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**PARTICIPATION DECISIONS, ANGLER WELFARE, AND THE
REGIONAL ECONOMIC IMPACT OF SPORTFISHING**

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ABSTRACT

Data from a stated preference survey of anglers who fished in marine waters off the Kenai Peninsula, Alaska, are used to model angler participation, angler welfare, and regional economic activity. The probability of taking a sportfishing trip is represented as a nonlinear function of predictable or controllable trip attributes and demographic characteristics. Conditional individual probabilities are aggregated into estimates of total recreation demand and compensating variation using a simulation-based sample enumeration, weighted to reflect differences in participant motivation. A regionally adjusted zip code-level input-output model is used to represent the level of primary and secondary expenditures conditioned on participation. This approach results in a behaviorally based integrated model for exploring the changes in angler welfare and regional economic activity occasioned by changes in the demand for sportfishing that arise from changes in trip costs or the expected number, size, or mix of species caught. Because the model allows for nonlinear marginal utility, and substitution and complementary effects across attributes, participation rates, angler welfare, and the magnitude of regional economic activities exhibit nonlinear responses to variations in trip attributes.

Key words: recreational demand, angler welfare, regional economic impacts