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Title: Economic Valuation of Freshwater Ecosystem Services in The United States: 1971-1997

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Abstract:

The purpose of this paper is to provide a sense of where the economic valuation of ecosystem services has come from and where it might go in the future. To accomplish this, this paper presents a comprehensive analysis of 30 peer-reviewed literature concerning economic data on freshwater ecosystems, including accomplishments and gaps in the previous research. The literature in this paper uses variations on the main three methods of determining economic value of ecosystem goods and services: travel cost, hedonic pricing, and contingent valuation. These methods incorporate social costs and benefits that are otherwise unrealized in the marketplace.

Although the results of the studies covered in this paper are highly site-specific and hard to generalize due to the lack of quantity, important lessons about ecosystem service valuation can be learned. In terms of freshwater ecosystems, it is important to realize that studies show that nonuse values comprise a large percentage of total economic value. Disregarding nonuse value could lead to environmentally harmful practices that focus too heavily on use values. Being able to put a value on ecosystem services provided by freshwater systems such as cleansing, recycling, and renewal is crucial to nonuse valuation, but also requires complete understanding of these complex processes and presents a difficult challenge to quantify.