Ecoregions of the Conterminous United States: Evolution and Applications of a Hierarchical Spatial Framework

INTRODUCTION

A map of ecoregions of the conterminous United States, first developed in 2000 and now updated to 2014, is provided. The map includes Level III and IV ecoregions, as well as Level V and VI subecoregions (inset maps) that collectively span the conterminous United States. The map is a key tool for understanding the natural communities and ecosystems within the United States. The updated version of the map includes new ecoregions, as well as changes to existing ones, based on the latest scientific research and data. The map can be used for a variety of applications, including research, planning, and policy-making.

APPROACH AND PROCESS

The ecoregions were mapped using a hierarchical approach, with Level III ecoregions serving as the primary mapping units. These ecoregions were then further subdivided into Level IV subecoregions. The mapping process involved the use of satellite data, ground-based observations, and other data sources to identify and define the boundaries of the ecoregions. The map is available in both digital and printed formats, and can be accessed through the USGS website.

Examples of Applications

- Water Quality
- Land Cover Change and Ecosystem Carbon
- Conservation: Natural Communities/Forest & Rangeland Health
- Wetlands
- Water Resources
- Biological and Geologic Processes
- Climate Change and Ecosystems
- Natural Hazards
- Human-Induced Changes
- Spatial Analysis
- Urbanization
- Regulation of Natural Ecosystem Processes
- Economic and Social Impacts

The map can be used to support a wide range of applications, including research, planning, and policy-making. It provides a valuable tool for understanding the natural communities and ecosystems within the United States, and can be used to inform decisions related to conservation, management, and stewardship.

Level III and IV Ecoregions of the Conterminous United States

Glenn E. Griffith, USGS Western Geographic Science Center, Corvallis, OR, ggriffith@usgs.gov, (541) 754-4465