Map Unit Description (Brief, Tabular)

Washington County, Arkansas

[Absence of an entry indicates that the feature is not a concern or that data were not estimated. Data applies to the entire extent of the map unit within the survey area. Map unit and soil properties for a specific parcel of land may vary somewhat and should be determined by onsite investigation]

AeC--Allegheny gravelly loam, 3 to 8 percent slopes (leesburg)

Composition

- Allegheny and similar soils: 100 percent of the unit

Setting

Landform(s): benches, hills, hills
Elevation:
Precipitation: 38 to 53 inches
Slope gradient: 3 to 8 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Allegheny and similar soils

Average total avail. water in top five feet (in.): 10.8
Available water capacity class: High
Parent material: loamy colluvium derived from sandstone and shale over clayey residuum weathered from acid shale
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately High
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Land capability class, irrigated:
Land capability class, nonirrigated: 4e
Hydric soil: no
Hydrologic group: B
Runoff class: low
Potential frost action: none

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap,AB,BA -- 0 to 13	Gravelly loam	1.0 to 2.1	4.5 to 5.5	0.0	0
Bt1 -- 13 to 30	Gravelly clay loam	1.5 to 3.0	4.5 to 5.5	0.0	0
Bt2 -- 30 to 43	Gravelly clay loam	1.6 to 2.3	4.5 to 5.5	0.0	0
2BC -- 43 to 60	Gravelly silty clay	2.0 to 3.0	4.5 to 5.5	0.0	0
2C -- 60 to 74	Clay	2.1 to 2.8	4.5 to 6.0	0.0	0

Ecological class(es):

AeC2--Allegheny gravelly loam, 3 to 8 percent slopes, eroded (leesburg)

Composition

- Allegheny and similar soils: 100 percent of the unit

Setting

Landform(s): benches, hills, hills
Elevation:
Precipitation: 38 to 53 inches
Slope gradient: 3 to 8 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Allegheny and similar soils

Average total avail. water in top five feet (in.): 10.8
Available water capacity class: High
Parent material: loamy colluvium derived from sandstone and shale over clayey residuum weathered from acid shale
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately High
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Land capability class, irrigated:
Land capability class, nonirrigated: 4e
Hydric soil: no
Hydrologic group: B
Runoff class: low
Potential frost action: none

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap,AB,BA -- 0 to 13	Gravelly loam	1.0 to 2.1	4.5 to 5.5	0.0	0
Bt1 -- 13 to 30	Gravelly clay loam	1.5 to 3.0	4.5 to 5.5	0.0	0
Bt2 -- 30 to 43	Gravelly clay loam	1.6 to 2.3	4.5 to 5.5	0.0	0
2BC -- 43 to 60	Gravelly silty clay	2.0 to 3.0	4.5 to 5.5	0.0	0
2C -- 60 to 74	Clay	2.1 to 2.8	4.5 to 6.0	0.0	0

Ecological class(es):

AeD2--Allegheny gravelly loam, 8 to 12 percent slopes, eroded (leesburg)

Composition

- Allegheny and similar soils: 100 percent of the unit

Setting

Landform(s): benches, hills, hillslopes
Elevation:
Precipitation: 38 to 53 inches
Slope gradient: 8 to 12 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Allegheny and similar soils

Average total avail. water in top five feet (in.): 10.8
Available water capacity class: High
Parent material: loamy colluvium derived from sandstone and shale over clayey residuum weathered from acid shale
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately High
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Land capability class, irrigated:
Land capability class, nonirrigated: 4e
Hydric soil: no
Hydrologic group: B
Runoff class: medium
Potential frost action: none

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap,AB,BA -- 0 to 13	Gravelly loam	1.0 to 2.1	4.5 to 5.5	0.0	0
Bt1 -- 13 to 30	Gravelly clay loam	1.5 to 3.0	4.5 to 5.5	0.0	0
Bt2 -- 30 to 43	Gravelly clay loam	1.6 to 2.3	4.5 to 5.5	0.0	0
2BC -- 43 to 60	Gravelly silty clay	2.0 to 3.0	4.5 to 5.5	0.0	0
2C -- 60 to 74	Clay	2.1 to 2.8	4.5 to 6.0	0.0	0

Ecological class(es):

AgD--Allegheny stony loam, 8 to 12 percent slopes (leesburg)

Composition

- Allegheny and similar soils: 100 percent of the unit

Setting

Landform(s): benches, hills, hillslopes
Elevation:
Precipitation: 38 to 53 inches
Slope gradient: 8 to 12 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Allegheny and similar soils

Average total avail. water in top five feet (in.): 10.8
Available water capacity class: High
Parent material: loamy colluvium derived from sandstone and shale over clayey residuum weathered from acid shale
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately High
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Land capability class, irrigated:
Land capability class, nonirrigated: 6s
Hydric soil: no
Hydrologic group: B
Runoff class: medium
Potential frost action: none

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap,AB,BA -- 0 to 13	Stony loam	1.0 to 2.1	4.5 to 5.5	0.0	0
Bt1 -- 13 to 30	Gravelly clay loam	1.5 to 3.0	4.5 to 5.5	0.0	0
Bt2 -- 30 to 43	Gravelly clay loam	1.6 to 2.3	4.5 to 5.5	0.0	0
2BC -- 43 to 60	Gravelly silty clay	2.0 to 3.0	4.5 to 5.5	0.0	0
2C -- 60 to 74	Clay	2.1 to 2.8	4.5 to 6.0	0.0	0

Ecological class(es):

AgF--Allegheny stony loam, 12 to 40 percent slopes (leesburg)

Composition

- Allegheny and similar soils: 100 percent of the unit

Setting

Landform(s): benches, hills, hillslopes
Elevation:
Precipitation: 38 to 53 inches
Slope gradient: 12 to 40 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Allegheny and similar soils

Average total avail. water in top five feet (in.): 10.8
Available water capacity class: High
Parent material: loamy colluvium derived from sandstone and shale over clayey residuum weathered from acid shale
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately High
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Land capability class, irrigated:
Land capability class, nonirrigated: 7s
Hydric soil: no
Hydrologic group: B
Runoff class: high
Potential frost action: none

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap,AB,BA -- 0 to 13	Stony loam	1.0 to 2.1	4.5 to 5.5	0.0	0
Bt1 -- 13 to 30	Gravelly clay loam	1.5 to 3.0	4.5 to 5.5	0.0	0
Bt2 -- 30 to 43	Gravelly clay loam	1.6 to 2.3	4.5 to 5.5	0.0	0
2BC -- 43 to 60	Gravelly silty clay	2.0 to 3.0	4.5 to 5.5	0.0	0
2C -- 60 to 74	Clay	2.1 to 2.8	4.5 to 6.0	0.0	0

Ecological class(es):

AhF--Allen-Hector complex, 20 to 40 percent slopes (nella)

Composition

- Allen and similar soils: 60 percent of the unit
- Hector and similar soils: 30 percent of the unit

Setting

Landform(s): hills, mountainsides
Elevation:
Precipitation: 38 to 53 inches
Slope gradient: 20 to 40 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Allen and similar soils

Average total avail. water in top five feet (in.): 8.3
Available water capacity class: Moderate
Parent material: loamy colluvium derived from sandstone and shale
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately High
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Land capability class, irrigated:
Land capability class, nonirrigated: 7s
Hydric soil: no
Hydrologic group: B
Runoff class: high
Potential frost action: none

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 6	Stony loam	0.5 to 0.9	4.5 to 5.5	0.0	0
BA,Bt1,Bt2 -- 6 to 39	Clay loam	2.3 to 4.6	4.5 to 5.5	0.0	0
Bt3 -- 39 to 72	Clay loam	2.6 to 5.0	4.5 to 5.5	0.0	0

Ecological class(es):

[AhF - Allen-Hector complex, 20 to 40 percent slopes (nella)]

Characteristics of Hector and similar soils

Average total avail. water in top five feet (in.): 1.7
Available water capacity class: Very low
Parent material: loamy residuum weathered from sandstone
Restrictive feature(s): lithic bedrock at 10 to 20 inches
Depth to Water table: none within the soil profile
Drainage class: somewhat excessively drained
Flooding hazard: none
Ponding hazard: none

Soil loss tolerance (T factor): 1
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 7s
Hydric soil: no
Hydrologic group: D
Runoff class: very high
Potential frost action: none

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 6	Stony fine sandy loam	0.5 to 0.7	5.1 to 6.5	0.0	0
Bw -- 6 to 15	Stony fine sandy loam	0.7 to 1.4	4.5 to 5.5	0.0	0
R -- 15 to 17	Unweathered bedrock			0.0	0

Ecological class(es): NRCS Rangeland Site - Sandstone Ridge

AhG--Allen-Hector complex, 40 to 55 percent slopes (nella)

Composition

- Allen and similar soils: 40 percent of the unit
- Hector and similar soils: 40 percent of the unit

Setting

Landform(s): hills, mountainsides
Elevation:
Precipitation: 38 to 53 inches
Slope gradient: 40 to 50 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Allen and similar soils

Average total avail. water in top five feet (in.): 8.3
Available water capacity class: Moderate
Parent material: loamy colluvium derived from sandstone and shale
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately High
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Land capability class, irrigated:
Land capability class, nonirrigated: 7s
Hydric soil: no
Hydrologic group: B
Runoff class: very high
Potential frost action: none

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 6	Stony loam	0.5 to 0.9	4.5 to 5.5	0.0	0
BA,Bt1,Bt2 -- 6 to 39	Clay loam	2.3 to 4.6	4.5 to 5.5	0.0	0
Bt3 -- 39 to 72	Clay loam	2.6 to 5.0	4.5 to 5.5	0.0	0

Ecological class(es):

[AhG - Allen-Hector complex, 40 to 55 percent slopes (nella)]

Characteristics of Hector and similar soils

Average total avail. water in top five feet (in.): 1.7
Available water capacity class: Very low
Parent material: loamy residuum weathered from sandstone
Restrictive feature(s): lithic bedrock at 10 to 20 inches
Depth to Water table: none within the soil profile
Drainage class: somewhat excessively drained
Flooding hazard: none
Ponding hazard: none

Soil loss tolerance (T factor): 1
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 7s
Hydric soil: no
Hydrologic group: D
Runoff class: very high
Potential frost action: none

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 6	Stony fine sandy loam	0.5 to 0.7	5.1 to 6.5	0.0	0
Bw -- 6 to 15	Stony fine sandy loam	0.7 to 1.4	4.5 to 5.5	0.0	0
R -- 15 to 17	Unweathered bedrock			0.0	0

Ecological class(es): NRCS Rangeland Site - Sandstone Ridge

AlC2--Allen loam, 3 to 8 percent slopes, eroded

Composition

- Allen and similar soils: 100 percent of the unit

Setting

Landform(s): benches, hills
Elevation:
Precipitation: 38 to 53 inches
Slope gradient: 3 to 8 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Allen and similar soils

Average total avail. water in top five feet (in.): 10.6
Available water capacity class: High
Parent material: loamy colluvium derived from sandstone and shale
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately High
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 3e
Hydric soil: no
Hydrologic group: B
Runoff class: low
Potential frost action: none

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 6	Loam	0.8 to 1.1	4.5 to 5.5	0.0	0
BA,Bt1.Bt2 -- 6 to 39	Clay loam	4.0 to 5.6	4.5 to 5.5	0.0	0
Bt3 -- 39 to 72	Clay loam	3.3 to 5.6	4.5 to 5.5	0.0	0

Ecological class(es):

AlD2--Allen loam, 8 to 12 percent slopes, eroded

Composition

- Allen and similar soils: 100 percent of the unit

Setting

Landform(s): benches, hills
Elevation:
Precipitation: 38 to 53 inches
Slope gradient: 8 to 12 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Allen and similar soils

Average total avail. water in top five feet (in.): 10.6
Available water capacity class: High
Parent material: loamy colluvium derived from sandstone and shale
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately High
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 4e
Hydric soil: no
Hydrologic group: B
Runoff class: medium
Potential frost action: none

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 6	Loam	0.8 to 1.1	4.5 to 5.5	0.0	0
BA,Bt1.Bt2 -- 6 to 39	Clay loam	4.0 to 5.6	4.5 to 5.5	0.0	0
Bt3 -- 39 to 72	Clay loam	3.3 to 5.6	4.5 to 5.5	0.0	0

Ecological class(es):

AlE2--Allen loam, 12 to 20 percent slopes, eroded

Composition

- Allen and similar soils: 100 percent of the unit

Setting

Landform(s): benches, hills
Elevation:
Precipitation: 38 to 53 inches
Slope gradient: 12 to 20 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Allen and similar soils

Average total avail. water in top five feet (in.): 10.6
Available water capacity class: High
Parent material: loamy colluvium derived from sandstone and shale
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately High
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 6e
Hydric soil: no
Hydrologic group: B
Runoff class: high
Potential frost action: none

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 6	Loam	0.8 to 1.1	4.5 to 5.5	0.0	0
BA,Bt1.Bt2 -- 6 to 39	Clay loam	4.0 to 5.6	4.5 to 5.5	0.0	0
Bt3 -- 39 to 72	Clay loam	3.3 to 5.6	4.5 to 5.5	0.0	0

Ecological class(es):

AnE--Allen soils, 8 to 20 percent slopes

Composition

- Allen and similar soils: 100 percent of the unit

Setting

Landform(s): benches, hills
Elevation:
Precipitation: 38 to 53 inches
Slope gradient: 8 to 20 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Allen and similar soils

Average total avail. water in top five feet (in.): 8.3
Available water capacity class: Moderate
Parent material: loamy colluvium derived from sandstone and shale
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately High
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Land capability class, irrigated:
Land capability class, nonirrigated: 6e
Hydric soil: no
Hydrologic group: B
Runoff class: medium
Potential frost action: none

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 6	Stony loam	0.5 to 0.9	4.5 to 5.5	0.0	0
BA,Bt1,Bt2 -- 6 to 39	Clay loam	2.3 to 4.6	4.5 to 5.5	0.0	0
Bt3 -- 39 to 72	Clay loam	2.6 to 5.0	4.5 to 5.5	0.0	0

Ecological class(es):

AoF--Allen stony loam, 12 to 35 percent slopes (nella)

Composition

- Allen and similar soils: 100 percent of the unit

Setting

Landform(s): benches, hills
Elevation:
Precipitation: 38 to 53 inches
Slope gradient: 12 to 35 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Allen and similar soils

Average total avail. water in top five feet (in.): 8.3
Available water capacity class: Moderate
Parent material: loamy colluvium derived from sandstone and shale
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately High
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Land capability class, irrigated:
Land capability class, nonirrigated: 6s
Hydric soil: no
Hydrologic group: B
Runoff class: high
Potential frost action: none

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 6	Stony loam	0.5 to 0.9	4.5 to 5.5	0.0	0
BA,Bt1,Bt2 -- 6 to 39	Clay loam	2.3 to 4.6	4.5 to 5.5	0.0	0
Bt3 -- 39 to 72	Clay loam	2.6 to 5.0	4.5 to 5.5	0.0	0

Ecological class(es):

ApB--Apison loam, 1 to 3 percent slopes

Composition

- Apison and similar soils: 100 percent of the unit

Setting

Landform(s): hills, hills, mountains
Elevation: 499 to 1099 feet
Precipitation: 38 to 53 inches
Slope gradient: 1 to 3 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Apison and similar soils

Average total avail. water in top five feet (in.): 5.4
Available water capacity class: Low
Parent material: loamy residuum weathered from sandstone
Restrictive feature(s): paralithic bedrock at 20 to 40 inches
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 2e
Hydric soil: no
Hydrologic group: C
Runoff class: low
Potential frost action: none

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 6	Loam	0.9 to 1.2	4.5 to 5.5	0.0	0
Bt1,Bt2 -- 6 to 33	Silty clay loam	3.5 to 4.9	4.5 to 5.5	0.0	0
Cr -- 33 to 35	Weathered bedrock			0.0	0

Ecological class(es):

ApC2--Apison loam, 3 to 8 percent slopes, eroded

Composition

- Apison and similar soils: 100 percent of the unit

Setting

Landform(s): hills, hills, mountains
Elevation: 499 to 1099 feet
Precipitation: 38 to 53 inches
Slope gradient: 3 to 8 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Apison and similar soils

Average total avail. water in top five feet (in.): 5.4
Available water capacity class: Low
Parent material: loamy residuum weathered from sandstone
Restrictive feature(s): paralithic bedrock at 20 to 40 inches
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 3e
Hydric soil: no
Hydrologic group: C
Runoff class: high
Potential frost action: none

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 6	Loam	0.9 to 1.2	4.5 to 5.5	0.0	0
Bt1,Bt2 -- 6 to 33	Silty clay loam	3.5 to 4.9	4.5 to 5.5	0.0	0
Cr -- 33 to 35	Weathered bedrock			0.0	0

Ecological class(es):

AsC2--Apison gravelly loam, 3 to 8 percent slopes, eroded

Composition

- Apison and similar soils: 100 percent of the unit

Setting

Landform(s): hills, hills, mountains
Elevation: 499 to 1099 feet
Precipitation: 38 to 53 inches
Slope gradient: 3 to 8 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Apison and similar soils

Average total avail. water in top five feet (in.): 5.4
Available water capacity class: Low
Parent material: loamy residuum weathered from sandstone
Restrictive feature(s): paralithic bedrock at 20 to 40 inches
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 3e
Hydric soil: no
Hydrologic group: C
Runoff class: high
Potential frost action: none

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 6	Gravelly loam	0.9 to 1.2	4.5 to 5.5	0.0	0
Bt1,Bt2 -- 6 to 33	Silty clay loam	3.5 to 4.9	4.5 to 5.5	0.0	0
Cr -- 33 to 35	Weathered bedrock			0.0	0

Ecological class(es):

BaC--Baxter very gravelly silt loam, 3 to 8 percent slopes

Composition

- Baxter and similar soils: 100 percent of the unit

Setting

Landform(s): hills, hills
Elevation:
Precipitation: 38 to 53 inches
Slope gradient: 3 to 8 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Baxter and similar soils

Average total avail. water in top five feet (in.): 7.8
Available water capacity class: Moderate
Parent material: clayey residuum weathered from cherty limestone
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately High
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 7
Wind erodibility index (WEI): 38
Land capability class, irrigated:
Land capability class, nonirrigated: 4e
Hydric soil: no
Hydrologic group: B
Runoff class: low
Potential frost action: none

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap,E -- 0 to 10	Very gravelly silt loam	1.4 to 1.8	4.5 to 6.5	0.0	0
BE -- 10 to 17	Gravelly silty clay loam	1.0 to 1.3	4.5 to 6.5	0.0	0
Bt1,Bt2 -- 17 to 50	Gravelly clay	3.3 to 4.6	4.5 to 5.5	0.0	0
C/B -- 50 to 60	Mixed extremely gravelly clay	0.8 to 1.3	4.5 to 5.5	0.0	0

Ecological class(es): NRCS Forestland Site - Chert Upland Woodland

BaD--Baxter very gravelly silt loam, 8 to 12 percent slopes

Composition

- Baxter and similar soils: 100 percent of the unit

Setting

Landform(s): hills, hills
Elevation:
Precipitation: 38 to 53 inches
Slope gradient: 8 to 12 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Baxter and similar soils

Average total avail. water in top five feet (in.): 7.8
Available water capacity class: Moderate
Parent material: clayey residuum weathered from cherty limestone
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately High
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 7
Wind erodibility index (WEI): 38
Land capability class, irrigated:
Land capability class, nonirrigated: 4e
Hydric soil: no
Hydrologic group: B
Runoff class: medium
Potential frost action: none

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap,E -- 0 to 10	Very gravelly silt loam	1.4 to 1.8	4.5 to 6.5	0.0	0
BE -- 10 to 17	Gravelly silty clay loam	1.0 to 1.3	4.5 to 6.5	0.0	0
Bt1,Bt2 -- 17 to 50	Gravelly clay	3.3 to 4.6	4.5 to 5.5	0.0	0
C/B -- 50 to 60	Mixed extremely gravelly clay	0.8 to 1.3	4.5 to 5.5	0.0	0

Ecological class(es): NRCS Forestland Site - Chert Upland Woodland

BaE--Baxter very gravelly silt loam, 12 to 20 percent slopes

Composition

- Baxter and similar soils: 100 percent of the unit

Setting

Landform(s): hills, hills, hills
Elevation:
Precipitation: 38 to 53 inches
Slope gradient: 12 to 20 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Baxter and similar soils

Average total avail. water in top five feet (in.): 7.8
Available water capacity class: Moderate
Parent material: clayey residuum weathered from cherty limestone
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately High
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 7
Wind erodibility index (WEI): 38
Land capability class, irrigated:
Land capability class, nonirrigated: 6e
Hydric soil: no
Hydrologic group: B
Runoff class: high
Potential frost action: none

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap,E -- 0 to 10	Very gravelly silt loam	1.4 to 1.8	4.5 to 6.5	0.0	0
BE -- 10 to 17	Gravelly silty clay loam	1.0 to 1.3	4.5 to 6.5	0.0	0
Bt1,Bt2 -- 17 to 50	Gravelly clay	3.3 to 4.6	4.5 to 5.5	0.0	0
C/B -- 50 to 60	Mixed extremely gravelly clay	0.8 to 1.3	4.5 to 5.5	0.0	0

Ecological class(es): NRCS Forestland Site - Chert Exposed Backslope Woodland
NRCS Forestland Site - Chert Protected Backslope Forest

BaF--Baxter very gravelly silt loam, 20 to 45 percent slopes

Composition

- Baxter and similar soils: 100 percent of the unit

Setting

Landform(s): hills, hills
Elevation:
Precipitation: 38 to 53 inches
Slope gradient: 20 to 45 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Baxter and similar soils

Average total avail. water in top five feet (in.): 7.8
Available water capacity class: Moderate
Parent material: clayey residuum weathered from cherty limestone
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately High
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 7
Wind erodibility index (WEI): 38
Land capability class, irrigated:
Land capability class, nonirrigated: 7e
Hydric soil: no
Hydrologic group: B
Runoff class: high
Potential frost action: none

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap,E -- 0 to 10	Very gravelly silt loam	1.4 to 1.8	4.5 to 6.5	0.0	0
BE -- 10 to 17	Gravelly silty clay loam	1.0 to 1.3	4.5 to 6.5	0.0	0
Bt1,Bt2 -- 17 to 50	Gravelly clay	3.3 to 4.6	4.5 to 5.5	0.0	0
C/B -- 50 to 60	Mixed extremely gravelly clay	0.8 to 1.3	4.5 to 5.5	0.0	0

Ecological class(es): NRCS Forestland Site - Chert Exposed Backslope Woodland
NRCS Forestland Site - Chert Protected Backslope Forest

CaB--Captina silt loam, 1 to 3 percent slopes

Composition

- Captina and similar soils: 85 to 96 percent of the map unit (RV=90 percent)
- Needleye and similar soils: 2 to 5 percent of the map unit (RV=5 percent)
- Nixa and similar soils: 2 to 10 percent of the map unit (RV=5 percent)

Setting

Landform(s): hills, interfluves
Elevation: 801 to 1588 feet
Precipitation: 39 to 49 inches
Slope gradient: 1 to 3 percent
Air temperature: 54 to 59 ºF
Frost-free period: 172 to 232 days

Characteristics of Captina and similar soils

Average total avail. water in top five feet (in.): 7.2
Available water capacity class: Moderate
Parent material: loess over pedisediment over residuum weathered from cherty limestone
Restrictive feature(s): fragipan at 20 to 36 inches
Depth to Water table: 21 inches
Drainage class: moderately well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately High
Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 3s
Hydric soil: no
Hydrologic group: C/D
Runoff class: very low
Potential frost action: high

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 5	Silt loam	1.1 to 1.2	4.5 to 6.5	0.1 to 2.0	0
Bt1 -- 5 to 25	Silty clay loam	3.4 to 4.4	4.5 to 5.5	0.1 to 2.0	0
2Btx -- 25 to 50	Very gravelly silt loam	0.5 to 1.7	3.5 to 5.5	0.1 to 2.0	0
3Bt2 -- 50 to 79	Gravelly clay	1.1 to 3.7	3.5 to 5.5	0.1 to 2.0	0

Ecological class(es): NRCS Forestland Site - Fragipan Upland Woodland
Missouri Vegetative Classes - Mixed/Transitional

CaC--Captina silt loam, 3 to 8 percent slopes

Composition

- Captina and similar soils: 80 to 95 percent of the map unit (RV=85 percent)
- Nixa and similar soils: 3 to 10 percent of the map unit (RV=10 percent)
- Noark and similar soils: 2 to 10 percent of the map unit (RV=5 percent)

Setting

Landform(s): hills, hillslopes
Elevation: 230 to 1181 feet
Precipitation: 39 to 49 inches
Slope gradient: 3 to 8 percent
Air temperature: 54 to 59 ºF
Frost-free period: 172 to 232 days

Characteristics of Captina and similar soils

Average total avail. water in top five feet (in.): 7.2
Available water capacity class: Moderate
Parent material: loess over pedisediment over residuum weathered from cherty limestone
Restrictive feature(s): fragipan at 20 to 36 inches
Depth to Water table: 21 inches
Drainage class: moderately well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately High
Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 3e
Hydric soil: no
Hydrologic group: C/D
Runoff class: low
Potential frost action: high

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 5	Silt loam	1.1 to 1.2	4.5 to 6.5	0.1 to 2.0	0
Bt1 -- 5 to 25	Silty clay loam	3.4 to 4.4	4.5 to 5.5	0.1 to 2.0	0
2Btx -- 25 to 50	Very gravelly silt loam	0.5 to 1.7	3.5 to 5.5	0.1 to 2.0	0
3Bt2 -- 50 to 79	Gravelly clay	1.1 to 3.7	3.5 to 5.5	0.1 to 2.0	0

Ecological class(es): NRCS Forestland Site - Fragipan Upland Woodland
Missouri Vegetative Classes - Mixed/Transitional

CaC2--Captina silt loam, 3 to 6 percent slopes, eroded

Composition

- Captina and similar soils: 100 percent of the unit

Setting

Landform(s): hills, mountains
Elevation: 699 to 1401 feet
Precipitation: 38 to 53 inches
Slope gradient: 3 to 6 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Captina and similar soils

Average total avail. water in top five feet (in.): 7.3
Available water capacity class: Moderate
Parent material: silty pedisediment over silty and clayey residuum weathered from cherty limestone
Restrictive feature(s): fragipan at 16 to 24 inches
Depth to Water table: 24 inches
Drainage class: moderately well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately High
Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 3e
Hydric soil: no
Hydrologic group: C
Runoff class: high
Potential frost action: none

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 8	Silt loam	1.1 to 1.6	4.5 to 6.5	0.0	0
Bt1,Bt2 -- 8 to 20	Silt loam	1.7 to 2.4	3.6 to 6.0	0.0	0
Btx1,Btx2 -- 20 to 54	Silty clay loam	2.7 to 4.1	3.6 to 6.0	0.0	0
C -- 54 to 60	Weathered bedrock	0.3 to 0.7	3.6 to 6.0	0.0	0

Ecological class(es): NRCS Forestland Site - Fragipan Upland Woodland

Ch--Cherokee silt loam

Composition

- Cherokee and similar soils: 90 percent of the unit
- Aqualfs and similar soils: 10 percent of the unit

Setting

Landform(s): depressions, hills
Elevation:
Precipitation: 38 to 53 inches
Slope gradient: 0 to 2 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Cherokee and similar soils

Average total avail. water in top five feet (in.): 11.4
Available water capacity class: High
Parent material: silty and clayey pedisediment
Restrictive feature(s): abrupt textural change at 16 to 22 inches
Depth to Water table: 12 inches
Drainage class: somewhat poorly drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 3w
Hydric soil: no
Hydrologic group: D
Runoff class: high
Potential frost action: none

Saturated hydraulic conductivity class: Moderately Low

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 9	Silt loam	2.0 to 2.2	4.5 to 7.3	0.0	0
Eg -- 9 to 19	Silt loam	2.2 to 2.4	4.5 to 7.3	0.0	0
Btg1 -- 19 to 24	Silty clay loam	0.5 to 0.8	4.5 to 6.0	0.0	0
Btg2 -- 24 to 61	Clay	3.7 to 5.6	4.5 to 6.0	0.0	0
Cg -- 61 to 72	Silty clay loam	1.0 to 2.0	5.1 to 7.3	0.0	0

Ecological class(es):

Ck--Cherokee complex, mounded

Composition

- Cherokee and similar soils: 90 percent of the unit
- Aqualfs and similar soils: 10 percent of the unit

Setting

Landform(s): hills, stream terraces
Elevation:
Precipitation: 38 to 53 inches
Slope gradient: 0 to 1 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Cherokee and similar soils

Average total avail. water in top five feet (in.): 11.4
Available water capacity class: High
Parent material: silty and clayey pedisediment
Restrictive feature(s): abrupt textural change at 16 to 22 inches
Depth to Water table: 12 inches
Drainage class: somewhat poorly drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 3w
Hydric soil: no
Hydrologic group: D
Runoff class: low
Potential frost action: none

Saturated hydraulic conductivity class: Moderately Low

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 9	Silt loam	2.0 to 2.2	4.5 to 7.3	0.0	0
E -- 9 to 19	Silt loam	2.2 to 2.4	4.5 to 7.3	0.0	0
Btg1 -- 19 to 24	Silty clay loam	0.5 to 0.8	4.5 to 6.0	0.0	0
Btg2 -- 24 to 61	Clay	3.7 to 5.6	4.5 to 6.0	0.0	0
Cg -- 61 to 72	Silty clay loam	1.0 to 2.0	5.1 to 7.3	0.0	0

Ecological class(es):

ClG--Clarksville extremely gravelly silt loam, 12 to 60 percent slopes

Composition

- Clarksville and similar soils: 100 percent of the unit

Setting

Landform(s): hills, hills
Elevation: 699 to 1299 feet
Precipitation: 38 to 53 inches
Slope gradient: 12 to 60 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Clarksville and similar soils

Average total avail. water in top five feet (in.): 4.4
Available water capacity class: Low
Parent material: clayey residuum weathered from cherty limestone
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: somewhat excessively drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: High
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Land capability class, irrigated:
Land capability class, nonirrigated: 7s
Hydric soil: no
Hydrologic group: A
Runoff class: high
Potential frost action: moderate

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A1,A2 -- 0 to 9	Extremely gravelly silt loam	1.1 to 1.5	3.6 to 6.0	0.0	0
Bt1,Bt2,BCt -- 9 to 47	Extremely gravelly silt loam	2.3 to 3.8	3.6 to 5.5	0.0	0

Ecological class(es): NRCS Forestland Site - Low-Base Chert Exposed Backslope Woodland
NRCS Forestland Site - Low-Base Chert Protected Backslope Woodland

Cr--Cleora fine sandy loam

Composition

- Cleora and similar soils: 95 percent of the unit
- Aquents and similar soils: 5 percent of the unit

Setting

Landform(s): flood plains, hills
Elevation:
Precipitation: 38 to 53 inches
Slope gradient: 0 to 3 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Cleora and similar soils

Average total avail. water in top five feet (in.): 10.6
Available water capacity class: High
Parent material: loamy alluvium
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Land capability class, irrigated:
Land capability class, nonirrigated: 2w
Hydric soil: no
Hydrologic group: A
Runoff class: very low
Potential frost action: none

Saturated hydraulic conductivity class: High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 13	Fine sandy loam	1.4 to 1.9	5.6 to 7.3	0.0	0
C1 -- 13 to 45	Fine sandy loam	3.5 to 6.4	5.6 to 7.3	0.0	0
C2 -- 45 to 72	Stratified loamy fine sand to loam	1.9 to 5.4	5.6 to 7.3	0.0	0

Ecological class(es):

DU--Dumps

Composition

- Dumps: 100 percent of the unit

Setting

Landform(s): hills
Elevation:
Precipitation: 38 to 53 inches
Slope gradient:
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Dumps

Average total avail. water in top five feet (in.):
Available water capacity class: NA
Parent material:
Restrictive feature(s):
Depth to Water table:
Drainage class:
Flooding hazard:
Ponding hazard:
Soil loss tolerance (T factor):
Wind erodibility group (WEG):
Wind erodibility index (WEI):
Land capability class, irrigated:
Land capability class, nonirrigated:
Hydric soil: no
Hydrologic group:
Runoff class:
Potential frost action:

Saturated hydraulic conductivity class: NA

Ecological class(es):

Ec--Elsah cobbly soils (ceda)

Composition

- Elsah and similar soils: 95 percent of the unit
- Aquents and similar soils: 5 percent of the unit

Setting

Landform(s): flood plains, hills
Elevation:
Precipitation: 38 to 53 inches
Slope gradient: 0 to 3 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Elsah and similar soils

Average total avail. water in top five feet (in.): 7.0
Available water capacity class: Moderate
Parent material: gravelly alluvium
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: excessively drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Land capability class, irrigated:
Land capability class, nonirrigated: 7s
Hydric soil: no
Hydrologic group: A
Runoff class: negligible
Potential frost action: none

Saturated hydraulic conductivity class: High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 10	Extremely cobbly silt loam	0.8 to 2.0	5.6 to 6.5	0.0	0
C -- 10 to 72	Extremely cobbly silt loam	1.2 to 10.0	5.6 to 6.5	0.0	0

Ecological class(es):

Eg--Elsah gravelly soils (ceda)

Composition

- Elsah and similar soils: 95 percent of the unit
- Aquents and similar soils: 5 percent of the unit

Setting

Landform(s): flood plains, hills
Elevation:
Precipitation: 38 to 53 inches
Slope gradient: 0 to 3 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Elsah and similar soils

Average total avail. water in top five feet (in.): 7.0
Available water capacity class: Moderate
Parent material: gravelly alluvium
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: excessively drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Land capability class, irrigated:
Land capability class, nonirrigated: 7s
Hydric soil: no
Hydrologic group: A
Runoff class: negligible
Potential frost action: none

Saturated hydraulic conductivity class: High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 10	Extremely gravelly silt loam	0.8 to 2.0	5.6 to 6.5	0.0	0
C -- 10 to 72	Extremely cobbly silt loam	1.2 to 10.0	5.6 to 6.5	0.0	0

Ecological class(es):

EnC--Enders gravelly loam, 3 to 8 percent slopes

Composition

- Enders and similar soils: 80 percent of the unit
- Mountainburg and similar soils: 10 percent of the unit
- Nella: 5 percent of the unit
- Rock outcrop: 5 percent of the unit

Setting

Landform(s): hillslopes on hills
Elevation: 499 to 2500 feet
Precipitation: 35 to 59 inches
Slope gradient: 3 to 8 percent
Air temperature: 44 to 72 ºF
Frost-free period: 175 to 255 days

Characteristics of Enders and similar soils

Average total avail. water in top five feet (in.): 7.3
Available water capacity class: Moderate
Parent material: clayey residuum weathered from acid shale
Restrictive feature(s): paralithic bedrock at 40 to 60 inches
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Land capability class, irrigated:
Land capability class, nonirrigated: 4e
Hydric soil: no
Hydrologic group: D
Runoff class: high
Potential frost action: none

Saturated hydraulic conductivity class: Moderately Low

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 3	Gravelly loam	0.2 to 0.3	3.6 to 5.5	0.0	0
E -- 3 to 8	Gravelly silt loam	0.3 to 0.5	3.6 to 5.5	0.0	0
Bt1 -- 8 to 40	Clay	3.9 to 5.8	3.6 to 5.5	0.0	0
Bt2 -- 40 to 54	Clay	1.1 to 2.3	3.6 to 5.5	0.0	0
Cr -- 54 to 58	Bedrock			0.0	0

Ecological class(es):

EnC2--Enders gravelly loam, 3 to 8 percent slopes, eroded

Composition

- Enders and similar soils: 100 percent of the unit

Setting

Landform(s): benches, hills
Elevation: 499 to 2500 feet
Precipitation: 38 to 53 inches
Slope gradient: 3 to 8 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Enders and similar soils

Average total avail. water in top five feet (in.): 7.3
Available water capacity class: Moderate
Parent material: clayey residuum weathered from acid shale
Restrictive feature(s): paralithic bedrock at 40 to 56 inches
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Land capability class, irrigated:
Land capability class, nonirrigated: 4e
Hydric soil: no
Hydrologic group: D
Runoff class: high
Potential frost action: none

Saturated hydraulic conductivity class: Moderately Low

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 3	Gravelly loam	0.2 to 0.3	3.6 to 5.5	0.0	0
E -- 3 to 8	Gravelly silt loam	0.3 to 0.5	3.6 to 5.5	0.0	0
Bt1 -- 8 to 40	Clay	3.9 to 5.8	3.6 to 5.5	0.0	0
Bt2 -- 40 to 54	Clay	1.1 to 2.3	3.6 to 5.5	0.0	0
Cr -- 54 to 58	Bedrock			0.0	0

Ecological class(es):

EnD--Enders gravelly loam, 8 to 15 percent slopes

Composition

- Enders and similar soils: 80 percent of the unit
- Mountainburg and similar soils: 10 percent of the unit
- Nella and similar soils: 5 percent of the unit
- Rock outcrop: 5 percent of the unit

Setting

Landform(s): hillslopes on hills
Elevation: 499 to 2500 feet
Precipitation: 37 to 59 inches
Slope gradient: 8 to 15 percent
Air temperature: 44 to 72 ºF
Frost-free period: 175 to 250 days

Characteristics of Enders and similar soils

Average total avail. water in top five feet (in.): 7.3
Available water capacity class: Moderate
Parent material: clayey residuum weathered from acid shale
Restrictive feature(s): paralithic bedrock at 40 to 60 inches
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Land capability class, irrigated:
Land capability class, nonirrigated: 6e
Hydric soil: no
Hydrologic group: D
Runoff class: very high
Potential frost action: none

Saturated hydraulic conductivity class: Moderately Low

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 3	Gravelly loam	0.2 to 0.3	3.6 to 5.5	0.0	0
E -- 3 to 8	Gravelly silt loam	0.3 to 0.5	3.6 to 5.5	0.0	0
Bt1 -- 8 to 40	Clay	3.9 to 5.8	3.6 to 5.5	0.0	0
Bt2 -- 40 to 54	Clay	1.1 to 2.3	3.6 to 5.5	0.0	0
Cr -- 54 to 58	Bedrock			0.0	0

Ecological class(es):

EnD2--Enders gravelly loam, 8 to 12 percent slopes, eroded

Composition

- Enders and similar soils: 100 percent of the unit

Setting

Landform(s): benches, hills
Elevation: 499 to 2500 feet
Precipitation: 38 to 53 inches
Slope gradient: 8 to 12 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Enders and similar soils

Average total avail. water in top five feet (in.): 11.6
Available water capacity class: High
Parent material: clayey residuum weathered from acid shale
Restrictive feature(s): paralithic bedrock at 40 to 85 inches
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Land capability class, irrigated:
Land capability class, nonirrigated: 6e
Hydric soil: no
Hydrologic group: D
Runoff class: very high
Potential frost action: none

Saturated hydraulic conductivity class: Moderately Low

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 3	Stony loam	0.2 to 0.3	3.6 to 5.5	0.0	0
E -- 3 to 9	Stony loam	0.4 to 1.1	3.6 to 5.5	0.0	0
Bt1 -- 9 to 48	Stony clay	4.7 to 7.0	3.6 to 5.5	0.0	0
Bt2,Bt3 -- 48 to 60	Clay	0.9 to 2.0	3.6 to 5.5	0.0	0
BCg -- 60 to 84	Clay	1.9 to 4.1	3.6 to 5.5	0.0	0
Cr -- 84 to 87	Weathered bedrock			Null	0

Ecological class(es):

EoD--Enders stony loam, 3 to 15 percent slopes

Composition

- Enders and similar soils: 85 percent of the unit
- Mountainburg and similar soils: 10 percent of the unit
- Nella and similar soils: 5 percent of the unit

Setting

Landform(s): hillslopes on hills
Elevation: 499 to 2500 feet
Precipitation: 37 to 59 inches
Slope gradient: 3 to 15 percent
Air temperature: 44 to 72 ºF
Frost-free period: 175 to 250 days

Characteristics of Enders and similar soils

Average total avail. water in top five feet (in.): 7.3
Available water capacity class: Moderate
Parent material: clayey residuum weathered from acid shale
Restrictive feature(s): paralithic bedrock at 40 to 60 inches
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Land capability class, irrigated:
Land capability class, nonirrigated: 6s
Hydric soil: no
Hydrologic group: D
Runoff class: very high
Potential frost action: none

Saturated hydraulic conductivity class: Moderately Low

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 3	Stony loam	0.2 to 0.3	3.6 to 5.5	0.0	0
E -- 3 to 8	Gravelly silt loam	0.3 to 0.5	3.6 to 5.5	0.0	0
Bt1 -- 8 to 40	Clay	3.9 to 5.8	3.6 to 5.5	0.0	0
Bt2 -- 40 to 54	Clay	1.1 to 2.3	3.6 to 5.5	0.0	0
Cr -- 54 to 58	Bedrock			0.0	0

Ecological class(es):

ErE--Enders-Leesburg complex, 8 to 20 percent slopes

Composition

- Enders and similar soils: 60 percent of the unit
- Leesburg and similar soils: 30 percent of the unit
- Mountainburg and similar soils: 10 percent of the unit

Setting

Landform(s): hillslopes on hills
Elevation: 499 to 2500 feet
Precipitation: 37 to 59 inches
Slope gradient: 8 to 20 percent
Air temperature: 45 to 69 ºF
Frost-free period: 185 to 245 days

Characteristics of Enders and similar soils

Average total avail. water in top five feet (in.): 7.3
Available water capacity class: Moderate
Parent material: clayey residuum weathered from acid shale
Restrictive feature(s): paralithic bedrock at 40 to 60 inches
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Land capability class, irrigated:
Land capability class, nonirrigated: 6s
Hydric soil: no
Hydrologic group: D
Runoff class: very high
Potential frost action: none

Saturated hydraulic conductivity class: Moderately Low

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 3	Stony loam	0.2 to 0.3	3.6 to 5.5	0.0	0
E -- 3 to 8	Gravelly silt loam	0.3 to 0.5	3.6 to 5.5	0.0	0
Bt1 -- 8 to 40	Clay	3.9 to 5.8	3.6 to 5.5	0.0	0
Bt2 -- 40 to 54	Clay	1.1 to 2.3	3.6 to 5.5	0.0	0
Cr -- 54 to 58	Bedrock			0.0	0

Ecological class(es):

[ErE - Enders-Leesburg complex, 8 to 20 percent slopes]

Characteristics of Leesburg and similar soils

Average total avail. water in top five feet (in.): 10.5

Available water capacity class: High

Parent material: loamy colluvium derived from sandstone and shale

Restrictive feature(s): none

Depth to Water table: none within the soil profile

Drainage class: well drained

Flooding hazard: none

Ponding hazard: none

Saturated hydraulic conductivity class: Moderately High

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Land capability class, irrigated:

Land capability class, nonirrigated: 6s

Hydric soil: no

Hydrologic group: B

Runoff class: medium

Potential frost action: none

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 10	Stony loam	0.8 to 1.6	4.5 to 5.5	0.0	0
Bt1 -- 10 to 33	Gravelly clay loam	2.8 to 4.2	4.5 to 5.5	0.0	0
Bt2 -- 33 to 72	Cobbly clay loam	4.7 to 7.0	4.5 to 5.5	0.0	0

Ecological class(es):

ErF--Enders-Leesburg complex, 20 to 40 percent slopes

Composition

- Enders and similar soils: 50 percent of the unit
- Leesburg and similar soils: 40 percent of the unit
- Mountainburg and similar soils: 10 percent of the unit

Setting

Landform(s): hillslopes on hills
Elevation: 499 to 2500 feet
Precipitation: 37 to 59 inches
Slope gradient: 20 to 40 percent
Air temperature: 45 to 69 ºF
Frost-free period: 175 to 250 days

Characteristics of Enders and similar soils

Average total avail. water in top five feet (in.): 7.3
Available water capacity class: Moderate
Parent material: clayey residuum weathered from acid shale
Restrictive feature(s): paralithic bedrock at 40 to 60 inches
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Land capability class, irrigated:
Land capability class, nonirrigated: 7s
Hydric soil: no
Hydrologic group: D
Runoff class: very high
Potential frost action: none

Saturated hydraulic conductivity class: Moderately Low

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 3	Stony loam	0.2 to 0.3	3.6 to 5.5	0.0	0
E -- 3 to 8	Gravelly silt loam	0.3 to 0.5	3.6 to 5.5	0.0	0
Bt1 -- 8 to 40	Clay	3.9 to 5.8	3.6 to 5.5	0.0	0
Bt2 -- 40 to 54	Clay	1.1 to 2.3	3.6 to 5.5	0.0	0
Cr -- 54 to 58	Bedrock			0.0	0

Ecological class(es):

[ErF - Enders-Leesburg complex, 20 to 40 percent slopes]

Characteristics of Leesburg and similar soils

Average total avail. water in top five feet (in.): 10.3

Available water capacity class: High

Parent material: loamy colluvium derived from sandstone and shale

Restrictive feature(s): none

Depth to Water table: none within the soil profile

Drainage class: well drained

Flooding hazard: none

Ponding hazard: none

Saturated hydraulic conductivity class: Moderately High

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Land capability class, irrigated:

Land capability class, nonirrigated: 7s

Hydric soil: no

Hydrologic group: B

Runoff class: high

Potential frost action: none

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 7	Stony loam	0.6 to 1.1	4.5 to 5.5	0.0	0
Bt1 -- 7 to 38	Gravelly clay loam	2.8 to 5.6	4.5 to 5.5	0.0	0
2Bt2 -- 38 to 72	Gravelly clay	4.1 to 6.1	4.5 to 5.5	0.0	0

Ecological class(es):

FaC2--Fayetteville fine sandy loam, 3 to 8 percent slopes eroded

Composition

- Fayetteville and similar soils: 100 percent of the unit

Setting

Landform(s): hills, hills
Elevation: 1299 to 1499 feet
Precipitation: 38 to 53 inches
Slope gradient: 3 to 8 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Fayetteville and similar soils

Average total avail. water in top five feet (in.): 11.6
Available water capacity class: High
Parent material: loamy residuum weathered from calcareous sandstone
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately High
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Land capability class, irrigated:
Land capability class, nonirrigated: 3e
Hydric soil: no
Hydrologic group: B
Runoff class: low
Potential frost action:

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 9	Fine sandy loam	0.9 to 1.2	5.6 to 6.5	0.0	0
BA -- 9 to 16	Fine sandy loam	0.7 to 1.2	5.6 to 6.5	0.0	0
Bt -- 16 to 67	Sandy clay loam	7.6 to 9.1	5.6 to 6.5	0.0	0
C -- 67 to 72	Sandy clay loam	0.8 to 0.9	5.6 to 6.5	0.0	0

Ecological class(es):

FaD2--Fayetteville fine sandy loam, 8 to 12 percent slopes, eroded

Composition

- Fayetteville and similar soils: 100 percent of the unit

Setting

Landform(s): hills, hills
Elevation: 1299 to 1499 feet
Precipitation: 38 to 53 inches
Slope gradient: 8 to 12 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Fayetteville and similar soils

Average total avail. water in top five feet (in.): 11.6
Available water capacity class: High
Parent material: loamy residuum weathered from calcareous sandstone
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately High
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Land capability class, irrigated:
Land capability class, nonirrigated: 4e
Hydric soil: no
Hydrologic group: B
Runoff class: medium
Potential frost action:

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 9	Fine sandy loam	0.9 to 1.2	5.6 to 6.5	0.0	0
BA -- 9 to 16	Fine sandy loam	0.7 to 1.2	5.6 to 6.5	0.0	0
Bt -- 16 to 67	Sandy clay loam	7.6 to 9.1	5.6 to 6.5	0.0	0
C -- 67 to 72	Sandy clay loam	0.8 to 0.9	5.6 to 6.5	0.0	0

Ecological class(es):

FaE2--Fayetteville fine sandy loam, 12 to 20 percent slopes, eroded

Composition

- Fayetteville and similar soils: 100 percent of the unit

Setting

Landform(s): hills, hills
Elevation: 1299 to 1499 feet
Precipitation: 38 to 53 inches
Slope gradient: 12 to 20 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Fayetteville and similar soils

Average total avail. water in top five feet (in.): 11.6
Available water capacity class: High
Parent material: loamy residuum weathered from calcareous sandstone
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately High
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Land capability class, irrigated:
Land capability class, nonirrigated: 6e
Hydric soil: no
Hydrologic group: B
Runoff class: high
Potential frost action:

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 9	Fine sandy loam	0.9 to 1.2	5.6 to 6.5	0.0	0
BA -- 9 to 16	Fine sandy loam	0.7 to 1.2	5.6 to 6.5	0.0	0
Bt -- 16 to 67	Sandy clay loam	7.6 to 9.1	5.6 to 6.5	0.0	0
C -- 67 to 72	Sandy clay loam	0.8 to 0.9	5.6 to 6.5	0.0	0

Ecological class(es):

FeF--Fayetteville stony fine sandy loam, 12 to 35 percent slopes

Composition

- Fayetteville and similar soils: 100 percent of the unit

Setting

Landform(s): hills, hills
Elevation: 1299 to 1499 feet
Precipitation: 38 to 53 inches
Slope gradient: 12 to 35 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Fayetteville and similar soils

Average total avail. water in top five feet (in.): 11.4
Available water capacity class: High
Parent material: loamy residuum weathered from calcareous sandstone
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately High
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 7e
Hydric soil: no
Hydrologic group: B
Runoff class: high
Potential frost action:

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 9	Stony fine sandy loam	0.7 to 1.0	5.6 to 6.5	0.0	0
BA -- 9 to 16	Fine sandy loam	0.7 to 1.2	5.6 to 6.5	0.0	0
Bt -- 16 to 67	Sandy clay loam	7.6 to 9.1	5.6 to 6.5	0.0	0
C -- 67 to 72	Sandy clay loam	0.8 to 0.9	5.6 to 6.5	0.0	0

Ecological class(es):

FhF--Fayetteville-Hector complex, 20 to 40 percent slopes

Composition

- Hector and similar soils: 65 percent of the unit
- Fayetteville and similar soils: 35 percent of the unit

Setting

Landform(s): hills, mountains
Elevation: 499 to 2402 feet
Precipitation: 38 to 53 inches
Slope gradient: 20 to 40 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Hector and similar soils

Average total avail. water in top five feet (in.): 1.7
Available water capacity class: Very low
Parent material: loamy residuum weathered from sandstone
Restrictive feature(s): lithic bedrock at 10 to 20 inches
Depth to Water table: none within the soil profile
Drainage class: somewhat excessively drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 1
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 7s
Hydric soil: no
Hydrologic group: D
Runoff class: very high
Potential frost action: none

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 6	Stony fine sandy loam	0.5 to 0.7	5.1 to 6.5	0.0	0
Bt -- 6 to 15	Stony fine sandy loam	0.7 to 1.4	4.5 to 5.5	0.0	0
R -- 15 to 17	Unweathered bedrock			0.0	0

Ecological class(es): NRCS Rangeland Site - Sandstone Ridge

[FhF - Fayetteville-Hector complex, 20 to 40 percent slopes]

Characteristics of Fayetteville and similar soils

Average total avail. water in top five feet (in.): 11.4

Available water capacity class: High

Parent material: loamy residuum weathered from calcareous sandstone

Restrictive feature(s): none

Depth to Water table: none within the soil profile

Drainage class: well drained

Flooding hazard: none

Ponding hazard: none

Saturated hydraulic conductivity class: Moderately High

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Land capability class, irrigated:

Land capability class, nonirrigated: 7e

Hydric soil: no

Hydrologic group: B

Runoff class: high

Potential frost action:

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 9	Stony fine sandy loam	0.7 to 1.0	5.6 to 6.5	0.0	0
BAt -- 9 to 16	Fine sandy loam	0.7 to 1.2	5.6 to 6.5	0.0	0
B -- 16 to 67	Sandy clay loam	7.6 to 9.1	5.6 to 6.5	0.0	0
C -- 67 to 72	Sandy clay loam	0.8 to 0.9	5.6 to 6.5	0.0	0

Ecological class(es):

GPI--Pits, gravel

Composition

- Pits: 100 percent of the unit

Setting

Landform(s): hills
Elevation:
Precipitation: 38 to 53 inches
Slope gradient:
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Pits

Average total avail. water in top five feet (in.):
Available water capacity class: NA
Parent material:
Restrictive feature(s):
Depth to Water table:
Drainage class:
Flooding hazard:
Ponding hazard:
Saturated hydraulic conductivity class: NA
Soil loss tolerance (T factor):
Wind erodibility group (WEG):
Wind erodibility index (WEI):
Land capability class, irrigated:
Land capability class, nonirrigated:
Hydric soil: no
Hydrologic group:
Runoff class:
Potential frost action:

Ecological class(es):

GuC--Guin very gravelly silt loam, 3 to 8 percent slopes (clarksville)

Composition

- Guin and similar soils: 100 percent of the unit

Setting

Landform(s): hills, hills
Elevation: 699 to 1299 feet
Precipitation: 38 to 53 inches
Slope gradient: 3 to 8 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Guin and similar soils

Average total avail. water in top five feet (in.): 4.8
Available water capacity class: Low
Parent material: loamy colluvium derived from cherty limestone
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Land capability class, irrigated:
Land capability class, nonirrigated: 4s
Hydric soil: no
Hydrologic group: A
Runoff class: low
Potential frost action: moderate

Saturated hydraulic conductivity class: High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap1 -- 0 to 5	Very gravelly silt loam	0.6 to 0.9	3.6 to 6.0	0.0	0
E2 -- 5 to 10	Very gravelly silt loam	0.6 to 0.8	3.6 to 6.0	0.0	0
Bw3 -- 10 to 52	Extremely gravelly silty clay loam	2.5 to 4.2	3.6 to 5.5	0.0	0

Ecological class(es): NRCS Forestland Site - Low-Base Chert Upland Woodland

HmC--Hector-Mountainburg gravelly fine sandy loam, 3 to 8 percent slopes

Composition

- Hector and similar soils: 45 percent of the unit
- Mountainburg and similar soils: 45 percent of the unit

Setting

Landform(s): hills, mountains
Elevation: 499 to 2799 feet
Precipitation: 38 to 53 inches
Slope gradient: 3 to 8 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Hector and similar soils

Average total avail. water in top five feet (in.): 1.8
Available water capacity class: Very low
Parent material: loamy residuum weathered from sandstone
Restrictive feature(s): lithic bedrock at 10 to 20 inches
Depth to Water table: none within the soil profile
Drainage class: somewhat excessively drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 1
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 6e
Hydric soil: no
Hydrologic group: D
Runoff class: medium
Potential frost action:

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 6	Gravelly fine sandy loam	0.5 to 0.9	5.1 to 6.5	0.0	0
Bw -- 6 to 15	Gravelly fine sandy loam	0.7 to 1.4	4.5 to 5.5	0.0	0
R -- 15 to 17	Unweathered bedrock			0.0	0

Ecological class(es): NRCS Rangeland Site - Sandstone Ledge

[HmC - Hector-Mountainburg gravelly fine sandy loam, 3 to 8 percent slopes]

Characteristics of Mountainburg and similar soils

Average total avail. water in top five feet (in.): 1.4

Available water capacity class: Very low

Parent material: gravelly and stony, loamy residuum weathered from sandstone and siltstone

Restrictive feature(s): lithic bedrock at 12 to 20 inches

Depth to Water table: none within the soil profile

Drainage class: well drained

Flooding hazard: none

Ponding hazard: none

Saturated hydraulic conductivity class: Moderately High

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Land capability class, irrigated:

Land capability class, nonirrigated: 6e

Hydric soil: no

Hydrologic group: D

Runoff class: high

Potential frost action: none

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 2	Gravelly fine sandy loam	0.1 to 0.2	4.5 to 6.0	0.0	0
E -- 2 to 8	Very gravelly fine sandy loam	0.3 to 0.6	4.5 to 6.0	0.0	0
Bt -- 8 to 18	Very cobbly sandy clay loam	0.5 to 1.0	4.5 to 5.5	0.0	0
R -- 18 to 20	Unweathered bedrock			0.0	0

Ecological class(es): NRCS Rangeland Site - Sandstone Ledge

HmD--Hector-Mountainburg gravelly fine sandy loams, 8 to 12 percent slopes

Composition

- Hector and similar soils: 45 percent of the unit
- Mountainburg and similar soils: 45 percent of the unit

Setting

Landform(s): hills, mountains
Elevation: 499 to 2799 feet
Precipitation: 38 to 53 inches
Slope gradient: 8 to 12 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Hector and similar soils

Average total avail. water in top five feet (in.): 1.8
Available water capacity class: Very low
Parent material: loamy residuum weathered from sandstone
Restrictive feature(s): lithic bedrock at 10 to 20 inches
Depth to Water table: none within the soil profile
Drainage class: somewhat excessively drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 1
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 6e
Hydric soil: no
Hydrologic group: D
Runoff class: medium
Potential frost action:

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 6	Gravelly fine sandy loam	0.5 to 0.9	5.1 to 6.5	0.0	0
Bt -- 6 to 15	Gravelly fine sandy loam	0.7 to 1.4	4.5 to 5.5	0.0	0
R -- 15 to 17	Unweathered bedrock			0.0	0

Ecological class(es): NRCS Rangeland Site - Sandstone Ledge

[HmD - Hector-Mountainburg gravelly fine sandy loams, 8 to 12 percent slopes]

Characteristics of Mountainburg and similar soils

Average total avail. water in top five feet (in.): 1.4

Available water capacity class: Very low

Parent material: gravelly and stony, loamy residuum weathered from sandstone and siltstone

Restrictive feature(s): lithic bedrock at 12 to 20 inches

Depth to Water table: none within the soil profile

Drainage class: well drained

Flooding hazard: none

Ponding hazard: none

Saturated hydraulic conductivity class: Moderately High

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Land capability class, irrigated:

Land capability class, nonirrigated: 6e

Hydric soil: no

Hydrologic group: D

Runoff class: high

Potential frost action: none

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 2	Gravelly fine sandy loam	0.1 to 0.2	4.5 to 6.0	0.0	0
E -- 2 to 8	Very gravelly fine sandy loam	0.3 to 0.6	4.5 to 6.0	0.0	0
Bt -- 8 to 18	Very cobbly sandy clay loam	0.5 to 1.0	4.5 to 5.5	0.0	0
R -- 18 to 20	Unweathered bedrock			0.0	0

Ecological class(es): NRCS Rangeland Site - Sandstone Ledge

HoF--Hector-Mountainburg stony fine sandy loams, 3 to 40 percent slopes, rocky

Composition

- Hector and similar soils: 40 to 65 percent of the map unit (RV=45 percent)
- Mountainburg and similar soils: 40 to 65 percent of the map unit (RV=45 percent)
- Linker and similar soils: 0 to 15 percent of the map unit (RV=5 percent)
- Enders and similar soils: 0 to 15 percent of the map unit (RV=4 percent)
- Rock outcrop: 0 to 5 percent of the map unit (RV=1 percent)

Setting

Landform(s): hillslopes on hills, mountain slopes on mountains
Elevation: 915 to 2421 feet
Precipitation: 38 to 53 inches
Slope gradient: 3 to 40 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Hector and similar soils

Average total avail. water in top five feet (in.): 1.7
Available water capacity class: Very low
Parent material: loamy residuum weathered from sandstone
Restrictive feature(s): lithic bedrock at 10 to 20 inches
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 1
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 7s
Hydric soil: no
Hydrologic group: D
Runoff class: very high
Potential frost action: none

Saturated hydraulic conductivity class: Moderately Low

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 6	Stony fine sandy loam	0.5 to 0.7	4.5 to 6.5	0.0 to 2.0	0
Bw -- 6 to 15	Gravelly fine sandy loam	0.7 to 1.4	4.5 to 5.5	0.0 to 2.0	0
R -- 15 to 25	Bedrock	0.0 to 0.1		Null	Null

Ecological class(es): NRCS Rangeland Site - Sandstone Ridge
Forage Suitability Groups - Unnamed

[HoF - Hector-Mountainburg stony fine sandy loams, 3 to 40 percent slopes, rocky]

Characteristics of Mountainburg and similar soils

Average total avail. water in top five feet (in.): 1.4

Available water capacity class: Very low

Parent material: stony loamy residuum weathered from sandstone

Restrictive feature(s): lithic bedrock at 12 to 20 inches

Depth to Water table: none within the soil profile

Drainage class: well drained

Flooding hazard: none

Ponding hazard: none

Saturated hydraulic conductivity class: Moderately High

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Land capability class, irrigated:

Land capability class, nonirrigated: 7s

Hydric soil: no

Hydrologic group: D

Runoff class: very high

Potential frost action: none

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 5	Stony fine sandy loam	0.3 to 0.6	4.5 to 6.5	0.0 to 2.0	0
E -- 5 to 9	Very stony fine sandy loam	0.2 to 0.4	4.5 to 6.0	0.0 to 2.0	0
Bt -- 9 to 16	Very stony fine sandy loam	0.2 to 0.7	4.5 to 5.5	0.0 to 2.0	0
R -- 16 to 26	Bedrock			Null	Null

Ecological class(es): NRCS Rangeland Site - Sandstone Ridge

JaB--Jay silt loam, 1 to 3 percent slopes

Composition

- Jay and similar soils: 80 to 100 percent of the map unit (RV=90 percent)
- Taloka and similar soils: 0 to 10 percent of the map unit (RV=5 percent)
- Captina and similar soils: 0 to 5 percent of the map unit (RV=2 percent)
- Pickwick and similar soils: 0 to 5 percent of the map unit (RV=2 percent)
- Mayes and similar soils: 0 to 2 percent of the map unit (RV=1 percent)

Setting

Landform(s): hillslopes on hills
Elevation: 554 to 1404 feet
Precipitation: 41 to 53 inches
Slope gradient: 1 to 3 percent
Air temperature: 55 to 59 ºF
Frost-free period: 180 to 210 days

Characteristics of Jay and similar soils

Average total avail. water in top five feet (in.): 12.4
Available water capacity class: High
Parent material: fine-silty loess over silty pedisediment
Restrictive feature(s): fragipan at 18 to 30 inches
Depth to Water table: 29 inches
Drainage class: moderately well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 2e
Hydric soil: no
Hydrologic group: C
Runoff class: low
Potential frost action: none

Saturated hydraulic conductivity class: Moderately Low

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 9	Silt loam	1.7 to 2.2	5.1 to 6.5	0.1 to 0.4	0
A -- 9 to 16	Silt loam	1.3 to 1.7	5.1 to 6.5	0.1 to 0.4	0
Bt -- 16 to 25	Silt loam	1.6 to 1.9	4.5 to 6.0	0.1 to 0.4	0
2Btx1 -- 25 to 29	Silt loam	0.5 to 0.7	4.5 to 6.0	0.1 to 0.4	0
2Btx2 -- 29 to 46	Silt loam	2.0 to 3.0	4.5 to 6.0	0.1 to 0.4	0
2Btx3 -- 46 to 80	Silty clay loam	3.4 to 5.4	5.1 to 6.5	0.1 to 0.4	0

Ecological class(es):

JaC--Jay silt loam, 3 to 8 percent slopes

Composition

- Jay and similar soils: 100 percent of the unit

Setting

Landform(s): hills, hills
Elevation: 1201 to 1499 feet
Precipitation: 38 to 53 inches
Slope gradient: 3 to 8 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Jay and similar soils

Average total avail. water in top five feet (in.): 11.0
Available water capacity class: High
Parent material: silty pedisediment
Restrictive feature(s): fragipan at 25 to 33 inches
Depth to Water table: 24 inches
Drainage class: moderately well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 3e
Hydric soil: no
Hydrologic group: C
Runoff class: high
Potential frost action: none

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 9	Silt loam	1.4 to 2.2	5.1 to 6.5	0.0	0
Bt -- 9 to 16	Silt loam	1.1 to 1.7	5.1 to 6.5	0.0	0
E and Btx -- 16 to 29	Silty clay loam	2.1 to 3.1	4.5 to 6.0	0.0	0
Btx -- 29 to 72	Silty clay loam	4.3 to 5.6	4.5 to 6.0	0.0	0

Ecological class(es): NRCS Rangeland Site - Loamy Prairie

Jo--Johnsburg silt loam, 0 to 2 percent slopes

Composition

- Johnsburg and similar soils: 80 to 100 percent of the map unit (RV=81 percent)
- Aquults and similar soils: 0 to 5 percent of the map unit (RV=5 percent)
- Cherokee and similar soils: 0 to 5 percent of the map unit (RV=5 percent)
- Leaf and similar soils: 0 to 5 percent of the map unit (RV=5 percent)
- Captina and similar soils: 0 to 3 percent of the map unit (RV=3 percent)
- Mayes and similar soils: 0 to 2 percent of the map unit (RV=1 percent)

Setting

Landform(s): hillslopes on hills
Elevation: 919 to 2287 feet
Precipitation: 43 to 53 inches
Slope gradient: 0 to 2 percent
Air temperature: 55 to 59 ºF
Frost-free period: 180 to 210 days

Characteristics of Johnsburg and similar soils

Average total avail. water in top five feet (in.): 9.8
Available water capacity class: High
Parent material: fine-silty loess over silty and clayey pedisediment over silty and clayey residuum weathered from sedimentary rock
Restrictive feature(s): fragipan at 18 to 28 inches
Depth to Water table: 14 inches
Drainage class: somewhat poorly drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately High
Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 2w
Hydric soil: no
Hydrologic group: D
Runoff class: medium
Potential frost action: high

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 8	Silt loam	1.5 to 1.7	4.5 to 5.5	0.1 to 0.4	0
Bt -- 8 to 22	Silty clay loam	2.7 to 3.0	4.5 to 5.5	0.1 to 0.4	0
2Btgx1 -- 22 to 31	Silty clay loam	0.6 to 1.4	4.2 to 5.5	0.1 to 0.4	0
2Btgx2 -- 31 to 43	Silty clay loam	0.6 to 1.9	4.2 to 5.5	0.1 to 0.4	0
2Btgx3 -- 43 to 56	Silty clay loam	0.6 to 1.9	4.2 to 5.5	0.1 to 0.4	0
3Bt -- 56 to 80	Gravelly silty clay loam	2.4 to 2.9	4.2 to 5.5	0.2 to 0.6	0

Ecological class(es): NRCS Forestland Site - Fragipan Upland Woodland

Js--Johnsburg complex, mounded

Composition

- Johnsburg and similar soils: 90 percent of the unit
- Aquults and similar soils: 10 percent of the unit

Setting

Landform(s): hills, stream terraces
Elevation: 699 to 899 feet
Precipitation: 38 to 53 inches
Slope gradient: 0 to 1 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Johnsburg and similar soils

Average total avail. water in top five feet (in.): 7.0
Available water capacity class: Moderate
Parent material: silty pedisediment
Restrictive feature(s): fragipan at 19 to 27 inches
Depth to Water table: 14 inches
Drainage class: somewhat poorly drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 3w
Hydric soil: no
Hydrologic group: D
Runoff class: low
Potential frost action: none

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 8	Silt loam	1.6 to 1.7	4.5 to 5.5	0.0	0
BE -- 8 to 12	Silt loam	0.8 to 0.9	4.5 to 5.5	0.0	0
Bt -- 12 to 23	Silty clay loam	2.0 to 2.2	4.5 to 5.5	0.0	0
Btx -- 23 to 72	Silty clay loam	1.5 to 3.4	4.5 to 5.5	0.0	0

Ecological class(es):

Le--Leaf silt loam

Composition

- Leaf and similar soils: 90 percent of the unit
- Aquults and similar soils: 10 percent of the unit

Setting

Landform(s): hills, hills
Elevation:
Precipitation: 38 to 53 inches
Slope gradient: 0 to 1 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Leaf and similar soils

Average total avail. water in top five feet (in.): 14.5
Available water capacity class: High
Parent material: silty pedisediment
Restrictive feature(s): abrupt textural change at 9 to 15 inches
Depth to Water table: 12 inches
Drainage class: poorly drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 4w
Hydric soil: yes
Hydrologic group: D
Runoff class: low
Potential frost action: none

Saturated hydraulic conductivity class: Moderately Low

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 5	Silt loam	1.0 to 1.1	3.6 to 5.5	0.0	0
Eg -- 5 to 12	Silt loam	1.3 to 1.5	3.6 to 5.5	0.0	0
Btg -- 12 to 50	Silty clay	6.9 to 8.0	3.6 to 5.5	0.0	0
Cg -- 50 to 72	Clay	4.0 to 4.6	3.6 to 5.5	0.0	0

Ecological class(es):

Lf--Leaf complex, mounded

Composition

- Leaf and similar soils: 90 percent of the unit
- Aquults and similar soils: 10 percent of the unit

Setting

Landform(s): hills, hills
Elevation:
Precipitation: 38 to 53 inches
Slope gradient: 0 to 1 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Leaf and similar soils

Average total avail. water in top five feet (in.): 14.5
Available water capacity class: High
Parent material: silty pedisediment
Restrictive feature(s): abrupt textural change at 9 to 15 inches
Depth to Water table: 12 inches
Drainage class: poorly drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 4w
Hydric soil: yes
Hydrologic group: D
Runoff class: low
Potential frost action: none

Saturated hydraulic conductivity class: Moderately Low

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 5	Silt loam	1.0 to 1.1	3.6 to 5.5	0.0	0
Eg -- 5 to 12	Silt loam	1.3 to 1.5	3.6 to 5.5	0.0	0
Btg -- 12 to 50	Silty clay	6.9 to 8.0	3.6 to 5.5	0.0	0
Cg -- 50 to 72	Clay	4.0 to 4.6	3.6 to 5.5	0.0	0

Ecological class(es):

LkB--Linker loam, 1 to 3 percent slopes

Composition

- Linker and similar soils: 100 percent of the unit

Setting

Landform(s): hills, hills, hills
Elevation: 499 to 2799 feet
Precipitation: 38 to 53 inches
Slope gradient: 1 to 3 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Linker and similar soils

Average total avail. water in top five feet (in.): 4.8
Available water capacity class: Low
Parent material: loamy residuum weathered from sandstone and siltstone
Restrictive feature(s): lithic bedrock at 20 to 40 inches
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately High
Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 2e
Hydric soil: no
Hydrologic group: C
Runoff class: low
Potential frost action: none

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 5	Loam	0.7 to 0.9	3.6 to 5.5	0.0	0
Bt1,Bt2 -- 5 to 26	Loam	2.1 to 3.8	3.6 to 5.5	0.0	0
BC -- 26 to 34	Fine sandy loam	0.8 to 1.4	3.6 to 5.5	0.0	0
R -- 34 to 37	Unweathered bedrock			0.0	0

Ecological class(es):

LkC2--Linker loam, 3 to 8 percent slopes, eroded

Composition

- Linker and similar soils: 100 percent of the unit

Setting

Landform(s): hills, hills, hills
Elevation: 499 to 2799 feet
Precipitation: 38 to 53 inches
Slope gradient: 3 to 8 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Linker and similar soils

Average total avail. water in top five feet (in.): 4.8
Available water capacity class: Low
Parent material: loamy residuum weathered from sandstone and siltstone
Restrictive feature(s): lithic bedrock at 20 to 40 inches
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately High
Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 3e
Hydric soil: no
Hydrologic group: C
Runoff class: high
Potential frost action: none

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 5	Loam	0.7 to 0.9	3.6 to 5.5	0.0	0
Bt1,Bt2 -- 5 to 26	Loam	2.1 to 3.8	3.6 to 5.5	0.0	0
BC -- 26 to 34	Fine sandy loam	0.8 to 1.4	3.6 to 5.5	0.0	0
R -- 34 to 37	Unweathered bedrock			0.0	0

Ecological class(es):

LnC2--Linker gravelly loam, 3 to 8 percent slopes, eroded

Composition

- Linker and similar soils: 100 percent of the unit

Setting

Landform(s): hills, hills, hills
Elevation: 499 to 2799 feet
Precipitation: 38 to 53 inches
Slope gradient: 3 to 8 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Linker and similar soils

Average total avail. water in top five feet (in.): 4.6
Available water capacity class: Low
Parent material: loamy residuum weathered from sandstone and siltstone
Restrictive feature(s): lithic bedrock at 20 to 40 inches
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately High
Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Land capability class, irrigated:
Land capability class, nonirrigated: 3e
Hydric soil: no
Hydrologic group: C
Runoff class: high
Potential frost action: none

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 5	Gravelly loam	0.4 to 0.7	3.6 to 5.5	0.0	0
Bt1,Bt2 -- 5 to 26	Loam	2.1 to 3.8	3.6 to 5.5	0.0	0
BC -- 26 to 34	Fine sandy loam	0.8 to 1.4	3.6 to 5.5	0.0	0
R -- 34 to 37	Unweathered bedrock			0.0	0

Ecological class(es):

LnD--Linker gravelly loam, 8 to 12 percent slopes

Composition

- Linker and similar soils: 100 percent of the unit

Setting

Landform(s): hills, hills, hills
Elevation: 499 to 2799 feet
Precipitation: 38 to 53 inches
Slope gradient: 8 to 12 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Linker and similar soils

Average total avail. water in top five feet (in.): 4.6
Available water capacity class: Low
Parent material: loamy residuum weathered from sandstone and siltstone
Restrictive feature(s): lithic bedrock at 20 to 40 inches
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately High
Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Land capability class, irrigated:
Land capability class, nonirrigated: 4e
Hydric soil: no
Hydrologic group: C
Runoff class: high
Potential frost action: none

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 5	Gravelly loam	0.4 to 0.7	3.6 to 5.5	0.0	0
Bt1,Bt2 -- 5 to 26	Loam	2.1 to 3.8	3.6 to 5.5	0.0	0
BC -- 26 to 34	Fine sandy loam	0.8 to 1.4	3.6 to 5.5	0.0	0
R -- 34 to 37	Unweathered bedrock			0.0	0

Ecological class(es):

MoD--Montevallo soils, 3 to 12 percent slopes

Composition

- Montevallo and similar soils: 100 percent of the unit

Setting

Landform(s): hills, mountains
Elevation: 499 to 1801 feet
Precipitation: 38 to 53 inches
Slope gradient: 3 to 12 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Montevallo and similar soils

Average total avail. water in top five feet (in.): 1.6
Available water capacity class: Very low
Parent material: silty residuum weathered from acid shale
Restrictive feature(s): paralithic bedrock at 10 to 20 inches
Depth to Water table: none within the soil profile
Drainage class: somewhat excessively drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Land capability class, irrigated:
Land capability class, nonirrigated: 6e
Hydric soil: no
Hydrologic group: D
Runoff class: high
Potential frost action: none

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 8	Channery loam	0.7 to 1.4	4.5 to 6.0	0.0	0
Bw -- 8 to 15	Very channery silt loam	0.1 to 0.9	4.5 to 6.0	0.0	0
Cr -- 15 to 17	Weathered bedrock			0.0	0

Ecological class(es): NRCS Rangeland Site - Shale Break

MoE--Montevallo soils, 12 to 25 percent slopes

Composition

- Montevallo and similar soils: 100 percent of the unit

Setting

Landform(s): hills, mountains
Elevation: 499 to 1801 feet
Precipitation: 38 to 53 inches
Slope gradient: 12 to 25 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Montevallo and similar soils

Average total avail. water in top five feet (in.): 1.6
Available water capacity class: Very low
Parent material: silty residuum weathered from acid shale
Restrictive feature(s): paralithic bedrock at 10 to 20 inches
Depth to Water table: none within the soil profile
Drainage class: somewhat excessively drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Land capability class, irrigated:
Land capability class, nonirrigated: 7e
Hydric soil: no
Hydrologic group: D
Runoff class: very high
Potential frost action: none

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A1 -- 0 to 8	Channery loam	0.7 to 1.4	4.5 to 6.0	0.0	0
Bw2 -- 8 to 15	Very channery silt loam	0.1 to 0.9	4.5 to 6.0	0.0	0
Cr -- 15 to 17	Weathered bedrock			0.0	0

Ecological class(es): NRCS Rangeland Site - Shale Break

MPI--Pits, quarry

Composition

- Pits: 100 percent of the unit

Setting

Landform(s): hills
Elevation:
Precipitation: 38 to 53 inches
Slope gradient:
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Pits

Average total avail. water in top five feet (in.):
Available water capacity class: NA
Parent material:
Restrictive feature(s):
Depth to Water table:
Drainage class:
Flooding hazard:
Ponding hazard:
Saturated hydraulic conductivity class: NA
Soil loss tolerance (T factor):
Wind erodibility group (WEG):
Wind erodibility index (WEI):
Land capability class, irrigated:
Land capability class, nonirrigated:
Hydric soil: no
Hydrologic group:
Runoff class:
Potential frost action:

Ecological class(es):

NaC--Nixa very gravelly silt loam, 3 to 8 percent slopes

Composition

- Nixa and similar soils: 85 to 95 percent of the map unit (RV=90 percent)
- Bendavis and similar soils: 5 to 15 percent of the map unit (RV=10 percent)

Setting

Landform(s): hills, hillslopes
Elevation: 919 to 1532 feet
Precipitation: 39 to 49 inches
Slope gradient: 3 to 8 percent
Air temperature: 54 to 59 ºF
Frost-free period: 172 to 232 days

Characteristics of Nixa and similar soils

Average total avail. water in top five feet (in.): 4.6
Available water capacity class: Low
Parent material: slope alluvium over pedisediment over residuum weathered from limestone
Restrictive feature(s): fragipan at 11 to 30 inches
Depth to Water table: 19 inches
Drainage class: moderately well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately Low
Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 7
Wind erodibility index (WEI): 38
Land capability class, irrigated:
Land capability class, nonirrigated: 4s
Hydric soil: no
Hydrologic group: D
Runoff class: very high
Potential frost action: moderate

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Oi -- 0 to 1	Slightly decomposed plant material	0.0 to 0.0		0.1 to 2.0	0
A -- 1 to 3	Very gravelly silt loam	0.2 to 0.3	3.9 to 6.0	0.1 to 2.0	0
E -- 3 to 10	Very gravelly silt loam	0.5 to 1.1	4.5 to 6.0	0.1 to 2.0	0
BE -- 10 to 20	Very gravelly silt loam	0.7 to 1.2	4.2 to 5.5	0.1 to 2.0	0
2Btx -- 20 to 43	Very gravelly silt loam	0.7 to 1.9	4.3 to 5.5	0.1 to 2.0	0
3Bt -- 43 to 80	Very gravelly clay	1.1 to 3.7	4.1 to 5.0	0.1 to 2.0	0

Ecological class(es): NRCS Forestland Site - Low-Base Chert Upland Woodland
NRCS Forestland Site - Low-Base Chert Upland Woodland
Missouri Vegetative Classes - Trees/Timber

NaD--Nixa very gravelly silt loam, 8 to 12 percent slopes

Composition

- Nixa and similar soils: 80 to 95 percent of the map unit (RV=90 percent)
- Bendavis and similar soils: 3 to 10 percent of the map unit (RV=5 percent)
- Noark and similar soils: 2 to 10 percent of the map unit (RV=5 percent)

Setting

Landform(s): hills, hillslopes
Elevation: 909 to 1696 feet
Precipitation: 39 to 49 inches
Slope gradient: 8 to 12 percent
Air temperature: 54 to 59 ºF
Frost-free period: 172 to 232 days

Characteristics of Nixa and similar soils

Average total avail. water in top five feet (in.): 4.6
Available water capacity class: Low
Parent material: slope alluvium over pedisediment over residuum weathered from limestone
Restrictive feature(s): fragipan at 11 to 30 inches
Depth to Water table: 17 inches
Drainage class: moderately well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately Low
Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 7
Wind erodibility index (WEI): 38
Land capability class, irrigated:
Land capability class, nonirrigated: 4s
Hydric soil: no
Hydrologic group: D
Runoff class: very high
Potential frost action: moderate

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Oi -- 0 to 1	Slightly decomposed plant material	0.0 to 0.0	3.5 to 6.0	0.1 to 2.0	0
A -- 1 to 3	Very gravelly silt loam	0.2 to 0.3	3.9 to 6.0	0.1 to 2.0	0
E -- 3 to 10	Very gravelly silt loam	0.5 to 1.1	4.5 to 6.0	0.1 to 2.0	0
BE -- 10 to 18	Very gravelly silt loam	0.6 to 1.0	4.2 to 5.5	0.1 to 2.0	0
2Btx -- 18 to 43	Very gravelly silt loam	0.8 to 2.0	4.3 to 5.5	0.1 to 2.0	0
3Bt -- 43 to 80	Very gravelly clay	1.1 to 3.7	4.1 to 5.0	0.1 to 2.0	0

Ecological class(es): NRCS Forestland Site - Low-Base Chert Upland Woodland
NRCS Forestland Site - Low-Base Chert Upland Woodland
Missouri Vegetative Classes - Trees/Timber

PeB--Pembroke silt loam, 1 to 3 percent slopes

Composition

- Pembroke and similar soils: 100 percent of the unit

Setting

Landform(s): hills, hills, stream terraces
Elevation:
Precipitation: 38 to 53 inches
Slope gradient: 1 to 3 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Pembroke and similar soils

Average total avail. water in top five feet (in.): 7.9
Available water capacity class: Moderate
Parent material: silty pedisediment
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Land capability class, irrigated:
Land capability class, nonirrigated: 2e
Hydric soil: no
Hydrologic group: B
Runoff class: low
Potential frost action: none

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 5	Silt loam	0.9 to 1.2	4.5 to 7.3	0.0	0
BA -- 5 to 13	Silt loam	1.4 to 1.8	4.5 to 7.3	0.0	0
Bt1 -- 13 to 26	Silty clay loam	2.3 to 2.9	4.5 to 6.0	0.0	0
Bt2 -- 26 to 42	Silty clay loam	2.1 to 3.1	4.5 to 6.0	0.0	0

Ecological class(es): NRCS Forestland Site - Loamy Footslope Forest

PeC2--Pembroke silt loam, 3 to 6 percent slopes, eroded

Composition

- Pembroke and similar soils: 100 percent of the unit

Setting

Landform(s): hills, hills, stream terraces
Elevation:
Precipitation: 38 to 53 inches
Slope gradient: 3 to 6 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Pembroke and similar soils

Average total avail. water in top five feet (in.): 7.9
Available water capacity class: Moderate
Parent material: silty pedisediment
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Land capability class, irrigated:
Land capability class, nonirrigated: 3e
Hydric soil: no
Hydrologic group: B
Runoff class: low
Potential frost action: none

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 5	Silt loam	0.9 to 1.2	4.5 to 7.3	0.0	0
BA -- 5 to 13	Silt loam	1.4 to 1.8	4.5 to 7.3	0.0	0
Bt1 -- 13 to 26	Silty clay loam	2.3 to 2.9	4.5 to 6.0	0.0	0
Bt2 -- 26 to 42	Silty clay loam	2.1 to 3.1	4.5 to 6.0	0.0	0

Ecological class(es): NRCS Forestland Site - Loamy Footslope Forest

PgC2--Pembroke gravelly silt loam, 3 to 8 percent slopes, eroded

Composition

- Pembroke and similar soils: 100 percent of the unit

Setting

Landform(s): hills, hills, stream terraces
Elevation:
Precipitation: 38 to 53 inches
Slope gradient: 3 to 8 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Pembroke and similar soils

Average total avail. water in top five feet (in.): 7.9
Available water capacity class: Moderate
Parent material: silty pedisediment
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Land capability class, irrigated:
Land capability class, nonirrigated: 3e
Hydric soil: no
Hydrologic group: B
Runoff class: low
Potential frost action: none

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 5	Silt loam	0.9 to 1.2	4.5 to 7.3	0.0	0
BA -- 5 to 13	Silt loam	1.4 to 1.8	4.5 to 7.3	0.0	0
Bt1 -- 13 to 26	Silty clay loam	2.3 to 2.9	4.5 to 6.0	0.0	0
Bt2 -- 26 to 42	Silty clay loam	2.1 to 3.1	4.5 to 6.0	0.0	0

Ecological class(es): NRCS Forestland Site - Loamy Footslope Forest

PkC2--Pickwick gravelly loam, 3 to 8 percent slopes, eroded

Composition

- Pickwick and similar soils: 100 percent of the unit

Setting

Landform(s): hills, hills, stream terraces
Elevation: 400 to 600 feet
Precipitation: 38 to 53 inches
Slope gradient: 3 to 8 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Pickwick and similar soils

Average total avail. water in top five feet (in.): 12.4
Available water capacity class: High
Parent material: silty pedisediment
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 3e
Hydric soil: no
Hydrologic group: B
Runoff class: low
Potential frost action: none

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 8	Silt loam	1.6 to 1.8	4.5 to 5.5	0.0	0
BA -- 8 to 15	Silt loam	1.4 to 1.6	4.5 to 5.5	0.0	0
Bt -- 15 to 24	Silty clay loam	1.7 to 2.0	4.5 to 5.5	0.0	0
Bt -- 15 to 24	Silty clay loam	1.7 to 2.0	4.5 to 5.5	0.0	0
Bt -- 24 to 64	Silty clay loam	6.0 to 8.0	4.5 to 5.5	0.0	0
Bt -- 24 to 64	Silty clay loam	6.0 to 8.0	4.5 to 5.5	0.0	0

Ecological class(es):

PkD2--Pickwick gravelly loam, 8 to 12 percent slopes, eroded

Composition

- Pickwick and similar soils: 100 percent of the unit

Setting

Landform(s): hills, hills, stream terraces
Elevation: 400 to 600 feet
Precipitation: 38 to 53 inches
Slope gradient: 8 to 12 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Pickwick and similar soils

Average total avail. water in top five feet (in.): 12.4
Available water capacity class: High
Parent material: silty pedisediment
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 4e
Hydric soil: no
Hydrologic group: B
Runoff class: medium
Potential frost action: none

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 8	Silt loam	1.6 to 1.8	4.5 to 5.5	0.0	0
BA -- 8 to 15	Silt loam	1.4 to 1.6	4.5 to 5.5	0.0	0
Bt1 -- 15 to 24	Silty clay loam	1.7 to 2.0	4.5 to 5.5	0.0	0
Bt2 -- 24 to 64	Silty clay loam	6.0 to 8.0	4.5 to 5.5	0.0	0

Ecological class(es):

PsB--Pickwick silt loam, 1 to 3 percent slopes

Composition

- Pickwick and similar soils: 100 percent of the unit

Setting

Landform(s): hills, hills, stream terraces
Elevation: 400 to 600 feet
Precipitation: 38 to 53 inches
Slope gradient: 1 to 3 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Pickwick and similar soils

Average total avail. water in top five feet (in.): 12.4
Available water capacity class: High
Parent material: silty pedisediment
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 2e
Hydric soil: no
Hydrologic group: B
Runoff class: low
Potential frost action: none

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 8	Silt loam	1.6 to 1.8	4.5 to 5.5	0.0	0
BA -- 8 to 15	Silt loam	1.4 to 1.6	4.5 to 5.5	0.0	0
Bt1 -- 15 to 24	Silty clay loam	1.7 to 2.0	4.5 to 5.5	0.0	0
Bt2 -- 24 to 64	Silty clay loam	6.0 to 8.0	4.5 to 5.5	0.0	0

Ecological class(es):

PsC2--Pickwick silt loam, 3 to 8 percent slopes, eroded

Composition

- Pickwick and similar soils: 100 percent of the unit

Setting

Landform(s): hills, hills, stream terraces
Elevation: 400 to 600 feet
Precipitation: 38 to 53 inches
Slope gradient: 3 to 8 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Pickwick and similar soils

Average total avail. water in top five feet (in.): 12.4
Available water capacity class: High
Parent material: silty pedisediment
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 3e
Hydric soil: no
Hydrologic group: B
Runoff class: low
Potential frost action: none

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 8	Silt loam	1.6 to 1.8	4.5 to 5.5	0.0	0
BA -- 8 to 15	Silt loam	1.4 to 1.6	4.5 to 5.5	0.0	0
Bt1 -- 15 to 24	Silty clay loam	1.7 to 2.0	4.5 to 5.5	0.0	0
Bt2 -- 24 to 64	Silty clay loam	6.0 to 8.0	4.5 to 5.5	0.0	0

Ecological class(es):

Ra--Razort silt loam, occasionally flooded

Composition

- Razort and similar soils: 90 percent of the unit
- Aquents and similar soils: 10 percent of the unit

Setting

Landform(s): flood plains, hills
Elevation: 499 to 1001 feet
Precipitation: 38 to 53 inches
Slope gradient: 0 to 2 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Razort and similar soils

Average total avail. water in top five feet (in.): 11.4
Available water capacity class: High
Parent material: loamy alluvium
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 2w
Hydric soil: no
Hydrologic group: B
Runoff class: low
Potential frost action: none

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 8	Silt loam	0.8 to 1.7	6.1 to 7.3	0.0	0
Bt -- 8 to 54	Silt loam	6.0 to 10.1	5.6 to 7.3	0.0	0
C -- 54 to 72	Very gravelly silt loam	1.4 to 2.2	5.6 to 7.3	0.0	0

Ecological class(es): NRCS Forestland Site - Loamy Terrace Forest

Rg--Razort gravelly silt loam, occasionally flooded

Composition

- Razort and similar soils: 90 percent of the unit
- Aquents and similar soils: 10 percent of the unit

Setting

Landform(s): flood plains, hills
Elevation: 499 to 1001 feet
Precipitation: 38 to 53 inches
Slope gradient: 0 to 2 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Razort and similar soils

Average total avail. water in top five feet (in.): 10.9
Available water capacity class: High
Parent material: loamy alluvium
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Land capability class, irrigated:
Land capability class, nonirrigated: 2w
Hydric soil: no
Hydrologic group: B
Runoff class: low
Potential frost action: none

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 8	Gravelly silt loam	0.6 to 0.9	6.1 to 7.3	0.0	0
Bt -- 8 to 54	Silt loam	6.0 to 10.1	5.6 to 7.3	0.0	0
C -- 54 to 72	Very gravelly silt loam	1.4 to 2.2	5.6 to 7.3	0.0	0

Ecological class(es): NRCS Forestland Site - Loamy Terrace Forest

Rk--Razort loam

Composition

- Razort and similar soils: 90 percent of the unit
- Aquepts and similar soils: 10 percent of the unit

Setting

Landform(s): hills, stream terraces
Elevation: 499 to 1001 feet
Precipitation: 38 to 53 inches
Slope gradient: 0 to 2 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Razort and similar soils

Average total avail. water in top five feet (in.): 11.4
Available water capacity class: High
Parent material: loamy alluvium
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Land capability class, irrigated:
Land capability class, nonirrigated: 2e
Hydric soil: no
Hydrologic group: B
Runoff class: low
Potential frost action: none

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 8	Loam	0.8 to 1.7	6.1 to 7.3	0.0	0
Bt -- 8 to 54	Silt loam	6.0 to 10.1	5.6 to 7.3	0.0	0
C -- 54 to 72	Very gravelly silt loam	1.4 to 2.2	5.6 to 7.3	0.0	0

Ecological class(es): NRCS Forestland Site - Loamy Terrace Forest

Ro--Rock land

Composition

- Rock outcrop: 100 percent of the unit

Setting

Landform(s): hills, ledges, talus slopes
Elevation:
Precipitation: 38 to 53 inches
Slope gradient:
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Rock outcrop

Average total avail. water in top five feet (in.):
Available water capacity class: NA
Parent material:
Restrictive feature(s):
Depth to Water table:
Drainage class:
Flooding hazard:
Ponding hazard:
Soil loss tolerance (T factor):
Wind erodibility group (WEG):
Wind erodibility index (WEI):
Land capability class, irrigated:
Land capability class, nonirrigated:
Hydric soil: no
Hydrologic group:
Runoff class:
Potential frost action:

Saturated hydraulic conductivity class: NA

Ecological class(es):

Sa--Samba silt loam

Composition

- Samba and similar soils: 90 percent of the unit
- Aqualfs and similar soils: 5 percent of the unit
- Johnsburg: 5 percent of the unit

Setting

Landform(s): hills, hills, stream terraces
Elevation: 1001 to 1499 feet
Precipitation: 38 to 53 inches
Slope gradient: 0 to 1 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Samba and similar soils

Average total avail. water in top five feet (in.): 12.0
Available water capacity class: High
Parent material: silty alluvium and/or silty pedisediment
Restrictive feature(s): none
Depth to Water table: 6 inches
Drainage class: poorly drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Land capability class, irrigated:
Land capability class, nonirrigated: 3w
Hydric soil: yes
Hydrologic group: D
Runoff class: low
Potential frost action: none

Saturated hydraulic conductivity class: Moderately Low

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A1 -- 0 to 12	Silt loam	1.9 to 2.8	5.6 to 6.5	0.0	0
Btg2 -- 12 to 52	Clay	4.8 to 8.8	5.1 to 7.3	0.0	0
C3 -- 52 to 72	Silty clay	2.4 to 3.2	5.1 to 7.3	0.0	0

Ecological class(es):

Sb--Samba complex, mounded

Composition

- Samba and similar soils: 90 percent of the unit
- Aqualfs and similar soils: 5 percent of the unit
- Johnsburg: 5 percent of the unit

Setting

Landform(s): hills, hills, stream terraces
Elevation: 1001 to 1499 feet
Precipitation: 38 to 53 inches
Slope gradient: 0 to 1 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Samba and similar soils

Average total avail. water in top five feet (in.): 12.0
Available water capacity class: High
Parent material: silty alluvium and/or silty pedisediment
Restrictive feature(s): none
Depth to Water table: 6 inches
Drainage class: poorly drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Land capability class, irrigated:
Land capability class, nonirrigated: 3w
Hydric soil: yes
Hydrologic group: D
Runoff class: low
Potential frost action: none

Saturated hydraulic conductivity class: Moderately Low

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 12	Silt loam	1.9 to 2.8	5.6 to 6.5	0.0	0
Btg -- 12 to 52	Clay	4.8 to 8.8	5.1 to 7.3	0.0	0
C -- 52 to 72	Silty clay	2.4 to 3.2	5.1 to 7.3	0.0	0

Ecological class(es):

SfB--Savannah fine sandy loam, 1 to 3 percent slopes

Composition

- Savannah and similar soils: 95 percent of the unit
- Aquults and similar soils: 5 percent of the unit

Setting

Landform(s): hills, stream terraces
Elevation:
Precipitation: 38 to 53 inches
Slope gradient: 1 to 3 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Savannah and similar soils

Average total avail. water in top five feet (in.): 7.0
Available water capacity class: Moderate
Parent material: loamy colluvium derived from sandstone and siltstone and/or loamy pedisediment
Restrictive feature(s): fragipan at 18 to 26 inches
Depth to Water table: 24 inches
Drainage class: moderately well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately High
Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Land capability class, irrigated:
Land capability class, nonirrigated: 2e
Hydric soil: no
Hydrologic group: C
Runoff class: low
Potential frost action: none

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 5	Fine sandy loam	0.7 to 0.8	3.6 to 5.5	0.0	0
Bt -- 5 to 22	Loam	1.9 to 2.9	3.6 to 5.5	0.0	0
Btx -- 22 to 70	Loam	2.4 to 4.8	3.6 to 5.5	0.0	0

Ecological class(es):

SfC2--Savannah fine sandy loam, 3 to 8 percent slopes, eroded

Composition

- Savannah and similar soils: 100 percent of the unit

Setting

Landform(s): benches, hills, hills, stream terraces
Elevation:
Precipitation: 38 to 53 inches
Slope gradient: 3 to 8 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Savannah and similar soils

Average total avail. water in top five feet (in.): 7.0
Available water capacity class: Moderate
Parent material: loamy colluvium derived from sandstone and siltstone and/or loamy pedisediment
Restrictive feature(s): fragipan at 18 to 26 inches
Depth to Water table: 24 inches
Drainage class: moderately well drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately High
Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Land capability class, irrigated:
Land capability class, nonirrigated: 3e
Hydric soil: no
Hydrologic group: C
Runoff class: medium
Potential frost action: none

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 5	Fine sandy loam	0.7 to 0.8	3.6 to 5.5	0.0	0
Bt -- 5 to 22	Loam	1.9 to 2.9	3.6 to 5.5	0.0	0
Btx -- 22 to 70	Loam	2.4 to 4.8	3.6 to 5.5	0.0	0

Ecological class(es):

SHO--Rock outcrop

Composition

- Rock outcrop: 100 percent of the unit

Setting

Landform(s): hills
Elevation:
Precipitation: 38 to 53 inches
Slope gradient:
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Rock outcrop

Average total avail. water in top five feet (in.):
Available water capacity class: NA
Parent material:
Restrictive feature(s):
Depth to Water table:
Drainage class:
Flooding hazard:
Ponding hazard:
Saturated hydraulic conductivity class: NA
Soil loss tolerance (T factor):
Wind erodibility group (WEG):
Wind erodibility index (WEI):
Land capability class, irrigated:
Land capability class, nonirrigated:
Hydric soil: no
Hydrologic group:
Runoff class:
Potential frost action:

Ecological class(es):

Sn--Sloan silt loam

Composition

- Sloan and similar soils: 90 percent of the unit
- Aquents and similar soils: 5 percent of the unit
- Razort: 5 percent of the unit

Setting

Landform(s): flood plains, hills
Elevation: 915 to 971 feet
Precipitation: 38 to 53 inches
Slope gradient: 0 to 2 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Sloan and similar soils

Average total avail. water in top five feet (in.): 11.2
Available water capacity class: High
Parent material: silty alluvium
Restrictive feature(s): none
Depth to Water table: 6 inches
Drainage class: poorly drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Land capability class, irrigated:
Land capability class, nonirrigated: 3w
Hydric soil: yes
Hydrologic group: B/D
Runoff class: low
Potential frost action: high

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 17	Silt loam	3.2 to 4.1	6.1 to 7.8	0.0	0
C -- 17 to 61	Silt loam	6.6 to 8.4	6.1 to 8.4	0.0	0

Ecological class(es): NRCS Forestland Site - Wet Floodplain Step Forest

So--Sogn rocky silt loam (moko)

Composition

- Sogn and similar soils: 100 percent of the unit

Setting

Landform(s): hills, hills
Elevation: 499 to 1499 feet
Precipitation: 38 to 53 inches
Slope gradient: 3 to 12 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Sogn and similar soils

Average total avail. water in top five feet (in.): 1.2
Available water capacity class: Very low
Parent material: silty residuum weathered from limestone
Restrictive feature(s): lithic bedrock at 6 to 20 inches
Depth to Water table: none within the soil profile
Drainage class: excessively drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 1
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Land capability class, irrigated:
Land capability class, nonirrigated: 6s
Hydric soil: no
Hydrologic group: D
Runoff class: high
Potential frost action: none

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A1 -- 0 to 2	Very stony silt loam	0.2 to 0.3	6.6 to 7.8	0.0	0
A2 -- 2 to 10	Very stony silt loam	0.7 to 1.1	6.6 to 7.8	0.0	0
R -- 10 to 12	Unweathered bedrock			0.0	0

Ecological class(es): NRCS Rangeland Site - Shallow Dolomite Upland Glade/Woodland

Sp--Summit complex, mounded

Composition

- Summit and similar soils: 90 percent of the unit
- Aquepts and similar soils: 5 percent of the unit
- Samba: 5 percent of the unit

Setting

Landform(s): depressions, hills, stream terraces
Elevation: 1001 to 2001 feet
Precipitation: 38 to 53 inches
Slope gradient: 0 to 1 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Summit and similar soils

Average total avail. water in top five feet (in.): 10.6
Available water capacity class: High
Parent material: clayey pedisediment
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: moderately well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4
Wind erodibility index (WEI): 86
Land capability class, irrigated:
Land capability class, nonirrigated: 2w
Hydric soil: no
Hydrologic group: C
Runoff class: low
Potential frost action: none

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 12	Silty clay	1.9 to 2.4	5.6 to 7.3	0.0	0
Bt -- 12 to 36	Clay	2.4 to 4.3	5.6 to 7.3	0.0	0
BC -- 36 to 72	Clay	3.6 to 6.5	5.6 to 8.4	0.0	0

Ecological class(es):

SsA--Summit silty clay, 0 to 1 percent slopes

Composition

- Summit and similar soils: 90 percent of the unit
- Aquepts and similar soils: 10 percent of the unit

Setting

Landform(s): depressions, hills, stream terraces
Elevation: 1001 to 2001 feet
Precipitation: 38 to 53 inches
Slope gradient: 0 to 1 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Summit and similar soils

Average total avail. water in top five feet (in.): 10.6
Available water capacity class: High
Parent material: clayey pedisediment
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: moderately well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4
Wind erodibility index (WEI): 86
Land capability class, irrigated:
Land capability class, nonirrigated: 2w
Hydric soil: no
Hydrologic group: C
Runoff class: low
Potential frost action: none

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 12	Silty clay	1.9 to 2.4	5.6 to 7.3	0.0	0
Bt -- 12 to 36	Clay	2.4 to 4.3	5.6 to 7.3	0.0	0
BC -- 36 to 72	Clay	3.6 to 6.5	5.6 to 8.4	0.0	0

Ecological class(es):

SsB--Summit silty clay, 1 to 3 percent slopes

Composition

- Summit and similar soils: 95 percent of the unit
- Aquepts and similar soils: 5 percent of the unit

Setting

Landform(s): hills, hills, stream terraces
Elevation: 1001 to 2001 feet
Precipitation: 38 to 53 inches
Slope gradient: 1 to 3 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Summit and similar soils

Average total avail. water in top five feet (in.): 10.6
Available water capacity class: High
Parent material: clayey pedisediment
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: moderately well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4
Wind erodibility index (WEI): 86
Land capability class, irrigated:
Land capability class, nonirrigated: 2e
Hydric soil: no
Hydrologic group: C
Runoff class: low
Potential frost action: none

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 12	Silty clay	1.9 to 2.4	5.6 to 7.3	0.0	0
Bt -- 12 to 36	Clay	2.4 to 4.3	5.6 to 7.3	0.0	0
BC -- 36 to 72	Clay	3.6 to 6.5	5.6 to 8.4	0.0	0

Ecological class(es):

SsC2--Summit silty clay, 3 to 8 percent slopes, eroded

Composition

- Summit and similar soils: 100 percent of the unit

Setting

Landform(s): hills, hills
Elevation: 1001 to 2001 feet
Precipitation: 38 to 53 inches
Slope gradient: 3 to 8 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Summit and similar soils

Average total avail. water in top five feet (in.): 10.6
Available water capacity class: High
Parent material: clayey residuum weathered from limestone
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: moderately well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4
Wind erodibility index (WEI): 86
Land capability class, irrigated:
Land capability class, nonirrigated: 4e
Hydric soil: no
Hydrologic group: C
Runoff class: high
Potential frost action: none

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 12	Silty clay	1.9 to 2.4	5.6 to 7.3	0.0	0
Bt -- 12 to 36	Clay	2.4 to 4.3	5.6 to 7.3	0.0	0
BC -- 36 to 72	Clay	3.6 to 6.5	5.6 to 8.4	0.0	0

Ecological class(es):

SsD2--Summit silty clay, 8 to 12 percent slopes, eroded

Composition

- Summit and similar soils: 100 percent of the unit

Setting

Landform(s): hills, hills, mountains
Elevation: 1001 to 2001 feet
Precipitation: 38 to 53 inches
Slope gradient: 8 to 12 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Summit and similar soils

Average total avail. water in top five feet (in.): 10.6
Available water capacity class: High
Parent material: clayey pedisediment
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: moderately well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4
Wind erodibility index (WEI): 86
Land capability class, irrigated:
Land capability class, nonirrigated: 6e
Hydric soil: no
Hydrologic group: C
Runoff class: high
Potential frost action: none

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 12	Silty clay	1.9 to 2.4	5.6 to 7.3	0.0	0
Bt -- 12 to 36	Clay	2.4 to 4.3	5.6 to 7.3	0.0	0
C -- 36 to 72	Clay	3.6 to 6.5	5.6 to 8.4	0.0	0

Ecological class(es):

StD2--Summit stony silty clay, 3 to 12 percent slopes, eroded

Composition

- Summit and similar soils: 100 percent of the unit

Setting

Landform(s): hills, hills, mountains
Elevation: 1001 to 2001 feet
Precipitation: 38 to 53 inches
Slope gradient: 3 to 12 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Summit and similar soils

Average total avail. water in top five feet (in.): 10.6
Available water capacity class: High
Parent material: clayey pedisediment
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: moderately well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 7
Wind erodibility index (WEI): 38
Land capability class, irrigated:
Land capability class, nonirrigated: 6s
Hydric soil: no
Hydrologic group: C
Runoff class: high
Potential frost action: none

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 12	Stony silty clay loam	1.9 to 2.4	5.6 to 7.3	0.0	0
Bt -- 12 to 36	Clay	2.4 to 4.3	5.6 to 7.3	0.0	0
C -- 36 to 72	Clay	3.6 to 6.5	5.6 to 8.4	0.0	0

Ecological class(es):

StE2--Summit stony silty clay, 12 to 25 percent slopes, eroded

Composition

- Summit and similar soils: 100 percent of the unit

Setting

Landform(s): hills, hills, mountains
Elevation: 1001 to 2001 feet
Precipitation: 38 to 53 inches
Slope gradient: 12 to 25 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Summit and similar soils

Average total avail. water in top five feet (in.): 10.6
Available water capacity class: High
Parent material: clayey pedisediment
Restrictive feature(s): none
Depth to Water table: none within the soil profile
Drainage class: moderately well drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 7
Wind erodibility index (WEI): 38
Land capability class, irrigated:
Land capability class, nonirrigated: 6s
Hydric soil: no
Hydrologic group: C
Runoff class: very high
Potential frost action: none

Saturated hydraulic conductivity class: Moderately High

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 12	Stony silty clay loam	1.9 to 2.4	5.6 to 7.3	0.0	0
Bt -- 12 to 36	Clay	2.4 to 4.3	5.6 to 7.3	0.0	0
C -- 36 to 72	Clay	3.6 to 6.5	5.6 to 8.4	0.0	0

Ecological class(es):

Ta--Taloka complex, mounded

Composition

- Taloka and similar soils: 90 percent of the unit
- Aqualfs and similar soils: 10 percent of the unit

Setting

Landform(s): hills, hills
Elevation: 499 to 1201 feet
Precipitation: 38 to 53 inches
Slope gradient: 0 to 1 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Taloka and similar soils

Average total avail. water in top five feet (in.): 10.9
Available water capacity class: High
Parent material: silty pedisediment over clayey pedisediment
Restrictive feature(s): abrupt textural change at 20 to 26 inches
Depth to Water table: 18 inches
Drainage class: somewhat poorly drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Land capability class, irrigated:
Land capability class, nonirrigated: 2w
Hydric soil: no
Hydrologic group: D
Runoff class: low
Potential frost action: none

Saturated hydraulic conductivity class: Moderately Low

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 12	Silt loam	1.9 to 2.8	5.1 to 6.0	0.0	0
Eg -- 12 to 23	Silt loam	1.8 to 2.6	5.1 to 6.0	0.0	0
Btg -- 23 to 60	Silty clay	4.4 to 8.1	5.1 to 8.4	0.0	0

Ecological class(es): NRCS Rangeland Site - Loamy Prairie

ToA--Taloka silt loam, 0 to 1 percent slopes

Composition

- Taloka and similar soils: 84 to 100 percent of the map unit (RV=89 percent)
- Parsons and similar soils: 0 to 5 percent of the map unit (RV=4 percent)
- Aquolls and similar soils: 0 to 4 percent of the map unit (RV=3 percent)
- Okemah and similar soils: 0 to 3 percent of the map unit (RV=2 percent)
- Carytown and similar soils: 0 to 2 percent of the map unit (RV=1 percent)
- Jay and similar soils: 0 to 2 percent of the map unit (RV=1 percent)

Setting

Landform(s): paleoterraces on plains
Elevation: 499 to 1201 feet
Precipitation: 42 to 46 inches
Slope gradient: 0 to 1 percent
Air temperature: 58 to 60 ºF
Frost-free period: 190 to 220 days

Characteristics of Taloka and similar soils

Average total avail. water in top five feet (in.): 12.4
Available water capacity class: High
Parent material: loamy and clayey alluvium and/or colluvium derived from sandstone and shale
Restrictive feature(s): none
Depth to Water table: 15 inches
Drainage class: somewhat poorly drained
Flooding hazard: none
Ponding hazard: none
Saturated hydraulic conductivity class: Moderately Low
Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Land capability class, irrigated:
Land capability class, nonirrigated: 3w
Hydric soil: no
Hydrologic group: D
Runoff class: very high
Potential frost action: none

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
Ap -- 0 to 12	Silt loam	1.9 to 2.8	5.1 to 6.5	0.0	0
E -- 12 to 22	Silt loam	1.6 to 2.5	5.1 to 6.5	0.0	0
Bt1 -- 22 to 38	Clay	1.4 to 3.5	5.1 to 7.8	0.0	0
Bt2 -- 38 to 49	Silty clay loam	1.0 to 2.4	5.1 to 7.8	0.0	0
BC -- 49 to 79	Silty clay loam	2.7 to 6.6	5.1 to 7.8	0.0	0

Ecological class(es): NRCS Rangeland Site - Loamy prairie (Northeast) PE 62-80
Forage Suitability Groups - Unnamed

ToB--Taloka silt loam, 1 to 3 percent slopes

Composition

- Taloka and similar soils: 90 percent of the unit
- Aqualfs and similar soils: 10 percent of the unit

Setting

Landform(s): hills, hills
Elevation: 499 to 1201 feet
Precipitation: 38 to 53 inches
Slope gradient: 1 to 3 percent
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Taloka and similar soils

Average total avail. water in top five feet (in.): 10.9
Available water capacity class: High
Parent material: silty pedisediment over clayey pedisediment
Restrictive feature(s): abrupt textural change at 20 to 26 inches
Depth to Water table: 18 inches
Drainage class: somewhat poorly drained
Flooding hazard: none
Ponding hazard: none
Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Land capability class, irrigated:
Land capability class, nonirrigated: 2e
Hydric soil: no
Hydrologic group: D
Runoff class: high
Potential frost action: none

Saturated hydraulic conductivity class: Moderately Low

Representative soil profile:

Horizon -- Depth (inches)	Texture	Available water capacity (inches)	pH	Salinity (mmhos/cm)	SAR
A -- 0 to 12	Silt loam	1.9 to 2.8	5.1 to 6.0	0.0	0
Eg -- 12 to 23	Silt loam	1.8 to 2.6	5.1 to 6.0	0.0	0
Btg -- 23 to 60	Silty clay	4.4 to 8.1	5.1 to 8.4	0.0	0

Ecological class(es): NRCS Rangeland Site - Loamy Prairie

W--Water

Composition

- Water: 100 percent of the unit

Setting

Landform(s):
Elevation:
Precipitation: 38 to 53 inches
Slope gradient:
Air temperature: 47 to 69 ºF
Frost-free period: 200 to 245 days

Characteristics of Water

Average total avail. water in top five feet (in.):
Available water capacity class: NA
Parent material:
Restrictive feature(s):
Depth to Water table:
Drainage class:
Flooding hazard:
Ponding hazard:
Soil loss tolerance (T factor):
Wind erodibility group (WEG):
Wind erodibility index (WEI):
Land capability class, irrigated:
Land capability class, nonirrigated:
Hydric soil: no
Hydrologic group:
Runoff class:
Potential frost action:

Saturated hydraulic conductivity class: NA

Ecological class(es):