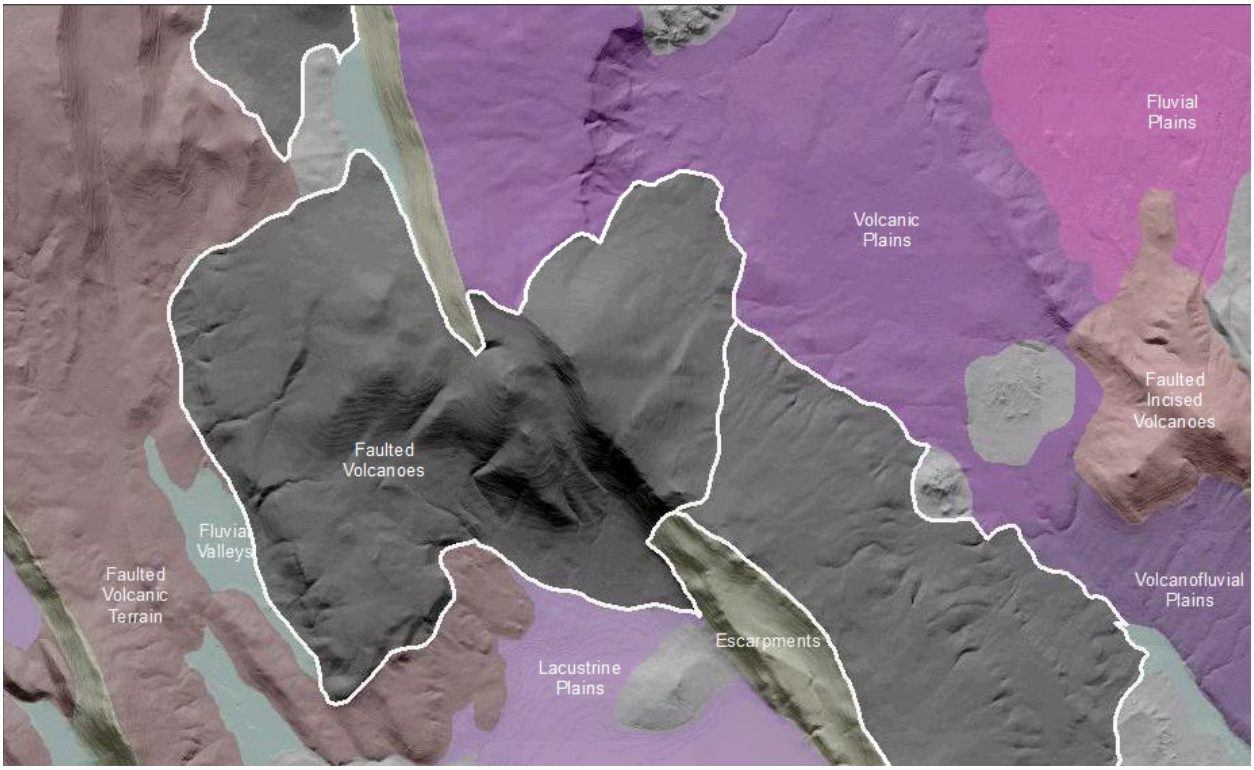
Blue Mountains Faulted Volcanoes

Volcanoes are edifies, typically conical in shape, with a central summit vent that erupts effusive magmatic material as ash, cinder, blocks and or lava that accumulates and build up the landform.

Landform Association – Faulted Volcanoes:



Faulted Volcanoes are volcanoes that exhibit displacement by faults. Volcanoes are edifies, typically conical in shape, with a central summit vent that erupts effusive magmatic material as ash, cinder, blocks and or lava that accumulates and build up the landform. These volcanoes are cut by faults leaving a series of fault scarps that displace bedrock blocks and divert former stream channels to zig-zag courses. Soils are thin to absent pm the rocky slopes and thick and rocky along lower (footslope, toeslope) slope positions. Soil taxa are typically Andisols, Alfisos and Mollisols.

This Landform Association has a limited spatial extent 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 Associations.

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°)**
Faulted Volcanoes	**0.1%**	**10**	**1401**	**1607**	**1516**	**52%**	**48%**
Faulted Volcanoes, Grand Fir-White Fir	40.8%	11	1402	1815	1640	85%	15%
Faulted Volcanoes, Ponderosa Pine - Douglas-Fir	18.5%	12	1406	1628	1538	54%	46%
Faulted Volcanoes, Ponderosa Pine - Shrub-Steppe	8.4%	8	1492	1695	1598	35%	65%
Faulted Volcanoes, Ponderosa Pine - Western Juniper	4.4%	15	1346	1502	1446	77%	23%
Faulted Volcanoes, Shrub-Steppe	14.7%	7	1393	1529	1461	44%	56%
Faulted Volcanoes, Western Juniper - Ponderosa Pine	7.7%	12	1350	1603	1485	69%	31%
Faulted Volcanoes, Western Juniper - Shrub-Steppe	5.6%	11	1434	1618	1535	15%	85%

Climate:

Landform Association/Landtype Association	**Mean Annual Precipitation (mm)**	**Mean Annual Temperature °C**	**AET/PET Ratio July, Aug, Sept**
Faulted Volcanoes	**385**	**7**	**0.10**
Faulted Volcanoes, Grand Fir-White Fir	400	7	0.17
Faulted Volcanoes, Ponderosa Pine - Douglas-Fir	390	7	0.10
Faulted Volcanoes, Ponderosa Pine - Shrub-Steppe	404	7	0.10
Faulted Volcanoes, Ponderosa Pine - Western Juniper	365	8	0.09
Faulted Volcanoes, Shrub-Steppe	374	7	0.08
Faulted Volcanoes, Western Juniper - Ponderosa Pine	377	7	0.08
Faulted Volcanoes, Western Juniper - Shrub-Steppe	401	7	0.08

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.ntsg.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 1means that the Actual Evapotranspiration is below potential based on this climatic zone (Ringo, et. al. 2016 in draft).