

# Introduction

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# INTRODUCTION

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This report provides the results of a study to determine an optimum number of limited entry permits for the Bristol Bay salmon drift gillnet fishery. It reviews the recent regulatory history of the fishery, provides an overview of the complexities of managing the fishery, estimates historic economic returns for the fishery, and provides projections of future economic returns. The report provides recommendations for an optimum number range based upon three general standards specified in Alaska's limited entry law.

## Program Basics

The Alaska legislature passed the state's limited entry law in 1973. The law created the Commercial Fisheries Entry Commission (CFEC or commission) as a quasi-judicial agency charged with implementing and administering the new program.<sup>1</sup>

The law provides a two-stage process for limiting fisheries. In the first stage, CFEC limits a fishery by adopting a maximum number of permits when it determines that limitation will serve the purposes of the law. The purposes of the law are: *"to promote the conservation and sustained yield management of Alaska's fishery resource and the economic health and stability of commercial fishing in Alaska by regulating and controlling entry of participants and vessels into the commercial fisheries in the public interest and without unjust discrimination."*<sup>2</sup>

Historically, the maximum number of permits reflected participation levels at the time of limitation. An Alaska Supreme Court decision in *Johns*<sup>3</sup> determined that the maximum number must be no less than the highest number of units of gear that have participated in a fishery in any one of the four years prior to the qualification date.<sup>4</sup>

In the second stage of limited entry, the commission is directed to select an "optimum number" of permits for a fishery. Alaska's limited entry law (AS 16.43) directs the commission to establish an optimum number based upon a reasonable balance of three general standards.<sup>5</sup>

If the optimum number is less than the maximum number, the commission may establish a buyback program with a buyback plan and a buyback fund for the fishery.<sup>6</sup> The commission may also establish by regulation a buyback assessment of up to 7% of the ex-vessel value of

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<sup>1</sup> See AS 16.43.

<sup>2</sup> See AS 16.43.010(a).

<sup>3</sup> See *Johns v. State, CFEC*, 758 P.2d 1256 (Alaska 1988).

<sup>4</sup> For fisheries limited under AS 16.43.240(a), the maximum number for a distressed fishery: "...shall be the highest number of units of gear fished in that fishery during any one of the four years immediately preceding January 1, 1973." However, the maximum number rule for fisheries limited under AS 16.43.240(b) is not specified in the law. The Alaska Supreme Court's decision in *Johns* established the "no less than" rule that CFEC must now use.

<sup>5</sup> See AS 16.43.290

<sup>6</sup> See AS 16.43.310 through AS 16.43.320.

each permit holder's harvest, and establish regulations for the purchase of transferable entry permits to reduce the number of permits to the optimum number.

If the optimum number is greater than the number of permits outstanding, the commission is directed to issue new permits at fair market value.<sup>7</sup> There is also a provision for revising the optimum number of permits in response to established long-term changes in a fishery.<sup>8</sup>

In an early draft of the limited entry statutes, limited entry was envisioned as a single-stage process, whereby "maximum" numbers would represent "optimum" levels rather than recent participation levels.<sup>9</sup> In that draft bill, the maximum number would have been based upon a reasonable balance of four general criteria. The legislature eventually rejected the single stage process as too extreme, and settled upon the two-stage process in AS 16.43.

At the time the limited entry law was passed, it was expected that movements from maximum numbers to optimum numbers would usually result in further fleet reductions. The two-stage process was seen as a "fairer" way to reduce the size of the fleet. At the time of limitation, most persons who were substantially dependent upon the fishery would receive an initial allocation of an entry permit.<sup>10</sup> When optimum numbers were established later, those opting to exit the fishery would be compensated by those opting to remain in the fishery through a fisherman-funded buyback program. Hopefully, under such a provision, both groups of fishermen - those remaining in the fishery and those leaving the fishery - would be able to benefit from fleet reductions.

## Optimum Number Developments since 1973

When Alaska's limited entry law was passed in 1973, the law made special findings for the Bristol Bay salmon drift gillnet fishery and two other drift gillnet fisheries. It classified the fisheries as those where: "*The sustained yield management and economic health . . . is severely impaired as a result, among other factors, of too many units of gear participating in the commercial harvest.*"<sup>11</sup>

Alaska's limited entry law directs the commission to designate a fishery as "distressed" if: "*it estimates the optimum number of entry permits will be less than the highest number of units of gear fished in that fishery during any one of the four years immediately preceding January 1, 1973.*"<sup>12</sup> The designation of "distressed" has to be made prior to the determination of a maximum number and before the initial issuance of entry permits. This special finding on the Bristol Bay salmon drift gillnet fishery by Alaska's legislature in the limited entry law, combined with the depressed sockeye stocks in Bristol Bay and the economic condition of

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<sup>7</sup> See AS 16.43.330.

<sup>8</sup> See AS 16.43.300.

<sup>9</sup> See Thomas A. Morehouse and George W. Rogers, *Limited Entry in the Alaska and British Columbia Salmon Fisheries*. Anchorage: Institute of Social and Economic Research, University of Alaska, (1980), pp.185-189.

<sup>10</sup> Alaska's maximum number rule, as clarified by the Alaska Supreme Court, still represents a less liberal "grandfathering" rule than would a simple moratorium without exclusions. Due to a natural turnover of participants in a fishery, the number of persons participating in the four years prior to limitation typically exceeds the maximum number. Because of this, the law creates an initial allocation mechanism known as a "hardship ranking system" or "point system."

<sup>11</sup> See AS 16.43.210. (d).

<sup>12</sup> See AS 16.43.230.

the fishery, led the commission to designate the Bristol Bay salmon drift gillnet fishery as a distressed fishery prior to limiting the fishery in 1973.<sup>13</sup> Eight of the original 19 salmon fisheries were designated as distressed by regulation.

While the designation of “distressed” suggests that the optimum number is less than the number of permits outstanding, the regulatory designation does not establish an optimum number. Under the law, the establishment of the optimum number occurs: “*following the initial issuance of entry permits.*”<sup>14</sup>

When the limited entry law was passed, many expected that optimum numbers, buyback programs, and fleet reductions would quickly follow the initial issuance of the maximum number of permits. The 1974 CFEC Annual Report indicated that the process of determining optimum numbers had begun and that a buyback program was expected by 1976. Economic studies were conducted on operating costs and net returns.<sup>15</sup> The Alaska Department of Fish and Game (ADFG) fishery managers were asked by CFEC to provide estimates of “management” optimum numbers, as they pertained to Standard Two under the optimum number law.<sup>16</sup>

However, the process of establishing optimum numbers soon slowed. The process for the initial issuance of permits proved to be more burdensome than originally imagined and the final classification of the more difficult permit applications could not be resolved without hearings and a long adjudication process. The commission hoped to complete the initial allocation process prior to embarking upon optimum numbers and buyback.

The conditions in the salmon fisheries also began to change. Following passage of the limited entry law and the Fisheries Management and Conservation Act of 1976, which established a 200-mile exclusive fisheries zone in coastal waters, the state’s depressed salmon runs began to recover. Salmon hatchery production also developed and eventually became substantial in some areas. The gross earnings and net returns of fishermen increased. Permit values increased commensurately, reflecting these improvements.

As a result, Alaska’s legislature became more concerned about other implications of limited entry: the cost of entry into fisheries, the ability of young Alaskans to get into a limited entry fishery, and the potential loss of entry permits to nonresidents. In 1979, the legislature sponsored studies to determine what changes were occurring under limited entry and to reevaluate limited entry alternatives, particularly with respect to permit transfers.

In the 1980’s there was renewed interest in buyback among some commercial fishing associations. The commission conducted operating cost and net return studies in some fisheries to monitor changes in the fisheries and to obtain baseline data which could be used to help estimate the probable impacts of further fleet reductions.

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<sup>13</sup> See AS 16.43.230 and 20 AAC 05.300.

<sup>14</sup> See AS 16.43.290.

<sup>15</sup> See James E. Owers, *Cost and Earnings of Alaska Fishing Vessels – An Economic Survey*. Juneau: Alaska Commercial Fisheries Entry Commission. (1974).

<sup>16</sup> See John B. Martin, *Optimum Numbers, A Report Submitted to the Commercial Fisheries Entry Commission*. Environmental Services Limited (June 15, 1979).

In May, 1985 the commission received an Alaska Attorney General's opinion that the buyback portion of the law was unconstitutional as written, chiefly because it required an unconstitutional dedicated fund.<sup>17</sup> This event led the commission to re-examine the issue of buyback and to develop suggestions for revising the law so the constitutional concerns could be addressed and better investment options would be provided for fishermen.<sup>18</sup>

In 1988, the Alaska Supreme Court decision in *Johns* further dampened the outlook for fleet reductions.<sup>19</sup> In their decision, the Supreme Court pointed to tensions between the limited entry clause in Alaska's constitution and the constitutional clauses which reserve fisheries for the common use of all of the people. The Court declared:

*[T]here is a tension between the limited entry clause of the state constitution and the clauses of the constitution which guarantee open fisheries. We suggested that to be constitutional, a limited entry system should impinge as little as possible on the open fishery clauses consistent with the constitutional purposes of limited entry, namely, prevention of distress to fishermen and resource conservation. Ostrovsky. 667 P.2d at 1191. The optimum number provision of the Limited Entry Act is the mechanism by which limited entry is meant to be restricted to its constitutional purposes. Without this mechanism, limited entry has the potential to be a system which has the effect of creating an exclusive fishery to ensure the wealth of the permit holders and permit values, while exceeding the constitutional purposes of limited entry.*

The *Johns* decision has substantially impacted thinking about fleet reductions under Alaska's limited entry program. In the decision, the Court warns that limiting the number of participants in a fishery to a given level is only constitutional if that level of exclusiveness is needed for resource conservation reasons or to prevent economic distress in a fishery.

If neither of these constitutional purposes is satisfied, then the commission is supposed to use the law's optimum number provision to increase the number of permits in the fishery. Moreover, the Court appears to be saying that a loss in permit value due to the issuance of additional permits does not qualify as economic distress to existing permit holders, even though many of these permit holders may have purchased their permit at fair market value. Under *Johns*, optimum numbers are seen as the only adjustment mechanism under AS 16.43 to prevent the program from becoming unconstitutional.

The *Johns* decision made a fisherman-funded buyback program less attractive. Should fleet reductions lead to an improvement in economic returns in a fishery, the Court might at some point rule that the fishery was too exclusive and force a revision in the optimum numbers to

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<sup>17</sup> See Alaska Dept. of Law, Attorney General's Office. File No. 366-279-85. *Constitutionality of the dedication of funds provision in the CFEC's buyback program*. May 23, 1985.

<sup>18</sup> See: (1) Kurt Schelle and Ben Muse, *Buyback of Fishing Rights in the US and Canada: Implications for Alaska*, Juneau: Commercial Fisheries Entry Commission (1984), and: (2) Ben Muse and Kurt Schelle, *Investments in Fleet Reductions: Suggestions for Revisions of Alaska's Buy-Back Statute*, CFEC Report 86-2. Juneau: Alaska Commercial Fisheries Entry Commission (1986).

<sup>19</sup> See *Johns v. State*, CFEC, 758 P.2d 1256 (Alaska 1988).

increase the number of permits. Thus the state might be forced to put more permits back into a fishery after the state had taxed fishermen to reduce the number of permits.

Indeed, CFEC's focus after the *Johns* decision was on fisheries that some suggested were too exclusive. The *Johns* decision applied directly to the Southeast Alaska roe herring purse seine fishery.<sup>20</sup> On December 10, 1993 the commission adopted an optimum number of 46 for this fishery after an extensive study. The optimum number regulation became effective in January, 1994.<sup>21</sup> The optimum number was greater than the original maximum number established for the fishery but was below the number of permits outstanding since the original maximum number had been exceeded and there were still interim-use permits in the fishery.

On December 28, 2000, in response to compelling resource conservation issues in the Northern Southeast Inside sablefish longline fishery, the commission adopted an optimum number of 73 for that fishery.<sup>22</sup> This number was based upon the testimony of the fishery manager and comments received on the regulatory proposal during a public comment process. The optimum number regulation became effective on May, 2001. As of this writing, litigants are challenging both the maximum number and optimum number in the Alaska court system. The plaintiffs are arguing that the fishery is too exclusive under *Johns*.

Because of *Johns*, in the 1990's the commission's focus was on fisheries where the optimum number might be greater than the maximum number. However, by the late 1990's, declines in salmon ex-vessel prices and gross earnings had a devastating impact on economic returns in the salmon fisheries. Since the decline in ex-vessel prices appears to be related to the explosive growth in farmed salmon production, many feel the decline represents a long-term change in the salmon fisheries, and real ex-vessel prices will continue to be at low levels for the foreseeable future.

Alaska's legislature has also become concerned about the need for change in the salmon fisheries. In 2002, the Alaska legislature passed two bills to try to improve the optimum number and buyback portions of the Alaska's limited entry statutes and to provide an alternative means for fleet consolidation. These new laws may improve the prospects for viable fleet reduction programs in the future.

Chapter 135 SLA 2002 (a.k.a. *CSHB288 (FIN) am*) removed a provision from the original law that established unconstitutional dedicated buyback funds. This portion of the law was substituted with provisions that detail how buyback assessments would be collected, deposited, and appropriated by the legislature. The new law also makes it explicit that the optimum number can be a range of numbers rather than a single number.

Other provisions in the new law include: Allowing a holder of an entry permit or interim-use permit to voluntarily relinquish the permit to the commission; clarifying that a nontransferable entry permit does not survive the death of the holder; eliminating

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<sup>20</sup> In recent years, this fishery has occurred primarily in Sitka and has been commonly called the Sitka roe herring fishery.

<sup>21</sup> See 20 AAC 05.1140. Optimum number of entry permits for the Southeastern roe herring purse seine fishery.

<sup>22</sup> See 20 AAC 05.1145. Optimum number of entry permits for the Northern Southeast inside sablefish longline fishery.

nontransferable permits from consideration under a buyback program; and specifying that a buyback program will be for permits and not for vessels and gear. The new law also removed a provision that made a buyback program mandatory if the optimum number was less than the maximum. It removed a provision that the buyback program must reach the optimum number within 10 years, and substituted a provision allowing the reduction to be at a rate established by the commission.

Chapter 134 SLA2002 (a.k.a. *CSHB286(RES)*) provides another means for fleet reductions to occur through private initiative. The new law allows a person to hold up to two salmon permits for a fishery for purposes of fleet reduction. However, the person cannot engage in fishing under the second permit. This new law also provides a means whereby permit holders in a salmon fishery can form a qualified salmon fishery association and vote to assess themselves for the purpose of promoting the consolidation of the fishing fleet. Some provisions in the law are similar to provisions in Alaska law providing for the formation of Regional Aquaculture Associations.

During 2002, Alaska's legislature formed and funded the Joint Legislative Salmon Industry Task Force (Task Force) to: *"evaluate the State of Alaska's statutory framework for Alaska's wild salmon industry as well as current industry practices and to make recommendations for statutory, regulatory, and structural changes that will improve the industry while recognizing the coastal economy."* The work of this Task Force was extended into 2004. The Task Force has asked the Alaska Board of Fisheries (Board) to help examine strategies for restructuring the salmon industry. The Board has recently formed a panel of interested stakeholders for this purpose.

In 2002, in response to requests from local fishermen, the commission began this study to determine an optimum number of permits for the Bristol Bay salmon drift gillnet fishery. The work began with a sample survey of Bristol Bay permit holders. The survey was designed to obtain information on permit holders' costs and net returns and to get their perspective on a number of topics related to optimum numbers and fleet reductions. Summaries of the surveys are available in two previous CFEC reports.<sup>23</sup>

This report provides the results of the optimum number study and the authors' recommendations for an optimum number in the Bristol Bay salmon drift gillnet fishery.

## **Outline of This Report**

The chapters of this report examine the Bristol Bay salmon drift gillnet fishery in detail and provide the rationale for an optimum number recommendation.

Chapter 1 briefly reviews and discusses the optimum number standards found in AS 16.43.290.

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<sup>23</sup> See: (1) Stefanie Carlson, *2002 Survey of Bristol Bay Salmon Drift Gillnet Permit Holders: Preliminary Summary of Responses*. CFEC Report No. 02-4C, Juneau: Alaska Commercial Fisheries Entry Commission (2002); and, (2) Carlson, S and K. Schelle: *2002 Survey of Bristol Bay Salmon Drift Gillnet Permit Holders: A Review of Survey Methodology and Implementation Procedures*. CFEC Report No. 02-5C. Juneau: Alaska Commercial Fisheries Entry Commission (2002).



Chapter 2 provides a review of the history of the fishery and its regulatory environment. It also provides some basic historic data on the fishery and describes the current approach to managing the fishery. The Bristol Bay salmon fisheries are very complex with five main districts, multiple species of concern, two commercial gear types, sport users, and subsistence users.

Chapter 3 provides summary data on the fishery and estimates of historic average rates of economic return in the fishery since limited entry. The chapter also discusses “reasonable rates of economic return” under the first optimum number standard found in AS 16.43.290.

Chapter 4 provides forecasts of future rates of average net economic return in the fishery based upon a simulation model. The chapter forecasts how future rates of return will vary depending upon harvests, ex-vessel prices, and the number of permits in the fishery. The chapter includes a “most likely” scenario, and provides a recommended range for the optimum number of permits under optimum number Standard One.

Chapter 5 reviews conservation and management concerns associated with the fishery, and discusses possible impacts of the number of units of gear on management. It includes rough estimates of the number of units of gear actually needed to harvest the resource in an orderly manner in years with the highest expected runs; it also provides estimates on the number of units that can be reasonably managed during years of the lowest expected runs. Chapter 5 also provides a recommended range for the optimum number of permits under optimum number Standard Two.

Chapter 6 briefly summarizes the report and provides recommendations with respect to optimum numbers based upon the results from the earlier chapters. It includes a discussion of optimum number Standard Three. The recommendations seek to achieve a reasonable balance of the three optimum number standards in AS 16.43.290.