Commercial Salmon Troll Fishery in Southeast Alaska

Alaska Board of Fisheries
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RC 3 – Tab 3

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Division of Commercial Fisheries
Commercial Salmon Troll Fishery

• Targets primarily king and coho salmon

• Chum salmon have become an important part of troll harvest in recent years

• King salmon harvest regulated under terms of Pacific Salmon Treaty (PST)

• Coho harvest managed for conservation and allocation among user groups
Troll Seasons and Fisheries

• WINTER SEASON DATES: October 1–April 30
  – Winter fishery: October 11–April 30
  – or until Guideline Harvest Level (GHL) of 45,000 king salmon are harvested

• SUMMER SEASON DATES: May 1–Sept. 30
  – Spring Fishery: May 1–June 30; can start earlier if winter fishery closes prior to April 30
  – Summer Fishery: July 1–Sept. 20
  – Coho retention begins June 15
Troll Permits Fished By Season

![Graph showing the number of permits fished by season from 1980 to 2011 for General Summer, Spring Fishery, and Winter Fishery.]
King Salmon Quota

• PST calls for abundance-based management of Southeast Alaska (SEAK) king salmon fisheries

• Chinook Technical Committee of the Pacific Salmon Commission determines the annual preseason abundance index (AI) using a statistical model

• AI equates to annual all-gear PST quota for SEAK

• King salmon quota is allocated among gear groups according to board regulations

• King salmon accounting year is October–September
King Salmon Allocation between Gear Groups

• Purse Seine = 4.3% of all-gear PST quota
• Drift Gillnet = 2.9% of all-gear PST quota
• Set Gillnet = 1,000 fish (historical average)
• Net gear total subtracted from all-gear quota
• Remainder split between **Troll** and **Sport** fisheries, giving 80% to troll, 20% to sport
All-Gear King Salmon Harvest

In 1996 and 1997, harvest ranges were used as per the U.S. LOA. Ranges were 140,000-155,000 in 1996 and 277,000-302,000 in 1997; the midpoints were used as targets here.
Winter Fishery Open Waters

Winter Troll Surfline

ALL WATERS CLOSED NORTH OF CAPE SPENCER, EXCEPT YAKUTAT BAY

Derric’s Bay
15-B closed
11-A open until April 14
Portion of 11-A closed
11-B open only Oct 11 – Mar 31

Stikine River, Portions of 8-A and 8-B closed

1-D Closed
Winter King Salmon Fishery

• Characterized by relatively low harvest and effort
• Higher AK hatchery contribution than in summer
• 2011 first time since 2006 that fishery closed before April 30, due to GHL being reached
  – Fishery closed on April 20

<table>
<thead>
<tr>
<th></th>
<th>Harvest</th>
<th>Alaska Hatchery %</th>
<th>Permits Fished</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>50,800</td>
<td>7%</td>
<td>464</td>
</tr>
<tr>
<td>5-year average</td>
<td>39,000</td>
<td>11%</td>
<td>456</td>
</tr>
</tbody>
</table>
Proposal - Winter Fishery

• **310**: Amend winter king salmon guideline harvest level (GHL) from 45,000 *total* fish to 45,000 *PST* fish.
  – PST fish are non-AK hatchery fish
  – GHL currently includes AK hatchery component
  – Proposal would add AK hatchery component to 45,000 fish GHL
  – Average AK hatchery contribution from 1985–2011 is 3,800 fish

*(NEUTRAL)*
Spring Fishery

- Designed to target Alaska hatchery-produced king salmon and includes both “spring” and “terminal” fishery areas
- Spring fisheries are opened along migration routes or close to hatchery and release sites
- Terminal area fisheries occur directly in front of hatcheries or remote-release sites during spring and may remain open in summer
- Most inside waters of the region are open to troll gear in spring
2011 Spring Troll Fisheries
## Spring Troll Summary

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Harvest</th>
<th>Alaska Hatchery Harvest</th>
<th>Total Alaska Hatchery Percent</th>
<th>Number of Spring Areas</th>
<th>Number of Terminal Areas</th>
<th>Permits Fished</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>32,581</td>
<td>12,374</td>
<td>39%</td>
<td>27</td>
<td>5</td>
<td>557</td>
</tr>
<tr>
<td>2010</td>
<td>28,614</td>
<td>11,161</td>
<td>41%</td>
<td>27</td>
<td>5</td>
<td>546</td>
</tr>
<tr>
<td>2011</td>
<td>38,940</td>
<td>14,948</td>
<td>42%</td>
<td>28</td>
<td>5</td>
<td>592</td>
</tr>
</tbody>
</table>

• Spring fisheries are managed individually on a weekly basis by emergency order
• Opening lengths are based on cumulative harvest and Alaska hatchery composition
Proposal-Spring Chum Fisheries

• **325**: Redirect spring troll fishery management from Alaska hatchery-produced king salmon to chum salmon in 4 existing Icy Strait fishery areas.
  – Icy Strait is migration corridor, not terminal area
  – Chum troll fishery in Icy Strait began in 2010
  – 86% to 90% of troll chum harvest in Icy Strait were of hatchery origin in 2010–2011; some wild chum were also harvested
  – Also create 2 new areas in Chatham Strait to target chum salmon

*(OPPOSE)*
Icy Strait Chum Troll Fishery

Icy Strait- Directed Troll Chum Fishery

- 2010- Harvest
- 2011- Harvest
- 2010- Permits
- 2011- Permits

Week of:
- 6-Jun
- 13-Jun
- 20-Jun
- 27-Jun
- 4-Jul
- 11-Jul

Chum Harvest

Permits Fished
Proposal-Spring Fishery

• **283**: Allow a limited spring troll fishery in Yakutat Bay regardless of the Situk River king salmon run projection.
  – Currently, Situk River run projection must be greater than 1,050 large kings before a spring troll fishery can occur
  – Since board adopted current regulations in 2006, run projections have been too low to allow a spring fishery in Yakutat Bay

*(NEUTRAL)*
Directed King Salmon Fisheries

- **2005**: Agreement was approved between United States and Canada allowing directed commercial and sport fisheries on king salmon returning to the Stikine and Taku Rivers (Districts 8 and 11) during the spring.

- **2006**: Management plans were adopted by board for commercial and sport fisheries in Districts 8 and 11.
Directed King Salmon Fisheries

• Taku and Stikine River directed fisheries may open in early May if preseason forecast results in a large enough allowable catch (AC)

• **Taku River**: directed commercial fisheries were allowed in 2005, 2006, 2009

• **Stikine River**: directed commercial fisheries were allowed in 2006, 2007, 2008

• **2012**: ACs are large enough to allow limited directed fisheries in districts 8 and 11
Proposals - District 11 King Salmon Management Plan

• 284: Increase *fishing time* for troll gear when directed Taku River king salmon fishery is open in Sections 11-A and 11-B. (NEUTRAL)

• 320: Increase *area* open to troll gear in Section 11-A when the directed Taku River king salmon fishery is open. (NEUTRAL)
Summer Troll Fishery

- Harvest and effort peak during summer
- Most waters of the region open to troll gear
- King, coho, and chum salmon targeted
- July 1–September 20
- Season can be extended through September 30 in years of high coho salmon abundance
Offshore Waters Open in Summer
Summer King Salmon Fishery

• The summer king salmon fishery is managed to take 70% of the remaining king harvest during the initial king salmon retention period beginning on July 1, after PST catch in the winter and spring fisheries is subtracted from the annual troll harvest allocation.

• Remaining 30% is to be taken during the second king salmon retention period in mid-August

• Second retention period follows any coho closure that occurs

• If no closure is necessary for coho conservation, a closure of at least 2 days occurs prior to 2nd king opening and begins no later than August 20
Coho Salmon Fishery

• Several proposals seek to modify coho season dates and management:
  – Start season 2 weeks earlier in June
  – Extend coho season by 2 weeks in September
  – Modify inseason closure lengths

• Coho season has been extended in 10 of the past 18 years

• Inseason closures have ranged from 0–10 days since 1993 and from 4–5 days since 2005
Coho Fishery Season Dates

• **311**: Allow troll coho retention beginning June 1 instead of June 15. *(NEUTRAL)*

• **312**: Change length of July and August coho closures from a potential range of days to a predetermined number of days.
  
  – 7-day closure in late July if run strength projected to be less than 1.1 million
  
  – 10-day closure in mid-August

  – Closure length would no longer vary with coho abundance

  *(NEUTRAL)*
Proposals - Extend Coho Season

• 313: Change regional troll closure date from September 20 to September 30, though season could close sooner if warranted. (NEUTRAL)

• 314: Allow trolling in portions of Districts 1, 6, and 8 from September 21–30.
  – If a district is open to drift gillnet gear, it would be open to troll gear as well. (OPPOSE)

• 317: Allow trolling in a portion of West Behm Canal from September 21–30. (OPPOSE)
Proposals - Coho Season Dates and Area

• **315**: Allow trolling in a portion of West Behm Canal from September 21–30 and would revise area open to troll gear in West Behm Canal from July 1–September 20. *(OPPOSE)*

• **316**: Revise area open to troll gear in West Behm Canal from July 1–September 20; same as area as described in proposal 315. *(SUPPORT)*

• **318**: Clarify open area in Section 1-F and would correct current regulations. *(SUPPORT)*
Troll Chum Salmon Fishery

Annual Troll Chum Harvest and Price, 2007-2011

- Chum Harvest
- Price

Year:
- 2007
- 2008
- 2009
- 2010
- 2011

Number of Chum Salmon:
- 200,000
- 300,000
- 400,000
- 500,000
- 600,000
- 700,000
- 800,000

Price Per Pound:
- $0.00
- $0.10
- $0.20
- $0.30
- $0.40
- $0.50
- $0.60
- $0.70
- $0.80
- $0.90
West Behm Canal Chum Troll Fishery

Neets Bay/West Behm

<table>
<thead>
<tr>
<th>Year</th>
<th>Troll Chum Harvest</th>
<th>Permits Fished</th>
</tr>
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<tbody>
<tr>
<td>2001</td>
<td>150,000</td>
<td>0</td>
</tr>
<tr>
<td>2002</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2003</td>
<td>180,000</td>
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<td>2004</td>
<td>0</td>
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<td>2005</td>
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<td>2007</td>
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<td>2008</td>
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<tr>
<td>2009</td>
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<tr>
<td>2010</td>
<td>180,000</td>
<td>0</td>
</tr>
<tr>
<td>2011</td>
<td>180,000</td>
<td>0</td>
</tr>
</tbody>
</table>

Number of Chum Salmon vs. Year

Permits Fished vs. Year
Sitka Sound Chum Troll Fishery

2011 chum salmon return to Deep Inlet was lowest since 1992; 2012 forecast 50% higher

![Graph showing Sitka Sound Troll Chum Harvest and Permits over years from 2001 to 2011. The graph illustrates a decline in chum salmon return in 2011, compared to previous years, and a forecasted increase in 2012.]
Proposal - Chum Fishery

• 326: Establish a new troll fishery in Section 11-A to target enhanced chum salmon produced by DIPAC hatchery, near Juneau.
  • July 1–20, during general summer fishery
  • Wild pink salmon would also be retained
  • Area is adjacent to Amalga Harbor
  • Is not highly mixed-stock area; is “terminal”
  • No previous commercial fisheries have been conducted in the proposed area

(Neutral)
Proposals - THAs

• 343: Open Hidden Falls THA to troll gear from August 1–September 20 to harvest coho salmon returning to the hatchery there.
  – THA would remain open during August coho closure with modified boundaries (within mile of shore) *(SUPPORT)*

• 344: Revise western boundary of Deep Inlet THA and lengthen time period in which revision would be in effect.
  – Would increase troll access to enhanced king salmon *(NEUTRAL)*
Proposal - Yakutat Closed Area

• **321**: Adjust northern boundary of area near Situk River, which is closed to troll gear from August 7–September 20.
  
  – River mouth has migrated northward over time
  
  – Proposal is reaction to changing geography
  
  – New northern boundary would be permanent
  
  – Could reallocate coho between gear groups
  
  – Similar proposal (322) submitted by department *(NEUTRAL)*
Proposals - Gear Specifications

• **307**: Allow use of downriggers year-round in hand troll fishery. *(NEUTRAL)*

• **308**: Withdrawn. *(OPPOSE)*

• **309**: Allow more than 4 fishing rods to be onboard hand troll vessel in summer.
  - Following first king salmon retention period
  - Only 4 rods may be operated simultaneously *(SUPPORT)*