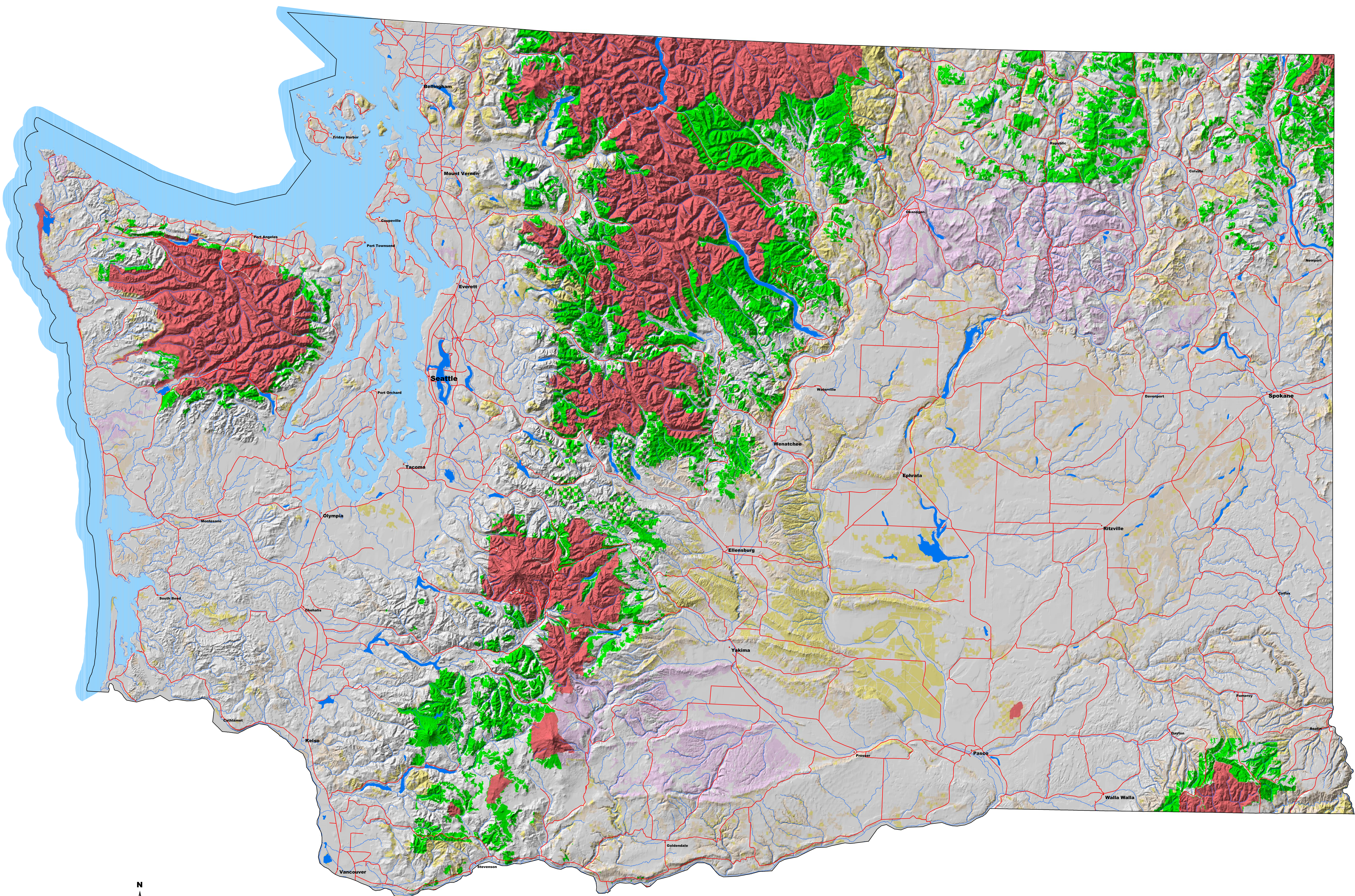


Wild and Roadless Lands in Washington State



Roadless and Undeveloped Lands

- Federally Protected Parks and Wilderness
- Forest Service unprotected wildlands
- Other public unprotected wildlands
- Tribal wildlands
- Private undeveloped lands

- Developed and Roadless Lands
- Lakes
- Pacific Ocean
- Major Roads
- Rivers
- State Boundary

This map portrays a comprehensive analysis of all roadless and undeveloped regions in Washington State, completed by the Pacific Biodiversity Institute(PBI). This work is a continuation of an independent evaluation of wild landscapes in eastern Oregon and Washington that Sierra Biodiversity Institute (SBI) began in 1993 as part of the Eastside Forests Scientific Society Panel Study (Henjum et al 1994). It represents part of our effort to map the wildlands of the western United States. This analysis is the first to look at roadless/undeveloped regions across all ownerships (federal, other public, tribal and private).

The methods to delineate roadless/undeveloped regions are similar to those used by the Eastside Forests Scientific Society Panel Study (Henjum et al 1994), with a number of enhancements. All undeveloped lands (i.e. not urban, agricultural, or otherwise permanently developed), more than 100 meters from a road and over 400 hectares (1000 acres) in size are designated as roadless/undeveloped regions. Appendages and narrow connections less than 200 meters in width are eliminated from the roadless/undeveloped regions because these areas are dominated by edge effects. Small, irregular roadless and undeveloped regions that approach the minimum size but have area/perimeter ratios of less than 80% of that of a circle are also eliminated because of the strong influence of edge habitat. Complex GIS analysis was used to identify landscapes that meet these criteria resulting in precise, repeatable, and consistent coverage across large regional landscapes.

The source data layers used in this analysis are:

Description	scale	date
Land use / Land cover data from the USGS	1:250000	1980's
TIGER road data from the US Dept. of Commerce	1:100000	1992
Colville National Forest road data	1:24000	1995
Gifford Pinchot National Forest road data	1:24000	1995
Mt. Baker - Snoqualmie National Forest road data	1:24000	1995
Okanogan National Forest road data	1:24000	1996
Olympic National Forest road data	1:24000	1995
Unatilla National Forest road data	1:24000	1995
Wenatchee National Forest road data	1:24000	1995

The accuracy of the roadless/undeveloped region mapping is dependent on the accuracy of the source data layers. We used the most reliable data that was available for each area of the state. The mapping is more reliable on National Forest lands than other ownerships, due to the recent, large scale source layers. Although no accuracy assessment has been made of this map, our reviews suggest that the accuracy of mapping on National Forest lands exceeds 90%. The accuracy on other ownerships appears to exceed 70%.

Federally protected wildlands (Wilderness Areas and undeveloped portions of National Parks) amount to about 4.4 million acres - only 10% of the land area of the state. There are currently about 3.7 million acres of unprotected wildlands (over 1000 acres in size) in the state's National Forests. Some of these lands have partial administrative protection. In other public ownerships (federal, state and local) there are over 2.3 million acres of additional wildlands. Most of this land has no formal protection. There are over 1.5 million acres of undeveloped tribal land and over 4.4 million acres of undeveloped private land in the state. Overall, undeveloped wild lands still remain on about 38.5% of the state's land base.

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