Ecoregions comprise areas of general similarity in ecosystems and in the types, quality, and quantity of associated natural resources. They are used as a spatial framework for the research, assessment, management, and monitoring of ecosystems and ecosystem components. By recognizing the spatial dynamics in the capacities and potentially of ecosystems, ecologists study the environment by the probable response to disturbance (Bray, Omernik, and Lancia, 1999).

Ecoregions are general purpose regions that are critical for structuring and implementing ecosystem management strategies across federal agencies, state agencies, and nongovernment organizations that are responsible for the management of natural systems. The system, based on the Roman numeral hierarchical scheme has been adopted for different levels of ecological regions. Level I is the US Environmental Protection Agency (USEPA) Ecoregion, and Level II is the USEPA Region's Ecological Area (EA) (Covell, et al., 1998). Level III is the Experimental Level III Ecoregions (EA-levels) as delineated by the USEPA Region 6 (Commission for Environmental Cooperation Working Group, 1997). Level IV are further subdivisions of level III ecoregions as specified by the Roman numeral hierarchical scheme. Level I ecoregions are used as the U.S. Environmental Protection Agency (USEPA) and have the largest area of all ecoregions. Level II has the region of like regions, whereas the third level delineates the ecoregions of the nine states in the region. Level III is the Ecological Significant Region (ESR) and is the most detailed level of the United States. Each of these frameworks is further refined, and their differences are becoming less discernible.

Ecoregions of Oklahoma

PRINCIPAL AUTHORS: Alisa J. Woods (Rhode Island University), James M. Omernik (U.S. Geological Survey), David B. Keiffer (Oregon Conservation Commission-State Water Quality Division), Jenny G. Ford (U.S. Department of Agriculture–National Resources Conservation Service), James S. Finke (U.S. Department of Agriculture–National Resources Conservation Service), Bruce W. Ngoddy (Oklahoma Biological Survey), David E. Atwood (Oklahoma Climatological Survey), and John E. Moore (Oklahoma City University). This project was supported in part by funds from USEPA Region 6, Water Quality Cooperative Agreement under the provisions of Section 1501 of the Clean Water Act to the Oklahoma Water Resources Board through the Office of the Secretary of the Department of Environmental Quality. Assistance from the private sector is acknowledged in the form of Ron Zinman, Ph.D. or learn more from our Environmental Project.

Electronic versions of ecoregions maps and posters as well as other ecoregion resources are available at http://www.epa.gov/region6/ok geological/s/.