

## **PAYMENTS FOR FOREST ECOSYSTEM SERVICES: AN INTEGRATED APPROACH TO VALUE FOREST WATER BENEFITS**

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Increased adoption of management practices for maintaining low basal area by non-industrial private forest landowners is a potential tool for improving groundwater resource conditions. However, the economic feasibility of this approach is largely unknown in watersheds connected to the Florida aquifer. This study assessed the forest-level economic tradeoffs associated with a suite of proposed management practices for slash, loblolly and longleaf pine forest enterprises in S. Georgia and N. Florida. We then surveyed non-industrial private forest landowners (n=6000) to determine what level of incentive payments would be required to ensure their participation in voluntary water conservation-based practices, which can affect forest yield and net return. We also surveyed general public (n= 3000) to understand their preferences for supporting those voluntary programs to incentivize forest landowners to improve water benefits. Both surveys used a discrete choice experiment (DCE) model to elicit Willingness to Accept (WTA) compensation for forest landowners to enroll in a voluntary incentive program and Willingness to Pay (WTP) for general public to support those voluntary incentive program. The preliminary results for the WTA survey showed the marginal estimates for WTA compensation increases with decreasing net returns, increasing production cost and higher rotation age. Similarly, the preliminary results for the WTP survey showed the marginal estimates for WTP is higher for positive economic impacts on producers, greater opportunities for outdoor recreation, assurance of better water quality for future generation and better environmental health of the aquatic flora and fauna. Taken together, the WTA and WTP findings will indicate social welfare impacts of adopting water conservation-based management practices in forest and help inform incentive program policy design and assess social value associated with policy interventions.

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