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Title: The Economic Value of Trinity River Water

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Abstract:

This paper focuses on estimating the non-market benefits of sending more water down the Trinity River, which was subject to re-routing into the Sacramento River as part of use for agriculture, a hydroelectric dam, and other uses. The study uses the contingent valuation method to estimate the non-market benefits and compares it to the benefits provided by market uses of the diverted water. Non-market benefits mainly involve the Trinity River's role in providing recreational and fishing opportunities to North Central California. Recreational use values and existence non-use values are considered in the valuation and were measured with willingness to pay (WTP) values from 1190 usable surveys conducted in the winter of 1993-94. Five different flow-related scenarios were presented and WTP bids (represented in amount per month the respondent was willing to pay) were solicited for each scenario.

This study estimates annual household benefits ranged between \$167 million for the lowest flow scenario to \$803 million for the highest flow scenario. This greatly exceeds the social cost of losing the use values of hydroelectric power, agriculture, and other related uses. In addition, a survey respondents desired an average flow of the Trinity River at 69%, which indicated the most support for the highest flow scenario. The WTP and preferred level of flow indicated a strong preference for enhancing the Trinity River flows.