Alaska FSM Sector Overview & Gap Analysis/Needs Assessment Survey

Prepared for:
Alaska Joint Fisheries Seafood Maritime Workforce Forum

Prepared by:
McDowell Group, Inc.
Anchorage - Juneau
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Presentation Contents
- Alaska FSM Sector Overview
- FSM Education, Training and Employment Resources
- Gap Analysis and Needs Assessment Survey

McDowell Group Role
- Define the FSM Sector
- Profile its current and evolving training needs
- Help UA analyze gaps and opportunities

Alaska Fisheries Seafood Maritime Sector Overview

Overview of FSM Businesses and Organizations
- Approx. 30 different NAICS (Industry) codes, for example:
  - 112511 – Finfish farming and Fish hatcheries
  - 331712 – Seafood canning
  - 336611 – Shipbuilding and repairing
  - 483111 – Deep-sea freight transportation
  - 488320 – Port and harbor operations
  - 926110 – Administration of economic development programs

Alaska Jobs by Sector 2010
- Agriculture, Forestry, and Fishing
- Construction
- Manufacturing
- Natural Resources
- Transportation and Utilities
- Wholesale Trade
- Health Care
- Educational Services
- Government
- Professional and Business Services
Overview of FSM Jobs and Workers

- Types of Jobs – About 80 SOC (Occupational) codes identified so far by UA
  - At least 70,000 workers
  - Perhaps 20% of all rural residents of working age.
- Annual Payroll
  - If we can identify firms/organizations, DOLWD can tell us occupations, employment and earnings.

UA: 80+ Occupations Identified

- In addition to ones already mentioned: Fisheries management, Marine biology, Hydroacoustics, Hydraulics, Refrigeration, Diesel mechanics, Marine electrical systems, Electronics, Underwater construction, Welding, Bio-remediation, Logistics, Vessel operations, Marine safety, Business management, Marketing, Law, Quality control, Recreational guiding, Food science and preparation, Regulatory enforcement, Equipment design, Environmental monitoring, .................

FSM Activities – Fisheries/Seafood

- Alaska produces more than half of all US seafood.
- Pollock is the most by volume, but salmon has more wholesale value than any other fish.
- Mariculture industry (shellfish) is small but growing.

Fisheries Labor Force

- 20,000 Alaska permit holders and crew not covered by NAICS codes
  - Independent business people
  - Occupational activities estimated but not tracked
- 30,000 total workers (includes perhaps 1,000 hatchery workers)
- ADF&G employs 1,400 fisheries-related personnel.

Seafood Labor Force

- 24,000 workers
  - Average employment about 27,000, but more than twice that during peak months.
- ¾ of processing workers are non-residents
- Though most employment is on processing lines, there are also skilled technical and supervisory positions.

FSM Activities - Maritime

- Personnel and businesses at more than 30 major ports and harbors.
- Vessel operations and management
- Boatbuilding and vessel services/electronics
- 30 Marine transportation companies
- Academic and applied science
- Professional services (including guiding)
Maritime Labor Force
- Alaska Marine Highway: 1,100 employees
- Other transportation and freight transport jobs not precisely identified yet
- 24 Coast Guard bases, stations and ships with 1,800 employees
- # Workers ??
- Annual Payroll ??

Importance of the FSM Sector to Communities
- 200+ coastal communities
- 34,000 miles of coastline
- CDQ Groups – 65 communities
  - Direct payroll of 1,600 workers (2008)
- 8 seafood processors and 3 marine transportation companies among Alaska’s 100 largest firms.

Regions – Fisheries/Seafood

<table>
<thead>
<tr>
<th>Region</th>
<th>2009 Ex-vessel Volume (1,000 MT)</th>
<th>First Wholesale Value ($million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aleutian/Pribilof Islands</td>
<td>497</td>
<td>$736</td>
</tr>
<tr>
<td>Bristol Bay</td>
<td>87</td>
<td>250</td>
</tr>
<tr>
<td>Kodiak</td>
<td>157</td>
<td>261</td>
</tr>
<tr>
<td>NW/Arctic/YK</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Southcentral</td>
<td>78</td>
<td>289</td>
</tr>
<tr>
<td>Southeast</td>
<td>134</td>
<td>374</td>
</tr>
<tr>
<td>At-Sea</td>
<td>883</td>
<td>2,396</td>
</tr>
<tr>
<td>Total</td>
<td>1,840</td>
<td>$3,353</td>
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</tbody>
</table>

Regions – Fisheries/Seafood

<table>
<thead>
<tr>
<th>Region</th>
<th>2009 Workers</th>
<th>% of Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aleutian/Pribilof Is.</td>
<td>11,600</td>
<td>62%</td>
</tr>
<tr>
<td>Bristol Bay</td>
<td>13,900</td>
<td>58%</td>
</tr>
<tr>
<td>Kodiak</td>
<td>6,600</td>
<td>42%</td>
</tr>
<tr>
<td>NW/Arctic/YK</td>
<td>4,500</td>
<td>15%</td>
</tr>
<tr>
<td>Southcentral*</td>
<td>11,600</td>
<td>19%</td>
</tr>
<tr>
<td>Southeast</td>
<td>15,000</td>
<td>17%</td>
</tr>
<tr>
<td>At-Sea</td>
<td>7,300</td>
<td>n/a</td>
</tr>
<tr>
<td>Total</td>
<td>70,500</td>
<td>12%</td>
</tr>
</tbody>
</table>

Regions – Maritime
- Needs more research

FSM Education Training and Employment Resources
Education and Training for the FSM Workforce

- University of Alaska
  - Fisheries or resource management
  - Fisheries and marine sciences and technology
  - Including occupational endorsements in diesel mechanics, welding and commercial refrigeration, vessel operations, and many other maritime-related areas
  - Business, economics and other related education
  - MAP workshops and education programs

- ADOLWD/Alaska Workforce Investment Board
- Non-UA Education and Training
  - 8 to 10 training organizations provide 60 to 70 FSM-related classes, but most are peripheral, such as cooking, hazmat, basic safety, etc.
  - Of 15 apprenticeship programs listed by the Alaska Job Center (DOLWD), just one – Merchant Marine – is directly related to FSM.

FSM Workforce Employment Resources

- Alaska Job Centers
- Alaska DOLWD Career Ladder/Lattice
- UA career counseling

Occupational Needs Assessment Survey

- Workforce trends
- Position similarities - where do skills/abilities/duties overlap?
- Geographic overlap?
- Existing vs. needed training

Purpose of the FSM Occupational Survey and Training Gap Analysis

- Define the FSM Sector in more detail
- Identify unmet needs across the FSM Sector, including career paths
- Identify relevant education/training/certification sources
- Identify opportunities for the University of Alaska to support Sector development that benefits Alaska communities
Occupational Needs Assessment Survey

- Survey sample and fielding
  - Not random, as many types of FSM organizations as possible
  - Need to reach the right people at each organization
- Analysis of results
  - Mid-April

In Conclusion

Summary

- The FSM Sector is large, not clearly defined, and has data challenges.
- But critical to Alaska’s economy and coastal communities
- UA training efforts are broad but not coordinated around FSM. Other training opportunities are limited.
- McD Group gap analysis and survey will help match needs and resources.

Next Steps

- A survey has been drafted but will be refined based on today’s proceedings.
- Distribution will begin about March 15.
- We need your help.
- Please be sure to complete the contact information sheet.

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