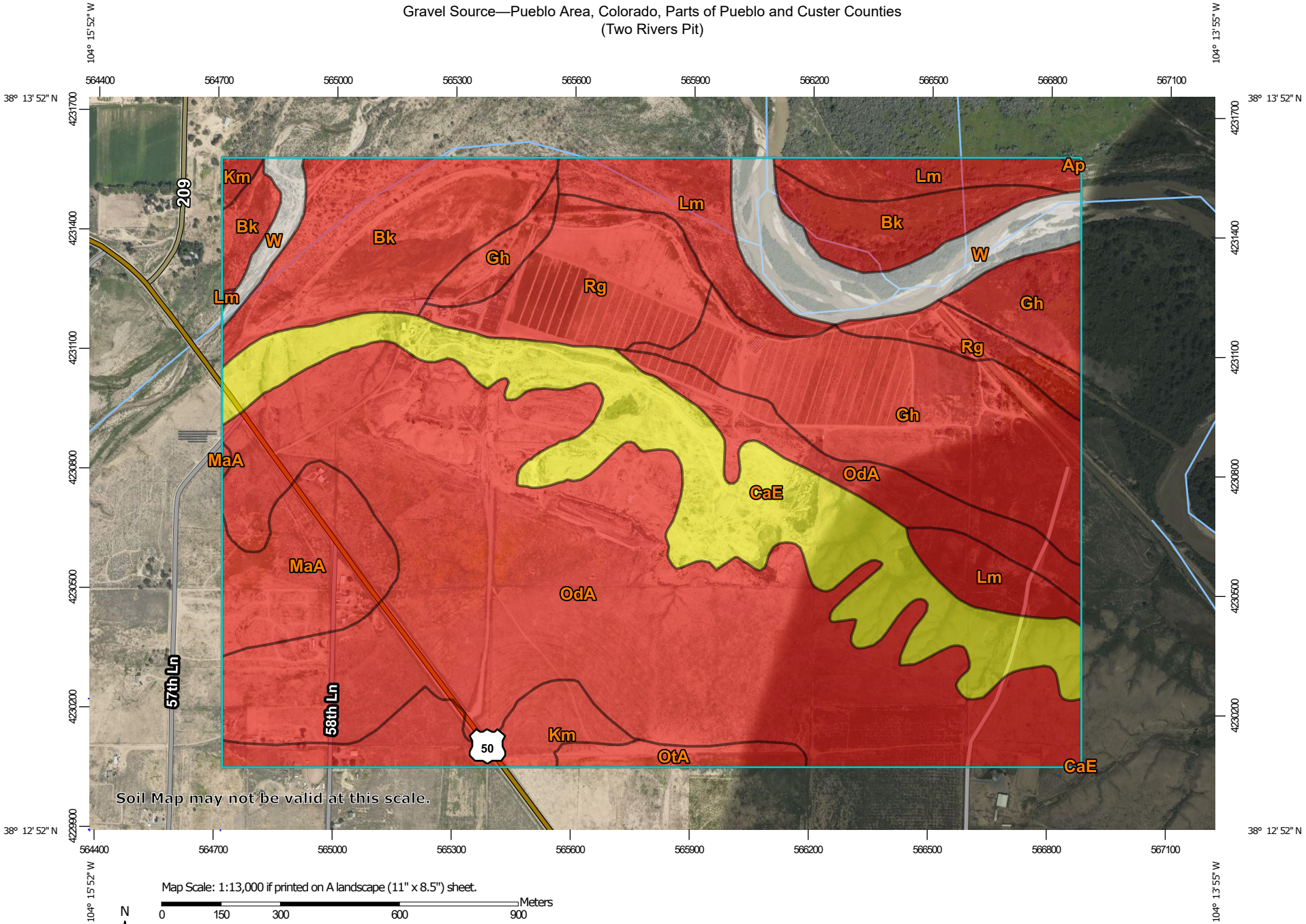
Gravel Source—Pueblo Area, Colorado, Parts of Pueblo and Custer Counties
(Two Rivers Pit)



Map Scale: 1:13,000 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 150 300 600 900

Feet
0 500 1000 2000 3000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

Poor

Fair

Good

Not rated or not available

Soil Rating Lines

Poor

Fair

Good

Not rated or not available

Soil Rating Points

Poor

Fair

Good

Not rated or not available

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

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

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

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

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

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

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

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

Soil Survey Area: Pueblo Area, Colorado, Parts of Pueblo and Custer Counties
Survey Area Data: Version 22, Aug 24, 2023

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

Date(s) aerial images were photographed: Aug 14, 2018—Oct 20, 2018

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.

Gravel Source

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
Ap	Apishapa clay loam, 0 to 2 percent slopes, occasionally flooded	Poor	Apishapa, occasionally flooded (85%)	Bottom layer (0.00)	0.3	0.0%
				Thickest layer (0.00)		
			Apishapa, ls substratum, occasionally flooded (10%)	Bottom layer (0.00)		
				Thickest layer (0.00)		
			Glenberg, occasionally flooded (3%)	Bottom layer (0.00)		
				Thickest layer (0.00)		
			Limon, occasionally flooded (2%)	Bottom layer (0.00)		
				Thickest layer (0.00)		
Bk	Bankard sand, 0 to 2 percent slopes, frequently flooded	Poor	Bankard, frequently flooded (90%)	Bottom layer (0.00)	83.5	10.2%
				Thickest layer (0.00)		
			Glenberg, frequently flooded (5%)	Bottom layer (0.00)		
				Thickest layer (0.00)		
			Las Animas, frequently flooded (5%)	Bottom layer (0.00)		
				Thickest layer (0.00)		
CaE	Cascajo very gravelly sandy loam, 2 to 20 percent slopes	Fair	Cascajo, very gravelly (85%)	Thickest layer (0.00)	102.6	12.5%
				Bottom layer (0.03)		
Gh	Glenberg-Haversid complex, 0 to 2 percent slopes, occasionally flooded	Poor	Glenberg, occasionally flooded (60%)	Bottom layer (0.00)	99.7	12.1%
				Thickest layer (0.00)		
			Haversid, occasionally flooded (30%)	Bottom layer (0.00)		
				Thickest layer (0.00)		

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
			Las Animas, occasionally flooded (10%)	Bottom layer (0.00)		
				Thickest layer (0.00)		
Km	Kimera loam, dry, 0 to 4 percent slopes	Poor	Kimera, dry (85%)	Bottom layer (0.00)	29.2	3.6%
				Thickest layer (0.00)		
			Wilid, dry (10%)	Bottom layer (0.00)		
				Thickest layer (0.00)		
			Oterodry, dry (5%)	Bottom layer (0.00)		
				Thickest layer (0.00)		
Lm	Las Animas fine sandy loam, 0 to 2 percent slopes, frequently flooded	Poor	Las Animas, frequently flooded (85%)	Bottom layer (0.00)	52.8	6.4%
				Thickest layer (0.00)		
			Bankard, frequently flooded (10%)	Bottom layer (0.00)		
				Thickest layer (0.00)		
			Apishapa, frequently flooded (5%)	Bottom layer (0.00)		
				Thickest layer (0.00)		
MaA	Manvel silt loam, dry, 0 to 2 percent slopes	Poor	Manvel, dry (90%)	Bottom layer (0.00)	35.3	4.3%
				Thickest layer (0.00)		
			Wilid, dry (5%)	Bottom layer (0.00)		
				Thickest layer (0.00)		
			Minnequa, dry (5%)	Bottom layer (0.00)		
				Thickest layer (0.00)		
OdA	Oterodry sandy loam, dry, 1 to 4 percent slopes	Poor	Oterodry, dry (80%)	Bottom layer (0.00)	314.7	38.3%
				Thickest layer (0.00)		
			Kimera, dry (10%)	Bottom layer (0.00)		

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
				Thickest layer (0.00)		
			Cascajo, dry (5%)	Bottom layer (0.00)		
				Thickest layer (0.00)		
			Olney, dry (5%)	Bottom layer (0.00)		
				Thickest layer (0.00)		
OtA	Otero clay loam, 0 to 1 percent slopes	Poor	Otero (90%)	Bottom layer (0.00)	9.1	1.1%
				Thickest layer (0.00)		
Rg	Rocky Ford silty clay loam, wet	Poor	Rocky Ford (90%)	Bottom layer (0.00)	53.7	6.5%
				Thickest layer (0.00)		
W	Water	Not rated	Water (90%)		41.6	5.1%
			Aquolls (5%)			
			Other soils (5%)			
Totals for Area of Interest					**822.5**	**100.0%**

Rating	Acres in AOI	Percent of AOI
Poor	678.3	82.5%
Fair	102.6	12.5%
Null or Not Rated	41.6	5.1%
Totals for Area of Interest	**822.5**	**100.0%**

Description

ENG - Engineering

Gravel consists of natural aggregates (2 to 75 millimeters in diameter) suitable for commercial use with a minimum of processing. It is used in many kinds of construction. Specifications for each use vary widely. Only the probability of finding material in suitable quantity is evaluated. The suitability of the material for specific purposes is not evaluated, nor are factors that affect excavation of the material.

The properties used to evaluate the soil as a source of gravel are gradation of grain sizes (as indicated by the Unified classification of the soil), the thickness of suitable material, and the content of rock fragments. If the bottom layer of the soil contains gravel, the soil is considered a likely source regardless of thickness. The assumption is that the gravel layer below the depth of observation exceeds the minimum thickness. The ratings are for the whole soil, from the surface to a depth of about 6 feet. Coarse fragments of soft bedrock, such as shale and siltstone, are not considered to be gravel.

The soils are rated "good," "fair," or "poor" as potential sources of gravel. A rating of "good" or "fair" means that the source material is likely to be in or below the soil. The bottom layer and the thickest layer of the soils are assigned numerical ratings. These ratings indicate the likelihood that the layer is a source of gravel. The number 0.00 indicates that the layer is a poor source. The number 1.00 indicates that the layer is a good source. A number between 0.00 and 1.00 indicates the degree to which the layer is a likely source.

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

Rating Options

Aggregation Method: Dominant Condition

Aggregation is the process by which a set of component attribute values is reduced to a single value that represents the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be rendered. Aggregation must be done because, on any soil map, map units are delineated but components are not.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

The aggregation method "Dominant Condition" first groups like attribute values for the components in a map unit. For each group, percent composition is set to the sum of the percent composition of all components participating in that group. These groups now represent "conditions" rather than components. The attribute value associated with the group with the highest cumulative percent composition is returned. If more than one group shares the highest cumulative percent composition, the corresponding "tie-break" rule determines which value should be returned. The "tie-break" rule indicates whether the lower or higher group value should be returned in the case of a percent composition tie. The result returned by this aggregation method represents the dominant condition throughout the map unit only when no tie has occurred.

Component Percent Cutoff: None Specified

Components whose percent composition is below the cutoff value will not be considered. If no cutoff value is specified, all components in the database will be considered. The data for some contrasting soils of minor extent may not be in the database, and therefore are not considered.

Tie-break Rule: Higher

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.