Measuring The Total Economic Value Of Restoring Ecosystem Services In The Platte River Basin: Results From A Contingent Valuation Method Survey

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Abstract. Five ecosystem services that could be restored along a 45 mile section of the Platte River were described to respondents using a building block approach developed by an interdisciplinary team. These ecosystem services were dilution of wastewater, natural purification of water, erosion control, habitat for fish and wildlife, and recreation. Households were asked a dichotomous choice willingness to pay question regarding purchasing the increase in ecosystem services through a higher water bill. Results from nearly 100 in-person interviews indicate that households would pay an average of $21 per month for the additional ecosystem services (95% confidence interval is $20.50 to $21.65). Generalizing this to the households living along the river yields a value of $30 million to $70 million depending on whether those refusing to be interviewed have a zero value or not. Even the lower bound benefit estimates greatly exceed the high estimate of water leasing costs ($1.13 million) and Conservation Reserve Program farmland easements costs ($12.3 million) necessary to produce the increase in ecosystem services.