

The Utility of Well-being Metrics for Evaluating Ecosystem Services

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The natural environment provides a multitude of goods and services that benefit people. These benefits are realized not only in the economic value of ecosystems, but in their intrinsic value as well. This ecosystem-human relationship is clearly evident in communities that reside within coastal watersheds. Although counties in these watersheds represent less than one-third of the U.S. land area, greater than 50% of the total population live in coastal watersheds and these areas contribute more than half of the Nation's economic output. For these reasons, the value of coastal ecosystems is commonly quantified in terms of economics. However, economic drivers alone are not enough to account for the rapid population growth exhibited in coastal communities. To better understand the range of benefits that humans derive from healthy and productive ecosystems, holistic approaches are needed to evaluate the qualitative linkages between ecosystem services and constituents of sustainable human well-being. Building upon existing well-being measures developed for economic and social accountability, we have developed an approach for linking ecosystem services to a core set of well-being domains. By evaluating these qualitative and quantitative linkages, we can demonstrate the utility of using a quantifiable measure of well-being that incorporates ecosystem services to enhance community-based alternative-scenario planning and to encourage more sustainable community practices and governance.