

The Status of Instream Flow Protection in the Southern United States

Mary Davis, *The Nature Conservancy, 1330 West Peachtree Street, Suite 410, Atlanta, GA 30309*

Abstract: Southern U.S. rivers represent a richly diverse range of river types and habitats which support globally significant fish, mollusk, and crayfish species diversity. The Southeast Aquatic Resource Partnership (SARP), The Nature Conservancy, American Fisheries Society, and others have recognized altered instream flows as a primary threat to the health of these ecosystems and the biota that depend on them. Specification of instream flow criteria varies widely among states, with Florida having one of the most ecologically holistic and protective instream flow programs in the country. Most states, however, specify minimum flow criteria that must be maintained at points of water withdrawals. The adequacy of these criteria can be difficult to assess as flow protection is a combination of flow criteria in policy, permit conditions, and other water management policies. In general, however, the level of protection of ecologically significant components of the hydrologic regime afforded by instream flow criteria depends on the cumulative amount of water allocated at the withdrawal point relative to the size of the stream. As allocation rates increase, minimum flow thresholds are reached more frequently and for longer periods of time, particularly in low flow months. Alternatively, innovative methods for specifying instream flow criteria used by the Southwest Florida Water Management District, European Union, and elsewhere have demonstrated that limiting withdrawals to a percent-of-flow are more protective of flow variability. Trade-offs with timing, amounts, and predictability of water supply must be managed to protect aquatic habitats while meeting human demands are met in a sustainable water management. These innovative methods hold promise for protection of the south's rich aquatic resources as southern states as they develop plans to manage their water resources in the face of increasing demands.

Proc. Annu. Conf. Southeast. Assoc. Fish and Wildl. Agencies 63:208