

**Fishery Management Report No. 11-21**

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**South Unimak and Shumagin Islands June Fisheries  
Salmon Management Plan, 2011**

by

**Aaron D. Poetter**

April 2011

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Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



## Symbols and Abbreviations

The following symbols and abbreviations, and others approved for the *Système International d'Unités* (SI), are used without definition in the following reports by the Divisions of Sport Fish and of Commercial Fisheries: Fishery Manuscripts, Fishery Data Series Reports, Fishery Management Reports, and Special Publications. All others, including deviations from definitions listed below, are noted in the text at first mention, as well as in the titles or footnotes of tables, and in figure or figure captions.

|                                       |                    |  |   |   |                         |
|---------------------------------------|--------------------|--|---|---|-------------------------|
| <b>Weights and measures (metric)</b>  |                    | <b>General</b>                                   |   | <b>Mathematics, statistics</b>                                    |                         |
| centimeter                            | cm                 | Alaska Administrative Code                       | AAC   | <i>all standard mathematical signs, symbols and abbreviations</i> |                         |
| deciliter                             | dL                 | all commonly accepted abbreviations              | e.g., Mr., Mrs., AM, PM, etc.               | alternate hypothesis  | $H_A$                   |
| gram                                  | g                  | all commonly accepted professional titles        | e.g., Dr., Ph.D., R.N., etc.                | base of natural logarithm   | $e$                     |
| hectare                               | ha                 | at   | @   | catch per unit effort   | CPUE                    |
| kilogram                              | kg                 | compass directions:                              |   | coefficient of variation  | CV                      |
| kilometer                             | km                 | east   | E   | common test statistics  | (F, t, $\chi^2$ , etc.) |
| liter                                 | L                  | north  | N   | confidence interval   | CI                      |
| meter                                 | m                  | south  | S   | correlation coefficient   |                         |
| milliliter                            | mL                 | west   | W   | (multiple)  | R                       |
| millimeter                            | mm                 | copyright  | ©   | correlation coefficient   |                         |
|                                       |                    | corporate suffixes:                              |   | (simple)  | r                       |
| <b>Weights and measures (English)</b> |                    | Company  | Co.   | covariance  | cov                     |
| cubic feet per second                 | ft <sup>3</sup> /s | Corporation                                      | Corp.                                       | degree (angular)  | °                       |
| foot                                  | ft                 | Incorporated                                     | Inc.  | degrees of freedom  | df                      |
| gallon                                | gal                | Limited  | Ltd.  | expected value  | $E$                     |
| inch                                  | in                 | District of Columbia                             | D.C.  | greater than  | >                       |
| mile                                  | mi                 | et alii (and others)                             | et al.                                      | greater than or equal to  | ≥                       |
| nautical mile                         | nmi                | et cetera (and so forth)                         | etc.  | harvest per unit effort   | HPUE                    |
| ounce                                 | oz                 | exempli gratia                                   |   | less than   | <                       |
| pound                                 | lb                 | (for example)                                    | e.g.  | less than or equal to   | ≤                       |
| quart                                 | qt                 | Federal Information Code                         | FIC   | logarithm (natural)   | ln                      |
| yard                                  | yd                 | id est (that is)                                 | i.e.  | logarithm (base 10)   | log                     |
|                                       |                    | latitude or longitude                            | lat. or long.                               | logarithm (specify base)  | log <sub>2</sub> , etc. |
| <b>Time and temperature</b>           |                    | monetary symbols                                 |   | minute (angular)  | '                       |
| day                                   | d                  | (U.S.)   | \$, ¢                                       | not significant   | NS                      |
| degrees Celsius                       | °C                 | months (tables and figures): first three letters | Jan, ..., Dec                               | null hypothesis   | $H_0$                   |
| degrees Fahrenheit                    | °F                 | registered trademark                             | ®   | percent   | %                       |
| degrees kelvin                        | K                  | trademark  | ™   | probability   | P                       |
| hour                                  | h                  | United States                                    | U.S.  | probability of a type I error                                     |                         |
| minute                                | min                | (adjective)                                      |   | (rejection of the null hypothesis when true)                      | $\alpha$                |
| second                                | s                  | United States of America (noun)                  | USA   | probability of a type II error                                    |                         |
|                                       |                    | U.S.C.   | United States Code                          | (acceptance of the null hypothesis when false)                    | $\beta$                 |
| <b>Physics and chemistry</b>          |                    | U.S. state                                       | use two-letter abbreviations (e.g., AK, WA) | second (angular)  | "                       |
| all atomic symbols                    |                    |  |   | standard deviation  | SD                      |
| alternating current                   | AC                 |  |   | standard error  | SE                      |
| ampere                                | A                  |  |   | variance  |                         |
| calorie                               | cal                |  |   | population  | Var                     |
| direct current                        | DC                 |  |   | sample  | var                     |
| hertz                                 | Hz                 |  |   |   |                         |
| horsepower                            | hp                 |  |   |   |                         |
| hydrogen ion activity                 | pH                 |  |   |   |                         |
| (negative log of)                     |                    |  |   |   |                         |
| parts per million                     | ppm                |  |   |   |                         |
| parts per thousand                    | ppt,               |  |   |   |                         |
|                                       | ‰                  |  |   |   |                         |
| volts                                 | V                  |  |   |   |                         |
| watts                                 | W                  |  |   |   |                         |

***FISHERY MANAGEMENT REPORT NO. 11-21***

**SOUTH UNIMAK AND SHUMAGIN ISLANDS JUNE FISHERIES  
SALMON MANAGEMENT PLAN, 2011**

by

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April 2011

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## ABSTRACT

The South Unimak and Shumagin Islands June commercial salmon fisheries occur in the Alaska Peninsula Management Area (Area M) and target sockeye salmon *Oncorhynchus nerka*. The South Unimak June fishery includes the Unimak and Southwestern districts plus the Bechevin Bay, West Pavlof Bay, and East Pavlof Bay sections. The Shumagin Islands June fishery includes only the Shumagin Islands Section of the Southeastern District. The season will begin 6:00 AM June 7, consist of four 88-hour fishing periods separated by 32-hour closures, followed by a final 64-hour fishing period, and end 10:00 PM June 29. This document summarizes the strategy for management of the Alaska Peninsula June fishery and outlines the requirements of industry to participate in these fisheries in 2011.

Key words: Alaska Peninsula, Area M, Shumagin Islands, South Unimak, June fishery, commercial fisheries, sockeye salmon, *Oncorhynchus nerka*, management plan, Alaska Department of Fish and Game, Fisheries Management Report, FMR.

## INTRODUCTION

This document provides commercial fishermen and processors with the Alaska Department of Fish and Game (ADF&G) harvest strategy for the South Unimak and Shumagin Islands June salmon fisheries. It also outlines the requirements of the industry to participate in these fisheries as well as how to provide information to the department.

The South Unimak and Shumagin Islands June commercial salmon fisheries occur in the Alaska Peninsula Management Area (Area M) and target sockeye salmon *Oncorhynchus nerka*. The South Unimak June fishery occurs in the Unimak and Southwestern districts, plus the Bechevin Bay, and West and East Pavlof Bay sections (Figure 1). The Shumagin Islands June fishery includes the Shumagin Islands Section of the Southeastern District. During the most recent 10 years (2001-2010), the South Unimak sockeye salmon harvest averaged 515,937 fish during the June fishery (Table 1) while the Shumagin Islands sockeye salmon harvest averaged 461,047 fish (Table 2). The average June fishery sockeye salmon harvest from 2001-2010 was 976,984 fish (Table 3).

## ANNOUNCEMENTS

Inseason announcements will be broadcast over radio station KSDP (frequency 830 AM) in Sand Point and translated over K201DA (88.1 MHz FM) in King Cove, and on VHF channels 6 and 73 daily at 9:30 AM and 5:00 PM. Recorded information may also be obtained from ADF&G in Sand Point at 907-383-2334 (383-ADFG) and Cold Bay at 907-532-2419. Announcements can also be found at the following website:

<http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareaakpeninsula.salmon>.

## HARVEST REPORTING

All buyers must report their salmon purchases daily by species (in both numbers of fish and pounds), and number of deliveries by gear type to either the ADF&G office in Sand Point or Cold Bay (5 AAC 39.130 (c)). Buyers must provide the department with catch reports by 9:30 AM the morning after purchases take place. However, earlier reporting is appreciated and helpful in conducting an orderly fishery. Contact can be made over VHF 6 and SSB 3.230 MHz. Buyers may also phone, fax, or e-mail their information to ADF&G offices in Sand Point or Cold Bay.

Sand Point Phone: 907-383-2066 Fax: 907-383-2606 E-mail: aaron.poetter@alaska.gov

Cold Bay Phone: 907-532-2419 Fax: 907-532-2470 E-mail: matthew.keyse@alaska.gov

Properly filled out fish tickets are essential to the management of these fisheries. An informational packet containing detailed instructions on filling out and submitting fish tickets is available to all fish transporters, tender operators and processor/buyers at ADF&G offices in Sand Point and Cold Bay. Fish tickets must be delivered to the ADF&G offices in Sand Point or Cold Bay (addresses listed below) within seven days of the purchase date.

Alaska Department of Fish and Game  
P.O. Box 129  
Sand Point, AK 99661

Alaska Department of Fish and Game  
P.O. Box 50  
Cold Bay, AK 99571

## **ALASKA BOARD OF FISHERIES REGULATION CHANGES FROM THE FEBRUARY 2010 MEETING**

During the February 2010 meeting, the Alaska Board of Fisheries (board) made no changes to the June Management Plan (5AAC 09.365). The board did, however, increase the length of seine lead that can be used with set gillnet gear from 10 fathoms to 25 fathoms. This gear modification will be in effect for the entire salmon fishing season in waters within the South Alaska Peninsula Management Area.

### **2011 MANAGEMENT PLAN**

The South Unimak and Shumagin Islands June Fishery Management Plan (5 AAC 09.365) is in effect from June 7 through June 29. Complete details can be found in the Alaska Peninsula commercial salmon fishing regulations available at your local ADF&G office.

The South Unimak June fishery includes the following locations (Figure 1):

- a. Unimak District as described in 5 AAC 09.200 (c);
- b. Bechevin Bay Section as described in 5 AAC 09.200 (b)(2);
- c. Southwestern District as described in 5 AAC 09.200 (d), and;
- d. West Pavlof and East Pavlof Bay sections of the South Central District as described in 5 AAC 09.200 (e)(1) and (2).

The Shumagin Islands fishery includes the Shumagin Islands Section of the Southeastern District (Figure 1) as described in 5 AAC 09.200 (f)(3).

Fishing periods for the 2011 June fishery will be as follows (Figure 2):

| <u>Dates and Times</u>                                      | <u>Duration</u> |
|---|-----------------|
| 6:00 AM Tuesday, June 7 until 10:00 PM Friday, June 10      | 88 hours        |
| 6:00 AM Sunday, June 12 until 10:00 PM Wednesday, June 15   | 88 hours        |
| 6:00 AM Friday, June 17 until 10:00 PM Monday, June 20      | 88 hours        |
| 6:00 AM Wednesday, June 22 until 10:00 PM Saturday, June 25 | 88 hours        |
| 6:00 AM Monday, June 27 until 10:00 PM Wednesday, June 29   | 64 hours        |

Fishermen should be aware that waters closed to commercial salmon fishing, as specified under 5 AAC 09.350 are in effect during June.

Latitude and longitude coordinates in the Alaska Peninsula Management Area will be determined and enforced using the Global Positioning System (GPS; North American Datum of 1983).

Gillnet fishermen are reminded that the South Unimak and Shumagin Islands June fisheries are the only fisheries in the South Peninsula that have no minimum gillnet mesh size restrictions.



## **TABLES AND FIGURES**

Table 1.–Number of salmon commercially harvested in the South Unimak June fishery, by species, 2001–2010.

| Year      | Number of Fish <sup>a</sup> |           |      |         |         |           |
|-----------|-----------------------------|-----------|------|---------|---------|-----------|
|           | Chinook                     | Sockeye   | Coho | Pink    | Chum    | Total     |
| 2001      | 134                         | 121,547   | 2    | 31,812  | 36,099  | 189,594   |
| 2002      | 433                         | 356,157   | 3    | 33,789  | 201,211 | 591,593   |
| 2003      | 373                         | 335,903   | 14   | 90,161  | 121,169 | 547,620   |
| 2004      | 670                         | 531,955   | 159  | 78,808  | 130,626 | 742,218   |
| 2005      | 790                         | 437,443   | 56   | 403,815 | 143,799 | 985,903   |
| 2006      | 1,472                       | 491,053   | 432  | 186,096 | 96,016  | 775,069   |
| 2007      | 976                         | 737,642   | 151  | 57,032  | 153,334 | 949,135   |
| 2008      | 1,317                       | 1,064,570 | 152  | 800,265 | 284,449 | 2,150,753 |
| 2009      | 1,394                       | 595,221   | 6    | 946,823 | 200,783 | 1,744,227 |
| 2010      | 1,474                       | 487,880   | 1    | 190,649 | 100,427 | 780,431   |
| 2001-2010 |                             |           |      |         |         |           |
| Average   | 903                         | 515,937   | 98   | 281,925 | 146,791 | 945,654   |

<sup>a</sup> Numbers of salmon do not include test fish catches.

Table 2.–Number of salmon commercially harvested in the Shumagin Islands June fishery, by species, 2001–2010.

| Year      | Number of Fish <sup>a</sup> |         |       |           |         |           |
|-----------|-----------------------------|---------|-------|-----------|---------|-----------|
|           | Chinook                     | Sockeye | Coho  | Pink      | Chum    | Total     |
| 2001      | 211                         | 29,085  | 0     | 7,439     | 12,251  | 48,986    |
| 2002      | 2,010                       | 234,949 | 1     | 42,462    | 177,606 | 457,028   |
| 2003      | 950                         | 117,244 | 139   | 127,739   | 161,269 | 407,341   |
| 2004      | 3,753                       | 816,118 | 462   | 281,108   | 351,683 | 1,453,124 |
| 2005      | 2,265                       | 566,952 | 1,863 | 1,251,144 | 284,031 | 2,106,255 |
| 2006      | 3,025                       | 441,238 | 2,197 | 1,146,223 | 203,811 | 1,796,494 |
| 2007      | 3,660                       | 852,198 | 1,482 | 210,496   | 144,205 | 1,212,041 |
| 2008      | 1,640                       | 649,005 | 26    | 1,171,003 | 126,483 | 1,948,157 |
| 2009      | 2,442                       | 572,697 | 197   | 1,301,732 | 495,992 | 2,373,060 |
| 2010      | 1,644                       | 330,985 | 26    | 141,786   | 171,273 | 645,714   |
| 2001-2010 |                             |         |       |           |         |           |
| Average   | 2,160                       | 461,047 | 639   | 568,113   | 212,860 | 1,244,820 |

<sup>a</sup> Numbers of salmon do not include test fish catches.

Table 3.—Number of salmon commercially harvested in the South Unimak and Shumagin Islands June fisheries, by species, 2001–2010.

| Year      | Number of Fish <sup>a</sup> |           |       |           |         | Total     |
|-----------|-----------------------------|-----------|-------|-----------|---------|-----------|
|           | Chinook                     | Sockeye   | Coho  | Pink      | Chum    |           |
| 2001      | 345                         | 150,632   | 2     | 39,251    | 48,350  | 238,580   |
| 2002      | 2,443                       | 591,106   | 4     | 76,251    | 378,817 | 1,048,621 |
| 2003      | 1,323                       | 453,147   | 153   | 217,900   | 282,438 | 954,961   |
| 2004      | 4,423                       | 1,348,073 | 621   | 359,916   | 482,309 | 2,195,342 |
| 2005      | 3,055                       | 1,004,395 | 1,919 | 1,654,959 | 427,830 | 3,092,158 |
| 2006      | 4,497                       | 932,291   | 2,629 | 1,332,319 | 299,827 | 2,571,563 |
| 2007      | 4,636                       | 1,589,840 | 1,633 | 267,528   | 297,539 | 2,161,176 |
| 2008      | 2,957                       | 1,713,575 | 178   | 1,971,268 | 410,932 | 4,098,910 |
| 2009      | 3,836                       | 1,167,918 | 203   | 2,248,555 | 696,775 | 4,117,287 |
| 2010      | 3,118                       | 818,865   | 27    | 332,435   | 271,700 | 1,426,145 |
| 2001-2010 |                             |           |       |           |         |           |
| Average   | 3,063                       | 976,984   | 737   | 850,038   | 359,652 | 2,190,474 |

<sup>a</sup> Numbers of salmon do not include test fish catches.

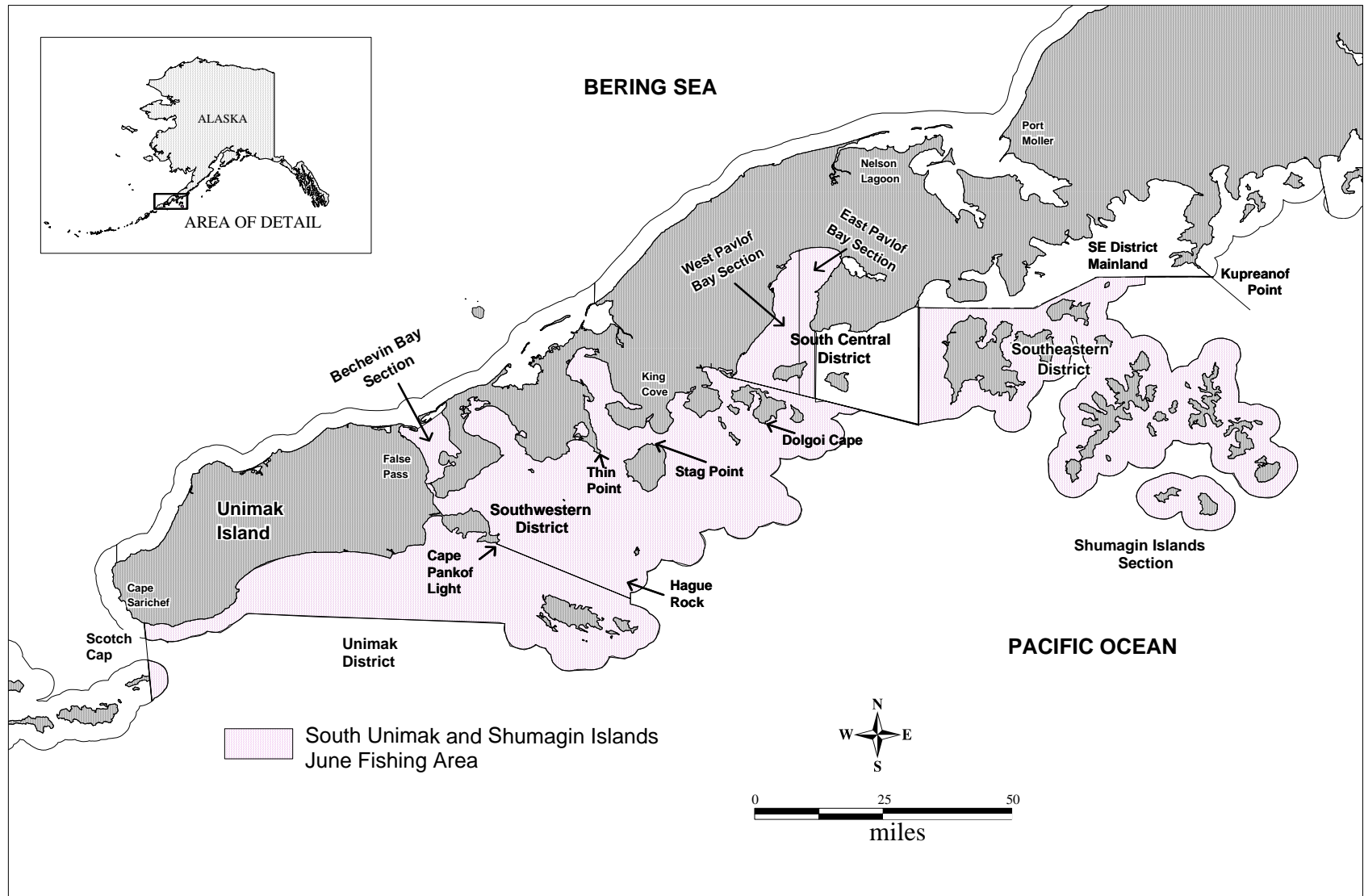


Figure 1.—Map depicting the locations of the South Unimak and Shumagin Islands June fisheries.

| June  |               |               |               |               |          |          |               |
|---|---------------|---------------|---------------|---------------|----------|----------|---------------|
| Sunday  | Monday        | Tuesday       | Wednesday     | Thursday      | Friday   | Saturday |               |
| Notes:<br>All fishing periods start at 6:00 AM and end at 10:00 PM.<br>All closures between fishing periods are for 32 hours. |               |               | 1             | 2             | 3        | 4        |               |
|   |               |               |               |               |          |          |               |
| 5   | 6             | 7             | 8             | 9             | 10       | 11       |               |
|   |               | 6:00 AM       | Open 88 hours |               |          | 10:00 PM |               |
| 12  | 13            | 14            | 15            | 16            | 17       | 18       |               |
| 6:00 AM   | Open 88 hours |               |               | 10:00 PM      |          | 6:00 AM  | Open 88 hours |
| 19  | 20            | 21            | 22            | 23            | 24       | 25       |               |
|   | 10:00 PM      |               | 6:00 AM       | Open 88 hours |          |          | 10:00 PM      |
| 26  | 27            | 28            | 29            | 30            |          |          |               |
|   | 6:00 AM       | Open 64 hours |               |               | 10:00 PM |          |               |

Figure 2.–Fishing time in South Unimak and Shumagin Islands June fisheries, 2011.