Potential Conifer Treatment in the Bi-state Sage-grouse Management Area

Potential Conifer Treatment Projects (CPT Rankings)

- Top Ranked
- Mid Ranked
- Lowest Ranked

Bi-state Sage-grouse Management

- Population Management Units

Temperature / Moisture Regime - Moisture Subclass Soil Survey Geographic Database (SSURGO)

- Soil Type Not Shown
- Cold & Saturated Seasonally (Cryic/Aquic-Typic)
- Cold & Wet (Cryic/Udic-Typic)
- Cold & Moist (Cryic/Xeric-Typic)
- Cold & Moist bordering on Dry (Cryic/Xeric bordering on Aridic)
- Cool & Moist (Frigid/Xeric-Typic)
- Cool & Most bordering on Dry (Frigid/Xeric bordering on Aridic)
- Cool & Dry bordering on Moist (Frigid/Aridic bordering on Xeric)
- Cool & Dry (Frigid/Aridic-Typic)
- Warm & Saturated Seasonally (Mesic/Aquic-Typic)
- Warm & Saturated Seasonally but Drier (Mesic/Aquic-Aeric)
- Warm & Moist (Mesic/Xeric-Typic)
- Warm & Moist bordering on Dry (Mesic/Xeric bordering on Aridic)
- Warm & Dry bordering on Moist (Mesic/Aridic bordering on Xeric)
- Warm & Dry (Mesic/Aridic-Typic)
- Hot & Dry bordering on Moist (Thermic/Aridic bordering on Xeric)
- Hot & Dry (Thermic/Aridic-Typic)

Soil Temperature & Moisture Regimes

Resilience & Resistance

- Cold & Moist (Cryic-Xeric)
- Cool & Moist (Frigid-Xeric)
- Warm & Moist (Mesic-Xeric)
- Cool & Dry (Frigid-Aridic)
- Warm and Dry (Mesic-Aridic)

Soil temperature and moisture regimes can be used as indicators of sagebrush ecosystem resilience to disturbance and resistance to annual grass invasion. This map displays soil temperature and moisture classes determined from soil surveys (NRCS SSURGO). Hotter colors indicate relatively lower resilience/resistance potential while cooler colors represent more resilient/resistant sites.

0 5 10 15 30

Miles

1:190,080

1 in = 3 miles

N W E S

Pine Nut PMU
Mount Grant PMU
Desert Creek-Fales PMU
Bodie PMU
South Mono PMU
White Mountains PMU

Description of Data

Potential Conifer Treatment Projects - Conservation Planning Tool Rankings

The conservation planning tool (CPT) assists land managers in ranking project areas for restoration of sage-grouse habitat. The CPT incorporates vegetation data (sagebrush, pinyon, grassland etc), sage-grouse location data from thousands of birds that have been tracked with radio telemetry and lek location and count data. The CPT uses this information to rank potential project areas based on their relative benefit for sage-grouse. The ranking can help land managers make decisions about where to put their limited restoration budgets that will provide the greatest benefit to sage-grouse.

Credits: U.S. Geological Survey
Peter S. Coates, Ph.D., Research Wildlife Biologist
Dixon, Ca 95620

Temperature-Moisture Regime (Moisture Sub Class) - Soil Survey Geographic Database (SSURGO)

Soil Temerature Regime	Mean Annual Soil Temperature °C	Mean Annual Soil Temperature °F
Cyric	~ 0° C to 8° C	32° F to 47°
Frigid	~ 0° C to 8° C and the difference between mean summer and mean winter soil temperatures is more than 5° C	32°F to 47° F and the difference between mean summer and mean winter soil temperatures is more than 41° F
Mesic	8° C to 15° C	47° F to 59° F
Thermic	15° C to 22° C	59° F to 72° F

Soil Moisture Regime	Major Characteristics
Aquic	Soil is saturated with water and virtually free of gaseous oxygen for sufficient periods of time, such that there is evidence of poor aeration (gleying and mottling); Common in wetlands
Udic	Soil moisture is sufficiently high year-round in most years to meet plant requirement; Common in humid regions
Aridic	Soil is dry for at least half of the growing season and moist for less than 90 consecutive days; Common in arid (desert-like) regions
Xeric	Soil moisture regime is found in Mediterranean-type climates, with cool, moist winters and warm, dry summers. It is characterized as having long periods of drought in the summer

Credits: USDA - Natural Resource Conservation Service
Steve Campbell, Soil Scientist & Jeremy Maestas, State Biologist
Portland, Or 97232

Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community