Thank you

- Industry Participants
- Council and Advisory Bodies
- West Coast Region
- Office of Law Enforcement
- General Council
- NWFSC Economists
- Communications Office
# Economic Data Used in Harvest Specification Analysis: IO-PAC and Net Revenue

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Survey</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Receivers and Shorebased Processors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catcher-Processors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motherships</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catcher vessels (at-sea and shoreside)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EDC - Trawl Catch Share</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limited Entry Trawl (shoreside only)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limited Entry Fixed Gear</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open Access (groundfish + crab and shrimp)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Recreational</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charter Operator</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recreational Angler Expenditure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Collection Year:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collection in future</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Discontinued (now part of EDC Program)
EDC Net Revenue Measures

- Types of Costs
  - Variable Costs (VC)
    - Vary directly with changes in output (e.g., fish harvest, or processed fish production)
    - Vary over a relatively short time period (e.g., a fishing trip, or day of processing)
    - Examples: Fuel, wages, food, bait, utilities, materials and supplies
  - Fixed Costs (FC)
    - Do not vary directly with changes in output
    - Occur over a relatively long time period. They are often periodic.
    - Examples: engine, haul out, gear, machinery, buildings
- Length of time period is important
  - Each instant, hour, day, trip, season, year, multiple years
  - For the EDC think about a day for VC’s and a season or year for FC’s
- Total Costs = VC + FC
EDC Net Revenue Measures

• Variable Cost Net Revenue: (Revenue – VC)
  • Measures net returns excluding overhead
  • Answers question of how net revenue would change if harvest or production were to increase over the short-run

• Total Cost Net Revenue: (Revenue – VC – FC)
  • Measures net returns including overhead
  • Answers question of longer-term economic viability
  • Lumpiness of FC’s means it will likely fluctuate more

• We are exploring options to better address the use of FC’s

• Not all costs are included in EDC forms. Excluded costs are mostly fixed costs.
Net Revenue Example

Variable cost net revenue

Total cost net revenue

Average vessel (millions of 2012 $)
Economic Measures

**Economic Net Benefits**

- Variable cost net revenue
- Total cost net revenue

**IO-PAC**

- Income
- Output (sales)
- Employment
Overview of Presentation

• Background and Purpose of EDC
• Overview of the EDC Reports
• Findings
  • Catcher Vessels
  • First Receivers and Shorebased Processors
  • Motherships
  • Catcher Processors
• FISHEyE
EDC Program

• Background:
  • Mandatory Economic Data Collection was initiated as part of the West Coast groundfish catch share program

• Purpose
  • Monitor economic effects of the catch share program
  • MSA requirement of 5 year review
  • Biennial PFMC Groundfish Specification Process
    • Net Revenue Analysis and IO-PAC
  • Other FMP analyses
About the Annual Reports

• Structure
  • Data Summaries
  • Infographics
  • Overviews

• Purpose
  • Document EDC methods
  • Summarize confidential data to provide basic economic information
  • Solicit feedback

• Final versions of theses reports will be published around January 1st

• Future Annual Reports
### V. Expenses and Depreciation

12. Provide the total expenses on utilities at your facility in 2013.

<table>
<thead>
<tr>
<th>Utility Expense Category</th>
<th>Total Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity</td>
<td>$ 69,400.00</td>
</tr>
<tr>
<td>Natural gas</td>
<td>$ 34,932.00</td>
</tr>
<tr>
<td>Propane gas for transportation and processing</td>
<td>$ 4,932.00</td>
</tr>
<tr>
<td>Other gas (not gasoline)</td>
<td>$ 9,420.00</td>
</tr>
<tr>
<td>Water</td>
<td>$ 49,124.00</td>
</tr>
<tr>
<td>Sewer, waste, and byproduct disposal</td>
<td>$ 1,239.00</td>
</tr>
</tbody>
</table>

13. Provide the total expenses on rental or lease payments for this facility in 2013.

<table>
<thead>
<tr>
<th>Rental or Lease Payments</th>
<th>Total Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rental or lease of buildings, job-site trailers, and other structures (including land)</td>
<td>$ 100,432.00</td>
</tr>
<tr>
<td>Rental or lease of processing machinery or equipment</td>
<td>$ 0.00</td>
</tr>
</tbody>
</table>

14. Provide total expenses on repair and maintenance on facility buildings, machinery, and equipment (see definitions of equipment in step 4) 

15. Provide the total depreciation for all capital investments on buildings, new and used machinery and equipment (see definitions of equipment in step 4) taken in 2013.

16. Provide the following information on 2013 custom processing of fish you own that was performed by another processor outside of this facility.

<table>
<thead>
<tr>
<th>Total weight of fish supplied to custom processors</th>
<th>Custom Processing Fees Paid</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whiting</td>
<td>N/A lbs</td>
<td>$</td>
</tr>
<tr>
<td>Non-Whiting Groundfish</td>
<td>2,348,348.00 lbs</td>
<td>$ 82,083.00</td>
</tr>
<tr>
<td>N/A</td>
<td>N/A lbs</td>
<td>$</td>
</tr>
</tbody>
</table>
Due Date: September 1
### Catcher Vessels

#### Catch Share Fisheries

<table>
<thead>
<tr>
<th>FISHERY PARTICIPATION</th>
<th>Vessels</th>
<th>Days at Sea</th>
<th>Landings (1000 MT)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CATCH</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At-sea Pacific whiting</td>
<td>16</td>
<td>38.8</td>
<td>40.7</td>
</tr>
<tr>
<td>Shoreside Pacific whiting</td>
<td>24</td>
<td>55.8</td>
<td>65.8</td>
</tr>
<tr>
<td>DTS trawl</td>
<td>58</td>
<td>40.7</td>
<td>12.3</td>
</tr>
<tr>
<td>Non-whiting, non-DTS trawl</td>
<td>50</td>
<td>24.6</td>
<td>5.7</td>
</tr>
<tr>
<td><strong>Fixed gear with trawl endorsement</strong></td>
<td>27</td>
<td>33.3</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Crab</strong></td>
<td>61</td>
<td>36.3</td>
<td>2.1</td>
</tr>
<tr>
<td><strong>Shrimp</strong></td>
<td>39</td>
<td>46.1</td>
<td>11.8</td>
</tr>
<tr>
<td><strong>Halibut</strong></td>
<td>6</td>
<td>27.7</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>Salmon</strong></td>
<td>12</td>
<td>23.7</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Tuna</strong></td>
<td>15</td>
<td>11.8</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>Alaska</strong></td>
<td>30</td>
<td>108.5</td>
<td>117.8</td>
</tr>
</tbody>
</table>

#### Fleet-wide Totals

- **110 vessels**
- **$58M revenue**
- **$26M variable cost net revenue**
- **$7M total cost net revenue**

### Economic Summary

- **Vessel Average**
  - **110 vessels**
  - **$406K revenue**
  - **$220K variable cost**
  - **$186K variable cost net revenue**
  - **$140K fixed cost**
  - **$45K total cost net revenue**
- **$4K variable cost net revenue per day**

### Alaska Participation

- **At-sea: $9.3M**
- **16 vessels**

### Shoreside Participation

- **Total value of catch share groundfish landings**
- **Vessel homeports**
  - **Washington: $9.5M 16 vessels**
  - **Astoria: $15.8M 37 vessels**
  - **Newport: $10.5M 23 vessels**
  - **Coos Bay: $2.8M 18 vessels**
  - **Brookings: $4.6M 15 vessels**
  - **Eureka:**
  - **Fort Bragg: $1.9M 6 vessels**
  - **San Francisco: $0.4M 6 vessels**
  - **Monterey: $0.6M 4 vessels**
  - **Morro Bay: $1.9M 11 vessels**

### Average Vessel in Catch Share Fisheries

- **69 ft average length**
- **29% are < 60 ft**
- **42% are 60-80 ft**
- **29% are > 80 ft**

### Additional Notes

- **Note that some off-board costs are not collected. Therefore reported net revenue is an overestimate of actual net revenue.**

---

**655 HP engine**

- **$1.2M vessel market value**
- **$2.4M replacement value**

- **2.4 crew size**
- **$53K crew member compensation**
- **$6K observer cost**
- **$104K captain compensation**
- **37% of vessels owner operated at least some of the time**

- **$5K food cost**
- **Fuel use**
  - 813 gal. Pacific whiting
  - 325 gal. groundfish trawl
  - **$75K total fuel cost**

---

**NOAA Fisheries**

**Northwest Fisheries Science Center**
Total revenue and vessel counts

* Includes crab, shrimp, halibut, salmon, tuna
Average Catcher Vessel Catch Share Costs

- Fixed costs:
  - Equipment: $100.0K
  - Captain: $93.3K
  - Crew: $90.8K
  - Fuel: $76.4K
  - Fishing gear: $56.6K
  - Other fixed costs: $25.6K
  - Other variable costs: $22.7K
  - Buyback fees: $21.5K
  - Observers: $5.2K

- Variable costs:
  - Crew: $64.4K
  - Equipment: $59.5K
  - Fuel: $45.7K
  - Fishing gear: $38.8K
  - Other variable costs: $19.9K
  - Buyback fees: $14.0K
  - Observers: $0.6K

Year:
- 2009
- 2010
- 2011
- 2012
Average Catcher Vessel Net Revenue

Catch share fisheries

All fisheries

Variable cost net revenue

Fixed costs

Variable costs

Variable cost net revenue

Total cost net revenue

Average (thousands of 2012 $)


0 200 400 600 800

0 200 400 600 800

0 200 400 600 800
EDC Information by Fishery

[Diagrams showing various data and statistics related to fisheries, including charts for total revenue, composition of landings weight and revenue, and breakdowns of variable and total cost net revenue.]
SSC Econ Subcommittee Recommendation 2: Allow user defined fisheries in the web-based query interface
<table>
<thead>
<tr>
<th></th>
<th>Topic</th>
<th>Year</th>
<th>Value</th>
<th>N</th>
<th>Fisheries</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Total cost</td>
<td>2009</td>
<td>73398</td>
<td></td>
<td>At-sea Pacific whiting</td>
</tr>
<tr>
<td>5</td>
<td>Fixed cost</td>
<td>2009</td>
<td>123398</td>
<td></td>
<td>At-sea Pacific whiting</td>
</tr>
<tr>
<td>6</td>
<td>Variable c</td>
<td>2009</td>
<td>168331</td>
<td></td>
<td>At-sea Pacific whiting</td>
</tr>
<tr>
<td>7</td>
<td>Variable c</td>
<td>2009</td>
<td>94933</td>
<td></td>
<td>At-sea Pacific whiting</td>
</tr>
<tr>
<td>11</td>
<td>Total cost</td>
<td>2010</td>
<td>67395</td>
<td></td>
<td>At-sea Pacific whiting</td>
</tr>
<tr>
<td>12</td>
<td>Fixed cost</td>
<td>2010</td>
<td>176477</td>
<td></td>
<td>At-sea Pacific whiting</td>
</tr>
<tr>
<td>13</td>
<td>Variable c</td>
<td>2010</td>
<td>263900</td>
<td></td>
<td>At-sea Pacific whiting</td>
</tr>
<tr>
<td>14</td>
<td>Variable c</td>
<td>2010</td>
<td>196505</td>
<td></td>
<td>At-sea Pacific whiting</td>
</tr>
<tr>
<td>15</td>
<td>Variable c</td>
<td>2010</td>
<td>103518</td>
<td></td>
<td>At-sea Pacific whiting</td>
</tr>
<tr>
<td>16</td>
<td>Variable c</td>
<td>2010</td>
<td>258871</td>
<td></td>
<td>At-sea Pacific whiting</td>
</tr>
<tr>
<td>17</td>
<td>Variable c</td>
<td>2010</td>
<td>446996</td>
<td></td>
<td>At-sea Pacific whiting</td>
</tr>
<tr>
<td>18</td>
<td>Variable c</td>
<td>2010</td>
<td>343478</td>
<td></td>
<td>At-sea Pacific whiting</td>
</tr>
<tr>
<td>19</td>
<td>Variable c</td>
<td>2010</td>
<td>120369</td>
<td></td>
<td>At-sea Pacific whiting</td>
</tr>
<tr>
<td>20</td>
<td>Variable c</td>
<td>2010</td>
<td>317489</td>
<td></td>
<td>At-sea Pacific whiting</td>
</tr>
<tr>
<td>21</td>
<td>Variable c</td>
<td>2010</td>
<td>257018</td>
<td></td>
<td>At-sea Pacific whiting</td>
</tr>
<tr>
<td>22</td>
<td>Variable c</td>
<td>2010</td>
<td>136649</td>
<td></td>
<td>At-sea Pacific whiting</td>
</tr>
<tr>
<td>23</td>
<td>Variable c</td>
<td>2010</td>
<td>60090</td>
<td></td>
<td>DTS trawl with trawl endorsement</td>
</tr>
<tr>
<td>24</td>
<td>Variable c</td>
<td>2010</td>
<td>128348</td>
<td></td>
<td>DTS trawl with trawl endorsement</td>
</tr>
<tr>
<td>25</td>
<td>Variable c</td>
<td>2010</td>
<td>119960</td>
<td></td>
<td>DTS trawl with trawl endorsement</td>
</tr>
<tr>
<td>26</td>
<td>Variable c</td>
<td>2010</td>
<td>79060</td>
<td></td>
<td>DTS trawl with trawl endorsement</td>
</tr>
<tr>
<td>27</td>
<td>Variable c</td>
<td>2010</td>
<td>39546</td>
<td></td>
<td>DTS trawl with trawl endorsement</td>
</tr>
<tr>
<td>28</td>
<td>Variable c</td>
<td>2010</td>
<td>132558</td>
<td></td>
<td>DTS trawl with trawl endorsement</td>
</tr>
<tr>
<td>29</td>
<td>Variable c</td>
<td>2010</td>
<td>105817</td>
<td></td>
<td>DTS trawl with trawl endorsement</td>
</tr>
<tr>
<td>30</td>
<td>Variable c</td>
<td>2010</td>
<td>66271</td>
<td></td>
<td>DTS trawl with trawl endorsement</td>
</tr>
<tr>
<td>31</td>
<td>Total cost</td>
<td>2011</td>
<td>38399</td>
<td></td>
<td>DTS trawl with trawl endorsement</td>
</tr>
<tr>
<td>32</td>
<td>Total cost</td>
<td>2011</td>
<td>172502</td>
<td></td>
<td>DTS trawl with trawl endorsement</td>
</tr>
<tr>
<td>33</td>
<td>Total cost</td>
<td>2011</td>
<td>138477</td>
<td></td>
<td>DTS trawl with trawl endorsement</td>
</tr>
<tr>
<td>34</td>
<td>Variable c</td>
<td>2011</td>
<td>100078</td>
<td></td>
<td>DTS trawl with trawl endorsement</td>
</tr>
<tr>
<td>35</td>
<td>Variable c</td>
<td>2011</td>
<td>42646</td>
<td></td>
<td>DTS trawl with trawl endorsement</td>
</tr>
<tr>
<td>36</td>
<td>Variable c</td>
<td>2011</td>
<td>144187</td>
<td></td>
<td>DTS trawl with trawl endorsement</td>
</tr>
<tr>
<td>37</td>
<td>Variable c</td>
<td>2011</td>
<td>127520</td>
<td></td>
<td>DTS trawl with trawl endorsement</td>
</tr>
<tr>
<td>38</td>
<td>Variable c</td>
<td>2011</td>
<td>84874</td>
<td></td>
<td>DTS trawl with trawl endorsement</td>
</tr>
<tr>
<td>39</td>
<td>Variable c</td>
<td>2009</td>
<td>15539</td>
<td></td>
<td>Groundfish fixed gear with trawl endorsement</td>
</tr>
<tr>
<td>40</td>
<td>Variable c</td>
<td>2009</td>
<td>29749</td>
<td></td>
<td>Groundfish fixed gear with trawl endorsement</td>
</tr>
<tr>
<td>41</td>
<td>Variable c</td>
<td>2009</td>
<td>31616</td>
<td></td>
<td>Groundfish fixed gear with trawl endorsement</td>
</tr>
<tr>
<td>42</td>
<td>Variable c</td>
<td>2009</td>
<td>16077</td>
<td></td>
<td>Groundfish fixed gear with trawl endorsement</td>
</tr>
</tbody>
</table>
FISHEyE plans

• Enhanced functionality
  • Additional sectors (at-sea and shorebased processors)
  • Comparisons
  • “What-if’s”
Feedback?
2012 Economic Data Collection (EDC)
West Coast Groundfish Trawl
Catch Share Program

FIRST RECEIVERS & SHOREBASED PROCESSORS

ECONOMIC SUMMARY*
Company Average
20 processors
$20.8M revenue
$17.2M variable costs
$3.6M variable cost net revenue
$1M fixed costs
$2.5M total cost net revenue

PRODUCT TYPES
Non-whiting groundfish
42% frozen
22% unprocessed
10% frozen
4% other
32% fresh

Pacific whiting
48% H&G
8% fillets
13% unprocessed
20% other

Other species
83% frozen
1% canned
9% unprocessed
2% other
5% fresh

Revenue
$21M fish production
$75K oiling
$235K custom processing

SHORESIDE PROCESSING
Washington
4 facilities
Groundfish: 13,236 MT, $23M
Other Species: 37,743 MT, $57M

Oregon
9 facilities
Groundfish: 25,573 MT, $78M
Other Species: 25,023 MT, $130M

California
11 facilities
Groundfish: 2,126 MT, $19 M
Other Species: 4,923 MT, $56 M

*Note that some off-site costs are not collected. Therefore reported net revenue is an overestimate of actual net revenue.
Average Processor Costs

- Labor $2.22M
- Fixed costs $2.06M
- $1.03M Fixed costs
- $1.01M Other expenses
- $2.85M Labor
- $0.70M Packing Materials
- $0.62M Custom Processing
- $0.57M Other expenses
- $0.39M Utilities
- $0.20M Freight
- $0.08M Additives
- $0.02M Monitoring
- $0.22M Freight
- $0.20M Additives
- $0.01M Monitoring
Total Processor Workers and Fish Purchases

Graph showing the number of workers and fish purchases over time from January 2009 to December 2012. The graph is color-coded to distinguish between shrimp, Pacific whiting, other species, groundfish, and crab.
Prices

- First-wholesale Price per Pound
- Fish Purchase Price per Pound

Recovery Rate

- Sablefish
- Petrale sole

Markup

- Sablefish
- Petrale sole
First Receiver and Shorebased Processor Net Revenue

![Graph showing net revenue](chart.png)
FR Cost Allocation Methods

- Costs are allocated to three broad fisheries categories:
  - Shoreside Pacific whiting
  - Non-whiting groundfish
  - Other fish
- Costs are disaggregated by:
  - Weight of fish purchased
  - Cost of fish purchased
  - Weight of fish produced
  - Value of fish produced
  - Value Added (Production value – purchase cost)
MOTHERSHIP

ECONOMIC SUMMARY*

Vessel Average
- $6.1M revenue
- $4.6M variable costs
- $1.5M variable cost net revenue
- $1.7M fixed costs
- $0.2M total cost net revenue

$23.8k variable cost net revenue per day

Fleet-wide Totals
- $30.3M revenue
- $7.4M variable cost net revenue
- $1.1M total cost net revenue

ALASKA PARTICIPATION

7 vessels
187,613 mt total fleet weight

WC DELIVERY PORTS

# of vessels offloading in each port
- Bellingham (3)
- Seattle (2) (*all five motherships report Seattle as their home port)

3,740 mt average total weight of processed product delivered per vessel

FISHERY PARTICIPATION

Days at Sea
- Average days fishing, processing, and steaming on the West Coast: 46
- Average days steaming to and from Alaska: 21
- Average days in Alaska: 141

TOTAL US PACIFIC WHITING TAC

135,480 mt

TOTAL CATCH

37,505 mt, 0.11 $/lb

TOTAL US PACIFIC WHITING TAC MS ALLOCATION

39,235 mt (24% of total U.S. TAC)

*$Note that some off-board costs are not collected. Therefore reported net revenue is an overestimate of actual net revenue.

*Other includes: fillets, fish oil, headed and gutted, and round, combined for confidentiality.

53% product recovery rate

Surimi
- 46%, 6588 mt
- $20.2M, $1.39/lb

Other*
- 35%, 8,661 mt
- $4.1M, $0.21/lb

Minced
- 10%, 1960 mt
- $2.8M, $0.64/lb

Fishmeal
- 8%, 1490 mt
- $3.2M, $0.97/lb

7700 HP engine
- $51M vessel market value
- $100M replacement value

Fuel use
- 5.9K gal/day
- 217.1K gal/season
- $750K total fuel cost

$33.1K observer cost

72 processing crew
- $10.1K per person compensation

$136.4K food cost

347 ft average length

32 non-processing crew
- $13.4K per person compensation
Average Mothership Costs

- Fixed costs
- Variable Costs

$1.32M Fish purchases

- $0.77M On-board equipment
- $0.54M Fuel
- $0.52M Processing crew
- $0.43M Other variable costs
- $0.35M Non-processing crew
- $0.26M Other fixed costs
- $0.16M Processing equipment
- $0.12M Fishing gear
- $0.02M Observers

2009 2010 2011 2012
Mothership Timing

Graph showing cumulative catch (%) and number of active vessels from May to December, with data from 2006-2007, 2008-2010, 2011, and 2012.
**ECONOMIC SUMMARY**

**Vessel Average**
- $5.7M revenue
- $2.7M variable costs
- $3M variable cost net revenue
- $1.6M fixed cost
- $1.4M total cost net revenue

**Fleet-wide Totals**
- $51M revenue
- $27M variable cost net revenue
- $13M total cost net revenue

**ALASKA PARTICIPATION**
- 9 vessels
- 316,423 mt total fleet weight

**WC DELIVERY PORTS**
- Bellingham (4)
- Seattle* (2)
- Tacoma (3)
*All nine catcher processors report Seattle as their home port

**2012**

**CATCHER PROCESSOR**

**PACIFIC WHITING PRODUCTION SUMMARY**

- surimi: 47%, 8688 mt, $22.8M, $1.13/lb
- fillets: 35%, 6509 mt, $21.7M, $1.46/lb
- fishmeal: 10%, 1897 mt, $3.9M, $0.94/lb
- fish oil: 1%, 254 mt, $0.4M, $0.66/lb

*Other includes: H&G, minced, and "other", combined for confidentiality.

**FISHERY PARTICIPATION**

- Fishing and processing West Coast whiting fishery: 29 days at sea
- Steaming in the West Coast whiting fishery: 3 days
- Off-loading in the West Coast whiting fishery: 3 days
- Steaming between West Coast and Alaska: 18 days
- Fishing in Alaska: 150 days

**TOTAL US PACIFIC WHITING TAC**
- 135,480 mt

**TOTAL CATCH**
- 55,263 mt

**TOTAL CP PACIFIC WHITING ALLOCATION**
- 55,584 mt (34% of U.S. TAC)

**CP ALLOCATION BY COMPANY**

- American Seafoods: 49.4%
- Trident Seafoods Corp: 29.6%
- Glacier Fish: 21.0%

**Vessel length**

- 6,487 HP engine
- $55M vessel market value
- $86M replacement value
- Fuel use: 7.6K gal/day
- 230K gal/season
- $808K total fuel cost

**$22K observer cost**

**$139K food cost**

**97 processing crew**

**$9.3K per person compensation**

**AVERAGE VESSEL**

- -27 mt
- -27 mt
- -27 mt
- -27 mt
- -27 mt
- -27 mt
- -27 mt
- -27 mt
- -27 mt
- -27 mt
- -27 mt
- -27 mt
- -27 mt
- -27 mt
- -27 mt
- -27 mt

**Note:** Some off-board costs are not collected. Therefore reported net revenue is an overestimate of actual net revenue.

**PWCC Amendment 29 Catcher/Processor Cooperative Annual Report 2012.**
Average Catcher-Processor Costs

- Processing equipment: $1.42M
- Processing crew: $1.20M
- On-board equipment: $0.82M
  - Fuel: $0.80M
- Other variable costs: $0.66M
- Non-processing crew: $0.33M
- Insurance: $0.24M
- Fishing gear: $0.13M
- Other fixed costs: $0.05M
- Observers: $0.03M

Catcher-Processor Timing

![Graph showing the cumulative catch and number of active vessels over time. The graph compares data from 2006-2007, 2008-2010, 2011, and 2012. The cumulative catch is shown on the y-axis, ranging from 0 to 100%, while the number of active vessels is shown on the x-axis for each month from May to December.]
Catcher-Processor
Net Revenue

Variable Costs
Variable Cost Net Revenue
Fixed Costs
Total Cost Net Revenue

Average vessel
(millions of 2012 $)

2009 2010 2011 2012

Variable cost net revenue
Total cost net revenue