

# Seafood and Technical Training for Western Alaska

A report to the Marine Advisory Program of the University of Alaska

## I. Background

The purpose of this study is to determine the types of training programs that would assist western Alaska residents to be hired and find advancement in the seafood industry. Western Alaska residents have participated in the Alaska commercial fisheries since their inception. In the 1950's and 1960's, many companies would hire a group of residents from a specific village to travel to a seafood processing plant – primarily those located in Bristol Bay for the salmon season. For a variety of reasons, this practice died out, except for one Bristol Bay company (Alaska General Seafoods) that continues to have a relationship with one community (Kipnuk).

Prior to the institution of the Community Development Program (“CDQ”) in the early 1990's, there were many efforts to turn this situation around.<sup>1</sup> However, by and large, the seafood industry continued to rely upon non-western Alaska residents for their workforce. What the CDQ program did was to begin a concentrated effort to involve western Alaskans in the seafood industry in positions other than as fishermen in the local fisheries. The CDQ program has accomplished three important improvements. First, through the competitive nature of the CDQ allocation process, an incentive was created for both the seafood harvesters and processors who became partners of the CDQ groups to recruit in western Alaska; second, the program created human resources programs whose main task is to place residents in jobs in the seafood industry; and third, the program provided the capital needed for the CDQ groups to establish seafood processing businesses in their regions. Once these businesses were established, one of the main ways for a CDQ group to transfer the benefits of the CDQ program to their members is to hire area residents in these plants.

The next two trends that have affected participation by western Alaskans in the seafood industry has been the severe downturn in value and, in some cases, the strength of the fish runs, in the salmon and herring fisheries – both statewide and in western Alaska. Coupled with other employment opportunities made available through unprecedented, short term, capital appropriations throughout western Alaska, many residents turned away from the seafood industry as their main source of income during the summer months. In some areas (e.g., Kotzebue Sound, Norton Sound, Yukon River, and the Kuskokwim River), the commercial salmon and herring fisheries have operated for only a portion of the season, if at all, due to low runs and lack of processor interest.

A final factor to add to the mix has been the increase in training money and the establishment of training facilities throughout western Alaska. The first dedicated training facility was built in Kotzebue in the early 1980's. Since that time, a portion of the King Salmon Air Force Base was turned into the Southwest Vocational & Education Center, the old St. Mary's Catholic mission has been purchased by a local corporation and is now a

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<sup>1</sup> For example, CEDC established numerous cooperatives in rural Alaska such as at Kotzebue, Marshall, Golovin, Elim, and Unalakleet to serve local fishermen and provide local employment.

dedicated conference and training facility, and site work has just begun on Yuut Elitnaurvik (the People's Learning Center) in Bethel. These facilities provide, or will provide, dormitory, classroom, and laboratory space for training western Alaska residents. These facilities have only become feasible because of the availability of capital and training funds, from both federal and state sources. An additional training facility is being created in Nome through a joint venture of the Bering Straits School District and the City of Nome School District. This facility will cater primarily to high school age, and younger, students.

In addition to the training facilities located in western Alaska, the AVTEC facility in Seward is a major provider of training for the seafood industry and is used heavily by western Alaskans and the Indian Valley International facility in Indian provides a variety of classes in seafood and meat processing topics.

Given this background, there are three questions to be answered:

1. Is there a need for seafood industry training for residents of western Alaska?
2. If so, what training courses will provide the most benefit to the trainees?
3. Who is providing the training, who could provide courses not currently given, and where can the courses be given?

These questions will be answered in the remainder of this report.

## II. Processing Operations in Western Alaska

There are several different categories of seafood processing businesses operating in western Alaska. These include -

1. Land-Based Processors – primarily salmon
2. Land-Based Processors – primarily groundfish and crab
3. Land-Based Processors – CDQ group ownership
4. Floating Processors – salmon, crab, herring
5. At-Sea Processors – primarily groundfish

A partial listing of the locations of the land-based processors, floating processors, at-sea processors, and their ownership is found in Appendix 1.

## III. Status of the Fishing Industry

This section provides information on the status of the seafood industry in the various fisheries operating in western Alaska and in the Bering Sea. This information is relevant as it does not make too much sense to train individuals for the seafood industry if they are planning to work in a salmon plant in Nome – given the status of the Norton Sound salmon fisheries. However, simply because the fishery happens to be depressed at the moment or there are no plants currently operating (e.g., Kotzebue, Kuskokwim) does not mean that training is inappropriate. Efforts are currently underway through the Bering Sea

Fishermen's Association to re-establish seafood processing in Kotzebue. Based upon their plans, training for the potential workforce is very appropriate in Kotzebue Sound.

<b>Table 1. Description and Status of the Western Alaska Fisheries</b>
<p><b>Kotzebue Sound</b> -The only significant commercial fishery in the Kotzebue Sound area is for chum salmon. The resource is considered to be declining, as there have been below average runs the last three years. One major buyer is conducting a catch and fly out program at this time. Over the past two years, the fleet has consisted of less than five fishermen. There are plans to reopen the Kotzebue plant in 2004. The ex-vessel value of the fishery in 2002 was \$7,500. This is the potential for a crab fishery in Kotzebue Sound and the Chukchi Sea though none has been established to date.</p>
<p><b>Norton Sound</b> - The Norton Sound commercial salmon fishery consists of chinook, chum, pink, and coho salmon. Over the recent past, there have been very low levels of chinook and chum. Chum salmon have been designated as a “stock of concern.” This year saw a very poor chum salmon return. While there is a harvestable surplus of pink salmon, at least in even years, there has been no buyer of late. There is a small coho salmon fishery operating this year. Due to small run sizes, the Unalakleet salmon plant operated for the coho season only. The ex-vessel value of the 2002 season was only \$2,900.</p>
<p><b>Yukon River</b> - The Yukon River commercial salmon fishery consists of chinook, summer chum, fall chum, and coho fisheries. In recent years, the run strength has been poor and little commercial opportunities have been allowed. In 2003, a large chinook run provided a small, but significant commercial fishery. The fall chum salmon fishery showed a marked increase over recent years allowing for a small commercial fishery this year. The fall fishery consists of a combined coho and chum salmon fishery. The ex-vessel value of the Yukon River fisheries in 2002 was \$1.7 million.</p>
<p><b>Kuskokwim River</b> - The Kuskokwim River, Kuskokwim Bay, and Goodnews Bay fisheries consist of chinook, chum, sockeye, and coho salmon. Despite poor runs in recent years in the river fishery, there have been more healthy runs of late, especially in 2003. The only commercial fishery on the river is for coho salmon, due to the lack of a buyer earlier in the season. For Kuskokwim Bay and Goodnews Bay, sufficient run strength has allowed commercial fishing throughout the season. The Kuskokwim Bay and Goodnews Bay fisheries are the largest north of Bristol Bay. The ex-vessel value of the Kuskokwim fisheries for 2002 was \$322,000. The outlook on the Kuskokwim is for improving runs of both chinook and chum. The 2003 coho season was very strong.</p>
<p><b>Bristol Bay</b> - The Bristol Bay salmon fishery is dominated by the sockeye fisheries in the eastern section (Ugashik, Egegik, Naknek, and Kvichak) and the western section (Nushagak and Togiak). There also are chinook, chum, and coho fisheries in the bay. While the sockeye harvests are about 50% of their peak levels over the past twenty years, they remain the largest sockeye harvests in Alaska. ADF&amp;G reports that the sockeye run is stable at average to below average levels. The other fisheries are stable. The ex-vessel value of the fishery in 2002 was over \$29 million.</p>
<p><b>Alaska Peninsula</b> - The Aleutian Peninsula fisheries occur along the north, west, and south side of the peninsula. The primary species are sockeye (North, South, and June</p>

<p>Unimak Pass), chum (South and June fisheries), and pink and coho (South) salmon. In the recent past, harvests have been curtailed due to concern about impacts in more terminal areas. The ex-vessel value of the fishery in 2002 was \$7.5 million. ADF&amp;G considers the resource to be in a stable condition, though there has been a drop in participation in the seine fishery.</p>
<p><b>Norton Sound crab</b> - The Norton Sound king crab is conducted in two seasons – one in the winter and one in the summer. A portion of the crab is delivered to a plant in Nome with most of the remainder flown out live to Anchorage. The ex-vessel value of the 2002 fishery was over \$750,000. ADF&amp;G reports that the Norton Sound crab fishery is stable at a good level of abundance.</p>
<p><b>Bering Sea crab</b> - There are several crab fisheries that operate in the Bering Sea. The two major crab fisheries are the Bering Sea snow crab fishery that takes place in the winter and the Bristol Bay red king crab fishery that takes place in the fall. The snow crab fishery harvested over 26,000,000 pounds this year. The red king crab fishery harvested over 9,000,000 pounds in 2002. The primary ports are located in the Pribilofs and Dutch Harbor. Some of the catch is brought as far as Kodiak for processing. In 2002, the fisheries combined value was over \$100 million. ADF&amp;G considers the snow crab fishery as stable and low; the Bristol Bay red king crab fishery as stable and potentially increasing; and the Aleutian Islands brown crab fishery as stable.</p>
<p><b>Bering Sea halibut</b> - The Bering Sea halibut fishery consists of five separate areas. Two are along the Alaska Peninsula and the Aleutians, one is around the Pribilofs, and the remaining two are to the north and east along the Alaska coastline. Major ports for halibut include Dutch Harbor, the Pribilofs, Atka, and in small communities along the Alaska coastline. The total harvest of halibut in the Bering Sea districts (two of the districts cross over into the Gulf of Alaska) was 12,500,000 lbs. The ex-vessel value was approximately \$20 million.</p>
<p><b>Bering Sea groundfish</b> - The Bering Sea groundfish fisheries are the most valuable fisheries in Alaska. They include pollock, Pacific cod, Atka mackerel, various flatfish, and various rockfishes. Harvesting is conducted by factory trawlers, longline, and pot vessels. Much of the processing occurs on the harvesting vessels with the remainder processed at shore plants. The major shore plants are located in Akutan and Dutch Harbor. There is some processing at Atka and in the Pribilofs. Total value of the fishery is in the hundreds of millions of dollars.</p>

#### IV. Training Opportunities Available in the Region

There are over 70 training providers approved under the Workforce Investment Act administered by the Alaska Department of Labor. These training providers present courses in a wide variety of courses from hairdressing to taxidermy to operating heavy equipment. Of the 70 providers, only a handful are located in western Alaska. From north to south, they include Ilisagvik College in Barrow, the Alaska Technical Center in Kotzebue, Project Education Residential School in Galena, and Yupiit Training Services in Bethel. In addition, the University of Alaska Fairbanks (including the Marine Advisory Program -

“MAP”) is an approved trainer provider at each of its branches in western Alaska, including Kotzebue, Nome, Bethel, and Dillingham.

Some of the courses at these facilities could serve the training needs that are identified in this report. For example, the Kotzebue facility has training programs in construction trades, plumbing systems, electrical systems, and building maintenance. Similarly, the Galena facility offers a two semester course in commercial kitchen production.

In addition to these western Alaska based training providers, two other approved providers conduct the bulk of the seafood industry training for western Alaska residents. The first is the Alaska Vocational Technical Center (“AVTEC”) in Seward. AVTEC has a long history of conducting training courses in several of the identified needs areas, including marine safety training, applied technology, culinary arts and sciences, and physical plant technology.

A second, small facility, is the Indian Valley International (“IVI”) training facility in Indian, located between Anchorage and Girdwood. IVI serves as a host facility for training courses, including those conducted by the Marine Advisory Program, as well as providing some of its own courses in seafood and meat processing.

Though not on the approved providers list, the Southwest Alaska Vocational and Education Center (“SWAVEC”) in King Salmon has the ability to design and hire instructors to conduct courses on its own or to serve as a facility for use by other training programs. Yuut Elitnavik, a coalition of nine organizations, is in the process of constructing a facility in Bethel that will provide space for each of its owner organizations to conduct their own training programs as well as to serve as a facility for other providers to use. The St. Mary’s Area Regional Training Center also has space for other organizations to conduct their programs.

#### V. Funding Available for Training

Funding for training can be obtained from a number of sources – federal, state, private, and tribal. An Alaska Department of Labor priority is to create a clearinghouse of information describing the various programs, their target client population, and eligibility requirements. This will greatly assist organizations and individuals in figuring out the best avenue to obtain funding.

The major sources of training funds, include:

<b>Table 2: Sources of Training Funds</b>
<b>STEP</b> (Statewide Training and Employment Program) administered by the Alaska Department of Labor (“ADOL”) - \$3.6 million annually – Tara Jolley. Special emphasis – target occupations that traditionally use out of state of labor; new and emerging occupations and businesses; people who have paid into UI system and at risk of having benefits expiring.
<b>WIA</b> (Workforce Investment Act) administered by the ADOL – \$6-8 million annually.

Mike Shiffers. Title IB – Class size training grants and individual referrals - 1) dedicated amount for youth (16-21 year olds at risk and in school) training, youth development; academic credentials; workforce competencies; career choice and planning; together with work experience; 2) adult program – anyone who is unemployed, underemployed, or economically disadvantaged for support of services, vocational training; 3) dislocated worker with no income limits for training.
<b>Denali Training Fund</b> administered by ADOL - \$3-7 million annually – Gerry McDunagh – Training to operate infrastructure projects supported by Denali Commission.
<b>TAA</b> – Trade Adjustment Act administered by ADOL – up to \$15,000 per participant – Shawna Harper – Training for groups of three or more who have been dislocated due to direct causal relationship between business shutdown and foreign competition. This is an entitlement program, if eligible.
<b>TVEP</b> – Technical Vocational Education Program – funded from UI (similar to STEP) and provides direct grants to training organizations rather than being administered through ADOL.
<b>Carl Perkins</b> – federal vocational education program – administered by Department of Education and Early Childhood Development – Helen Mehrkens – 85% funding to school districts and 15% is available for post-secondary vocational training. (e.g., Alaska Technical Center could apply for a vocational training program).
<b>Alaska Native Regional Non-Profits and Tribal entities</b> (AVCP, BBNA, Kawerak, APIA, ONC, etc.) – BIA Employment Assistance; WIA set aside for Alaska Native organizations; Johnson – O’Malley.
<b>CDQ groups</b> (APICDA, BBEDC, CBSFA, CVRF, NSEDC, YDFDA) – Create their own dedicated training programs.
<b>Private companies</b> – Create their own dedicated training programs.

## VI. Training Needs

### A. Numbers of Individuals

Without doing an exhaustive survey of each of the fish harvesting and processing sectors operating in western Alaska it is very difficult to determine the number of individuals who would or should take training courses. Based upon the sample of surveys returned, there is a demand for several hundred slots per year. The number of individuals to be associated with each course also is difficult to ascertain. Some respondents indicated 1-2 persons for a course, one indicated up to 350 for a particular course, and most did not identify a specific number. The important information from the industry survey is to give an idea of what course areas are seen as beneficial by the prospective employers of the trainees.

### B. Economic Need

In talking with the various participants in industry and in the training field, clearly, there is a benefit for providing seafood industry training programs. As described in the introduction section to this report, for some organizations (e.g., CDQ groups) there is a real incentive to have a skilled workforce. First, it means that the groups’ processing plants will be able to

operate efficiently with local labor; second, it means that their resident members will be able to obtain some direct benefit from the CDQ program; and third, it means that a successful CDQ group will remain successful and be in a better position to obtain good allocation levels in the future. Finally, while some of the training courses are specific to the fishing industry, many teach skills that are transferable to other industries and job opportunities (e.g., carpentry, heavy equipment, etc.).

For a second segment of the industry, those companies that are partnered with CDQ groups, training has many of the same benefits as it does for the CDQ groups themselves. For example, NSEDC has a program to send prospective at-sea workers to AVTEC for a 10-day training course. This course serves many purposes, one of which is to help the processing company identify individuals who have a better chance of being successful at sea. This program addresses a major problem, constant turnover that leads to a reluctance to rehire from western Alaska.

However, the area where training may provide the biggest return is to assist in placement of western Alaskans in positions in seafood companies that do not have any of the incentives discussed above. Is it better to take a group of interested individuals, provide training, and then present those who were successful to the company? Is it better to work with the company to hire western Alaskans at entry level positions, provide training for those who were successful, so that they can advance at the company? Whether one of these approaches or another is taken, it will require an entity that will do the work to recruit the workers, work with the companies to hire, make the training happen, and then again work with the company to make sure that the individuals advance in their trained fields. Most companies find it too much to take on this role due to the added expense and difficulty involved in doing things differently than under current procedures, which seem to be working for them.<sup>2</sup>

So far, this discussion has concentrated on the benefits of training for individuals pursuing employment in the seafood processing industry. However, there are at least two examples where training can lead in somewhat divergent directions. The first is to train fishermen in the harvesting sector. The second is to train fishermen so as to be able to combine their harvesting with processing for direct sales into the marketplace. Examples of the first approach is to teach fishermen how to longline for halibut, where they have either not previously been halibut fishermen or have only jigged or to teach quality control during the harvesting process so that a higher quality product is brought to the dock. An example of the second approach is the Fisheries Business Incubator program being tried in Valdez. This program, funded through a US EDA grant, provides fishermen access to a facility and training with an eye towards new product and market development. Once the product forms have been created and markets established, the fisherman/processor will have to obtain other financing and use another facility for the production stage.

### C. Opportunity

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<sup>2</sup> In a recent news story, the use of J1 (cultural exchange) visas to provide workers in seafood plants was described. These visas provide the employers with a highly motivated work force without many of the added hurdles encountered when hiring in western Alaska.

The purpose of this report is to identify training courses that will 1) assist a western Alaskan to obtain a job in the seafood industry, 2) remain in the industry either in the processing or harvesting sectors, and 3) achieve advancement. In order to determine which training courses will help accomplish this goal, a survey was sent to many of the companies participating in some fishery in western Alaska or the Bering Sea.<sup>3</sup> In addition, contact was made with government, private, and tribal entities to obtain their perspectives on the fishing industry, the opportunities for training and funding, and the usefulness to the trainees and the companies.

The following is a list of the courses that the companies have an interest in for the employees and prospective employees (in order based upon number of positive responses):

<b>Table 3. Seafood Training Courses and Current Course Providers</b>	
1.	<p><b>HACCP</b> MAP – Conducts 3-day training sessions several times per year.</p> <p><b>Refrigeration</b> MAP – Conducts 2-4 hour sessions on low temperature storage. Lecture format. Can add commercial refrigeration technician to teach troubleshooting. AVTEC – Teaches refrigeration as part of heating, air conditioning, and ventilation course lasting 40 weeks.</p>
2.	<p><b>Aluminum welding</b> AVTEC – Teaches aluminum welding in conjunction with welding technology course lasting 20 weeks. Did participate in Yukon Delta Fisheries Development Association program to construct aluminum boats that no longer operates.</p> <p><b>Crane Operations</b></p> <p><b>Culinary</b> AVTEC – Teaches a 10.5 month culinary course with an externship.</p> <p><b>Electrical</b> AVTEC – Teaches a 40-week electrical program from basic home wiring to logic controllers.</p> <p><b>Equipment maintenance and repair (processing and other)</b></p> <p><b>Roe processing</b> Previously, roe processing was taught at Sheldon Jackson College. As there appears to be a need for training in this field, MAP may want to consider reviving a such a course. Currently, MAP does not have a person on staff capable of teaching the hands-on portion of the course.</p> <p><b>Safety at-sea (both large vessels and small skiffs)</b> AVTEC – In addition to the orientation and safety course described below, AVTEC also conducts a five-day safety training course for vessel operators and crewmembers and a five-day safety course covering</p>

<sup>3</sup> A total of twenty survey forms were sent to processors and CDQ groups operating in western Alaska. Ten surveys were returned. The topic areas receiving the most interest are listed in Table 1, in priority order.

	such topics as basic first aid, personal responsibilities, firefighting, and survival techniques.
3.	<p><b>Fisheries business – including computer skills</b>  Prince William Sound Community College will be conducting a fisheries business course as part of its Fisheries Business Incubator program. Part of the training involved in this program includes MAP instruction taken from other courses on this list. Fisheries business is an area that MAP might wish to teach in other areas of the State. Currently, MAP does not have staff able to teach all aspects of the course.</p> <p><b>Production management</b>  There could be many aspects of this subject area that could be pulled from other courses taught by MAP and new areas developed to create a full-blown production management course. Most of the areas can be taught with existing staff.</p> <p><b>Quality Control/Quality Assurance</b>  MAP – This course is given currently and last from 4-5 days. An advanced version requires the availability of a laboratory.</p> <p><b>Safety – processing</b></p> <p><b>Sanitation</b>  MAP – This is a one-day course usually taught in conjunction with HACCP. A sanitation plan is required under DEC regulations.</p>
4.	<p><b>Hazwopper</b></p> <p><b>Machinist</b></p> <p><b>Packaging (e.g., scales, strapping machines, vac pack machines)</b></p> <p><b>Seafood Processor orientation</b>  AVTEC – This course is designed to provide an overview of life and safety aboard an at-sea trawler. It is used by the Norton Sound Economic Development Corporation for entry level crew. The course lasts for 10 days.</p> <p><b>Vessel repair</b></p>
5.	<p><b>Carpentry</b>  AVTEC – Carpentry is taught as part of a construction trades course, which includes plumbing and wiring. The course lasts for 40 weeks.</p> <p><b>Halibut handling</b>  MAP – Halibut handling is included in a fish handling course that includes salmon, cod, Pollock, rockfish, and flounders. The course can last from _ day to 2 days.</p> <p><b>Surimi production</b></p>
6.	<p><b>Canning</b>  MAP – The Better Process Control course is taught once per year and concentrates on seam integrity and retorting procedures.</p> <p><b>Fiberglassing</b></p> <p><b>Fish Meal production</b></p> <p><b>Inventory control</b>  Could be included as part of a Managing Production course.</p>

	<p><b>Regulations</b> Many of the regulations governing the processing sector are covered in various courses currently being given. Sheldon Jackson did have a course that dealt with regulations as a separate topic.</p> <p><b>Smoke Products</b> MAP – Teaches a 20 hour course on fish smoking, including the preparation of smoked products.</p>
7.	<b>Small engine repair</b>
8.	<p><b>Diesel repair</b> AVTEC – This course is taught as part of a 40 week course that also includes heavy equipment maintenance.</p> <p><b>Drug testing</b></p> <p><b>Longlining</b> AVTEC – There is a longlining training program listed on AVTEC’s course listings.</p> <p><b>Observer training</b> MAP – Provides the species identification portion of the Observer training program operated by the University of Alaska.</p>

## VII. Regional Training Centers

Currently, as described above, there are four regional training centers in existence and one under construction.

<b>Table 4. Regional Training Centers (existing and under construction)</b>
<b>Alaska Technical Center</b> , located in Kotzebue, has 23,000 sq. ft. of space for classrooms, shops, and offices, and housing for 40.
<b>Southwest Alaska Vocational and Education Center</b> in King Salmon has 26,000 sq. ft., 7-8 classrooms, and dormitory space for 32.
<b>St. Mary’s Area Regional Training Center</b> has dormitory space for 105 and numerous rooms available for conferences and training.
<b>Yuut Elitnaurviat</b> , in Bethel, will be completed by August 2005. The facility will have a total of 31,000 sq. ft., with 5 classrooms, multi-purpose room, shop building, and housing for 80.
<b>Nome</b> – This facility, a joint project of two school districts in the Norton Sound region, currently is dedicated to high school and middle school age instruction. Training courses to be given include many of the vocational areas that could be applied to the seafood industry, such as welding, woodworking, and small engine repair.

The appropriateness of using these facilities depends upon the course being given. For strictly lecture courses, use of any of the facilities is feasible. However, for some of the courses, the facilities would either need to have access to a nearby processing facility or access to equipment appropriate to a particular course. For this reason, Indian Valley

International is used quite often as it is a training facility housed in a working processing plant.

Items that a facility would need to operate some of the courses listed in the previous section, include the following: Vac pack machine; smokehouse; processing tables; scales; agitator; chlorine dioxide system; and a table top model refrigeration system. This is by no means an exhaustive list and one would have to be developed in conjunction with a course outline.

## VIII. Recommendations

This report has covered an overview of the employment issues affecting western Alaska, the current training programs and those other areas that have been identified by the industry; the facilities that are (or will be) available for holding training courses; funding availability; and the status of the fisheries. Two areas that have not been discussed deserve some consideration in this report and may lead to other roles that may be appropriate for the Marine Advisory Program to undertake.

From the amount of time it took to gather the information contained in this report and the certainty that there is still a lot more out there, it is clear that there is a need for a seafood industry training clearinghouse. This function could include the preparation of a website, newsletter, or similar vehicle to identify the seafood industry-related training programs that are being offered by the various training providers. It also could include a description of the funding sources available for training, provide a vehicle for the training centers to advertise their courses and capabilities, and be very informative to the employers as to the opportunities that they have to support their workforce through additional training. Bits and pieces of the information that would be disseminated is available, but it is not readily available in any consistent form at the present time.

The second function is one that can be modeled on some of the human resources programs operated by the CDQ groups. Similar to a case worker in other fields and in regions of the State not covered by a CDQ group, it would be useful for residents interested in a job in the seafood industry to have an advocate for finding a job, learning about and obtaining training (and the funding that goes along with it), and following up with the employers, if necessary, on the issues of rehire, on-the-job training, vocational training, advancement, etc. This function also could serve to reduce the other impediments to hiring rural Alaskans (e.g., costs and time associated with personal interviews, drug tests, etc.). Whether or not expanding the CDQ Human Resources model and who would take on these responsibilities (and who would have the resources to dedicate to such a program) would take at a minimum discussions among the CDQ groups, the Alaska Department of Labor and Workforce Development, and possibly the Marine Advisory Program, among others.

Appendix 1: Western Alaska Land-Based Processors

Appendix 2: List of Persons and Agencies/Companies Contacted

Appendix 3: Western Alaska Training Survey Forms (Returned)

## Acknowledgment

I would like to thank Terry Reeve for his review of the information that was collected during this project, his comments, and ideas for how to better organize seafood training programs that serve western Alaska. I also want to thank Verla Mojin, Jerry Ivanoff, Mark Mickelson, and Laurie Fulgvog, whom I bothered many times in trying to come up with a complete picture of the importance of training in the seafood industry. Additional thanks go to Don Kramer and Liz Brown of the Marine Advisory Program and the other individuals listed in Exhibit 2 who took the time to fill out the survey form and explain to me their programs. Finally, I take full responsibility for any conclusions, recommendations, or mistake made in the report.