Montana's Crucial Areas and Connectivity Assessment: An Update and Demonstration of the Crucial Areas Mapping Service

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Montana Fish, Wildlife and Parks (FWP) completed the Comprehensive Fish and Wildlife Conservation Strategy (CFWCS) in October 2005 as a landscape level plan to identify aquatic and terrestrial focus areas important to species and habitats of "Greatest Conservation Need." As implementation of the CFWCS began, FWP saw a need to refine the conservation scale and include terrestrial game and sport fish, FWP lands, and other recreational values into a Comprehensive Plan for Conservation. The "Crucial Areas and Connectivity Assessment" is an attempt to refine the conservation scale and identify important game and nongame fish and wildlife habitats, critical corridors, and valued recreational areas using a combination of empirical data, modeling based on these data, and expert opinion. The goal of this project is to identify and display critical and important habitats for fish and wildlife. Multiple benefits are perceived through achievement of this goal: increased efficiency in planning and commenting on development proposals, effective targeting and planning for the conservation of valued habitats, and increased opportunity for coordination with other agencies states. FWP spent the past year developing data layers, vetting the layers both internally and within the scientific community. Layers available to date include: game quality, game fish life history, watershed integrity, species of concern, aquatic connectivity, angler use, terrestrial species richness, and core area index. In parallel, FWP has developed an interactive Crucial Areas Mapping Service (CAMS) that depicts these resource values and allows users to relate each resource value to risk factors including energy development, urbanization, and subdivision. As the project develops and nears completion, best management practices and policy related to critical habitats will be produced. In mid-March, we plan to release CAMS to the public as a preplanning tool and comprehensive decision support system.