

## Umatilla Basin

### Description

The Umatilla Basin is comprised of two distinct ecoregions – the Columbia Basin, a broad upland plain formed by basalt lava flows, and the Blue Mountain ecoregion, composed of rugged terrain created by the folding and faulting of volcanic, sedimentary and metamorphic rock.

This basin includes the drainages of Willow Creek and the Umatilla and Walla Walla rivers. The headwaters of the Umatilla and Walla Walla spring from the forested hillsides of the Blue Mountains, areas that support remarkably high numbers and diversity of native fish species. In addition to the Umatilla and its tributaries, the basin includes a number of smaller streams directly tributary to the Columbia.

The Umatilla Basin once supported runs of fall and spring chinook, coho salmon and steelhead. Natural conditions and extensive irrigation withdrawals create extremely low streamflows during the summer months. Other limiting factors for fish production include dewatered stretches of river, high water temperatures and major diversion dams. The Umatilla tribe began producing and re-introducing chinook salmon to the basin in the mid-1980's with a goal of restoring a naturally-spawning population.

The Umatilla is one of the most developed of the major drainages in eastern Oregon. About 13% of the land in the basin is forested, with around 3% in urban uses. The rest – roughly 84% - is fairly evenly divided between agriculture and range/range-forestland. Just over half the basin's land is in private ownership.

Priority ecological systems in the Umatilla are focused primarily on grassland, wetland and riparian types. One exception is black greasewood. Although black greasewood has substantial distribution on public lands in the basin, it has declined significantly enough from historic distribution levels, and is important enough from a habitat perspective, to warrant additional conservation efforts.

### Priority Ecological Systems

Aspen forest and woodland  
Big sagebrush steppe  
Black greasewood  
Canyon and foothill deciduous shrubland  
Foothill and canyon dry grassland  
Foothill and lower montane riparian woodland  
Freshwater emergent marsh  
Lowland riparian shrublands and woodlands  
North Pacific hardpan vernal pool  
Palouse prairie grassland  
Subalpine or montane wet meadow

Basin Ecological Priorities  
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## Western juniper woodland (Columbia Basin)

### Rare or At-Risk Plant Communities

Annual hairgrass - branched popcorn flower vernal pool  
Basin big sagebrush / basin wildrye  
Basin big sagebrush / needle-and-thread  
Basin big sagebrush / Sandberg bluegrass - bluebunch wheatgrass Palouse  
Basin wildrye bottomlands  
Bitterbrush / needle-and-thread  
Bitterbrush / Sandberg bluegrass  
Black cottonwood - white alder  
Black cottonwood / black hawthorn  
Black cottonwood / coyote willow  
Black hawthorn - woods rose  
Bluebunch wheatgrass - Idaho fescue Palouse  
Bluebunch wheatgrass - needle-and-thread grass  
Bluebunch wheatgrass - Sandberg bluegrass Palouse  
Chokecherry  
Coyote willow - pacific willow  
Downy wheatgrass - needle-and-thread  
Idaho fescue - (common snowberry)  
Inland shrub dunes  
Needle-and-thread grass - Sandberg bluegrass  
Slender-branched popcorn-flower - purslane speedwell vernal pool  
White alder / chokecherry  
White alder / hackberry  
White alder / mockorange  
White alder / serviceberry  
White alder / water birch  
White alder / woods rose  
Wyoming big sagebrush / needle-and-thread

Umatilla Basin – Priority Species

<i>Fish</i>	<i>Birds</i>	<i>Mammals</i>	<i>Amphibians and Reptiles</i>	<i>Invertebrates</i>	<i>Plants</i>
Bull Trout Redband Trout Steelhead Pacific Lamprey	Burrowing Owl (burrow nests only) Ferruginous Hawk (nest sites only) Grasshopper Sparrow Loggerhead Shrike Long-billed Curlew Swainson's Hawk (nest sites only) White-Headed Woodpecker Willow Flycatcher	Townsend's Big-Eared Bat Washington Ground Squirrel Western Small-Footed Bat	Columbia Spotted Frog Northern Leopard Frog	<i>Satyrium sylvinum</i> (Sylvan Hairstreak)	<i>Astragalus collinus</i> var. <i>laurentii</i> (Laurence's Milk-vetch) <i>Myosurus sessilis</i> (Sessile Mousetail)