Owyhee Uplands Section

This area is characterized by deeply dissected canyons formed through the combination of erosion and geologic uplifting. Lava formations are prevalent and are older than those of the Snake River Plain. The Owyhee Mountains are composed primarily of granite, and most of the uplands are rhyolites, ash deposits, and wind–blown loess. Elevation ranges from 1200–2500 m (4000–8000 ft). The Snake, Owyhee, and Bruneau Rivers are the major waterbodies and are among the few perennial waterbodies represented. Small streams are typically intermittent and arise from snow accumulation at the higher elevations, but some streams are fed by springs. Few small lakes and reservoirs are present.

Precipitation ranges from 20–40 cm (7–15 in) annually. Much precipitation is lost to evaporation during summer months. Average annual temperature ranges from 2–8ºC (35–45ºF). The growing season varies with elevation, ranging from 120 days to less than 60 days at higher elevations.

Residential communities are small and sparsely distributed in the central and southern parts of the region, but the northern part of the section is the urban center of the state containing about half of the state's population. Livestock grazing, dryland and irrigated agriculture, and recreation are the major land uses.

Table 1. Owyhee Uplands land use and land ownership.

Land use	Area (ha)	Area (ac)	Percent
Dryland Agriculture	78,109	193,010	2
Forest	134,530	332,429	4
Irrigated–Gravity Flow	331,319	818,705	10
Irrigated–Sprinkler	157,524	389,249	5
Rangeland	2,600,444	6,425,811	75
Riparian	98,874	244,321	3
Rock	1388	3429	<1
Urban	40,278	99,529	1
Water	10,467	25,865	<1
Total	3,452,932	8,532,347	100

Land ownership	Area (ha)	Area (ac)	Percent
USDI Bureau of Land Management	2,019,559	4,990,420	58
USDI Bureau of Indian Affairs	58,153	143,699	2
USDI Bureau of Reclamation	75,000	185,327	2
USDA Forest Service	2035	5029	<1
US Department of Defense	45,147	111,560	1
USDI National Park Service	1509	3729	<1
Open water	20,081	49,622	1

Private	1,031,460	2,548,782	30
State of Idaho	199,360	492,627	6
USDI Fish and Wildlife Service	569	1406	<1
Total	3,452,873	8,532,201	100

Species of Greatest Conservation Need in the Owyhee Uplands

Fishes

White Sturgeon (Snake River system) *Acipenser transmontanus*[a]
Leopard Dace *Rhinichthys falcatus*[a]
Umatilla Dace *Rhinichthys umatilla*[a]
Inland Redband Trout *Oncorhynchus mykiss gairdneri*[a]
Bull Trout *Salvelinus confluentus*
Shoshone Sculpin *Cottus greenei*[a]
Wood River Sculpin *Cottus leiopomus*[a]

Amphibians

Woodhouse's Toad *Bufo woodhousii*
Columbia Spotted Frog (populations south of the Snake River) *Rana luteiventris*
Northern Leopard Frog *Rana pipiens*[a]

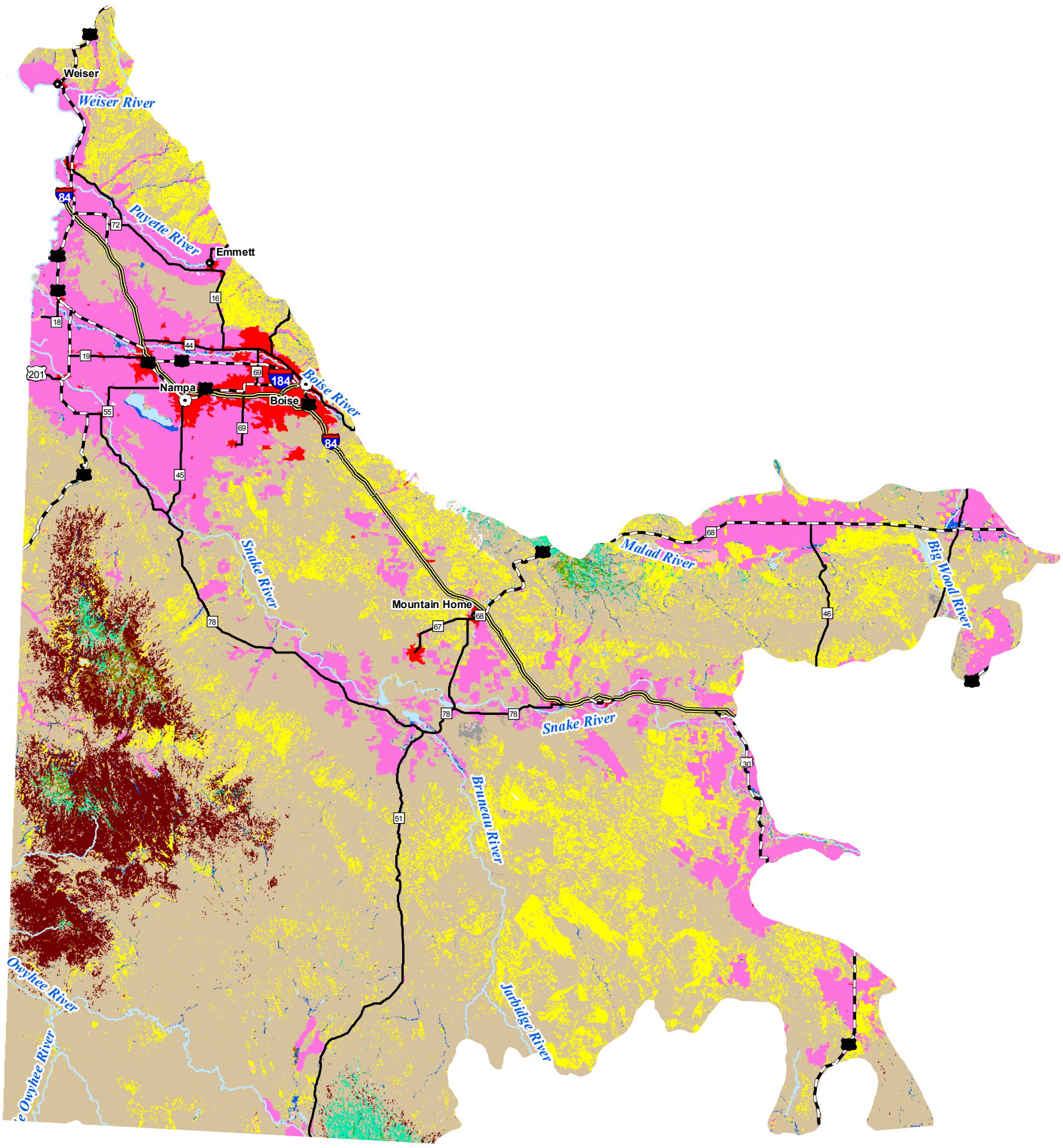
Reptiles

Great Basin Collared Lizard *Crotaphytus bicinctores*[a]
Ring–necked Snake *Diadophis punctatus*
Long–nosed Snake *Rhinocheilus lecontei*[a]
Groundsnake *Sonora semiannulata*[a]

Birds

Northern Pintail *Anas acuta*[a]
Lesser Scaup *Aythya affinis*
Hooded Merganser *Lophodytes cucullatus*
Greater Sage–Grouse *Centrocercus urophasianus*[a]
Sharp–tailed Grouse *Tympanuchus phasianellus*
Mountain Quail *Oreortyx pictus*
Western Grebe *Aechmophorus occidentalis*
Clark's Grebe *Aechmophorus clarkii*
American White Pelican *Pelecanus erythrorhynchos*[a]
Great Egret *Ardea alba*
Snowy Egret *Egretta thula*
Cattle Egret *Bubulcus ibis*
Black–crowned Night–Heron *Nycticorax nycticorax*[a]
White–faced Ibis *Plegadis chihi*[a]
Bald Eagle *Haliaeetus leucocephalus*
Swainson's Hawk *Buteo swainsoni*

Owyhee Uplands Ecological Section Habitats



Habitats

- Arableland
- Dry Conifer Forest
- Dry Grassland
- Dune, Canyon, and Rockland
- Mesic Deciduous Shrubland
- Non-native Herbaceous
- Open Water
- Riparian Woodland
- Southern Wetland
- Southern Woodland
- Southern Xeric Shrubland and Steppe
- Subalpine Forest
- Subalpine Grassland
- Upland Deciduous Forest
- Urban

Town Population

- 0 - 20,000
- 20,001 - 200,000

Highways

- Interstate
- U.S. Highway
- State Route

IDAHO

Area Enlarged

N

0 12.5 25 50 Kilometers

0 12.5 25 50 Miles

25 July 2005
Idaho Conservation Data Center, Idaho Department of Fish and Game.

Figure 19. Owyhee Uplands habitats.

Ferruginous Hawk *Buteo regalis*[a]
Merlin *Falco columbarius*[a]
Peregrine Falcon *Falco peregrinus*[a]
Sandhill Crane *Grus canadensis*
Black–necked Stilt *Himantopus mexicanus*
American Avocet *Recurvirostra americana*[a]
Upland Sandpiper *Bartramia longicauda*
Long–billed Curlew *Numenius americanus*[a]
Wilson's Phalarope *Phalaropus tricolor*
Franklin's Gull *Larus pipixcan*
California Gull *Larus californicus*[a]
Caspian Tern *Sterna caspia*[a]
Forster's Tern *Sterna forsteri*
Black Tern *Chlidonias niger*
Burrowing Owl *Athene cunicularia*[a]
Short–eared Owl *Asio flammeus*
Boreal Owl *Aegolius funereus*
Lewis's Woodpecker *Melanerpes lewis*
Juniper Titmouse *Baeolophus ridgwayi*
Virginia's Warbler *Vermivora virginiae*[a]
Brewer's Sparrow *Spizella breweri*
Grasshopper Sparrow *Ammodramus savannarum*[a]
Lesser Goldfinch *Carduelis psaltria*

Mammals

Merriam's Shrew *Sorex merriami*
Coast Mole *Scapanus orarius*
California Myotis *Myotis californicus*[a]
Fringed Myotis *Myotis thysanodes*[a]
Spotted Bat *Euderma maculatum*[a]
Townsend's Big–eared Bat *Corynorhinus townsendii*[a]
Pygmy Rabbit *Brachylagus idahoensis*[a]
Southern Idaho Ground Squirrel *Spermophilus brunneus endemicus*[a]
Columbia Plateau Ground Squirrel *Spermophilus canus*[a]
Wyoming Ground Squirrel *Spermophilus elegans*[a]
Great Basin Ground Squirrel *Spermophilus mollis*[a]
Townsend's Pocket Gopher *Thomomys townsendii*[a]
Little Pocket Mouse *Perognathus longimembris*
Dark Kangaroo Mouse *Microdipodops megacephalus*[a]
Piñon Mouse *Peromyscus truei*[a]
Gray Wolf *Canis lupus*
Kit Fox *Vulpes macrotis*
Bighorn Sheep (populations south of the Snake River) *Ovis canadensis*[a]

Bivalves

California Floater *Anodonta californiensis*[a]

Western Ridged Mussel *Gonidea angulata*

Gastropods

Bruneau Hot Springsnail *Pyrgulopsis bruneauensis*[a]
A Springsnail *Pyrgulopsis robusta*[a]
Bliss Rapids Snail *Taylorconcha serpenticola*[a]
Desert Valvata *Valvata utahensis*[a]
Rustic Pondsnail *Stagnicola hinkleyi*
Mountain Marshsnail *Stagnicola montanensis*
Shortface Lanx *Fisherola nuttalli*[a]
Banbury Springs Limpet *Lanx sp.* [undescribed][a]
Snake River Physa *Physa natricina*[a]

Arachnids

A Cave Obligate Harvestman *Speleomaster lexi*

Insects

A Mayfly *Centroptilum selanderorum*
A Mayfly *Paraleptophlebia jenseni*[a]
A Mayfly *Asioplax edmundsi*[a]
A Stonefly *Utacapnia nedia*[a]
A Tiger Beetle *Cicindela plutonica*[a]
Bruneau Tiger Beetle *Cicindela waynei*[a]
Blind Cave Leiodid Beetle *Glacicavicola bathyscioides*

[a] Species for which the Owyhee Uplands represents a significant portion of their Idaho range.

Habitats in the Owyhee Uplands

Table 2. Owyhee Uplands habitats.

Habitats	Area (km²)	Area (ac)	Percent
Urban	564	139,421	2
Arableland	5019	1,240,265	15
Non–native Herbaceous	4649	1,148,779	13
Upland Deciduous Forest	42	10,279	<1
Southern Woodland	1843	455,435	5
Dry Conifer Forest	114	28,105	<1
Mesic Deciduous Shrubland	265	65,471	1
Southern Xeric Shrubland and Steppe	21,329	5,270,516	62
Dry Grassland	80	19,682	<1
Open Water	182	44,968	1
Southern Wetland	84	20,866	<1
Riparian Woodland	252	62,288	1

Dune, Canyon, and Rockland	45	11,084	<1
Total	34,468	8,517,159	100

Priority Habitats and Associated Vertebrate Species in the Owyhee Uplands

Arableland

Fishes

White Sturgeon (Snake River system) *Acipenser transmontanus*
Leopard Dace *Rhinichthys falcatus*
Umatilla Dace *Rhinichthys umatilla*
Inland Redband Trout *Oncorhynchus mykiss gairdneri*
Shoshone Sculpin *Cottus greenei*
Wood River Sculpin *Cottus leiopomus*

Amphibians

Columbia Spotted Frog (populations south of the Snake River) *Rana luteiventris*
Northern Leopard Frog *Rana pipiens*

Birds

Northern Pintail *Anas acuta*
Hooded Merganser *Lophodytes cucullatus*
Greater Sage–Grouse *Centrocercus urophasianus*
Sharp–tailed Grouse *Tympanuchus phasianellus*
Black–crowned Night–Heron *Nycticorax nycticorax*
White–faced Ibis *Plegadis chihi*
Merlin *Falco columbarius*
Long–billed Curlew *Numenius americanus*
Franklin’s Gull *Larus pipixcan*
California Gull *Larus californicus*
Burrowing Owl *Athene cunicularia*
Blue Grosbeak *Passerina caerulea*

Mammals

Coast Mole *Scapanus orarius*
Townsend's Pocket Gopher *Thomomys townsendii*

Non–native Herbaceous

Fishes

Bull Trout *Salvelinus confluentus*
Shoshone Sculpin *Cottus greenei*
Wood River Sculpin *Cottus leiopomus*

Amphibians

Northern Leopard Frog *Rana pipiens*

Reptiles

Groundsnake *Sonora semiannulata*

Birds

Sharp–tailed Grouse *Tympanuchus phasianellus*
Merlin *Falco columbarius*
Peregrine Falcon *Falco peregrinus*
Long–billed Curlew *Numenius americanus*
Burrowing Owl *Athene cunicularia*
Grasshopper Sparrow *Ammodramus savannarum*
Blue Grosbeak *Passerina caerulea*

Mammals

Merriam's Shrew *Sorex merriami*
Coast Mole *Scapanus orarius*
California Myotis *Myotis californicus*
Townsend's Big–eared Bat *Corynorhinus townsendii*
Southern Idaho Ground Squirrel *Spermophilus brunneus endemicus*
Wyoming Ground Squirrel *Spermophilus elegans*
Townsend's Pocket Gopher *Thomomys townsendii*
Dark Kangaroo Mouse *Microdipodops megacephalus*
Bighorn Sheep (populations south of the Snake River) *Ovis canadensis*

Southern Xeric Shrubland and Steppe

Fishes

White Sturgeon (Snake River system) *Acipenser transmontanus*
Leopard Dace *Rhinichthys falcatus*
Umatilla Dace *Rhinichthys umatilla*
Inland Redband Trout *Oncorhynchus mykiss gairdneri*
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Reptiles

Great Basin Collared Lizard *Crotaphytus bicinctores*
Ring–necked Snake *Diadophis punctatus*
Long–nosed Snake *Rhinocheilus lecontei*
Groundsnake *Sonora semiannulata*

Birds

Greater Sage–Grouse *Centrocercus urophasianus*
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Burrowing Owl *Athene cunicularia*
Virginia's Warbler *Vermivora virginiae*
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Lesser Goldfinch *Carduelis psaltria*

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