Chapter 1. Purpose and Scope of Study

Purpose

The Alaska Department of Fish and Game contracted with ISER to assess the economics of sport fishing in Alaska. This is an important consideration in the allocation of fish stocks among users, in the evaluation of fishery projects, and in land and water management and other planning decisions. In these and other instances resource managers need economic information to help them develop plans for the most beneficial and sustainable uses of Alaska’s fish stocks.

Methods of Analysis

We estimated the economics of sport fishing in Alaska by looking at: (1) economic significance; and (2) net economic value. Economic significance measures sport fishing’s contributions to economic activity—in jobs, income, and sales. Net value analysis looks at all the costs and benefits—both the market and the less tangible costs and benefits—of sport fishing and estimates its overall economic contribution. To do our analyses, we built economic models, using primarily information we collected in three surveys in 1993 and 1994: a telephone survey of resident sport anglers, a mail survey of non-resident sport anglers, and a mail survey (with follow up by telephone) of guide and charter businesses. (The survey questionnaires are in Appendix A.) We also used many secondary sources. Our methods of analysis are described more in Chapter 2.

Value and Limits of Analysis

This report provides the most comprehensive, detailed data available on sport fishing in Alaska. We used state-of-the-art survey designs and methods of analysis, providing rigorous, independent measures of the amount of effort devoted to sport fishing in Alaska and its economic importance.

But our estimates are based on data from 1993 and 1994, and it’s not entirely clear how sport fishing has changed since then. The Department of Fish and Game reports that the number of resident licenses issued has stayed roughly the same, while the number issued to nonresidents grew about 25 percent. At the same time, the department also reports that measures of fishing pressure—angler-days fished and numbers of fishing trips—have not changed substantially since 1993. There is some evidence that the growing number of visiting anglers may be mostly casual anglers, who fish once or twice while they’re in Alaska. Numbers of sport charters operating in Southcentral and Southeast Alaska have certainly increased in the 1990s, and many customers of those charters are tourists who buy single-day licenses.

So the overall economic contribution of sport fishing may not have changed substantially since our survey. In any case, patterns of sport fishing—what people buy for sport fishing
and how they travel to sport fishing locations, for instance—don’t change quickly. We believe the broad picture of the economics of sport fishing in Alaska that we present here is valid. Also, the data provides a valuable benchmark for understanding fishery values and assessing future change. 1

Report Organization

Chapter 2 provides more information about our surveys, methods of analysis, and the economic models we developed for this study.

Chapter 3 profiles recreational fishing in Alaska in 1993, based on our surveys. It discusses, among other things, characteristics of resident and nonresident households with anglers, as well as how many fishing trips anglers took that year, what they fished for, and how they got to the fishing sites.

Chapter 4 begins with estimates of anglers’ spending for sport fishing in Alaska in 1993—spending that is the basis for our estimates of both economic significance and net economic value of sport fishing in Alaska. The chapter then presents our estimates of economic significance, as measured by jobs, payroll, and sales that sport fishing directly and indirectly generated in Alaska, and within regions of the state, in 1993. We estimated economic significance primarily with an input-output model of the Alaska economy—a model we developed specifically for this project from survey information.

Chapter 5 presents our net economic value analysis, done with a series of travel cost models we developed for this study. It includes estimates of statewide economic value and value by site, species, and selected fisheries.

A series of appendixes includes our survey questionnaires as well as descriptions of how we built our models, confidence intervals for our findings, detailed tables, and discussions of data reliability and model resolution.

1 One of the intended uses of this work was to help ADF&G in evaluation of regulatory options and other management decisions. However, the value of the study for use in current fisheries management is limited—not only by the passage of time but because our data are better suited to analysis of fisheries in the aggregate rather than to decision-making about individual fisheries. See Chapter 2 and Appendix G for more discussion of these issues.