



United States Department of Agriculture

Riparian and Aquatic Ecosystem Strategy

Southwestern Region of the Forest Service



Forest Service

Southwestern Region

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INTRODUCTION

The eleven National Forests and four National Grasslands in the Southwestern Region of the USDA Forest Service occupy 20.6 million acres that range in elevation from 1,600 feet to more than 13,000 feet above sea level. Riparian areas currently occupy approximately 431,000 acres, or about two percent of National Forest System (NFS) lands in the Southwestern Region. These riparian and aquatic zones (see Appendix A) are among the most diverse of our landscapes, harboring higher plant, bird, insect, reptile-amphibian, fish, and mammal biodiversity than most ecosystems. In the arid Southwest, riparian areas offer a multitude of benefits and ecosystem services that are disproportionate relative to the small area they occupy (Covish et al. 2004; Giller et al. 2004; Naiman and Décamps 1997; NRC 2002, 2004).

The ecological integrity of riparian areas has been affected by numerous stressors, with the percent of riparian areas in the United States degraded by human impacts estimated to be as high as 90 percent (Zaimes et al. 2007). Between 30 and 50 percent of Southwestern wetlands have been lost outright (Mitch and Gosselink 1993). Stressors to riparian and aquatic systems include dams, diversions, groundwater pumping, non-native and invasive species, channelization, ditches, dikes, conversion to agricultural uses, urbanization, grazing, roads, fires, post-fire flooding, mining, fuel wood gathering, and logging. Continued population growth, associated recreational use, and climate change put additional disturbance pressure on already impacted areas. Many of these stressors result in altered flow regimes that disrupt the connection between the stream and its floodplain (USDA Forest Service 2020). These factors have resulted in plant and animal species declines and increased federal listings under the Endangered Species Act (ESA). Of the 55 threatened, endangered, proposed, or candidate species in the Southwestern Region, 29 are riparian or aquatic obligates with an additional five species significantly benefiting from these habitats (ECOS 2016).

As stewards of headwater systems, the Southwestern Region has developed this comprehensive strategy for management of riparian and aquatic ecosystems on NFS lands. The fundamental purpose of the Riparian and Aquatic Ecosystem Strategy (RAES) is to ensure the ecological integrity of riparian and aquatic ecosystems is maintained or restored by implementing actions to achieve desired conditions (USDA Forest Service 2020). Conservation of riparian and aquatic natural resources ensures continued physical, cultural, social, and economic benefits, as well as resilient ecosystems for future generations. In no other ecosystem can we as an agency have a greater impact in *“Caring for the land and serving people.”*

For more information on the Southwestern Region’s Riparian and Aquatic Ecosystem Strategy, including access to the full document and appendices, please visit <https://www.fs.usda.gov/detail/r3/landmanagement/resourcemanagement/?cid=fseprd601133>.