

Ecoregions denote areas of general similarity in ecosystems and in the type, quality, and quantit of environmental resources; they are designed to serve as a spatial framework for the research assessment, management, and monitoring of ecosystems and ecosystem components. B recognizing the spatial differences in the capacities and potentials of ecosystems, ecoregion stratify the environment by its probable response to disturbance (Bryce and others, 1999) Ecoregions are directly applicable to the immediate needs of state agencies, including th development of biological criteria and water quality standards and the establishment management goals for nonpoint-source pollution (Omernik and Griffith, 1991; Hughes and others, 1990; Whittier and others, 1988). They are also relevant to integrated ecosystem management, an ultimate goal of many federal and state resource management agencies.

The approach used to compile this map is based on the premise that ecological regions can identified through the analysis of the spatial patterns and the composition of biotic and abioti phenomena that affect or reflect differences in ecosystem quality and integrity (Wiken, 1986 Omernik, 1987, 1995). These phenomena include geology, physiography, vegetation, climate soils, land use, wildlife distributions, and hydrology. The relative importance of each characteristic varies from one ecological region to another regardless of the hierarchical level. Roman numeral hierarchical scheme has been adopted for different levels of ecological regions Level I is the coarsest level, dividing North America into 15 ecological regions. Level II divide the continent into 52 regions (Commission for Environmental Cooperation Working Group 1997). At level III, the continental United States contains 104 ecoregions and the conterminou United States has 84 ecoregions (United States Environmental Protection Agency [USEPA] 2003). Level IV is a further subdivision of level III ecoregions. Explanations of the methods use to define the USEPA's ecoregions are given in Omernik (1995), Omernik and others (2000) Griffith and others (1994), and Gallant and others (1989).

Oregon is ecologically diverse. The west side of the state has a marine-influenced climate and receives plentiful precipitation three seasons of the year. In contrast, eastern Oregon lies in th rain shadow of the Cascades and is much drier. The climatic gradient is evident in the state' landscapes: forested mountains, glaciated peaks, shrub- and grass-covered plains, agricultura valleys, beaches, desert playas, and wetlands. There are 9 level III ecoregions and 65 level IV ecoregions in Oregon and many continue into ecologically similar parts of adjacent states (Bryc and others, 2003; McGrath and others, 2002; Pater and others, 1998).

This level III and IV ecoregion map was compiled at a scale of 1:250,000. The western part wa originally published as part of Pater and others (1998). The level IV lines in the Columbia Platea and Blue Mountains were originally published in Clarke and Bryce (1997). Ecoregion boundarie in the remainder of Oregon depict revisions and subdivisions of earlier level III ecoregions that were originally compiled at a coarser scale (Omernik, 1987; USEPA, 2003).

This poster is the product of a collaborative effort primarily between the USEPA Region X, th USEPA National Health and Environmental Effects Research Laboratory (Corvallis, Oregon), th Oregon Natural Heritage Program, the United States Department of Agriculture-Forest Service (USFS), the United States Department of Agriculture-Natural Resources Conservation Servic (NRCS) (formerly the Soil Conservation Service), and the United States Department of th Interior-Geological Survey (USGS)-Earth Resources Observation Systems (EROS) Data Center

The Oregon ecoregion project is part of an interagency effort to develop a common framework ecological regions for the United States. Reaching that objective requires recognition of th differences in the conceptual approaches and mapping methodologies applied to develop the most common ecoregion-type frameworks, including those developed by the USFS (Bailey and others 1994), the USEPA (Omernik, 1987, 1995), and the NRCS (U.S. Department of Agriculture-Sol Conservation Service, 1981). As each of these frameworks is further refined, their differences ar becoming less discernible. Regional collaborative projects, such as this one in Oregon, wher agreement has been reached among multiple resource management agencies, are a step toward attaining consensus and consistency in ecoregion frameworks for the entire nation.

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CITING THIS POSTER: Thorson, T.D., Bryce, S.A., Lammers, D.A., Woods, A.J., Omernik J.M., Kagan, J., Pater, D.E., and Comstock, J.A., 2003. Ecoregions of Oregon (color poster with map, descriptive text, summary tables, and photographs): Reston, Virginia, U.S. Geologica Survey (map scale 1:1,500,000).

This project was partially supported by funds from the USEPA-Office of Research and Development's Environmental Monitoring and Assessment Program through contract 68-C6-00. to Dynamac Corporation. Partial funding was also provided by the Oregon Watershe Enhancement Board.

Digital information can be obtained at http://www.epa.gov/wed/pages/ecoregions/ecoregions.htm

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