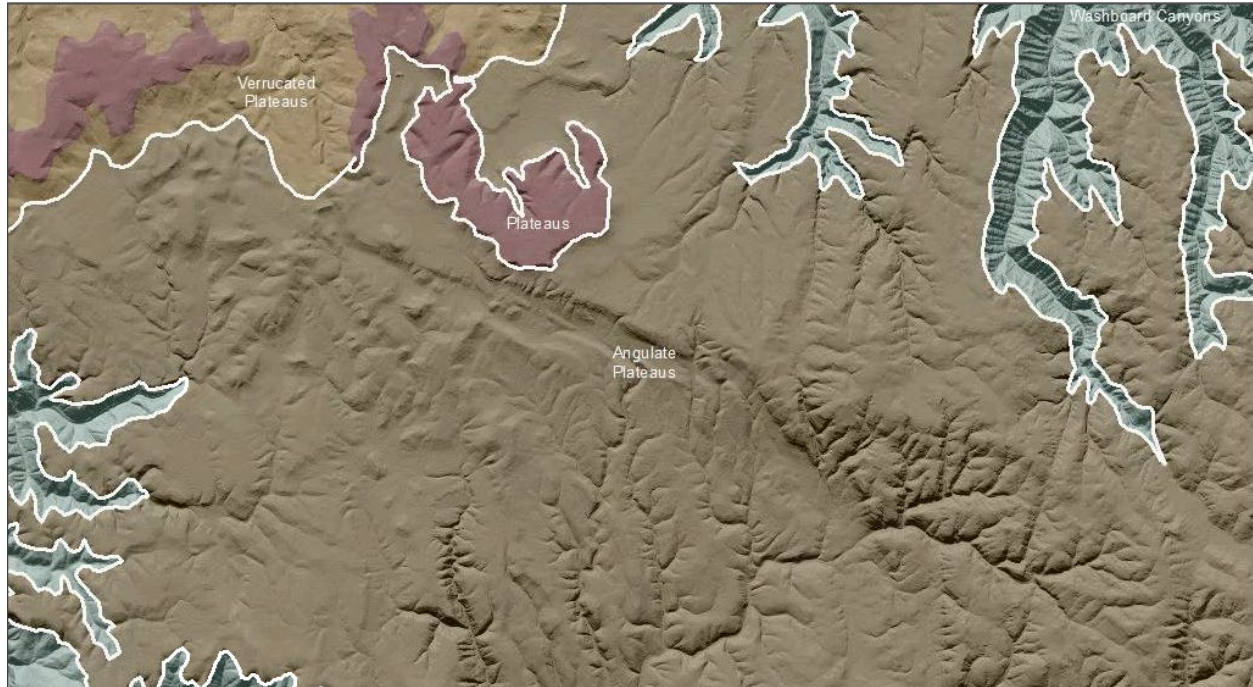


Blue Mountains Angulate Plateaus

Plateaus in the Pacific Northwest are predominantly underlain by stacked flows of the Columbia River Basalts and form extensive elevated plains bounded on one or more sides by steep slopes hundreds of feet above adjoining areas. Plateaus are differentiated from each other by the most-evident surficial processes of alteration.

Landform Association:

Angulate Plateaus:



Angulate Plateaus are characterized by having a strong prominent system of drainages at other than at right angles due to rock structure, including joints and faults. Subsidiary channel incision of these plateaus proceeds along these structural weaknesses. Water routing along drainages follows dominantly straight reaches which may lead to flashy discharges during storms. Unless overlain by loess, these surfaces are mantled by thin, residual soils.

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°)
Angulate Plateaus	3.8%	14	1336	1519	1443	74%	26%
Angulate Plateaus, Douglas-Fir	27.3%	13	1219	1489	1371	77%	23%
Angulate Plateaus, Douglas-Fir - Grand Fir-White Fir	1.7%	18	1244	1398	1348	83%	17%
Angulate Plateaus, Douglas-Fir - Ponderosa Pine	0.6%	19	1303	1455	1387	79%	21%
Angulate Plateaus, Douglas-Fir - Ponderosa Pine - mix	0.3%	17	1345	1471	1403	81%	19%
Angulate Plateaus, Grand Fir-White Fir	27.8%	19	1286	1527	1429	90%	10%
Angulate Plateaus, Grand Fir-White Fir - Douglas-Fir	0.1%	9	1472	1549	1517	68%	32%
Angulate Plateaus, Grand Fir-White Fir - Ponderosa Pine	0.2%	11	1251	1392	1320	76%	24%
Angulate Plateaus, Grand Fir-White Fir - Shrub-Steppe	0.1%	26	1188	1319	1276	79%	21%
Angulate Plateaus, Ponderosa Pine	0.6%	17	1366	1519	1460	66%	34%
Angulate Plateaus, Ponderosa Pine - Douglas-Fir	5.7%	12	1362	1554	1469	61%	39%
Angulate Plateaus, Ponderosa Pine - Grand Fir-White Fir - mix	1.8%	19	1244	1624	1500	77%	23%
Angulate Plateaus, Ponderosa Pine - Shrub-Steppe	0.7%	10	1525	1652	1584	60%	40%
Angulate Plateaus, Ponderosa Pine - Shrub-Steppe - mix	0.1%	8	1365	1490	1410	71%	29%
Angulate Plateaus, Shrub-Steppe	27.8%	9	1368	1531	1460	68%	32%
Angulate Plateaus, Shrub-Steppe - Douglas-Fir	0.4%	16	1283	1424	1376	77%	23%
Angulate Plateaus, Shrub-Steppe - Grand Fir-White Fir - mix	1.9%	14	1273	1563	1488	76%	24%
Angulate Plateaus, Shrub-Steppe - Ponderosa Pine	2.7%	10	1470	1610	1549	58%	42%
Angulate Plateaus, Shrub-Steppe - Western Juniper - mix	0.1%	13	1357	1479	1459	77%	23%
Angulate Plateaus, Western Juniper - Shrub-Steppe	0.2%	4	1668	1720	1695	61%	39%

Climate:

Landform Association/Landtype Association	Mean Annual Precipitation (mm)	Mean Annual Temperature °C	AET/PET Ratio July, Aug, Sept
Angulate Plateaus	574	6	0.16
Angulate Plateaus, Douglas-Fir	591	7	0.22
Angulate Plateaus, Douglas-Fir - Grand Fir-White Fir	557	7	0.18
Angulate Plateaus, Douglas-Fir - Ponderosa Pine	521	7	0.17
Angulate Plateaus, Douglas-Fir - Ponderosa Pine - mix	499	6	0.12
Angulate Plateaus, Grand Fir-White Fir	636	7	0.23
Angulate Plateaus, Grand Fir-White Fir - Douglas-Fir	574	6	0.12
Angulate Plateaus, Grand Fir-White Fir - Ponderosa Pine	498	6	0.19
Angulate Plateaus, Grand Fir-White Fir - Shrub-Steppe	569	8	0.22
Angulate Plateaus, Ponderosa Pine	524	6	0.10
Angulate Plateaus, Ponderosa Pine - Douglas-Fir	569	6	0.13
Angulate Plateaus, Ponderosa Pine - Grand Fir-White Fir - mix	547	6	0.11
Angulate Plateaus, Ponderosa Pine - Shrub-Steppe	632	6	0.11
Angulate Plateaus, Ponderosa Pine - Shrub-Steppe - mix	510	6	0.11
Angulate Plateaus, Shrub-Steppe	531	6	0.11
Angulate Plateaus, Shrub-Steppe - Douglas-Fir	461	6	0.10
Angulate Plateaus, Shrub-Steppe - Grand Fir-White Fir - mix	544	6	0.10
Angulate Plateaus, Shrub-Steppe - Ponderosa Pine	592	6	0.11
Angulate Plateaus, Shrub-Steppe - Western Juniper - mix	513	6	0.10
Angulate Plateaus, Western Juniper - Shrub-Steppe	697	5	0.15

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