Abundance of Susitna River Chinook and Coho Salmon, 2013 - 2015

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Alaska Department of Fish and Game
Division of Sport Fish
Palmer

Oral Report
RC 4
TAB 11
Primary Objectives

Estimate abundance of Chinook and coho – 2013 - 2015

Estimate distribution of Chinook and coho – 2013 - 2015 (Susitna River)

2013 - 2014 (Yentna River)
Methods
Tag deployment and recovery sites 2013

- Susitna RM 34
- Yentna RM 6
- Talachulitna River sonar
- Middle Fork Chulitna River sonar
- Montana Creek weir
- Deshka River weir
- Susitna RM 34

Tagging Recap
Chinook Salmon Abundance Tag deployment and recovery sites 2013

Susitna RM 34 Yentna RM 6
Montana Creek weir

Tagging Recap

Middle Fork Chulitna River sonar

Montana Creek weir

Yentna RM 18 Deshka River weir

Yentna RM 6 Susitna RM 34
Tag deployment and recovery sites
2015

- Susitna RM 34
- Yentna RM 6
- Montana Creek weir
- Deshka River weir
- Yentna RM 18
- Susitna RM 80

- Recap
- Tagging
Susitna River fish wheel
Drift gill netting
Montana Creek weir and PIT tag array
Results
Mainstem Susitna Chinook Abundance

Mainstem Susitna Chinook Abundance Estimation

- 2013: 89,463
- 2014: 68,225
- 2015: 88,580

Sources: Fari, GFO, NOAA, National Geographic, Delorme HERE, GeoNames.org, and others.
Yentna Chinook Abundance

<table>
<thead>
<tr>
<th>Year</th>
<th>Abundance Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>22,267</td>
</tr>
<tr>
<td>2015</td>
<td>48,416</td>
</tr>
</tbody>
</table>
Yentna River

Mainstem Susitna River

Total Chinook Abundance

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Chinook Abundance Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>90,492</td>
</tr>
<tr>
<td>2015</td>
<td>136,996</td>
</tr>
</tbody>
</table>
Average Chinook Abundance
Susitna River 2013 – 2015

Chulitna River
Unit 6

Talkeetna River
Unit 5

Deshka River
Unit 1

Eastside Susitna Unit 2

RM 102.4 – 153.4

Unit 3

RM 34 – 102.4

Unit 1

24%

21%

24%

19%

4%

8%

Average N = 82,089
Coho Salmon Abundance

Yentna River

Mainstem Susitna River
Yentna Coho Abundance

Yentna Coho

<table>
<thead>
<tr>
<th>Year</th>
<th>Abundance Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>73,819</td>
</tr>
<tr>
<td>2014</td>
<td>110,321</td>
</tr>
<tr>
<td>2015</td>
<td></td>
</tr>
</tbody>
</table>
Total Coho Abundance

Mainstem Susitna Coho total Run Estimate

- **2013**
  - Marine harvest: 194,556
  - Abundance Estimate: 194,108

- **2014**
  - Marine harvest: 114,604

- **2015**
  - Marine harvest: 194,108

Sources: Esri, GEBCO, NOAA, National Geographic, Delorme HERE, Geonames.org, and others.
Coho Salmon Harvest Rates

2013
- Sport – 8%
- Commercial – 33%
- Total – 41%

Mainstem Susitna River
Coho Salmon Harvest Rates

2014

- Sport – 12%
- Commercial – 26%
- Total – 38%

Mainstem Susitna River
Coho Salmon Harvest Rates

2015
- Sport – 8%
- Commercial – 20%
- Total – 28%

Mainstem Susitna River
Reports:

Susitna River Chum and Coho 2010 – 2012 – ADF&G
Chinook and Coho 2013 – 2014 – Alaska Energy Authority
Chinook and Coho 2015 – ADF&G (draft)
Chinook 2016 – ADF&G (pending)
Field Season 2017 - Funding

Pacific States Marine Fisheries Commission -(Grant)

Susitna Salmon Research and Enhancement Initiative

SSREI (CIP)
Acknowledgements

Alaska Energy Authority

Susitna Salmon Research and Enhancement Initiative

Dingell-Johnson Program, Alaska Department of Fish and Game, Division of Sport Fish

Alaska Sustainable Salmon Fund/ Pacific Coastal Salmon Recovery Fund