6 Viewpoints: Major Vegetation Zone Classifications for Washington's east-side Cascades:					
***Watchable Wildflowers: A Columbia Basin Guide:* B.L.M.**	**Woodland Park Zoo *Washington Wildlife***	***Plants of Southern Interior B.C. & the Inland NW*: edited by Parish, Coupe Lloyd**	***Birds of Yakima County*: Andrew Stepniewski**	***Celebrating Wildflowers* North Cascades Institute**	***Sagebrush Country: A Wildflower Sanctuary:* Ronald J.Taylor**
Eastern Washington's Columbia Basin in the rainshadow of the Cascades is characterized by harsh extremes of weather & climate, with **4 major habitats.** In each, plants grow in communities, all sharing similar needs and adaptations to their environment.	Washington state is divided into **5 habitat regions** (steppe, montane, temperate forest, wetlands, and urban). Within each habitat, similar climatic and geologic characteristics and species of plants & animals exist.	Southern Interior British Columbia & adjoining U.S. states: The authors divided the region into **5 broad vegetation zones** to simplify plant distribution descriptions	Yakima County's diversity of habitats between the crest of the Cascades and the Columbia River, with **a complex mosaic** of forested, non-forested, wetland, agricultural, and urban habitats.	Washington state is divided into **8 major ecosystems** defined as: living communities and the nonliving environment functioning together, including abiotic substances, producers, consumers, and decomposers.	The sagebrush steppe and the Great Basin sagebrush desert, including parts of 9 western states, including eastern Washington. **6 generalized ecological zones** exist within this given area where vegetation follows a pattern of distribution determined in large part, due to physical & chemical properties of soil.
shrub-steppe (deep soil)	**sagebrush steppe (or shrub-steppe)**	**big sage shrub-steppe**	**shrub-steppe zone** (includes lands converted to agriculture)	**grassland/sagebrush steppe: deep soil**	**sagebrush-steppe: standard-type zone,** characterized by lack of extremes, moderately deep soils, and most extensively lost habitat due to agriculture.
lithosol (rock-soil)	(not addressed)	(not addressed)	(not addressed)	**grassland/sagebrush steppe: lithosol**	**sagebrush-steppe: lithosol zone (**with shallow basalt bedrock soils)
talus (unstable slopes of rock outcrops and rocks of all sizes	(not addressed)	(not addressed)	**talus and cliffs zone** (includes along Columbia River)	(not addressed)	**sagebrush-steppe: talus zone** (rocky outcrops, hills, & canyons, often unstable slopes)
riparian: along creeks, lakes, & seeps	**riparian woodlands**	**broadleaf deciduous forests**	**riparian zone** (along valley or creek bottoms; along lake and marsh margins	**grassland/sagebrush steppe: riparian**	**sagebrush-steppe: meadow zone** (in depressions & wet year-round)
(not addressed)	**steppe** (canopy of shrubs absent)	**grasslands**	(not addressed)	(not addressed)	(not addressed)
(not addressed)	**low-elevation temperate forest** (1,800-3,000 ft.)	**dry forests**	**ponderosa pine** zone	**eastside low montane forest** (generally between 1,800-3,000 ft.)	(not addressed)
(not addressed)	**montane forest** (3000-6000 ft.)	wet **montane forest**	**mixed-conifer** zone	**eastside high montane forest** (4,000-6,000 ft.)	(not addressed)
(not addressed)	**subalpine** (>6,000 ft. to treeline)	**subalpine** forests	**subalpine**	**subalpine**: tree islands and meadows (above the closed forest canopy)	(not addressed)
(not addressed)	**alpine** (above treeline.)	**alpine** meadows, rocklands, and heaths	**alpine** (treeless)	**alpine** (above the limit of permanent tree growth)	(not addressed)
(not addressed)	**freshwater welands**: marsh, swamp, bog, riparian woodlands	**freshwater wetlands**: fens, marshes, bogs, meadows, and shrub-carrs (tall shrubs)	**irrigated agriculture lands**: human converted	**freshwater wetlands: pond, marsh, bog**	**sagebrush-steppe: meadow zone** (moister areas that typically occupy depressions)
(not addressed)	(not addressed)	(not addressed)	**alkaline flats** (extensively human modified)	(not addressed)	**sagebrush-steppe: saline zone** (seasonally wet & in areas of low precipitation where mineral salts have accumulated on the soil surface)
					sagebrush-steppe: sand dune