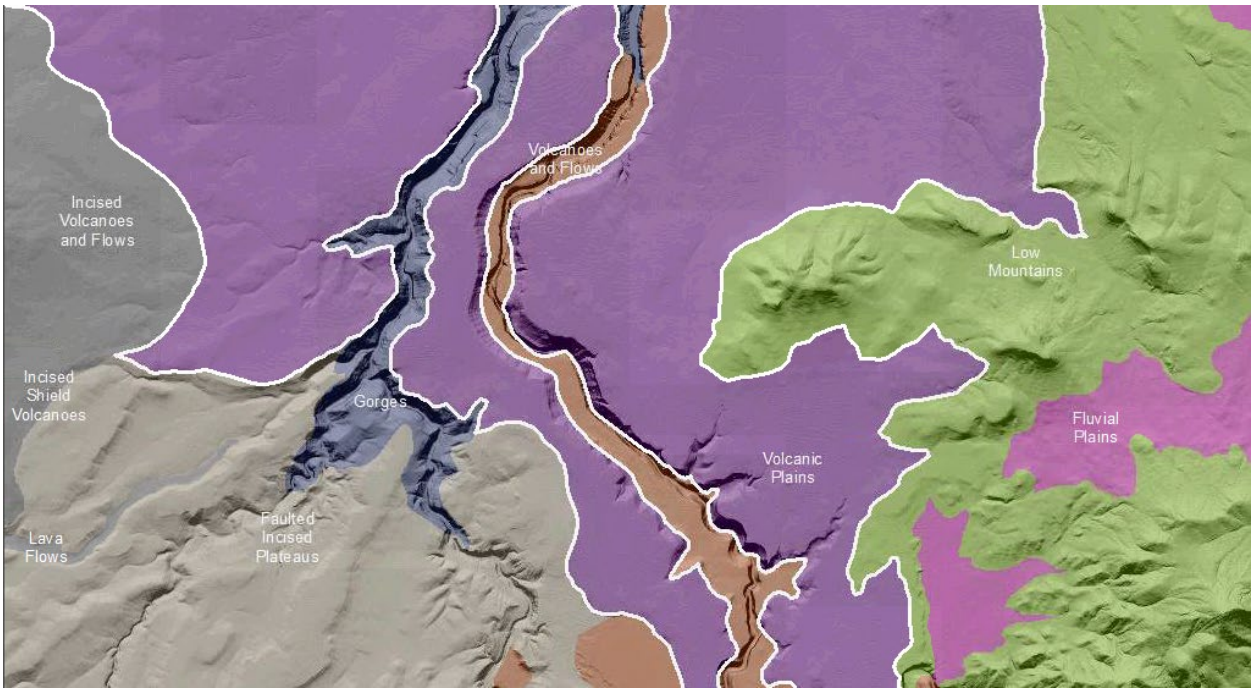
Blue Mountain Volcanic Plains

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:

Volcanic Plains:



Volcanic Plains are broad expanses of volcanic lava flows issued from extant or now-absent volcanoes or vents. They are characterized by undulating to irregular hill-flat flow topography typical of basalt. Locally vents and small cinder cones, as well as spatter mounds and lava flow pressure ridges form topographic highs on these plains. Tephra deposits and local stream deposits provide some weatherable materials on top of the volcanic flow rock. Soils classify as Andisols.

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 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°)
Volcanic Plains	**0.7%**	**7**	**772**	**885**	**845**	**81%**	**19%**
Volcanic Plains, Developed	38.7%	2	767	880	835	71%	29%
Volcanic Plains, Grasslands / Meadows - Shrub-Steppe	0.3%	1	771	817	810	96%	4%
Volcanic Plains, Ponderosa Pine	14.1%	5	898	1030	963	90%	10%
Volcanic Plains, Ponderosa Pine - Shrub-Steppe	0.6%	2	810	850	826	88%	12%
Volcanic Plains, Shrub-Steppe	4.6%	5	794	879	847	79%	21%
Volcanic Plains, Shrub-Steppe - Western Juniper	2.1%	5	722	802	785	82%	18%
Volcanic Plains, Water - Western Juniper	0.5%	3	842	892	870	91%	9%
Volcanic Plains, Western Juniper	37.6%	12	730	913	856	80%	20%
Volcanic Plains, Western Juniper - Developed	0.8%	12	685	758	717	91%	9%
Volcanic Plains, Western Juniper - Shrub-Steppe	0.6%	5	834	912	875	67%	33%

Climate:

Landform Association/Landtype Association	Mean Annual Precipitation (mm)	Mean Annual Temperature °C	AET/PET Ratio July, Aug, Sept
Volcanic Plains	**319**	**9**	**0.10**
Volcanic Plains, Developed	280	9	0.20
Volcanic Plains, Grasslands / Meadows - Shrub-Steppe	298	9	0.08
Volcanic Plains, Ponderosa Pine	353	9	0.09
Volcanic Plains, Ponderosa Pine - Shrub-Steppe	374	9	0.06
Volcanic Plains, Shrub-Steppe	345	9	0.07
Volcanic Plains, Shrub-Steppe - Western Juniper	338	10	0.07
Volcanic Plains, Water - Western Juniper	293	9	0.07
Volcanic Plains, Western Juniper	305	9	0.10
Volcanic Plains, Western Juniper - Developed	277	10	0.20
Volcanic Plains, Western Juniper - Shrub-Steppe	287	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.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).