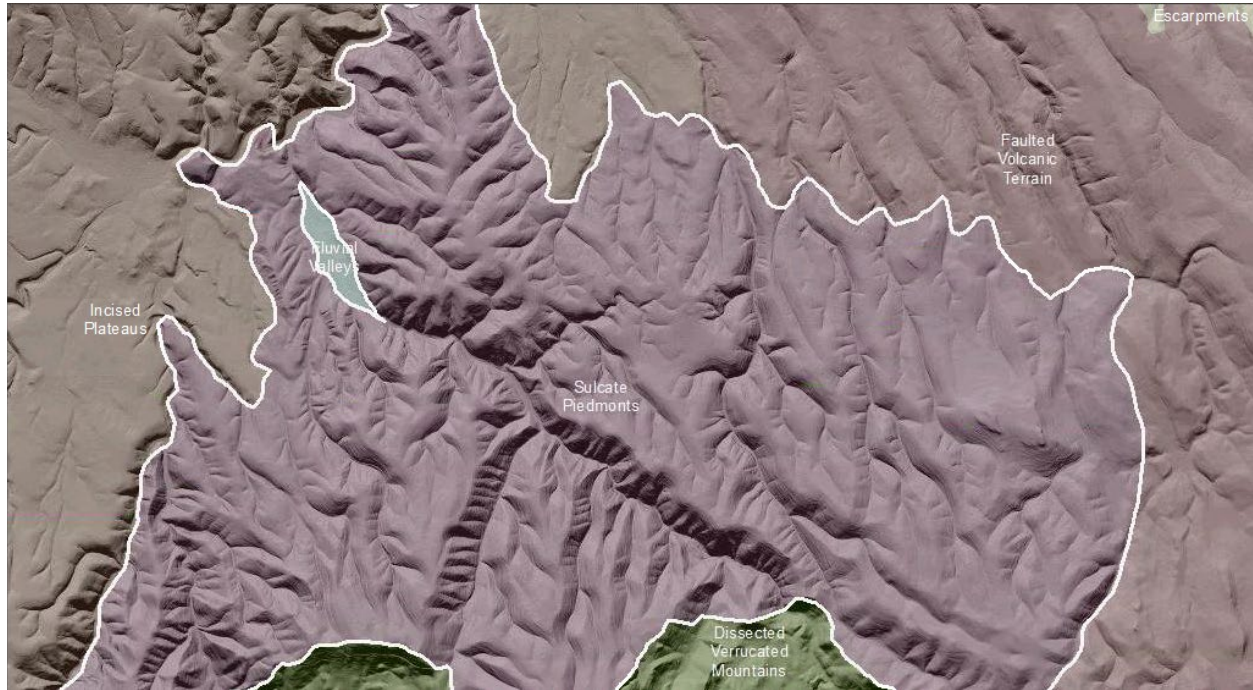


## Blue Mountain Sulcate Piedmonts, Serpentinic

**Plain** [Landscape Term] A general term referring to an extensive, lowland area that ranges from level to gently sloping or undulating. A plain has few or no prominent hills or valleys, and usually occurs at low elevation relative to surrounding areas. (Bates and Jackson, 1980)

### Landform Association:

#### Sulcate Piedmonts, Serpentinic:



**Sulcate Piedmonts, Serpentinic** are advance weathering and degradation phase of Piedmonts. They are characterized by surfaces with longitudinal furrows with crests that are smoothly convex and swales that are v-shaped. Serpentinic is a term attached to the Landtype Association if the base geology is peridotite or serpentine (from geologic maps). The resultant chemical imbalance (low Ca/Mg ratio) may or may not dominate the above ground vegetation assemblages. In some areas, the chemical imbalance may be obscured by landslide activity which neutralizes the affect by mixing multiple parent materials.

Drainage sideslopes are planar convex. Sulcate Piedmonts have repeating landform patterns of accordant ridges and swales. Unlike Piedmonts, the accordant ridges of this map unit are of unknown depth of erosion beneath the presumed original surface of the parent surface.

Soils on ridgetops tend to be rich in patterned ground, so-called biscuit scabland or mima mound microtopography. The pattern ground or scabs tend to elongate on the backslopes forming stony stripes that virtually feed accumulation piles of stones at the toeslope position. Soil taxa vary from Ultisols in the west to Mollisols in the east.

This Landform Association is rare on National Forest System Lands.

**Landtype Associations:** Landtype Associations are formed by intersecting vegetation series or groups of vegetation series with Landform Associations.

**Topography:**

The following tables represent the average conditions for the Landform Association. Only lands within and adjacent to National Forest System Lands were mapped by this project. The entire EPA Level III Ecoregion is not covered by this mapping.

The percent of Landform Association (% of LfA) in bold in the table below refers to the percent of the Ecoregion represented by that Landform Association. The (% of LfA) numbers not in bold in the table below refer to the percent of each Landtype Association within the Landform Association.

Landform Association/Landtype Association	% of LfA	Mean % Slope	Minimum Elevation (m)	Maximum Elevation (m)	Mean Elevation (m)	% Northerly Aspect (226° - 134°)	% Southerly Aspect (135° - 225°)
<b>Sulcate Piedmonts, Serpentinic</b>	<b>0.0%</b>	<b>29</b>	<b>961</b>	<b>1421</b>	<b>1167</b>	<b>90%</b>	<b>10%</b>
Sulcate Piedmonts, Serpentinic, Western Juniper	100.0%	29	961	1421	1167	90%	10%

**Climate:**

Landform Association/Landtype Association	Mean Annual Precipitation (mm)	Mean Annual Temperature °C	AET/PET Ratio July, Aug, Sept
<b>Sulcate Piedmonts, Serpentinic</b>	<b>402</b>	<b>9</b>	<b>0.13</b>
Sulcate Piedmonts, Serpentinic, Western Juniper	402	9	0.13

The ratio of Actual Evapotranspiration to Potential Evapotranspiration (AET/PET) is used as a broad-scale indicator of potential drought stress. We obtained modeled actual and potential evapotranspiration datasets from the Numerical Terradynamic Simulation Group at the University of Montana (<http://www.ntsug.umt.edu/project/mod16>) for a 30 year climate average. AET/PET ratio in the table above is based on a scale of zero to one. A value closer to 1 means the vegetation is transpiring close to its potential. A value farther from 1 means that the Actual Evapotranspiration is below potential based on this climatic zone (Ringo, et. al. 2016 in draft).