UPPER COOK INLET
2012 OUTLOOK FOR COMMERCIAL SALMON FISHING

SOCKEYE SALMON
A run of 6.2 million sockeye salmon is forecasted to return to Upper Cook Inlet (UCI) in 2012, with a harvest by all user groups of 4.4 million. The forecasted harvest in 2012 is about 0.4 million fish above the 20-year average harvest by all user groups of 4.0 million.

The run forecast for the Kenai River is 4.0 million, which is 6% greater than the 20-year average run of 3.8 million. Age-1.3 sockeye salmon typically comprise about 63% of the run to the Kenai River. Age-2.3 sockeye salmon typically comprise about 19% of the run to the Kenai River. The predominant age classes in the 2012 run should be age 1.3 (50%), age 1.2 (8%), and age 2.3 (35%).

The 10-year Mean Absolute Percent Error (MAPE) for the set of models used for the 2012 Kenai sockeye salmon run forecast was 23%.

The sockeye salmon run forecast for the Kasilof River is 754,000, which is 21% less than the 20-year average run of 950,000. Age-1.3 sockeye salmon typically comprise about 35% of the run to the Kasilof River. The forecast for age-1.3 sockeye salmon is 255,000, which is 23% less than the 20-year average return (332,000) for this age class. Age-1.2 sockeye salmon typically comprise about 30% of the run. The forecast for age-1.2 sockeye salmon is 148,000, which is 47% less than the 20-year average return (280,000) for this age class. Age-2.2 sockeye salmon typically comprise about 24% of the run. The forecast for age-2.2 sockeye salmon is 253,000, which is 12% greater than the 20-year average return (227,000) for this age class. The predominant age classes in the 2012 run should be age 1.2 (20%), age 1.3 (34%), and age 2.2 (34%). The 10-year MAPE for the set of models used for the 2012 Kasilof sockeye salmon run forecast was 17%.

The sockeye salmon run forecast for the Susitna River is 443,000, which is 50% less than the 20-year average run of 881,000. This forecast was derived from historical aggregate weir counts rather than sonar and age composition catch allocation models, because recent mark–recapture studies have shown that the Yentna sonar project underestimated sockeye salmon escapement,
causing estimates of adult returns to also be underestimated. Although, this is only the third year a weir-based method has been used, the MAPE for this method based on 2010–2011 data was 41%. The 20-year average run was calculated by expanding sonar abundance estimates using mark–recapture and genetic stock composition estimates.

The sockeye salmon run forecast for Fish Creek is 84,000, which is 27% less than the 20-year average run of 116,000. Age-1.2 and -1.3 sockeye salmon typically comprise 78% of the run to Fish Creek. The age-1.2 forecast is 38% less than the 20-year average return (61,000) for this age class, while the age-1.3 forecast is 5% less than the 20-year average return (30,000) for this age class. The predominant age classes in the 2012 run should be age 1.2 (44%), age 1.3 (34%), and age 2.2 (14%).

The sockeye salmon run forecast for Crescent River is 81,000, which is 27% less than the 20-year average run of 110,000. Age-1.3 and -2.3 sockeye salmon typically comprise 75% of the run to Crescent River. The predominant age classes in the 2012 run should be age 1.3 (46%) and age 2.3 (26%).

Forecast runs to individual freshwater systems are as follows:

<table>
<thead>
<tr>
<th>System</th>
<th>Run</th>
<th>Goals a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crescent River</td>
<td>81,000</td>
<td>30,000–70,000</td>
</tr>
<tr>
<td>Fish Creek</td>
<td>84,000</td>
<td>20,000–70,000</td>
</tr>
<tr>
<td>Kasilof River b, c</td>
<td>754,000</td>
<td>160,000–390,000</td>
</tr>
<tr>
<td>Kenai River b</td>
<td>4,026,000</td>
<td>1,000,000–1,200,000</td>
</tr>
<tr>
<td>Susitna River</td>
<td>443,000</td>
<td></td>
</tr>
<tr>
<td>Larson Lake</td>
<td>N/A</td>
<td>15,000–50,000</td>
</tr>
<tr>
<td>Chelatna Lake</td>
<td>N/A</td>
<td>20,000–65,000</td>
</tr>
<tr>
<td>Judd Lake</td>
<td>N/A</td>
<td>25,000–55,000</td>
</tr>
<tr>
<td>Unmonitored</td>
<td>808,000</td>
<td>N/A</td>
</tr>
<tr>
<td>Total</td>
<td>6,196,000</td>
<td></td>
</tr>
</tbody>
</table>

a Goals listed here are as follows, Crescent River: BEG; Fish Creek: SEG; Kasilof River: OEG; Kenai River: Inriver; and Susitna River: SEG (weir goals).
b Kasilof and Kenai rivers escapement goals are now DIDSON-based.
c Kasilof River biological escapement goal is 160,000 to 340,000 sockeye salmon.

OTHER SPECIES’ HARVEST PROJECTIONS

Very little information is available on which to base outlooks for the commercial harvests of the other salmon species. Using recent harvest trends and factoring in the expected intensity of the sockeye-based fishery, the following numbers represent our best estimate of the 2012 harvest:

- Pink Salmon 334,000
- Chum Salmon 113,000
- Coho Salmon 159,000
- Chinook Salmon 12,000
REGULATORY CHANGES AND FISHING STRATEGY

There were several regulatory changes made by the Alaska Board of Fisheries (board) during the 2011 meeting, with additional modifications made after the 2011 season. The following summary is for informational purposes only and is not a comprehensive review. Regulation booklets covering the UCI commercial fishery are currently available at the Anchorage, Soldotna, and Homer ADF&G offices. Fishermen should consult the new regulations to see how their specific fishery may have changed.

Northern District Set Gillnet

- The Northern District king salmon fishery will open on the first Monday on or after May 25. The area from a point at the wood chip dock located approximately at 61° 02.56' N. lat., 151° 14.36' W. long., to the Susitna River is closed to commercial king salmon fishing for 2012. Furthermore, the four commercial king salmon fishing periods scheduled in 2012 have been reduced in duration from 12 hours per fishing period to 6 hours per period, and will be from 7:00 a.m. to 1:00 p.m. All of the Northern District will return to a regular fishing schedule beginning on June 25.

- Susitna River sockeye salmon remain a stock of yield concern. The Susitna River Sockeye Salmon Action Plan requires the Northern District set gillnet fishery to fish with no more than one net per permit from July 20 through August 6. At the 2011 BOF meeting, the board modified this restriction, allowing for that portion of the General Subdistrict south of the Susitna River to fish with no more than two nets per permit after July 30. All areas in the Northern District return to a full complement of gear after August 6.

Central District Fisheries

Upper Subdistrict Set Gillnet Fishery

Kasilof Section Prior to July 8

- The Kasilof Section opens on the first regular period on or after June 25, unless the department estimates that 50,000 sockeye salmon are in the Kasilof River prior to that date, at which time the commissioner may open the fishery, by Emergency Order (EO); however, the fishery may not open earlier than June 20.

- From June 25 through July 7, the department may not allow more than 48 hours of additional fishing time per week (Sunday through Saturday) and must close the fishery for 36 consecutive hours per week, which will begin between 7:00 p.m. on Thursdays and 7:00 a.m. on Fridays.

- Beginning July 8, or after the Kenai and East Forelands Sections open, the Kasilof Section will be managed in combination with the Kenai and East Forelands Sections.

Kenai, Kasilof and East Forelands Sections

After July 8, or after the Kenai and East Forelands Sections fishing season opens, the following fishing scenarios are possible depending on the sockeye salmon run strength to the Kenai River. For 2012, the projection to the Kenai River is 4.0 million sockeye salmon. Therefore, the season will be managed with guidelines outlined below for runs between 2.3
and 4.6 million sockeye salmon. The Kenai River sockeye salmon run will then be reassessed after July 20 to verify inseason run strength.

- If the Kenai assessment shows the run to be **less than 2.3 million Kenai sockeye salmon**, there will be no more than 24 hours of additional fishing time per week in the Upper Subdistrict and there are no mandatory window closures. If the Kenai and East Forelands Sections are not fished during regular or additional openings, the department may limit regular and additional periods in the Kasilof Section to within one-half mile of shore. If the Kasilof escapement is projected to exceed 390,000 fish, 24-hours of additional fishing time per week is available after July 15 within one-half mile of shore in the Kasilof Section.

- If the Kenai assessment is between **2.3 and 4.6 million Kenai sockeye salmon**, the Department may allow up to 51 hours of additional fishing time per week and will close the Upper Subdistrict for a 36-hour closed period per week, which will begin between 7:00 p.m. on Thursdays and 7:00 a.m. on Fridays. In addition there will be a second 24-hour closed period per week on Tuesdays. If the Kenai and East Forelands Sections are not fished, the department may limit regular and extra periods in the Kasilof Section to within one-half mile of shore.

- If the Kenai assessment changes to a run of **more than 4.6 million Kenai sockeye salmon**, the department may allow up to 84 hours of additional fishing time per week and will close the Upper Subdistrict for a 36-hour closed period each week, which will begin between 7:00 p.m. on Thursdays and 7:00 a.m. on Fridays. There are no other mandatory windows at this run strength. If the Kenai and East Forelands Sections are not fished, the department may limit regular and extra periods in the Kasilof Section to within one-half mile of shore.

- The Upper Subdistrict set gillnet fishery will close no later than August 15 and all restrictions and additional time regulations from July carry over into August, except that the fishery is restricted to regular periods only from August 11–15. However, the season will close any time after July 31, if during two consecutive fishing periods (defined as a calendar day); the sockeye salmon harvest is less than 1% of the season total.

**Central District Drift Gillnet Fishery**

- The drift fishery opens the third Monday in June or June 19, whichever is later.

- From July 9 through July 15,
  - Drift gillnet fishing is restricted for the first regular fishing period to the Expanded Kenai and Expanded Kasilof Sections (Figure 1) described below.
  - Drift gillnet fishing is restricted for the second regular fishing period to the Kenai and Kasilof Sections (Figure 2) and Drift Area One (Figure 3) described below.
  - Additional fishing time between the first restricted period and the second period during this time frame may be allowed in the Expanded Kenai and Expanded Kasilof Sections.
  - In runs of over 2.3 million sockeye salmon to the Kenai River, there may be one additional 12-hour period in the Kenai and Kasilof Sections of the Upper Subdistrict and in Drift Area One.
From July 16 through July 31,

- In runs of less than 2.3 million sockeye salmon to the Kenai River, there will be one regular 12-hour fishing period restricted to the Expanded Kenai and Expanded Kasilof Sections of the Upper Subdistrict;
- In runs of between 2.3 and 4.6 million sockeye salmon to the Kenai River, there will be one regular 12-hour fishing period per week restricted to either or both the Expanded Kenai or the Expanded Kasilof Sections of the Upper Subdistrict, or the fishery will be restricted to Drift Area One, but drifting may not occur in both Drift Area One and the Expanded corridors together during this restricted fishing period;
- In runs of greater than 4.6 million sockeye salmon to the Kenai River, there are no mandatory restrictions.

From August 16 until closed by emergency order,

- Drift Areas three & four (Figure 4) are open for regular periods;
- Chinitna Bay may be opened by emergency order.

**New Drift Gillnet Fishing Areas**

1.) Expanded Kenai Section: all waters enclosed by a line from a point located on the shore at 60° 40.35' N. lat., 151° 23.00' W. long. then west to a point located at 60° 40.35' W. long., south to a point at the latitude of the Blanchard line located at 60° 27.10' N. lat., 151° 33.76' W. long. east to a point on the beach at 60° 27.10' N. lat., 151° 16.94' W. long.

2.) Expanded Kasilof Section: all waters enclosed by a line from a point on the beach at 60° 27.10' N. lat., 151° 16.94' W. long., west to a point at the Blanchard line located at 60° 27.10' N. lat., 151° 33.76' W. long., south to a point located at 60° 04.02' N. lat., 151° 46.60' W. long., east to an ADF&G regulatory marker located at 60° 04.02' N. lat., 151° 38.90' W. long.

**Other regulatory changes include:**

- Permit stacking for set gillnets was authorized.
- A pink salmon fishery may occur during even years for both drift and set gillnets; mesh size restriction not to exceed 4¾ inches apply; in the Upper Subdistrict, fishing is not allowed within 600 feet of shore.
- After July 8, the Kasilof River Special Harvest Area may be fished for up to 48 hours, followed by a 24-hour closure, without an escapement trigger, if fish are present in sufficient numbers.
- The sockeye salmon escapement trigger for opening the Kasilof River Special Harvest Area to commercial fishing without limitation is now 365,000 fish.
- In the Kasilof Section, after July 8, if further restrictions beyond the one-half mile fishery are necessary to aid in achieving the lower end of the Kenai River escapement...
goal, this area may be further restricted to fishing within 600 feet of the high tide mark in the Kasilof Section.

- The board redefined what constitutes a fishing period for determining when the Upper Subdistrict set gillnet fishery may close after July 31 based on the 1% rule. A fishing period is now defined as a time period open to commercial fishing not to exceed 24-hours per calendar day.

**SET NET REGISTRATION AND BUOY STICKERS**

*All Cook Inlet setnet fishermen* are required to register prior to fishing for one of three areas of Cook Inlet: 1) the Upper Subdistrict of the Central District; 2) the Northern District; or, 3) all remaining areas of Cook Inlet (Greater Cook Inlet). Once registered for one of these three areas, fishermen may fish only in the area for which they are registered for the remainder of the year. No transfers will be permitted. Set gillnet permit holders fishing in the Northern District or the Greater Cook Inlet area can register at Department offices in Soldotna, Homer, or Anchorage or by mail. Forms are available at area offices or on the department’s homepage at [http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareauci.salmon#management](http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareauci.salmon#management). Fishermen wishing to register in the Upper Subdistrict must register in the Soldotna ADF&G office only, and must purchase buoy stickers at the time of registering.

**SEASON OPENING DATES**

Season opening dates in 2012 for the various fisheries around the inlet are as follows:

- **Big River Fishery:** June 1 and continuing through June 24, unless the 1,000 Chinook salmon harvest limit is reached prior to that date. Weekly fishing periods are Mondays, Wednesdays, and Fridays from 7:00 a.m. to 7:00 p.m.

- **Northern District King Salmon Fishery:** May 28. There will be up to four fishing periods in 2012, with the remaining periods scheduled for June 4, 11, and 18. Weekly fishing periods are Mondays only from 7:00 a.m. to 1:00 p.m. The area from a point at the wood chip dock, located approximately at 61° 02.56' N. lat., 151° 14.36' W. long., to the Susitna River, is closed for the directed king salmon fishery in 2012.

- **Northern District Regular Season Salmon Fishery:** June 25.

- **Western Subdistrict Set Net Fishery:** June 18.

- **All remaining set gillnet fisheries, except the Upper Subdistrict:** June 25.

- **Upper Subdistrict Set Net Fishery:** June 25 for the Kasilof Section (that portion south of the Blanchard Line), unless opened earlier by EO (based on 50,000 sockeye salmon estimated in the Kasilof River before the June 25 opener), but will not open before June 20. The Kenai and East Forelands Sections (that portion of the Upper Subdistrict north of the Blanchard Line) will open July 9. All sections of the Upper Subdistrict will close for the season on or before August 15.

- **Drift Gillnet Fishery:** June 21.
GENERAL INFORMATION

The UCI commercial fisheries information line will again be available by calling 262-9611. The most recent emergency order announcement is always available on the recorded message line and catch, escapement and test fishing information is included whenever possible. All emergency order announcements are also faxed to processors as quickly as possible and posted to the Upper Cook Inlet web page at http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareauci.main. For very general information, we invite you to visit the Commercial Fisheries web page on the Internet at http://www.adfg.alaska.gov/index.cfm?adfg=fishingcommercial.main.

If, during the summer, fishermen have information or questions concerning the commercial fishery, the Soldotna Division of Commercial Fisheries staff can be reached by phone at 262-9368, by fax at 262-4709, or by mail at 43961 Kalifornsky Beach Road, Suite B, Soldotna, 99669.
Latitude and Longitude are based on the North American Datum of 1983 (NAD 83), which is equivalent to the World Geodetic System 1984 (WGS 84).

Figure 1. Map of the Expanded Kenai and Expanded Kasilof Sections with waypoint descriptions.
Latitude and Longitude are based on the North American Datum of 1983 (NAD 83), which is equivalent to the World Geodetic System 1984 (WGS 84).

Figure 2. Map of the Kenai and Kasilof Sections with waypoint descriptions.
### Drift Gillnet Area 1 & Area 2 Descriptions

<table>
<thead>
<tr>
<th>AREA DESCRIPTION</th>
<th>COORDINATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Southwest Corner</td>
<td>$60^0 20.43'$ N. lat., $151^0 54.83'$ W. long.</td>
</tr>
<tr>
<td>2. Northwest Corner</td>
<td>$60^0 41.08'$ N. lat., $151^0 39.00'$ W. long.</td>
</tr>
<tr>
<td>3. Northeast Corner</td>
<td>$60^0 41.08'$ N. lat., $151^0 24.00'$ W. long.</td>
</tr>
<tr>
<td>4. Blanchard Line Corridor Boundary</td>
<td>$60^0 27.10'$ N. lat., $151^0 25.70'$ W. long.</td>
</tr>
<tr>
<td>5. Southeast Corner</td>
<td>$60^0 20.43'$ N. lat., $151^0 28.55'$ W. long.</td>
</tr>
</tbody>
</table>

Figure 3. Map of drift gillnet fishing areas one and two.
Figure 4. Map of the drift gillnet areas open beginning August 16.