

Valuing Watershed Services in Mexico's Temperate Forests

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Received August 11, 2011; revised September 14, 2011; accepted October 15, 2011

Abstract

Water resources are highly valuable in arid, semiarid, or high-altitude areas where the sources are restricted to groundwater or flash floods occurred in short periods of time. In this paper, we present a case study where water is economically valued through nonmarket valuation techniques. A follow-up review of similarly- conducted case studies in Mexico was carried out to evaluate the potential relationships that elevation, moisture index, and human development index have over the economic value of water. The main factors influencing the value of water in our case study were income, education, age, and family size. Bivariate correlations of the case studies in the country suggest that there is no a significant relationship between water value and elevation, although there is some relationship between water value, moisture index, and the human development index. Drier areas and more developed communities tend to pay more for an improvement in current water resources conditions. These results can help decision-makers to consider regional policies aimed to improve water management conditions in semiarid and less-developed communities in Mexico.

Keywords: Durango, Contingent Valuation, Non-Market Valuation, Moisture Index, Water Scarcity