

Ay =Cryaquolls, 1 to 5 percent slopes

Setting

Landform: Stream terraces
Elevation: 7,200 to 9,000 feet
Native plants: Grass and willows
Air temperature: 38 to 42 degrees F
Annual precipitation: 20 to 30 inches
Frost-free period: 60 to 75 days

Composition

Cryaquolls soil and similar inclusions: 85 percent
Contrasting inclusions: 15 percent

Cryaquolls: These soils are highly variable and typically have a dark surface layer over stratified mottled layers. Sand and gravel are at depths of 15 to 40 inches.

Typical Profile

Surface layer:
0 to 9 inches=loam
Subsurface layer:
9 to 18 inches=loamy sand
Substratum:
18 to 60 inches=stratified sand and gravel

Soil Properties and Qualities

Parent material: Alluvium
Depth class: Very deep
Drainage class: Very poorly drained
Permeability: Moderately rapid
Available water capacity: Low
Potential rooting depth: 60 or more inches
Water Table: 6 to 30 inches
Runoff: Slow
Hazard of water erosion: Low
Hazard of wind erosion: Low
Flooding: Occasional

Contrasting Inclusions

Soils that have a dark surface layer greater than 16 inches thick
Soils that do not have a water table

Major Current Uses

Livestock grazing, wildlife habitat

Major Management Factors

Urban Development

Soil-related factors: Water table, flooding
Suitability as a site for buildings: Poor

Ecological Site

Dominant overstory vegetation in the potential plant community: Willows, alder
Dominant understory vegetation in the potential plant community: sedges, bluegrass, shrubby cinquefoil, alpine timothy, tufted hairgrass, slender wheatgrass
Annual production of air-dry vegetation: 3,700 pounds per acre

Interpretive Groups

Land capability subclass: 5W
Ecological site: #32301, A1int/sall
MLRA: 48A

AC =Adderton-Naz Families-
Cryaquolls complex, 3 to 15
percent slopes

Setting

Landform: Drainageways, fans,
foot slopes

Elevation: 7,600 to 9,000 feet

Native plants: Grass, willows

Air temperature: 38 to 42
degrees F

Annual precipitation: 20 to 30
inches

Frost-free period: 60 to 75 days

Composition

Adderton soil and similar
inclusions: 40 percent

Naz soil and similar inclusions:
30 percent

Cryaquolls soil and similar
inclusions: 20 percent

Contrasting inclusions: 10
percent

Typical Profile

Adderton

Surface layer:

0 to 14 inches=gravelly loam

Subsoil:

14 to 25 inches=gravelly loam

25 to 46 inches=gravelly sandy
loam

Substratum:

46 to 57 inches=gravelly coarse
sandy loam

57 to 60 inches=sandy loam

Naz

Surface layer:

0 to 32 inches=gravelly sandy
loam

Substratum:

32 to 60 inches=gravelly sandy
loam

Cryaquolls

Surface layer:

0 to 9 inches=loam

Substratum:

9 to 18 inches=loamy sand

18 to 60 inches=stratified sand
and gravel

Soil Properties and Qualities

Adderton

Parent material: Alluvium

Depth class: Very deep

Drainage class: Well drained

Permeability: Moderate

Available water capacity: High

Potential rooting depth: 60 or
more inches

Flooding: Rare

Runoff: Rapid

Hazard of water erosion: High

Hazard of wind erosion: High

Naz

Soil Properties and Qualities

Parent material: Alluvium

Depth class: Very deep

Drainage class: Well drained

Permeability: Moderately rapid

Available water capacity: High

Potential rooting depth: 60 or
more inches

Flooding: Rare

Runoff: Rapid

Hazard of water erosion: High

Hazard of wind erosion: High

Cryaquolls

Soil Properties and Qualities

Parent material: Alluvium

Depth class: Very deep

Drainage class: Poorly drained

Permeability: Moderate

Available water capacity:

Moderate to high

Potential rooting depth: 60 or
more inches

Flooding: Rare

Water table: 1 to 2 feet

Runoff: Slow

Hazard of water erosion: Slight

Hazard of wind erosion: Slight

Contrasting Inclusions

Soils that lack a thick dark
surface layer

Soils that have a developed
subsoil

Soils that have bedrock at
depths of 20 to 40 inches

Major Current Uses

Livestock grazing, wildlife habitat

Major Management Factors

Ecological Site

Soil-related factors: Erosion
Potential plant community: Parry
oatgrass, needleandthread,
mountain mahony, willows, alder,
forbs

Annual production of air-dry
vegetation: 1,800 pounds per
acre

Urban Development

Soil-related factors: Flooding,
erosion, water table
Suitability as a site for
buildings: Good in areas of
Adderton and Naz soils

Interpretive Groups

Land capability subclass: 6E
Ecological site for Adderton and
Naz soils: Dabai/Canel
Ecological site for Cryaquolls
soil: 41402-32301, Ainus/salex
MLRA: 48A

Ln =Leighcan Family, warm, 10 to 40 percent slopes, extremely stony

Setting

Landform: Mountains

Position on landscape:

Mountainsides, south-east-west-facing slopes

Elevation: 9,000 to 10,200 feet

Native plants: Lodgepole Pine

Air temperature: 36 to 40 degrees F

Annual precipitation: 30 to 35 inches

Frost-free periods: 30 to 60 days

Composition

Leighcan soil and similar

inclusions: 85 percent

Contrasting inclusions: 10 percent

Rock outcrops: 5 percent

Typical Profile

Surface layers:

1 to 0 inches=partially decomposed litter, moss

0 to 5 inches=very gravelly sandy loam

Subsoil:

5 to 32 inches=very gravelly sandy loam

Substratum:

32 to 51 inches=very gravelly loamy coarse sand

Bedrock:

51 inches=soft to hard schist, pegmatite

Soil Properties and Qualities

Parent material: Glacial deposits

Depth class: Very deep

Drainage class: Well drained

Permeability: Moderately rapid

Available water capacity: Moderate

Potential rooting depth: 60 or more inches

Runoff: Slow

Hazard of water erosion: Slight

Hazard of wind erosion: Slight

Contrasting Inclusions

Soils that are less than 40 inches to bedrock

Soils that have accumulated clay in the subsoil

Major Current Uses

Timber, recreation, wildlife habitat

Major Management Factors

Ecological Site

Soil-related factors: Large stones and boulders

Site index for Lodgepole pines: 50

Estimated annual production per acre: 41 cubic feet or 2.9 cubic meters per hectare

Dominant overstory vegetation in the potential plant community:

Lodgepole pine, with lesser amounts of Subalpine fir and Engelmann Spruce

Dominant understory vegetation in the potential plant

community: Grouse whortleberry, sedges, forbs

Urban Development

Soil-related factors: Large stones and boulders, steepness of slope

Suitability as a site for buildings: Poor

Interpretive Groups

Land capability subclass: 6E

Ecological site: #00910

Pico/VAsc

MLRA: 48A

TS =Troutville-Bullwark Families complex, 20 to 45 percent slopes, stony

Setting

Landform: Mountains

Position on landscape: North and east-facing mountainsides

Elevation: 7,800 to 9,800 feet

Native plants: Lodgepole Pine, Douglas-fir

Air temperature: 38 to 42 degrees F

Annual precipitation: 18 to 30 inches

Frost-free period: 30 to 70 days

Composition

Troutville soil and similar inclusions: 50 percent

Bullwark soil and similar inclusions: 30 percent

Contrasting inclusions: 20 percent

Typical Profile

Troutville

Surface layer:

2 to 0 inches=covered with about 1 percent stones, needles, twigs and partially decomposed pine litter

0 to 9 inches=gravelly sandy loam

Subsoil:

9 to 30 inches=very gravelly sandy loam and sandy clay loam

30 to 60 inches=very gravelly sandy loam

Bullwark

Surface layer:

2 to 1 inches=covered with about 1 percent stones, partially decomposed pine needles and twigs

1 to 0 inches=mostly decomposed pine litter and moss

0 to 8 inches=gravelly sandy loam

Subsoil:

8 to 13 inches=gravelly sandy loam

13 to 22 inches=very gravelly sandy loam and sandy clay loam

Bedrock:

22 inches=soft schist that grades to hard bedrock with depth

Soil Properties and Qualities

Troutville

Parent material: Colluvium

Depth class: Very deep

Drainage class: Well drained

Permeability: Moderate

Available water capacity: High

Potential rooting depth: 60 or more inches

Flooding: None

Runoff: Medium

Hazard of water erosion:

Moderate

Hazard of wind erosion: Slight

Bullwark

Parent material: Colluvium, residuum

Depth class: Moderately deep

Drainage class: Well drained

Permeability: Moderately rapid

Available water capacity: Low to moderate

Potential rooting depth: 20 to 40 inches

Flooding: None

Runoff: Rapid

Hazard of water erosion:

Moderate

Hazard of wind erosion: Slight

Contrasting Inclusions

Soils that are less than 20 inches to bedrock

Soils that average less than 35 percent rock fragments

Major Current Uses

Timber, livestock grazing, wildlife habitat

Major Management Factors

Ecological Site

Soil-related factors on this unit: Large stones on the surface

Site index for Lodgepole pine:
54

Estimated annual production per acre: 44 cubic feet or 3.1 cubic meters per hectare

Dominant overstory vegetation in the potential plant community:

Lodgepole pine, Douglas fir

Dominant understory vegetation in the potential plant community: Kinnikinnick, buffaloberry, common juniper, sedges

Urban Development

Soil-related factors on the Troutville soil: Erosion, steepness of slope

Soil-related factors on the Bullwark soil: Moderate depth to bedrock, erosion, steepness of slope

Suitability as a site for buildings: Poor

Interpretive Groups

Land capability subclass: 7e

Ecological site for this unit:

#00908 Pico-PSme/SHca

MLRA: 48A

Sc =Scout Family, 10 to 40 percent slopes, very bouldery

Setting

Landform: Mountains
Position on landscape: Glacial moraines
Elevation: 8,800 to 10,000 feet
Native plants: Lodgepole Pine
Air temperature: 36 to 40 degrees F
Annual precipitation: 30 to 35 inches
Frost-free period: 30 to 60 days

Composition

Scout soil and similar inclusions: 95 percent
Contrasting inclusions: 5 percent

Typical Profile

Surface layer:
2 to 0 inches=partially decomposed needles and twigs
0 to 7 inches=very cobbly sandy loam
Subsoil:
7 to 60 inches=very cobbly sandy loam

Soil Properties and Qualities

Parent material: Glacial till and outwash
Depth class: Very deep
Drainage class: Somewhat excessively drained
Permeability: Moderately rapid
Available water capacity: Low to moderate
Potential rooting depth: 60 or more inches
Flooding: None
Runoff: Slow
Hazard of water erosion: Slight
Hazard of wind erosion: Slight

Contrasting Inclusions

Soils that are less than 40 inches to bedrock

Major Current Uses

Timber, wildlife habitat, recreation

Major Management Factors

Ecological site

Soil-related factors: Large stones and boulders
Site index for Lodgepole pine: 50
Estimated annual production per acre: 40 cubic feet or 2.8 meters per hectare
Dominant overstory vegetation in the potential plant community: Dominantly Lodgepole pine with smaller amounts of aspen, Engelmann spruce, and Subalpine fir
Dominant understory vegetation in the potential plant community: Grouse whortleberry, common juniper, sedges, buffaloberry

Urban Development

Soil-related factors: Large stones and boulders, steepness of slope
Suitability as a site for buildings: Poor

Interpretive Groups

Land capability subclass: 7e
Ecological site: #00910
Pico/VAsc
MLRA: 48A

Le =Leighcan Family, 10 to 40 percent slopes, extremely stony

Setting

Landform: Mountains

Position on landscape:

Mountainsides, north-facing

Elevation: 9,200 to 10,500 feet

Native plants: Engelmann spruce,

Subalpine fir

Air temperature: 36 to 40

degrees F

Annual precipitation: 30 to 35

inches

Frost-free periods: 30 to 60 days

Composition

Leighcan soil and similar

inclusions: 90 percent

Contrasting inclusions: 10

percent

Typical Profile

Surface layer:

1 to 0 inches=partially

decomposed litter, moss

0 to 5 inches=very gravelly

sandy loam

Subsoil:

5 to 32 inches=very gravelly

sandy loam

Substratum:

32 to 51 inches=very gravelly

loamy coarse sand

Bedrock:

51 inches=soft to hard schist,

pegmatite

Soil Properties and Qualities

Parent material: Glacial

deposits

Depth class: Very deep

Drainage class: Well drained

Permeability: moderately rapid

Available water capacity:

moderate

Potential rooting depth: 60 or

more inches

Runoff: Slow

Hazard of water erosion: Slight

Hazard of wind erosion: Slight

Contrasting Inclusions

Soils that are less than 40

inches to bedrock

Soils that have accumulated clay

in the subsoil

Major Current Uses

Recreation, timber, wildlife

habitat

Major Management Factors

Ecological Site

Soil-related factors: Large

stones and boulders

Site index for Spruce-fir: 52

Estimated annual production per

acres: 41 cubic feet or 2.9 cubic

meters per hectare

Dominant overstory vegetation in

the potential plant community:

Engelmann spruce, Subalpine fir

Dominant understory vegetation

in the potential plant

community: Grouse whortleberry,

sedges, forbs

Urban Development

Soil-related factors: Large

stones and boulders

Suitability as a site for

buildings: Steepness of slope

Interpretive Groups

Land capability subclass: 6E

Ecological site: #00321C AB1a-

PIen1/VAsc

MLRA: 48A

AC =Adderton-Naz Families-
Cryaquolls complex, 3 to 15
percent slopes

Setting

Landform: Drainageways, fans,
foot slopes
Elevation: 7,600 to 9,000 feet
Native plants: Grass, willows
Air temperature: 38 to 42
degrees F
Annual precipitation: 20 to 30
inches
Frost-free period: 60 to 75 days

Composition

Adderton soil and similar
inclusions: 40 percent
Naz soil and similar inclusions:
30 percent
Cryaquolls soil and similar
inclusions: 20 percent
Contrasting inclusions: 10
percent

Typical Profile

Adderton

Surface layer:
0 to 14 inches=gravelly loam
Subsoil:
14 to 25 inches=gravelly loam
25 to 46 inches=gravelly sandy
loam
Substratum:
46 to 57 inches=gravelly coarse
sandy loam
57 to 60 inches=sandy loam

Naz

Surface layer:
0 to 32 inches=gravelly sandy
loam
Substratum:
32 to 60 inches=gravelly sandy
loam

Cryaquolls

Surface layer:
0 to 9 inches=loam
Substratum:
9 to 18 inches=loamy sand
18 to 60 inches=stratified sand
and gravel

Soil Properties and Qualities

Adderton

Parent material: Alluvium
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: High
Potential rooting depth: 60 or
more inches
Flooding: Rare
Runoff: Rapid
Hazard of water erosion: High
Hazard of wind erosion: High

Naz

Soil Properties and Qualities

Parent material: Alluvium
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately rapid
Available water capacity: High
Potential rooting depth: 60 or
more inches
Flooding: Rare
Runoff: Rapid
Hazard of water erosion: High
Hazard of wind erosion: High

Cryaquolls

Soil Properties and Qualities

Parent material: Alluvium
Depth class: Very deep
Drainage class: Poorly drained
Permeability: Moderate
Available water capacity:
moderate to high
Potential rooting depth: 60 or
more inches
Flooding: Rare
Water table: 1 to 2 feet
Runoff: Slow
Hazard of water erosion: Slight
Hazard of wind erosion: Slight

Contrasting Inclusions

Soils that lack a thick dark
surface layer
Soils that have a developed
subsoil
Soils that have bedrock at
depths of 20 to 40 inches

Major Current Uses

Livestock grazing, wildlife habitat

Major Management Factors

Ecological Site

Soil-related factors: Erosion
Potential plant community: Parry
oatgrass, needleandthread,
mountain mahony, willows, alder,
forbs

Annual production of air-dry
vegetation: 1,800 pounds per
acre

Urban Development

Soil-related factors: Flooding,
erosion, water table
Suitability as a site for
buildings: Good in areas of
Adderton and Naz soils

Interpretive Groups

Land capability subclass: 6E
Ecological site for Adderton and
Naz soils: Dapal/Cahel
Ecological site for Cryaquolls
soil: 41402-32301, Alnus/salex
MLRA: 48A

Ay =Cryaquolls, 1 to 5 percent slopes

Setting

Landform: Stream terraces
Elevation: 7,200 to 9,000 feet
Native plants: Grass and willows
Air temperature: 38 to 42 degrees F
Annual precipitation: 20 to 30 inches
Frost-free period: 60 to 75 days

Composition

Cryaquolls soil and similar inclusions: 85 percent
Contrasting inclusions: 15 percent

Cryaquolls: These soils are highly variable and typically have a dark surface layer over stratified mottled layers. Sand and gravel are at depths of 15 to 40 inches.

Typical Profile

Surface layer:
0 to 9 inches=loam
Subsurface layers:
9 to 18 inches=loamy sand
Substratum:
18 to 60 inches=stratified sand and gravel

Soil Properties and Qualities

Parent material: Alluvium
Depth class: Very deep
Drainage class: Very poorly drained
Permeability: Moderately rapid
Available water capacity: Low
Potential rooting depth: 60 or more inches
Water Table: 6 to 30 inches
Runoff: Slow
Hazard of water erosion: Low
Hazard of wind erosion: Low
Flooding: Occasional

Contrasting Inclusions

Soils that have a dark surface layer greater than 16 inches thick
Soils that do not have a water table

Major Current Uses

Livestock grazing, wildlife habitat

Major Management Factors

Urban Development

Soil-related factors: Water table, flooding
Suitability as a site for buildings: Poor

Ecological Site

Dominant overstory vegetation in the potential plant community: Willows, alder
Dominant understory vegetation in the potential plant community: sedges, bluegrass, shrubby cinquefoil, alpine timothy, tufted hairgrass, slender wheatgrass
Annual production of air-dry vegetation: 3,700 pounds per acre

Interpretive Groups

Land capability subclass: 5W
Ecological site: #82301, A1int/sall
NLRA: 48A

CC =Cumulic Cryoborolls, 7 to 25 percent slopes

Setting

Landform: Mountains

Position on landscape:

Drainageways

Elevation: 8,500 to 9,500 feet

Native plants: Aspen

Air temperature: 36 to 40 degrees F

Annual precipitation: 20 to 24 inches

Frost-free period: 60 to 75 days

Composition

Cumulic Cryoborolls soil and similar inclusions: 90 percent
This soil is highly variable.
About 50 percent of the unit averages less than 35 percent rock fragments and 40 percent averages more than 35 percent.
Contrasting inclusions: 10 percent

Typical Profile

Surface layer:

0 to 30 inches=gravelly loam

Subsoil:

30 to 39 inches=very cobbly sandy clay loam

39 to 55 inches=very gravelly sandy clay loam

Substratum:

55 to 60 inches=very gravelly sandy loam

Soil Properties and Qualities

Parent material: Alluvium

Depth class: 60 or more inches

Drainage class: Well drained

Permeability: Moderate

Available water capacity: High

Potential rooting depth: 60 or more inches

Flooding: None

Runoff: Rapid

Hazard of water erosion: High

Hazard of wind erosion: Low

Contrasting Inclusions

Soils that have a water table

Soils that are 20 to 40 inches to bedrock

Major Current Uses

Livestock grazing, wildlife habitat

Major Management Factors

Urban Development

Soil-related factors: Steepness of slope, large stones, erosion
Suitability as a site for buildings: Fair

Ecological site

Dominant overstory vegetation in the potential plant community: Aspen

Dominant understory vegetation in the potential plant community: Sedges, nodding bromegrass, shrubby cinquefoil, Thurbers fescue, common juniper
Annual production of air-dry vegetation: 3,500 pounds per acre

Interpretive Groups

Land capability subclass: 6E,

Ecological site: #10501,

Potr1/Cagel

MLRA: 48A

Le =Leighcan Family, 10 to 40 percent slopes, extremely stony
Setting
Landform: Mountains
Position on landscape: Mountainsides, north-facing
Elevation: 9,200 to 10,500 feet
Native plants: Engelmann spruce, Subalpine fir
Air temperature: 36 to 40 degrees F
Annual precipitation: 30 to 35 inches
Frost-free period: 30 to 60 days

Composition

Leighcan soil and similar inclusions: 90 percent
Contrasting inclusions: 10 percent

Typical Profile

Surface layer:
1 to 0 inches=partially decomposed litter, moss
0 to 5 inches=very gravelly sandy loam
Subsoils:
5 to 32 inches=very gravelly sandy loam
Substratum:
32 to 51 inches=very gravelly loamy coarse sand
Bedrock:
51 inches=soft to hard schist, pegmatite

Soil Properties and Qualities

Parent material: Glacial deposits
Depth class: Very deep
Drainage class: Well drained
Permeability: moderately rapid
Available water capacity: moderate
Potential rooting depth: 60 or more inches
Runoff: Slow
Hazard of water erosion: Slight
Hazard of wind erosion: Slight

Contrasting Inclusions

Soils that are less than 40 inches to bedrock
Soils that have accumulated clay in the subsoil

Major Current Uses

Recreation, timber, wildlife habitat

Major Management Factors

Ecological Site

Soil-related factors: Large stones and boulders
Site index for Spruce-fir: 52
Estimated annual production per acre: 41 cubic feet or 2.9 cubic meters per hectare
Dominant overstory vegetation in the potential plant community: Engelmann spruce, Subalpine fir
Dominant understory vegetation in the potential plant community: Grouse whortleberry, sedges, forbs

Urban Development

Soil-related factors: Large stones and boulders
Suitability as a site for buildings: Steepness of slope

Interpretive Groups

Land capability subclass: 6E
Ecological site: #00321C AB1a-P1en1/VAsc
MLRA: 48A

Ln =Leighcan Family, warm, 10 to 40 percent slopes, extremely stony

Setting

Landform: Mountains

Position on landscape:

Mountainsides, south-east-west-facing slopes

Elevation: 9,000 to 10,200 feet

Native plants: Lodgepole Pine

Air temperature: 36 to 40 degrees F

Annual precipitation: 30 to 35 inches

Frost-free period: 30 to 60 days

Composition

Leighcan soil and similar

inclusions: 85 percent

Contrasting inclusions: 10 percent

Rock outcrop: 5 percent

Typical Profile

Surface layer:

1 to 0 inches=partially decomposed litter, moss

0 to 5 inches=very gravelly sandy loam

Subsoil:

5 to 32 inches=very gravelly sandy loam

Substratum:

32 to 51 inches=very gravelly loamy coarse sand

Bedrock:

51 inches=soft to hard schist, pegmatite

Soil Properties and Qualities

Parent material: Glacial deposits

Depth class: Very deep

Drainage class: Well drained

Permeability: Moderately rapid

Available water capacity: Moderate

Potential rooting depth: 60 or more inches

Runoff: Slow

Hazard of water erosion: Slight

Hazard of wind erosion: Slight

Contrasting Inclusions

Soils that are less than 40 inches to bedrock

Soils that have accumulated clay in the subsoil

Major Current Uses

Timber, recreation, wildlife habitat

Major Management Factors

Ecological Site

Soil-related factors: Large stones and boulders

Site index for Lodgepole pine: 50

Estimated annual production per acre: 41 cubic feet or 2.9 cubic meters per hectare

Dominant overstory vegetation in the potential plant community:

Lodgepole pine, with lesser amounts of Subalpine fir and Engelmann Spruce

Dominant understory vegetation in the potential plant

community: Grouse whortleberry, sedges, forbs

Urban Development

Soil-related factors: Large stones and boulders, steepness of slope

Suitability as a site for buildings: Poor

Interpretive Groups

Land capability subclass: 6E

Ecological site: #00910

Pico/VAsc

MLRA: 48A

Sc =Scout Family, 10 to 40 percent slopes, very bouldery

Setting

Landform: Mountains

Position on landscape: Glacial moraines

Elevation: 8,800 to 10,000 feet

Native plants: Lodgepole Pine

Air temperature: 36 to 40 degrees F

Annual precipitation: 30 to 35 inches

Frost-free period: 30 to 60 days

Composition

Scout soil and similar inclusions: 95 percent

Contrasting inclusions: 5 percent

Typical Profile

Surface layer:

2 to 0 inches=partially decomposed needles and twigs

0 to 7 inches=very cobbly sandy loam

Subsoil:

7 to 60 inches=very cobbly sandy loam

Soil Properties and Qualities

Parent material: Glacial till and outwash

Depth class: Very deep

Drainage class: Somewhat excessively drained

Permeability: Moderately rapid

Available water capacity: Low to moderate

Potential rooting depth: 60 or more inches

Flooding: None

Runoff: Slow

Hazard of water erosion: Slight

Hazard of wind erosion: Slight

Contrasting Inclusions

Soils that are less than 40 inches to bedrock

Major Current Uses

Timber, wildlife habitat, recreation

Major Management Factors

Ecological site

Soil-related factors: Large stones and boulders

Site index for Lodgepole pine: 50

Estimated annual production per acre: 40 cubic feet or 2.8 meters per hectare

Dominant overstory vegetation in the potential plant community: Dominantly Lodgepole pine with smaller amounts of aspen, Engelmann spruce, and Subalpine fir

Dominant understory vegetation in the potential plant community: Grouse whortleberry, common juniper, sedges, buffaloberry

Urban Development

Soil-related factors: Large stones and boulders, steepness of slope

Suitability as a site for buildings: Poor

Interpretive Groups

Land capability subclass: 7e

Ecological site: #00910

Pico/VAsc

MLRA: 48A

THR =Troutville-Hechtman
Families-Rock outcrop complex,
30 to 70 percent slopes, very
stony

Setting

Landforms: Mountains

Position on landscape:

Mountainsides

Elevations: 7,200 to 9,500 feet

Native plants: Mixed conifers

Air temperature: 38 to 42
degrees F

Annual precipitation: 16 to 24
inches

Frost-free period: 60 to 75 days

Composition

*Troutville soil and similar
inclusions:* 40 percent

*Hechtman soil and similar
inclusions:* 30 percent

Rock outcrops: 20 percent

Contrasting inclusions: 10
percent

Typical Profile

Troutville

Surface layer:

2 to 0 inches=covered with 1 to
3 percent stones, needles,
twigs, and partially decomposed
pine litter

0 to 9 inches=gravelly sandy
loam

Subsoils:

9 to 30 inches=very gravelly
sandy loam and sandy clay loam

30 to 60 inches=very gravelly
sandy loam

Hechtman

Surface layer:

Surface is covered with 3 to 5
percent stones

0 to 4 inches=very gravelly
sandy loam

Subsoil:

4 to 11 inches=very gravelly
sandy loam

Substratum:

11 to 19 inches=soft schist and
gneiss

Bedrock:

19 inches=hard gneiss and schist

Rock outcrop

Near vertical escarpments of
gneiss and schist

Soil Properties and Qualities

Troutville

Parent material: Colluvium

Depth class: Deep and very deep

Drainage class: Well drained

Permeability: Moderately rapid

Available water capacity:
Moderate

Potential rooting depth: 40 to
60 inches or more

Runoff: Very rapid

Hazard of water erosion: High

Hazard of wind erosion: Low

Hechtman

Parent material: Residuum

Depth class: 5 to 20

Drainage class: Somewhat
excessively drained

Permeability: Moderately rapid

Available water capacity: Very
low

Potential rooting depth: 5 to 20
inches

Runoff: Very rapid

Hazard of water erosion: High

Hazard of wind erosion: Moderate

Similar Inclusions

Soils that are deep but do not
have a developed subsoil

Contrasting Inclusions

Soils that average 20 to 40
inches to bedrock

Major Current Uses

Timber, wildlife habitat

Major Management Factors

Ecological Site

Soil-related factors on the Troutville soil: Steepness of slope

Soil-related factors on the Hechtman soil: Depth to bedrock

Site index for Douglas fir: 47

Estimated annual production per acre: 34 cubic feet or 2.4 cubic meters per hectare

Dominant overstory vegetation in the potential plant community:

Douglas fir, Lodgepole pine

Dominant understory vegetation in the potential plant

community: Kinnikinnick, wax currant, buffaloberry, sedges, spike fescue, bluegrass

In many areas the Douglas fir has died and is presently dominated by Lodgepole pine

Urban Development

Soil-related factors on the Troutville soil: Steepness of slope, large stones on the surface

Soil-related factors on the Hechtman soil: Depth to bedrock

Suitability as a site for buildings: Poor

Interpretive Groups

Land capability subclass: 7e

Ecological site for this unit:

01219B PSme/ARad-JUco

MLRA: 48A

1975

TS =Troutville-Bullwark Families complex, 20 to 45 percent slopes, stony

Setting

Landform: Mountains

Position on landscape: North and east-facing mountainsides

Elevation: 7,800 to 9,800 feet

Native plants: Lodgepole Pine, Douglas fir

Air temperature: 38 to 42 degrees F

Annual precipitation: 18 to 30 inches

Frost-free period: 30 to 70 days

Composition

Troutville soil and similar inclusions: 50 percent

Bullwark soil and similar inclusions: 30 percent

Contrasting inclusions: 20 percent

Typical Profile

Troutville

Surface layer:

2 to 0 inches=covered with about 1 percent stones, needles, twigs and partially decomposed pine litter

0 to 9 inches=gravelly sandy loam

Subsoil:

9 to 30 inches=very gravelly sandy loam and sandy clay loam

30 to 60 inches=very gravelly sandy loam

Bullwark

Surface layer:

2 to 1 inches=covered with about 1 percent stones, partially decomposed pine needles and twigs

1 to 0 inches=mostly decomposed pine litter and moss

0 to 8 inches=gravelly sandy loam

Subsoil:

8 to 13 inches=gravelly sandy loam

13 to 22 inches=very gravelly sandy loam and sandy clay loam

Bedrock:

22 inches=soft schist that grades to hard bedrock with depth

Soil Properties and Qualities

Troutville

Parent material: Colluvium

Depth class: Very deep

Drainage class: Well drained

Permeability: Moderate

Available water capacity: High

Potential rooting depth: 60 or more inches

Flooding: None

Runoff: Medium

Hazard of water erosion:

Moderate

Hazard of wind erosion: Slight

Bullwark

Parent material: Colluvium, residuum

Depth class: Moderately deep

Drainage class: Well drained

Permeability: Moderately rapid

Available water capacity: Low to moderate

Potential rooting depth: 20 to 40 inches

Flooding: None

Runoff: Rapid

Hazard of water erosion:

Moderate

Hazard of wind erosion: Slight

Contrasting Inclusions

Soils that are less than 20 inches to bedrock

Soils that average less than 35 percent rock fragments

Major Current Uses

Timber, livestock grazing, wildlife habitat

Major Management Factors

Ecological Site

Soil-related factors on this unit: Large stones on the surface

Site index for Lodgepole pine:
54

Estimated annual production per acre: 44 cubic feet or 3.1 cubic meters per hectare

Dominant overstory vegetation in the potential plant community:

Lodgepole pine, Douglas fir

Dominant understory vegetation in the potential plant

community: Kinnikinnick, buffaloberry, common Juniper, sedges

Urban Development

Soil-related factors on the Troutville soil: Erosion, steepness of slope

Soil-related factors on the Bullwark soil: Moderate depth to bedrock, erosion, steepness of slope

Suitability as a site for buildings: Poor

Interpretive Groups

Land capability subclass: 7e

Ecological site for this unit:

#00908 Pico-PSme/SHca

MLRA: 48A