

MISSOURI ECOLOGICAL MAPPING FRAMEWORKS

Missouri has implemented ecoregion mapping under each of the three dominant national terrestrial frameworks. Each mapping project has relied on strong and sustained interagency efforts; producing complementary boundary sets that (1) meet state needs, (2) fit into their respective national schemes and (3) contribute to the evolution of a national/state common framework. This was achieved by assembling each ecological unit in a framework's hierarchy from a common set of land type association (LTA) boundaries compiled by the Missouri Ecological Classification System (ECS) project. Missouri's ecoregion mapping activities also include the development of an aquatic classification framework as part of the Missouri Resource Assessment Partnership's (MoRAP) Aquatic GAP Pilot Project.

In 1995, Missouri initiated a multi-year interagency project to develop, test and document a common framework of ecological regions for Missouri. The project utilized a derivative Bailey framework based on the USFS system. ECS units (Section, Subsection and Land Type Association) were classified and mapped at 1:100,000 scale.

In considering a revision of the state's MLRA boundaries, NRCS hypothesized that the land type association (LTA) boundaries could be reassembled to form revised MLRA boundaries that would meet agency needs and further ecoregion integration at the state and national levels. The NRCS hypothesis was based on the extensive integration of data, including both SSURGO and STATSGO soils data, that was done in defining and delineating the LTAs and the strong interagency influence on the ECS compilation process. NRCS assembled an interagency team and successfully met its' MLRA revision goals without modifying any LTA boundary lines.

A similar effort was implemented to map EPA's Ecoregions in Missouri. An interagency team, organized and led by the Missouri Department of Natural Resources, Division of Environmental Quality, Environmental Services Program has mapped Level III and IV ecological units based on assemblages of LTAs. While the final map, like the MLRA map, will be recompiled to meet agency specific mapping protocols, it will share a common origin with the ECS and MLRA mapping efforts.

In addition to these terrestrial ecoregion mapping projects, Missouri has developed an eight-level hierarchical classification system to characterize and map the state's riverine ecosystems into distinct ecological units. This interagency effort is part of a much larger Missouri Resource Assessment Partnership (MoRAP) effort, the Aquatic Gap Pilot Project, to develop a process for identifying and prioritizing targets for conserving aquatic biodiversity in riverine environments.