

Powder River Basin

Description

The Powder River basin is located in northeastern Oregon and bordered by the Blue Mountains to the west, the Wallowa Mountains to the northeast, the Snake River canyon to the east, and the Malheur River basin to the south. Elevations in the basin vary from 2,000 feet at Brownlee Dam on the Snake River to 9,600 feet at the summit of Eagle Cap in the Wallowas. Land use is dominated by agriculture, range, and timber. Just over half the land in the basin is in public ownership.

The Powder and Burnt rivers flow south and east through the basin from the Blue Mountains to the Snake River. Streamflows in the Powder Basin are consistently low from July through February. Although present historically, anadromous fish have been absent from the basin since the 1970's. Bull trout, found in limited headwater areas in this basin, are listed as threatened under the federal Endangered Species Act.

The Oregon Biodiversity Project (OBP) identified Baker Valley as a conservation opportunity area based on the potential to restore key habitats such as riparian thickets and bottomland hardwood forests. Wetlands, black greasewood flats and alkaline grasslands are also present. According to the OBP, wetland and riparian restoration in this area "could improve water quality and late-season stream flows and boost habitat values for a broad range of species".

Black greasewood and valley bottom sagebrush vegetation priorities are worth additional comment. Within the big sagebrush steppe ecological system, three-tip sagebrush, basin big sagebrush and those occurrences along valley bottoms and riparian areas are most important, as well as areas known to provide habitat for sage grouse, which occurs here at the edge of its range. Greasewood is also important in valley bottoms.

Priority Ecological Systems

Subalpine or montane wet meadow
Foothill and lower montane riparian woodland
Black greasewood
Alkaline wetlands
Big sagebrush steppe
Semi-desert grassland
Montane riparian woodland and shrubland
Lowland riparian forest and shrubland
Freshwater emergent marsh

Rare or At-Risk Plant Communities

Basin wildrye bottomlands
Black cottonwood - white alder

Basin Ecological Priorities
September 14, 2004

Black cottonwood / black hawthorn
Black cottonwood / coyote willow
Black cottonwood / pacific willow riparian
Black hawthorn - woods rose
Coyote willow - Pacific willow
Mockorange
Mountain alder - western birch
Nevada bluegrass - lemmon alkaligrass
Ponderosa pine / black hawthorn
Scouler willow
Tufted hairgrass - Douglas' sedge alkaline prairie
Western birch - black hawthorn
Western birch - creek dogwood
Western birch - mockorange
White alder / chokecherry
White alder / hackberry
White alder / mockorange
White alder / serviceberry
White alder / water birch
White alder / woods rose
Wyoming big sagebrush - squawapple / idaho fescue

Powder 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	Bobolink Burrowing Owl (burrow nest sites only) Greater Sage Grouse Lewis's Woodpecker Loggerhead Shrike Long-Billed Curlew Sharp-Tailed Grouse ¹ Willow Flycatcher Wilson's Phalarope	Pallid Bat Preble's Shrew Pygmy Rabbit Western Small-Footed Bat	Columbia Spotted Frog Northern Leopard Frog	<i>Clossiana selene atrocotalis</i> (Silver-Bordered Fritillary) <i>Satyrrium sylvinum</i> (Sylvan Hairstreak)	<i>Pleuropogon oregonus</i> (Oregon Semaphore Grass) <i>Thelypodium howellii</i> ssp. <i>spectabilis</i> (Howell's Spectacular Thelopody)

¹ This species was extirpated from the basin in 1950, but is a priority for restoration. It was recently restored in the Grande Ronde, and natural re-establishment is possible.