LOOKING TO THE FUTURE

Southeast Cove & Crawfish Projects, Program Changes: The Impact on NSRAA - The next 15 years
NSRAA Board approves a budget of $10.8 million

- Chum fry releases: 277 million
- Chinook smolt: 4.5 million
- Coho smolt: 7.6 million

Update: Value of 2029 catch: $44 million
2030 Spring Board Meeting

- Value of 2029 catch: $44 million
- Commercial: $35.5 million

- Chum: $27.5 million
- Chinook: $4.2 million
- Coho: $3.8 million
2030 Spring Board Meeting

- Value of 2029 catch: $44 million
- Cost Recovery: $8.4 million

- Chum: $5.8 million
- Chinook: $1.0 million
- Coho: $1.6 million
HOW DO WE GET THERE?

Program changes already underway
Changes in progress - Coho

- Sitka area coho
  - growth from 250K to 2M smolt

- Deer Lake coho
  - growth to 2.2M smolt
  - 2013 return was the first glimpse of (recent) success for this project: 247K adult return

- Hidden Falls coho
  - growth to 3.4M smolt
Changes in progress - Coho

- Overall coho release goal is 210% of 2010 levels
- FY15 Release goal is 88% of long-term goal
Changes in progress - Chinook

- Medvejie Chinook program
  - Green Lake rearing expansion from 1M to 2M
    - potential double survival rate
  - Halibut Point Marine releases
    - potential better troll access
Changes in progress - Chinook

- Overall Chinook release goal is 133% of 2010 levels
- FY15 – we have reached long term goal
Changes in progress - Chum

- **Deep Inlet chum**
  - Currently: 77M eggs or ~70 M fry
  - New BY14: 86M eggs or ~78 M fry
  - **9M egg increase** or ~8.5M fry

- **Southeast Cove chum**
  - Currently: 10M eggs or ~9.4 M fry
  - New BY14: 15M eggs or ~14.1 M fry
  - **5M egg increase** or ~4.7M fry

**Potential Adults**

<table>
<thead>
<tr>
<th>Area</th>
<th>Adults</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DI</strong></td>
<td>212,500</td>
<td>$995,000</td>
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<tr>
<td>New BY14</td>
<td></td>
<td>2.5% ms, 7.8 lb avg, $0.60</td>
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<tr>
<td><strong>SEC</strong></td>
<td>117,500</td>
<td>$550,000</td>
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<tr>
<td>New BY14</td>
<td></td>
<td>2.5% ms, 7.8 lb avg, $0.60</td>
</tr>
<tr>
<td><strong>Both</strong></td>
<td>330,000</td>
<td>$1.5 million</td>
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</tbody>
</table>

Total 330,000 Value $1.5 million
Changes in progress - Chum

- Combined, Chum release goal will eventually be 194% of 2010 levels*
- FY15 – release goal is 67% of long-term goal

* If we increase of SE Cove to 55M eggs & develop Crawfish project at 50M eggs
Changes in progress

- Nearly all of the coho and Chinook changes are already paid for in terms of capital needs (and a portion of SE Cove chum).
- Nearly all of the coho and Chinook operations costs are already in our current FY15 budget (and a portion of SE Cove chum).
- All are in early stages of “maturity”.
- We have a large inventory at sea that should boost returns in the next 5 years.
HOW DO WE GET THERE?

NSRAA

New Production
New Production – SE Cove Chum

- Increase Southeast Cove chum to 55m eggs
- ~52m fry release / 1.3m adults per year
- Value of harvest: $6m per year

- Operations cost: $724k per year
- CIP for expansion: $1.260m (does not incl. 455K already paid)
- Benefit: Cost Ratio 8.4:1 at full production

- Using relatively conservative assumptions of 2.5% marine survival, 7.8 lb. avg. weight, $0.60 price
New Production – Crawfish Inlet Chum

- New Crawfish Inlet chum program to 50m eggs
- ~47m fry release / 1.2m adults
- Value of harvest: $5.5m per year

- Operations cost: $658k per year
- CIP for expansion: $1.778m
- Benefit: Cost Ratio 8.4:1 at full production
- Using relatively conservative assumptions of 2.5% marine survival, 7.8 lb. avg. weight, $0.60
IMPACT ON BUDGET?

How will our budget change over the next 15 years?
Current Budget

- **Payroll:** $1.45m (excludes Temporary wages)
- **Operations:** $6.15m (includes payroll)
- **Total:** $6.6m (operations & CIP - SE Cove portion removed for comparison)
Current Budget + New Chum Programs

- **Payroll**: $1.5m (excludes Temporary wages)
- **Operations**: $7.6m (includes payroll) (increase of ~$1.4m) Begin FY16
- **Total**: $8.1m (operations & CIP) (FY 16)
NSRAA Budget with New Chum Programs

Annual 2% inflation and 2.5% cost of living increases applied
NSRAA Budget with New Chum Programs

Annual 2% inflation and 2.5% cost of living increases applied
NSRAA Budget with New Chum Programs

- Anticipated staff increase: 1 new fulltime position
- Loans for CIP: $3.1 m total. FY15-FY16

### Loan Summary

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Loan 1</th>
<th>Loan 2</th>
<th>Total</th>
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<tbody>
<tr>
<td>SE COVE</td>
<td>$ 944,200</td>
<td>$ 315,600</td>
<td>$ 1,259,800</td>
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<tr>
<td>CRAWFISH INLET</td>
<td>$ 1,778,800</td>
<td>$ 1,778,800</td>
<td>$ 3,557,600</td>
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<tr>
<td><strong>Total</strong></td>
<td>$ 2,723,000</td>
<td>$ 2,094,400</td>
<td>$ 4,817,400</td>
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*Possible loans to cover Capital Costs*
NSRAA Budget with New Chum Programs

Possible scenario with 2 loans to pay for capital start-up

Annual 2% inflation and 2.5% cost of living increases applied
Chum Harvest (NSRAA Major Chum Programs)

- Build to ~6.3m adult CPH harvest (6.9m total adults)
Chum Harvest (NSRAA Major Chum Programs)

- Build to 6.3m adult harvest/ $30m CPH value (unadjusted annual price at $0.60)
Build to 6.3m adult harvest/ ~$35m CPH value
(adjusted for 2% price increase per year – price grows from $0.60 to $0.78)
Assumptions:

- 2.5% ms
  
  (Med/MI 2.6% 10-yr, 4.5% 20yr) (HF 2.0% 10-yr, 2.9% 20yr)

- $.60 price

- 7.8 pound avg wt.

Data and graphics:

- 2013 pro forma model SE Cove -Crawfish.xlsx
- qry_NSRAA Com Salmon Value for CostBen 2.13.14.xlsx
- 2014 NSRAA proforma.xlsx