OREGON ENVIROTHON 2023 TEAM #_____
SOILS AND LAND USE Test Total: _____/ 50 points

Part I: Soil Properties

1. Complete the list of the five soil formation factors, known by their acronym **ClORPT**. [2 points]
   Climate
   Organisms
   Relief
   Parent **M**aterial
   T ime

2. What is soil structure? [1 point]
   a) melting point
   b) how much water a soil holds
   c) how soils discipline each other
   d) the shapes which a soil naturally breaks apart into

3. An ice-transported soil parent material is called: [1 point]
   a) glacial deposits
   b) ash
   c) organic material
   d) residuum

4. Where can you expect the sandiest topsoil? [1 point]
   a) lake bottom
   b) base of a mountain
   c) windy dunes
   d) no-till field

5. In soil formation, spreading compost on soil is considered a/an: [1 point]
   a) addition
   b) loss
   c) translocation
   d) transformation

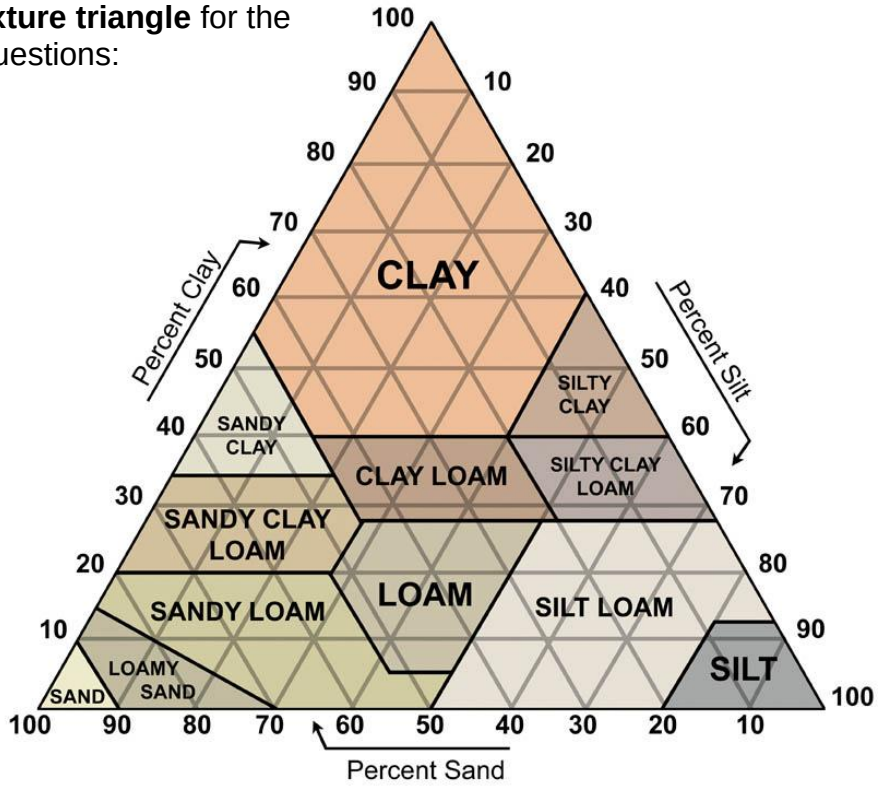
6. When salts are washed deeper into a soil profile, it is considered a/an: [1 point]
   a) addition
   b) loss
   c) translocation
   d) transformation

7. Which of the following affect soil texture? Circle all that apply. [2 points]
   a) soil color
   b) fertilizer or lime
   c) landscape position
   d) parent material

___ **/ 9 points**

Part II: Soil Classification

Use the **texture triangle** for the following questions:



8. What is the maximum percentage of sand that can be found in soil classified as silt? [2 points]

   _____20__%

9. What texture describes a soil that has 60% sand and 30% silt? [2 points]

   ____sandy clay loam_____

10. Determine the texture and color of the soil sample. Use **Soil Texture by Feel Flow Chart** and **Munsell Color Book** provided**.** [6 points] To be added when soil sample is chosen.

Texture [3 points]	**Munsell Color Notation** [moist, 3 points]
_____	_____ _____ **/**_____

___ **/ 10 points**

Part III: Soils & Land Use Management

11. Which soil chemical property is most limiting to a home garden? [1 point]
    a) pH of 6.8
    b) moderate cation exchange capacity
    c) high salinity
    d) aerobic soil conditions

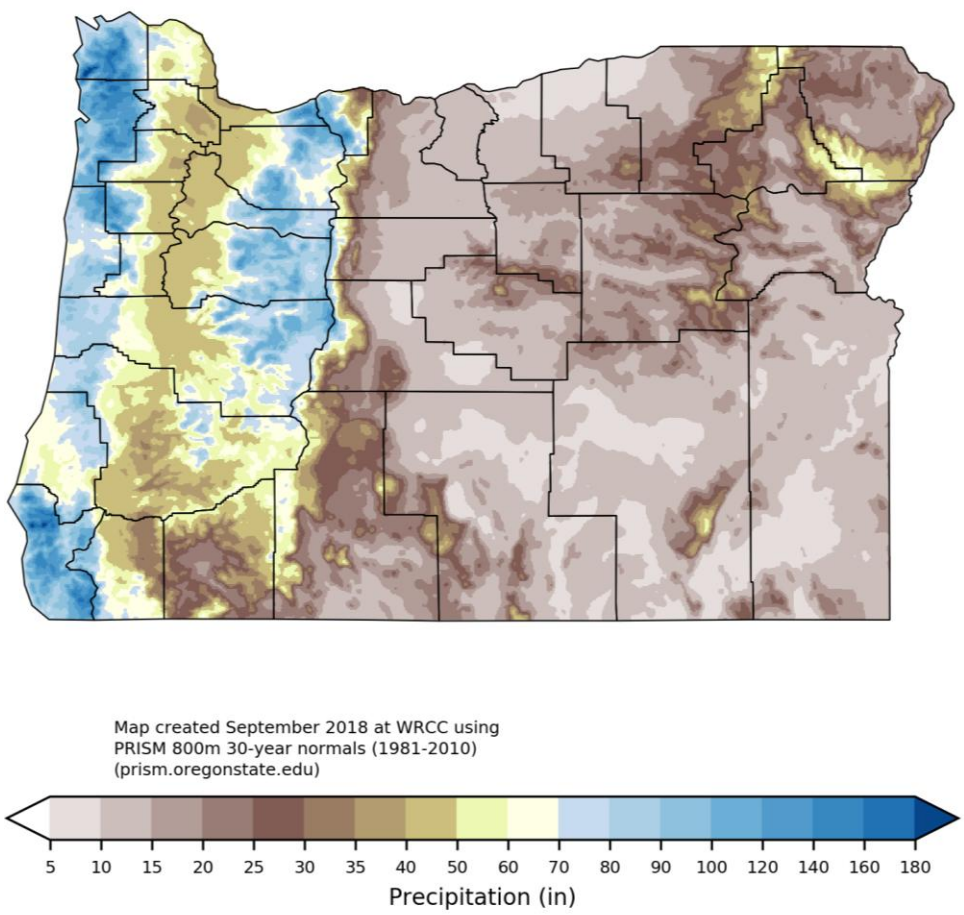
12. In which slope class might you find a tidal marsh? [1 point]
    A - ≤ 3% slope
    B - 4 to 8% slope
    C - 9 to 15% slope
    D - 16 to 35% slope
    E - 36 to 60% slope
    F - 61 to 80% slope

13. Which soil layer (horizon) is present in healthy forest and wetland soils, but not present in typical agricultural soils? [1 point]
    a) O
    b) A
    c) BC
    d) R

14. In which drainage class might you find a tidal marsh? [1 point]
    a) Excessively drained
    b) Bestly drained
    c) Somewhat poorly drained
    d) Very poorly drained

15. What is the name of the soil tool provided? [1 point]
    a) spade
    b) Büchner funnel
    c) bulk density tester
    d) soil sieve

___ / 5 points



16. Based on the rainfall map above, where would you expect the most severe summer droughts to occur? [1 point]
    a) western Oregon
    b) eastern Oregon

17. Which layer (horizon) contains the most soil carbon? [1 point]
    a) A
    b) Bw
    c) Bt
    d) C

18. How can you tell if a soil has carbon in it? [1 point]
    a) it feels neither gritty nor smooth
    b) it has a dark color
    c) it smells of elderberries
    d) it blows away easily

___ / 3 points

19. Which soil characteristic is most important for using soil to address climate change? [1 point]
    a) pH
    b) texture
    c) organic matter content
    d) rock fragment content

20. Discuss one way to capture more precipitation in agricultural soils and explain how it works. [3 points] Answer can include any of the following:
    - Improving soil structure by reducing tilling or adding organic material
    - Adding organic matter, carbon, compost, mulch, etc. because it acts as a "sponge"
    - Reducing or remediating soil compaction
    - Mulching or using a cover crop to protect the soil from erosion and rainfall impact crusting

    One point for naming the mechanism, two points for explaining why it helps increase precipitation capture.

Part IV: Soil Survey

Use the **Soil Map** for a portion of The Coos River to answers the following questions:

21. At what scale was this soil survey **mapped**? [1 point]

    ____1:20,000_____

22. What is the **scale of the printed map**? [1 point]

    _____1:31,300_____

23. What is the Map Unit Name of map symbol **34**? [1 point]

    _____ Langlois silty clay loam_____

24. Which map unit has the highest salinity? [1 point]

    _____23 - Fluvaquents-Histosols complex [Fluvaquents okay]

25. Name 3 limitations to sewage disposal in this floodplain. [3 points, one point each]
    _____Any 3 of: slow water movement, slope, depth to bedrock, flooding, depth to saturated zone, ponding, subsidence _____
    _____

___ / 11 points

26. What would happen to the soils in and near this floodplain if sea level rise occurs here? [4 points]
    Must include at least one of the following:
    - Increased salinity or saltwater intrusion
    - Increased flooding or drowned marsh
    - Erosion and/or sediment deposition
    - Organic matter increase

    _____

27. Would you build a house here? Why or why not? [4 points]
    Two points for answering no (unless for a very good reason), two points for explaining why. Answer must include: flooding, climate change, sea level rise, salinity, or habitat

    _____
    _____
    _____
    _____

28. How is soil formation related to climate? [2 points]
    Two points for identifying that climate affects soil formation (e.g., temperature and moisture affects biological and activity, organic matter content, leaching, biota, frost). For more information, see last page, which includes excerpt from Oregon Envirothon soil manual.

    _____
    _____
    _____
    _____
    _____

29. How is soil carbon related to climate? [2 points]
    Two points for identifying that **soils hold carbon**/ are a carbon sink, and/or plants can help pull greenhouse gases from the atmosphere and into soils.

    _____
    _____
    _____
    _____
    _____

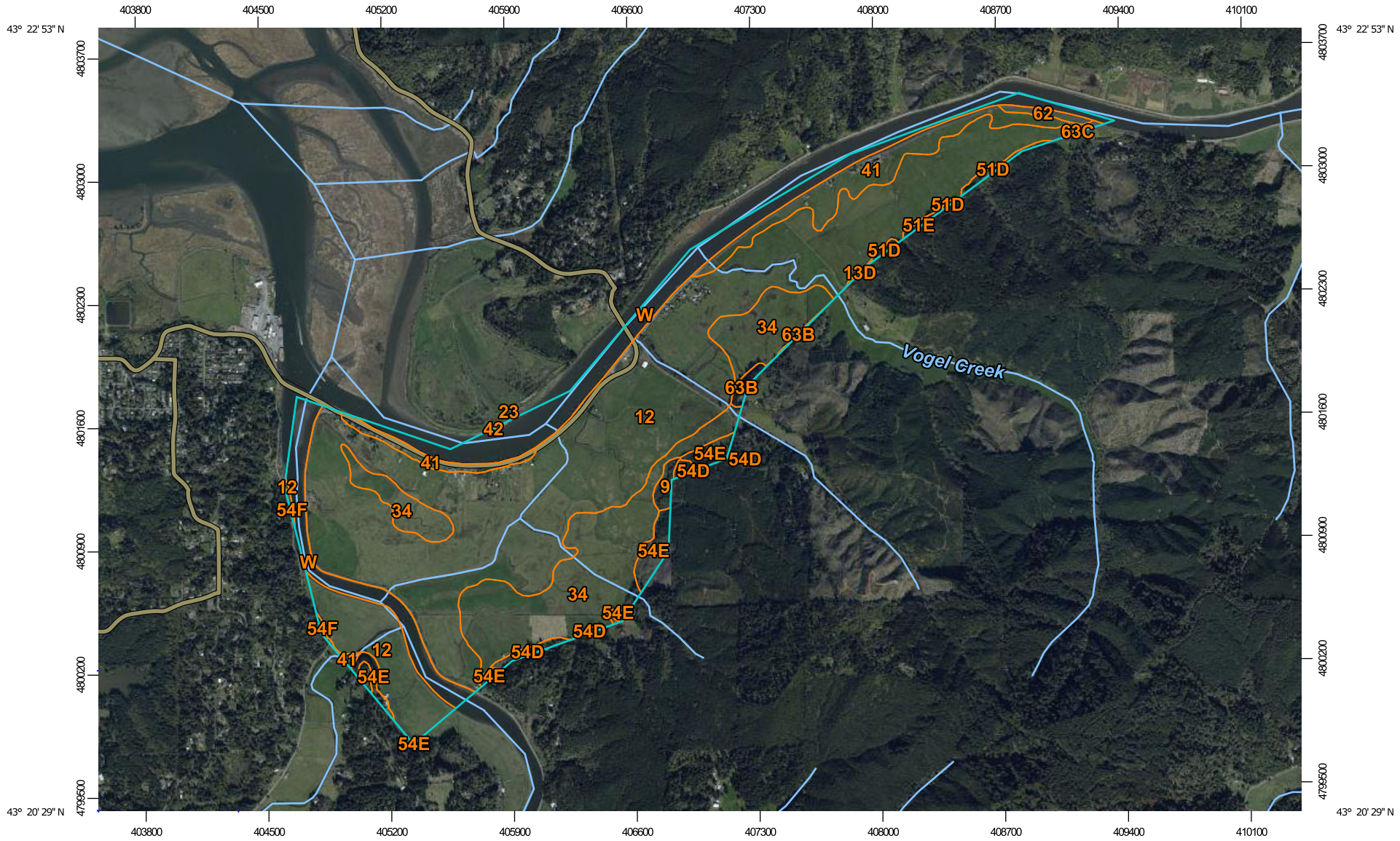
___ / 12 points

More information for question 28:

From the Oregon Envirothon soil manual: “Climate influences the rate of chemical and biological activity in soil through temperature and moisture. In environments that are both cold and dry or remain saturated for most of the year, the level of biological and chemical activity is low. Organic matter may accumulate in these environments because although the rate of production is low, it also breaks down very slowly. Biological and chemical weathering and organic matter decomposition occur faster in warmer moist soils. Leaching occurs in places like western Oregon where high rainfall washes minerals out of the topsoil, resulting in acidic (low pH) soils. In eastern Oregon where rainfall is limited, soils are more likely to have a higher pH and build up salts near the surface from evaporation. Climate can also influence which plants and animals live in the soil, which in turn affects soil properties. For example, moist wooded areas with trees that shed needles or leaves are more likely to have an O (organic) horizon than arid rangeland or plowed fields. Colder areas are more likely to undergo cryoturbation, or mixing of soil layers due to frost heave.

The climate in Oregon differs depending mainly on elevation, topography, and the orographic (rain shadow) effect of the Cascade Range…”

Soil Map—Coos County, Oregon
(Coos River floodplain)



Map Scale: 1:31,300 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 450 900 1800 2700

Feet
0 1500 3000 6000 9000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

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 1:20,000.

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: Coos County, Oregon
Survey Area Data: Version 18, Sep 8, 2022

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

Date(s) aerial images were photographed: Oct 5, 2019—Oct 10, 2019

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
9	Chetco silty clay loam	5.7	0.5%
12	Coquille silt loam	704.5	58.9%
13D	Dement silt loam, 12 to 30 percent slopes	0.5	0.0%
23	Fluvaquents-Histosols complex	0.0	0.0%
26C	Geisel silt loam, 2 to 12 percent slopes	2.2	0.2%
26D	Geisel silt loam, 12 to 30 percent slopes	2.0	0.2%
34	Langlois silty clay loam	213.2	17.8%
41	Nestucca silt loam	71.9	6.0%
42	Nestucca-Willanch complex	0.2	0.0%
51D	Rinearson silt loam, 0 to 30 percent slopes	5.4	0.5%
51E	Rinearson silt loam, 30 to 50 percent slopes	1.6	0.1%
54D	Templeton silt loam, 7 to 30 percent slopes	5.9	0.5%
54E	Templeton silt loam, 30 to 50 percent slopes	26.7	2.2%
54F	Templeton silt loam, 50 to 70 percent slopes	1.7	0.1%
62	Willanch fine sandy loam	5.2	0.4%
63B	Wintley silt loam, 0 to 8 percent slopes	4.7	0.4%
63C	Wintley silt loam, 8 to 15 percent slopes	0.3	0.0%
W	Water	143.5	12.0%
Totals for Area of Interest		**1,195.2**	**100.0%**

Chemical Soil Properties

This table shows estimates of some chemical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Cation-exchange capacity is the total amount of extractable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. Soils having a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. The ability to retain cations reduces the hazard of ground-water pollution.

Effective cation-exchange capacity refers to the sum of extractable cations plus aluminum expressed in terms of milliequivalents per 100 grams of soil. It is determined for soils that have pH of less than 5.5.

Soil reaction is a measure of acidity or alkalinity. It is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

Calcium carbonate equivalent is the percent of carbonates, by weight, in the fraction of the soil less than 2 millimeters in size. The availability of plant nutrients is influenced by the amount of carbonates in the soil.

Gypsum is expressed as a percent, by weight, of hydrated calcium sulfates in the fraction of the soil less than 20 millimeters in size. Gypsum is partially soluble in water. Soils that have a high content of gypsum may collapse if the gypsum is removed by percolating water.

Salinity is a measure of soluble salts in the soil at saturation. It is expressed as the electrical conductivity of the saturation extract, in millimhos per centimeter at 25 degrees C. Estimates are based on field and laboratory measurements at representative sites of nonirrigated soils. The salinity of irrigated soils is affected by the quality of the irrigation water and by the frequency of water application. Hence, the salinity of soils in individual fields can differ greatly from the value given in the table. Salinity affects the suitability of a soil for crop production, the stability of soil if used as construction material, and the potential of the soil to corrode metal and concrete.

Sodium adsorption ratio (SAR) is a measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration. Soils that have SAR values of 13 or more may be characterized by an increased dispersion of organic matter and clay particles, reduced saturated hydraulic conductivity and aeration, and a general degradation of soil structure.

Report—Chemical Soil Properties

Chemical Soil Properties–Coos County, Oregon								
Map symbol and soil name	**Depth**	**Cation-exchange capacity**	**Effective cation-exchange capacity**	**Soil reaction**	**Calcium carbonate**	**Gypsum**	**Salinity**	**Sodium adsorption ratio**
	In	*meq/100g*	*meq/100g*	*pH*	*Pct*	*Pct*	*mmhos/cm*	
9—Chetco silty clay loam								
Chetco	0-10	20-35	—	5.1-6.5	0	0	0	0
	10-24	15-35	—	5.6-6.5	0	0	0	0
	24-60	20-25	—	5.6-6.5	0	0	2.0-4.0	0
12—Coquille silt loam								
Coquille	0-14	15-35	—	3.5-5.0	0	0	0	0
	14-36	10-25	—	3.5-5.0	0	0	0	0
	36-60	15-30	—	3.5-5.0	0	0	2.0-4.0	0
13D—Dement silt loam, 12 to 30 percent slopes								
Dement	0-7	15-30	—	4.5-6.5	0	0	0	0
	7-45	10-30	—	4.5-5.5	0	0	0	0
	45-55	—	—	—	—	—	—	—

Chemical Soil Properties–Coos County, Oregon								
Map symbol and soil name	**Depth**	**Cation-exchange capacity**	**Effective cation-exchange capacity**	**Soil reaction**	**Calcium carbonate**	**Gypsum**	**Salinity**	**Sodium adsorption ratio**
	In	*meq/100g*	*meq/100g*	*pH*	*Pct*	*Pct*	*mmhos/cm*	
23—Fluvaquents-Histosols complex								
Fluvaquents	0-3	10-30	—	5.6-6.5	0	0	5.0-25.0	0-5
	3-6	15-30	—	6.1-6.5	0	0	5.0-25.0	0-5
	6-9	15-30	—	6.6-7.3	0	0	5.0-25.0	0-5
	9-59	15-30	—	6.6-7.3	0	0	5.0-25.0	0-5
Histosols	0-7	120-165	—	5.6-7.3	0	0	—	0
	7-13	120-165	—	5.6-7.3	0	0	—	0
	13-20	120-165	—	5.6-7.3	0	0	—	0
	20-32	25-45	—	5.6-7.3	0	0	—	0
	32-60	25-45	—	5.6-7.3	0	0	—	0
26C—Geisel silt loam, 2 to 12 percent slopes								
Geisel	0-10	20-30	—	5.6-6.5	0	0	0	0
	10-54	15-35	—	4.5-6.0	0	0	0	0
	54-64	—	—	—	—	—	—	—
26D—Geisel silt loam, 12 to 30 percent slopes								
Geisel	0-10	20-30	—	5.6-6.5	0	0	0	0
	10-54	15-35	—	4.5-6.0	0	0	0	0
	54-64	—	—	—	—	—	—	—
34—Langlois silty clay loam								
Langlois	0-10	20-35	—	5.1-6.0	0	0	0	0
	10-28	20-35	—	5.1-6.0	0	0	0	0
	28-60	20-40	—	5.6-6.0	0	0	0.0-4.0	0

Chemical Soil Properties–Coos County, Oregon								
Map symbol and soil name	**Depth**	**Cation-exchange capacity**	**Effective cation-exchange capacity**	**Soil reaction**	**Calcium carbonate**	**Gypsum**	**Salinity**	**Sodium adsorption ratio**
	In	*meq/100g*	*meq/100g*	*pH*	*Pct*	*Pct*	*mmhos/cm*	
41—Nestucca silt loam								
Nestucca	0-14	15-30	—	4.5-5.5	0	0	0	0
	14-40	10-20	—	4.5-5.5	0	0	0	0
	40-60	10-25	—	4.5-5.5	0	0	0	0
42—Nestucca-Willanch complex								
Nestucca	0-14	15-30	—	4.5-5.5	0	0	0	0
	14-40	10-20	—	4.5-5.5	0	0	0	0
	40-60	10-25	—	4.5-5.5	0	0	0	0
Willanch	0-13	5.0-15	—	5.6-6.5	0	0	0	0
	13-35	0.0-10	—	5.6-6.0	0	0	0	0
	35-60	0.0-5.0	—	5.6-6.0	0	0	0	0
51D—Rinearson silt loam, 0 to 30 percent slopes								
Rinearson	0-18	15-20	—	4.5-5.5	0	0	0	0
	18-33	10-20	—	3.5-5.5	0	0	0	0
	33-42	10-20	—	3.5-5.5	0	0	0	0
	42-52	—	—	—	—	—	—	—
51E—Rinearson silt loam, 30 to 50 percent slopes								
Rinearson	0-18	15-20	—	4.5-5.5	0	0	0	0
	18-33	10-20	—	3.5-5.5	0	0	0	0
	33-42	10-20	—	3.5-5.5	0	0	0	0
	42-52	—	—	—	—	—	—	—

Chemical Soil Properties–Coos County, Oregon								
Map symbol and soil name	**Depth**	**Cation-exchange capacity**	**Effective cation-exchange capacity**	**Soil reaction**	**Calcium carbonate**	**Gypsum**	**Salinity**	**Sodium adsorption ratio**
	In	*meq/100g*	*meq/100g*	*pH*	*Pct*	*Pct*	*mmhos/cm*	
54D—Templeton silt loam, 7 to 30 percent slopes								
Templeton	0-16	50-70	—	3.6-5.5	0	0	0	0
	16-42	15-30	—	3.6-5.0	0	0	0	0
	42-52	—	—	—	—	—	—	—
54E—Templeton silt loam, 30 to 50 percent slopes								
Templeton	0-16	50-70	—	3.6-5.5	0	0	0	0
	16-42	15-30	—	3.6-5.0	0	0	0	0
	42-52	—	—	—	—	—	—	—
54F—Templeton silt loam, 50 to 70 percent slopes								
Templeton	0-16	50-70	—	3.6-5.5	0	0	0	0
	16-42	15-30	—	3.6-5.0	0	0	0	0
	42-52	—	—	—	—	—	—	—
62—Willanch fine sandy loam								
Willanch	0-13	5.0-15	—	5.6-6.5	0	0	0	0
	13-35	0.0-10	—	5.6-6.0	0	0	0	0
	35-60	0.0-5.0	—	5.6-6.0	0	0	0	0
63B—Wintley silt loam, 0 to 8 percent slopes								
Wintley	0-1	—	30-40	3.5-5.5	0	0	0	0
	1-5	10-20	—	4.5-5.5	0	0	0	0
	5-48	10-20	—	4.5-5.5	0	0	0	0
	48-61	0.0-5.0	—	4.5-5.5	0	0	0	0

Chemical Soil Properties–Coos County, Oregon								
Map symbol and soil name	**Depth**	**Cation-exchange capacity**	**Effective cation-exchange capacity**	**Soil reaction**	**Calcium carbonate**	**Gypsum**	**Salinity**	**Sodium adsorption ratio**
	In	*meq/100g*	*meq/100g*	*pH*	*Pct*	*Pct*	*mmhos/cm*	
63C—Wintley silt loam, 8 to 15 percent slopes								
Wintley	0-1	—	30-40	3.5-5.5	0	0	0	0
	1-5	10-20	—	4.5-5.5	0	0	0	0
	5-48	10-20	—	4.5-5.5	0	0	0	0
	48-61	0.0-5.0	—	4.5-5.5	0	0	0	0
W—Water								
Water	—	—	—	—	—	—	—	—

Data Source Information

Soil Survey Area: Coos County, Oregon
Survey Area Data: Version 18, Sep 8, 2022

Sewage Disposal

This table shows the degree and kind of soil limitations that affect septic tank absorption fields and sewage lagoons. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Septic tank absorption fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. Only that part of the soil between depths of 24 and 72 inches or between a depth of 24 inches and a restrictive layer is evaluated. The ratings are based on the soil properties that affect absorption of the effluent, construction and maintenance of the system, and public health. Saturated hydraulic conductivity (Ksat), depth to a water table, ponding, depth to bedrock or a cemented pan, and flooding affect absorption of the effluent. Stones and boulders, ice, and bedrock or a cemented pan interfere with installation. Subsidence interferes with installation and maintenance. Excessive slope may cause lateral seepage and surfacing of the effluent in downslope areas.

Some soils are underlain by loose sand and gravel or fractured bedrock at a depth of less than 4 feet below the distribution lines. In these soils the absorption field may not adequately filter the effluent, particularly when the system is new. As a result, the ground water may become contaminated.

Sewage lagoons are shallow ponds constructed to hold sewage while aerobic bacteria decompose the solid and liquid wastes. Lagoons should have a nearly level floor surrounded by cut slopes or embankments of compacted soil. Nearly impervious soil material for the lagoon floor and sides is required to minimize seepage and contamination of ground water. Considered in the ratings are slope, saturated hydraulic conductivity (Ksat), depth to a water table, ponding, depth to bedrock or a cemented pan, flooding, large stones, and content of organic matter.

Saturated hydraulic conductivity (Ksat) is a critical property affecting the suitability for sewage lagoons. Most porous soils eventually become sealed when they are used as sites for sewage lagoons. Until sealing occurs, however, the hazard of pollution is severe. Soils that have a Ksat rate of more than 14 micrometers per second are too porous for the proper functioning of sewage lagoons. In these soils, seepage of the effluent can result in contamination of the ground water. Ground-water contamination is also a hazard if fractured bedrock is within a depth of 40 inches, if the water table is high enough to raise the level of sewage in the lagoon, or if floodwater overtops the lagoon.

A high content of organic matter is detrimental to proper functioning of the lagoon because it inhibits aerobic activity. Slope, bedrock, and cemented pans can cause construction problems, and large stones can hinder compaction of the lagoon floor. If the lagoon is to be uniformly deep throughout, the slope must be gentle enough and the soil material must be thick enough over bedrock or a cemented pan to make land smoothing practical.

Information in this table is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil between the surface and a depth of 5 to 7 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this table. Local ordinances and regulations should be considered in planning, in site selection, and in design.

Report—Sewage Disposal

[Onsite investigation may be needed to validate the interpretations in this table and to confirm the identity of the soil on a given site. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The table shows only the top five limitations for any given soil. The soil may have additional limitations]

Sewage Disposal–Coos County, Oregon					
Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
9—Chetco silty clay loam					
Chetco	75	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00		

Sewage Disposal–Coos County, Oregon					
Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
12—Coquille silt loam					
Coquille	75	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	0.50
		Flooding	0.40	Flooding	0.40
13D—Dement silt loam, 12 to 30 percent slopes					
Dement	75	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	1.00	Depth to soft bedrock	0.84
		Depth to bedrock	0.94		
23—Fluvaquents-Histosols complex					
Fluvaquents	50	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Organic matter content	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
Histosols	40	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Organic matter content	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Seepage	0.50
26C—Geisel silt loam, 2 to 12 percent slopes					
Geisel	75	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Depth to bedrock	0.57	Depth to soft bedrock	0.13
26D—Geisel silt loam, 12 to 30 percent slopes					
Geisel	75	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	1.00	Depth to soft bedrock	0.13
		Depth to bedrock	0.57		

Sewage Disposal–Coos County, Oregon					
Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
34—Langlois silty clay loam					
Langlois	80	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00		
41—Nestucca silt loam					
Nestucca	80	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	0.50
42—Nestucca-Willanch complex					
Nestucca	45	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	0.50
Willanch	40	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
51D—Rinearson silt loam, 0 to 30 percent slopes					
Rinearson	75	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Depth to bedrock	0.99	Depth to soft bedrock	0.96
		Slow water movement	0.50	Seepage	0.50
51E—Rinearson silt loam, 30 to 50 percent slopes					
Rinearson	75	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Depth to bedrock	0.99	Depth to soft bedrock	0.96
		Slow water movement	0.50	Seepage	0.50

Sewage Disposal–Coos County, Oregon					
Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
54D—Templeton silt loam, 7 to 30 percent slopes					
Templeton	75	Very limited		Very limited	
		Slope	1.00	Organic matter content	1.00
		Depth to bedrock	0.99	Slope	1.00
		Slow water movement	0.50	Depth to soft bedrock	0.96
				Seepage	0.50
54E—Templeton silt loam, 30 to 50 percent slopes					
Templeton	75	Very limited		Very limited	
		Slope	1.00	Organic matter content	1.00
		Depth to bedrock	0.99	Slope	1.00
		Slow water movement	0.50	Depth to soft bedrock	0.96
				Seepage	0.50
54F—Templeton silt loam, 50 to 70 percent slopes					
Templeton	85	Very limited		Very limited	
		Slope	1.00	Organic matter content	1.00
		Depth to bedrock	0.99	Slope	1.00
		Slow water movement	0.50	Depth to soft bedrock	0.96
				Seepage	0.50
62—Willanch fine sandy loam					
Willanch	75	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
63B—Wintley silt loam, 0 to 8 percent slopes					
Wintley	85	Very limited		Somewhat limited	
		Slow water movement	1.00	Seepage	0.50
				Slope	0.32
63C—Wintley silt loam, 8 to 15 percent slopes					
Wintley	80	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.63	Seepage	0.50

Sewage Disposal–Coos County, Oregon					
Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
W—Water					
Water	100	Not rated		Not rated	

Data Source Information

Soil Survey Area: Coos County, Oregon
Survey Area Data: Version 18, Sep 8, 2022