Juneau Cold Storage: Demand and Financial Analysis

Prepared for the

Juneau Economic Development Council

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Abbreviations

ADF&G	Alaska Department of Fish and Game
CBJ	City and Borough of Juneau
JEDC	Juneau Economic Development Council
kWh	kilowatt-hour
NEI	Northern Economics, Inc.
PPI	Producer Price Index
RFP	Request for Proposals
RMA	Risk Management Association

Executive Summary

In early 2011, the Juneau Economic Development Council (JEDC) issued a request for proposals (RFP) for an assessment of demand for a potential public cold storage facility in the City and Borough of Juneau (CBJ).

JEDC felt the lack of public cold storage was hampering growth of Juneau's seafood economy. In particular, JEDC noted, In addition to storage, expanded freezing and processing capacity would enhance growth of smaller seafood businesses, freeing up space and capital for higher-value processing equipment and activities.

Northern Economics, Inc. analyzed demand in 1998 for the CBJ, and JEDC wanted to review and note any differences in demand over the past 13 years. A key factor in 1998 and again in 2011 was the cost of service; proposed fees and charges would need to meet both capital and operating costs, providing a firm financial foundation for the facility, if constructed.

JEDC and Northern Economics signed a contract to update the initial 1998 assessment in late June of 2011.

The first step in this project was developing a demand assessment based on key informant interviews of four potential user segments and the prior work.

Demand Assessment

Table ES-1 illustrates estimated demand by user segment for 1998 and 2011.

User	1998 (Ibs)	2011 (lbs)	Difference (lbs)
Processor	2,900,000	2,000,000	-900,000
Permit holders	2,500,000	N/A	-2,000,000
Direct Marketers (inc permit holders)	N/A	500,000	
Households	60,000	N/A	N/A
Commercial	N/A	40,000	N/A
Total	5,460,000	2,540,000	-2,900,000

Table ES-1. Cold Storage Comparison by Weights and User Segments, 1998 to 2011

Source: Northern Economics Inc.

This analysis finds that total annual demand is approximately 2.5 million pounds with the highest demand in the summer and fall and much more limited demand from December through May. This estimate is substantially lower than the 1998 estimate of nearly 5.5 million pounds. Several reasons account for this decline in demand for local cold storage facilities:

- First, processors and several permit holders noted their heavy use of public, Puget Sound area cold storage facilities where cold storage costs are lower than in Alaska, on the average, even with relatively low-cost hydroelectric power in Juneau (and elsewhere in Southeast).
- Processors also noted that product stored in the Puget Sound area was closer to customers. If a customer wanted to inspect the product, they could arrange a short trip to Bellingham or Seattle. If a sale was consummated, purchased product could be moved more quickly (by several days) than any stored in Juneau (or other parts of Southeast Alaska).

- In addition, smaller self-processors (direct marketers) developed ways to meet their needs, including temporary or seasonal storage in freezer vans, along with small-scale cold storage near their processing facilities. More detailed information from project interviews suggests cold storage may not be the dampening factor of potential market expansion.
- The 1998 and 2011 studies have slightly different methodologies. The 1998 study included a comprehensive survey of permit holders. During this survey, administrators noted that surveyed permit holders assumed that the cold storage facility was actually functioning as a processor. At the time very few, if any, permit holders were operating as direct marketers with an independent need for cold storage. Thus, there are some indications that the 1998 study overestimated permit holders' short-term demand for cold storage as very few were operating with an actual business need for cold storage; most respondents were looking to sell their fish to a new processor.
- The current study contacted operating direct marketers (i.e., existing businesses with a proven need for cold storage in their business models). Many of these direct marketers are permit holders processing their own fish. The study did not conduct a comprehensive survey of permit holders who are selling to existing processors and do not currently demand independent cold storage. Thus, the 2011 survey is a better measure of existing demand, but does not answer the question of what demand might appear from permit holders who decide to direct market simply because of the existence of a cold storage facility.

This decline in estimated demand should not be taken as sign that fishing and fish processing are declining in the Juneau area. In fact, data from the National Marine Fisheries Service's *Fisheries of the United States* shows that the volume and value of landings in Juneau increased substantially between the 1998 report and this analysis. Figure ES-1 illustrates the growth in volume and value at Juneau.



Figure ES-1. Volume and Value of Juneau Area Landings, 1996-2010

Source: Northern Economics' estimates based on NMFS, 2011.

Other Regional Cold Storage Facilities

JEDC requested an analysis of public cold-storage facilities for comparison with a potential facility in Juneau. Four facilities were selected, from Bellingham (Bellingham Cold Storage), Petersburg (Petersburg Community Cold Storage), Sitka, (Sitka Marine Services Center) and Wrangell (city owned and leased to Trident Seafoods).

Facility	Operator	Facility Size (sq ft)	Capacity (lbs)	Monthly Storage Rate (\$/lb)
Bellingham	Bellingham Cold Storage	550,000	160,000,000	0.02
Petersburg	Petersburg Economic Development Council	6,500	500,000	0.10
Sitka	Sitka Producers Cooperative	16,000	4,500,000	0.03
Wrangell	Trident Seafoods	15,000	4,500,000	0.02

Table ES-2. Summary, Four Cold Storage Facilities

Source: Northern Economics, Inc.

Sitka's public cold storage operations grew from a federal Economic Development Administration (EDA) grant; the Petersburg and Wrangell facilities were partially funded by state and local grants in the 2006 time frame.

Financial Analysis

Financial analysis for this evaluation started with balance sheet comparisons of small, medium, and large facilities, based on total (owned) assets as published in the Annual Statement Studies by Risk Management Association (RMA), a non-profit designed to assist banks and their lending officers.

Small firms consisted of 15 firms with average assets of \$2 million and under; medium-sized firms were based on facilities with average assets between \$2 million and \$10 million; and large firms had assets that exceed \$10 million. The four public cold storage facilities included at least one facility in each size category.

The 15 firms in the smaller RMA category (\$2 million and less of assets) were struggling financially; they had an average negative net worth (owed more than they owned) of -\$194,000 with an average total of \$1.2 million of assets. On average, these firms had \$4.3 million of gross sales and \$120,000 of profit before taxes.

The 43 firms in the medium category had, on the average, positive net worths of approximately \$1.3 million with a total of \$5.0 million of assets. They averaged \$9.2 million of gross sales and \$1.0 million of profit before taxes.

Size	Total Assets (\$)	Total Liabilities (\$)	Net worth (\$)	Sales (\$)
Small	1,242,700	1,436,500	-193,800	4,298,000
Medium	4,977,600	3,673,400	1,304,100	9,235,900
Large	24,810,800	17,094,600	7,716,200	17,136,100

Table ES-3. Summary, Cold Storage Financial Data, Three Sizes, 2010 to 2011

Source: Northern Economics, adapted from RMA Annual Statement Studies, 2010-2011.

Bank lending officials note the continuing difficulty in using specific RMA credit ratios for Alaska-based operations, but for the purposes of this project, it is clear that larger facilities appear to generate healthier profits while smaller firms do not. And larger firms maintain operations on a stronger financial footing.

Correlating total assets to size (or capacity) of a cold storage facility is limited to a few Alaska-based sites. The small facility size matches the Petersburg facility most closely, while cold storage facilities at Sitka and Wrangell are considered medium in size. Many of the public cold storage facilities in the Pacific Northwest, such as Bellingham Cold Storage, are categorized as large; there are no large public cold storage facilities in Alaska at this time. The study's estimated current demand for public cold storage would fit in the "small category."

Summary and Conclusions

The study concludes that:

- There is demand for public cold storage in Juneau, but current demand volume is not high enough to support the size of facility needed to operate in a competitive market without some form of subsidy. Thus, the combination of a medium-sized facility (for financial purposes) and a steep decline in estimated demand places real fiscal and economic constraints on any potential construction of a self-sustaining public cold storage facility in Juneau at this time.
- The estimated demand volume would support a smaller facility. However, smaller facilities have higher average costs and need to charge a higher monthly storage rate per

pound. In the case of a smaller Juneau-based facility, the monthly storage rate is likely to be in excess of the market-setting rate charge by the large cold storage facility located in Bellingham, Washington. Small public storage facilities are less profitable and less capable of financially-successful operations.

- The facility would be at less of a disadvantage if one of its customers was a large-scale processor of value-added products. Respondents told us that any facility in Juneau is at a disadvantage to locations in the Lower 48 that serve the fillet and headed and gutted markets because customers frequently want to inspect product before they purchase it to ensure it is of high enough quality. A customer focus on value-added products throughout the year could also help smooth out the expected demand for the facility on a monthly basis as many respondents told us that they empty their current freezers by December.
- Location of a cold storage facility is very important. Respondents outside the immediate Juneau-Douglas area consistently indicated they were not interested in a potential facility other than as possible emergency storage for times when weather affected Juneau International Airport. A number of Juneau-Douglas area respondents told us that any facility more than 15 to 20 minutes from their location would be untenable.
- While the 1998 report and this analysis come to different estimates of underlying demand for cold storage, the takeaway message from both analyses is substantially similar: a cold storage facility that is "right sized" to take advantages of economies of scale and be competitive on cost is likely to be "over sized" relative to current market demand. Such a facility will require a subsidy for an unknown period of time. We note that demand may grow in the future simply because such a facility exists and this "but for the existence of" demand is not included in this analysis. Overall demand is lower than it was in 1998 in large part because Juneau's small fishery businesses have forged their own solutions.

1 Introduction

In January of 2011, the Juneau Economic Development Council (JEDC) issued a Request for Proposals (RFP) to evaluate cold storage feasibility in Juneau. JEDC provided background as excerpted below:

The Juneau seafood economy is in a unique position. Since the near-death of its seafood processing industry following the fires that destroyed the old Juneau Cold Storage and Douglas Cold Storage plants in the late 1980s, Juneau has reclaimed a position as an increasingly important fishing port in Alaska and the nation.

Several factors have contributed to this resurgence:

- Juneau is a transportation hub with several barge lines, relatively quick access to the road system through Haines and Skagway ferry connections, and an international airport with multiple direct daily flights to Seattle and Anchorage;
- Juneau's hydroelectric capacity provides relatively low and predictable energy costs;
- It has access to a diverse an ample supply of seafood resources;
- Its home market is large enough to support nascent direct marketing sector, which is often spawned larger, growing processing companies; and
- Juneau seafood sector has shown remarkable entrepreneurship, and enjoys a uniquely high level of local ownership, especially as compared to other areas of Alaska.

All these factors have helped make Juneau one of the more dynamic, higher-paying ports in Alaska, serving as the principal buying port for northern Southeast Alaska. Drift gillnetters who fish the Taku Inlet and Lynn Canal principally sell into the Juneau area. Trawlers and longliners from all over the northern Southeast and eastern Gulf of Alaska bring product to Juneau. Pelican, Hoonah, Gustavus and Elfin Cove fisherman sell to tenders from Juneau processors.

Limited access to cold storage is believed to hamper further growth in Juneau's seafood economy. In addition to storage, expended freezing and processing capacity would enhance growth of smaller seafood businesses, freeing up space and capital for higher-value processing equipment and activities.

In 1998, the City and Borough of Juneau (CBJ) contracted with Northern Economics of Anchorage to prepare a "Feasibility Analysis of a Publicly Owned Refrigerated Warehouse Facility for the City and Borough of Juneau." It assumed the facility would provide public access, and the owned, managed, financed, and possibly even subsidized by the municipality with tax-exempt bonds, grants or other public resources. The contractor should have read this report is part of the preparation of a bid. This report is meant as a resource only and no claims are made regarding its validity.

JEDC noted \$25,000 was available for the work, originally including two phases and seven tasks; the seven tasks (or project objectives) are listed below with the first two considered as Phase I and the rest considered as Phase II.

- 1. Demand assessment
- 2. Optimum facility design
- 3. Site selection
- 4. Capital costs
- 1.1 **Objectives**

JEDC's project objectives were listed in the RFP Scope of Work:

This request for proposals is for a feasibility assessment for a public use cold storage facility based on current market conditions and assuming potential users of the facility will cover capital and operating costs, may manage and own the facility, perhaps with municipal support. It is envisioned the facility would be available to all potential users at set prices based on prudent financial practices.

JEDC noted that not all deliverables might be completed within the budget allotted and proposers were encouraged to submit a project scope consistent with their estimate of scope. Northern Economics provided a modified proposal in February, 2011.

1.2 Northern Economics' Proposal

Northern Economics proposal was accepted and JEDC asked the firm for more specific details. Northern Economics submitted a letter in April that outlined several changes:

- The Northern Economics survey will be a key informant survey, using knowledgeable members of the industry, commercial users, and direct marketers.
- JEDC confirmed the financial and market aspect of the project; it must make economical sense, no matter who owns (or operates) the potential facility.
- JEDC requested more specifics on the project deliverable and Northern Economics included a draft report outline, with sections, and captions for both tables and figures.
- The company added an experienced member of the fish business to its team. Bob Waldrop developed and worked with both Silver Lining and Norquest Seafoods.

JEDC accepted this modification and signed a contract with Northern Economics in late June, 2011.

1.3 Product Flow

Fish, and products derived from them, generally follow a five-step process, from securing the resource, to processing, to cold storage, sales and eventual consumption by end users. Figure 1 illustrates this conceptual flow for the Juneau area.

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6. Financing

5. Feasibility assessment

7. Ownership



Figure 1. Product Flow, Juneau

As shown, permit holders catch fish (including shellfish and crab) and either sell them to a processor or process the resource themselves (self-processing). Following this step, most fish are frozen and stored in cold storage, either private, or in the case under review, at a public facility, including use of temporary freezer vans. Several processors supply fresh fish to local and regional markets, but the relative amount, when compared to frozen fish, is small.

As market demands are met, fish are sold commercially, through brokers, wholesalers, and retailers. The cycle ends when end users consume the products.

This conceptual flow provides the framework for this project, but there are nuances, such as custom processing, where a permit holder may contract with a processor for a specific product, paying for that service. Generally, the project team found few exceptions to this model.

1.4 Summary, NEI 1998 Report

The prior feasibility study (Northern Economics, 1998) sized a potential cold storage warehouse to meet an estimated total annual demand of 5.5 million pounds, with the facility having the attributes listed below, in 1998 dollars:

- 12,000 square feet of frozen storage space
- 4,000 square feet of office and dock space
- Blast freezer with 80,000 pound per day capacity
- 2.2 acres of land required
- \$3.8 million of capital costs, including financing, over a 20-year term

Source: Northern Economics

- Break-even (revenues equal costs) of 4.7 million pounds stored or 86% of annual demand
- Average capital cost per square foot of \$153.10
- AL&P energy cost: \$0.048 to \$0.051 per kWh
- Annual operating cost estimate: \$921,000 (Year 1)
- Financial break-even at Year 12

Northern Economics adjusted the original capital cost estimate, using the U.S. Bureau of Labor Statistics' Producer Price Index (PPI), to the Year 2010; the result is a capital cost estimate of \$5.3 million.

1.5 Project Scope

Northern Economics used the same basic scope as the prior (1998) report. Additionally, the project team contacted many of the same firms and organizations contacted during the earlier project. Also, JEDC provided a list of names and companies with a request that specific firms be interviewed for possible use or even ownership of a public cold storage facility.

1.6 Report Format

Section 1 is an introduction, outlining the project and providing background from the 1998 report results.

Section 2 is a demand assessment, based on key informant interviews by members of the project team.

Section 3 provides financial information on cold storage facilities, as reported by the Risk Management Association (RMA).

Section 4 is a brief summary of findings and specific answers to JEDC's questions.

Appendices. There are several appendices, including the following:

- A. JEDC list of contacts.
- B. Questions asked during interviews.
- C. Bellingham Cold Storage tariff sheets.
- D. Common Size Balance Sheet, Small-sized Firms
- E. Common Size Balance Sheet, Medium-sized Firms
- F. Common Size Balance Sheet, Large-sized Firms

2 Demand Assessment

This report section outlines how the project team accomplished project objectives related to potential cold storage demand, especially who was interviewed and what they told interviewers. JEDC and its financial contributors also requested financial analysis (in Section 3 of this report), consistent with the demand assessment.

A key factor specified by JEDC was the need for any public cold storage to operate on its own, with fees and tariffs meeting both operating (annual) and investment (longer term loans) costs. No subsidies or grants were planned or expected; user tariffs would be the sole source of funding.

When compared to 1998, estimated demand dropped by approximately 3 million pounds, based on the key informant interviews. This is a significant amount, and Table 1 illustrates the estimated difference in potential storage at a Juneau-based public cold storage by potential user segment.

User	1998 (lbs)	2011(lbs)	Difference
Processor	2,900,000	2,000,000	-900,000
Permit holders	2,500,000	500,000	-2,000,000
Households	60,000	N/A	N/A
Commercial	N/A	40,000	N/A
Total	5,460,000	2,540,000	-2,900,000

 Table 1. Cold Storage Comparison, 1998 to 2011

Source: Northern Economics Inc.

There are several reasons for this decline: market changes, competing cold storage facilities, closeness to clients, the flexibility of freezer vans, and small-scale cold storage units established near similar sized processing facilities.

2.1 Summary, Demand Assessment, 1998

The following sections summarize results from the prior analysis, with an emphasis on the current markets and current resources.

2.1.1 1998 Survey

The earlier work included a detailed and extensive telephone survey of potential cold storage users. A conservative estimate of permit holder demand for cold storage space indicated that 2.5 million pounds could be stored each year; this amount far exceeds the 2011 estimate of less than 500,000 pounds based on key informant survey results.

Annual demand in 1998 from processors was conservatively estimated at 2.9 million pounds. Current results suggest this amount approaches 2 million pounds, or approximately a third less; this reduction is discussed in report sections that provide interview results.

Also in 1998, Juneau area residents were surveyed to determine their level of interest in potential refrigerated warehouse lockers for residential storage. Estimates suggested just under 900 households were interested in renting cold storage lockers or approximately 60,000 pounds of storage demand.

The total annual demand for warehouse space was estimated at 5.5 million pounds while the current estimate is less than half of that amount.

2.1.2 Facility

Engineers on the early project team designed a conceptual facility with 12,000 ft.² of frozen storage area, along with 4,000 ft.² of office and loading dock space. At these capacities, the proposed facility had the ability to store a maximum of 5,000,000 pounds of frozen product at -20°F.

The facility included a blast freezer with a daily capacity of 80,000 pounds. Total estimated land area was 2.2 acres, and the site required good access to electricity and sewer.

Total cost estimates in 1999 (the year the revised report was delivered to CBJ) were \$3.6 million. Financing charges and interest on construction brought the total cost to \$3.8 million with an assumed term of 20 years.

2.1.3 Operations

The study based pro forma income statements on revenues and operating costs from an initial storage level of 2.2 million pounds, gradually increasing to 5.5 million pounds over 10 years.

Tariffs (lists with detailed customer prices for cold storage and services) from three other cold storage facilities in the Pacific Northwest were used for estimating comparable revenue levels. Operating costs came from engineers' estimates and the refrigerated warehouse industry.

As modeled, the facility required a breakeven use of approximately 4.7 million pounds per year or 86 percent of the estimated annual demand. A key factor affecting the potential facility grew from cash flow estimates and sensitivity analysis.

Cash flow modeling suggested the facility may need additional funding during its early years of operations; cumulative revenues only exceeded cumulative expenses near year 18.

2.1.4 Summary

Within the 13 or so years since the prior report was finalized, no public cold storage has been built in the CBJ. However, public cold storage facilities have been built in Petersburg (2006) and Wrangell (2007), using the state's \$50 million Fisheries Revitalization Strategy and certain matching local funds.

The project team found no single answer as to why a Juneau-based public cold storage was not built. Several specialists suggested the conceptual facility was too large, though a similar-sized facility in Sitka existed and continues to operate in 2011. This suggests capital costs or competition may be factors.

Other comments, listed in greater detail under the report section Survey Interviews, suggest that high-volume producers ship frozen product to the Puget Sound area instead, with Bellingham Cold Storage mentioned several times.

Monthly cold storage costs are a factor, with lower costs, generally, in the Puget Sound area. Access by customers for product inspection and quicker shipping of product sold were also mentioned.

The three existing facilities operating in Sitka, Petersburg, and Wrangell share a common factor: all three received capital funding from either federal or state agencies. Sitka received funds from the federal Economic Development Administration (EDA), while Petersburg and Wrangell received state

grant awards under the 2006 Fisheries Economic Development Program: http://www.dced.state.ak.us/ded/dev/seafood/revitalization/projects.htm).

2.2 2011 Key Informant Interviews

The demand assessment started with key informant interviews within the Juneau area; the regional area (especially for cold storage facilities); and the Seattle-Bellingham area (competitive cold storage rates). After interviews were complete, the team met and developed updates to the original 1998 demand figures.

Northern Economics suggested key informant interviews could meet JEDC's project objectives, within the time and budget available. The team asked JEDC to provide a list of recommended contacts, with their firms, addresses and phone numbers. Four categories were developed and are discussed in the following subsection. Northern Economics used Survey Monkey (<u>www.surveymonkey.com</u>) to consolidate interviews and provide structure for the questions asked.

A list of all contacts is contained in Appendix A, while the survey instrument itself is contained in Appendix B.

2.2.1 Interviewees

JEDC supplied the project team with both recommended and suggested contacts, ranging from permit holders to commercial (retail) sellers in the CBJ. A short description of each category is noted below, along with summary information from interviews in the segment.

Direct Marketers

Direct marketers sell, process, or export their own catch, including custom processing. The Direct Marketer's license, obtained from the state, does not allow purchase of fish from other fisherman for resale or to custom process for other fisherman (Alaska Department of Fish and Game, 2011). Direct marketers are similar to Catchers/Sellers, fisherman who sell their own catch (processed) to members of the public, grocery stores, or restaurants, including sales from a vessel that is docked (ADF&G, 2011): see http://www.adfg.alaska.gov/index.cfm?adfg=fishlicense.definitions

Interviews with this group indicated that demand would likely be relatively small compared to the overall minimum size of a successful storage facility and that there are number of barriers to establishing a centralized cold storage facility.

In general, this group consists of individuals who process relatively small amount of product. The study team found a common pattern for this group; they need storage during the summer months to finish shipping their customized product by the holiday season, although some continue to ship product through the winter and into the spring. The team also found most direct marketers interviewed had developed some form of custom cold storage that worked for their business model either through the use of large chest freezers or through the use of 20-foot freezer vans.

The real question for the direct marketers was how to fit a centralized cold storage facility into their business models. Those direct marketers located outside of the immediate Juneau-Douglas area indicated that they were not interested in a centralized facility because it was simply too far for them to use. The overall cost of transportation was a greater issue for them than additional or replacement storage. These businesses did indicate that it would be nice to have storage near Juneau International Airport in case their shipments were "weathered in."

Businesses located in the immediate area indicated that while it would be nice to have less expensive cold storage, they wondered how they would be able to merge their existing business models with a cold storage that was farther from the rest of their operations.

For example, one interviewee stated that he would like to lower his cost of storage, but the convenience of his freezer van to his processing area was paramount. He felt that in all likelihood the lower cost of storage would be more than offset by additional time running back and forth between the cold storage facility, his work area, and his shipper's drop-off point. Based on these factors, it would appear that aggregate demand from direct marketers is currently quite low. It appears to be limited to a few individuals who have outgrown their current business model, those who produce enough product to have year-round operations, and those who participate in other business lines (e.g., custom game processing and storage).

Processors

Processors contacted during the 1998 study were re-contacted, as available, along with other processors suggested by JEDC. These processors are shore-based and they operate a facility or business that is located in the CBJ or adjacent areas (Hoonah, Pelican); processors can buy fisheries resources and process, export, and act as a custom processor processing fish to the specifications of a given customer. If they elect to can fish, a canning license from the state is required (only salmon may be canned).

Under a canning license, (one that requires both an ADF&G and Department of Revenue license), the cannery is located onshore and can buy fisheries resources for processing, exporting, or custom processing.

Most processing firms, however, use some form of frozen cold storage for one or more of the following purposes:

- Providing product to customer over an extended period
- Consolidating mixed products for a single buyer
- Inventorying raw material for re-processing at a later time
- Staging product for transit to a cold storage facility located closer to market

Regardless of the purpose, cold storage use is highly seasonal for seafood products processed in Juneau. The short peak-use period spikes in late July through early October with a protracted low point reached during December through May.

The team interviewed four established local seafood processing companies by phone. All of these companies constructed and utilize their own frozen storage, space that is integrated with their processing facilities. The estimated total capacity of the cold storages owned by these four companies is approximately 800,000 lbs. These processors often make space available to smaller processors and direct marketers when the owner company is not fully utilizing the cold storage.

Three of the four processors interviewed were not very interested in seeing a public cold storage built in Juneau. These larger processors produce much more product than can be absorbed by the regional market, so these companies ship the vast majority of their frozen product to very large cold storage facilities in the Pacific Northwest. From their viewpoint, not only are these outside cold storages well located to meet sales needs, they also charge very low rates (< \$0.02/lb/month for storage) and serve as a distribution point for customers in the Lower 48.

Their view is also that a new public cold storage facility might negatively impact existing processors, allowing new competitors to gain a business advantage by reducing their need to build and operate a cold storage.

A fourth processor is experiencing significant growth and is considering expanding its existing capacity for holding frozen product. The company expressed possible interest in seeing a public facility built to accommodate its growing needs for cold storage. Currently this company transports 2 to 3 million pounds of product to a cold storage in Washington State. Hypothetically, they said they might store that product in the Juneau area if adequate storage was available at a competitive rate.

Commercial Firms

Commercial firms contacted in the CBJ included wholesale and retail sellers, including those with local, regional or national market presence. Most of those interviewed were store managers, buyers, or product-line heads (especially frozen food).

Wholesalers stated they had adequate storage space for meeting their needs and did not anticipate any need for additional public cold storage space. When pushed a bit to explain their answers, most supported the concept of public cold storage for others, such as local fishermen, but stated cold storage itself is but one part of their own company's services and supported their sales program.

Other important aspects of wholesaling included quality control, maintaining adequate records of incoming and outgoing product, along with timely response to their customers. According to interviewees, these are best met by a single (or consolidated) warehouse under their direct control.

Retailers, while stating essentially the same thing, noted their sales were captured in computer databases by point-of-sale registers and consolidated in their regional offices (Seattle, generally) for procurement of additional frozen foods, and dispatching via refrigerated vans or containers. Re-supply of frozen food stocks appeared seamless to most retailers.

One respondent noted his retail store had more frozen food capacity than most of their sister stores in the Pacific Northwest; however, the design grew from anticipated barge and ship traffic shipments from Seattle and even after several years, they had experienced no difficulties with frozen food shipments or storage.

As a group, commercial firms expressed no need for a public cold storage facility.

One noted exception came from a retailer with a strong cruise ship passenger market (from May to September). The company bought frozen product in the fall and stored it at Bellingham, shipping it north as required by local sales. However, the firm lacks adequate cold storage space in Juneau and relies on the good will of local fish processors who provide (and charge for) small amounts of storage space. The firm strongly supported local and public cold storage and expressed a willingness to pay a premium over Bellingham storage rates to have frozen inventory available as needed, and readily accessible (without standing in line for fish totes to be brought into and out of freezers).

2.3 Other Public Cold Storage Facilities

JEDC requested information on other Southeast Alaska public cold storage facilities, as well as those operating within the Pacific Northwest. Northern Economics contacted four public cold storage facilities, from Bellingham in the Puget Sound area, north to Wrangell, Petersburg and Sitka.

Several Juneau-based fish processors commented on their use of Bellingham Cold Storage, a firm that was also used as part of the 1998 cold storage analysis. Analysts selected this facility as a

representative of the general Puget Sound area while Wrangell, Petersburg, and Sitka contributed information from nearby public storage facilities.

2.3.1 Bellingham



The Port of Bellingham ranked as the 38th largest port by value and volume for seafood harvested in the United States in 2010 (National Oceanic and Atmospheric Administration, 2011).

Bellingham Cold Storage (BCS) was founded in 1946 and has grown to become the largest portside cold storage on the West Coast, serving a worldwide customer base. BCS was constructed next the Bellingham Bay Shipyard on land leased from the Port of Bellingham and ever since the Port has played a critical role in helping BCS and its customers prosper. What started in 1946 as

two warehouses totaling 18,000 sq. ft, has flourished into 16 refrigerated warehouses, at two separate locations, totaling 550,000 sq. ft. and 160 million pounds of frozen warehouse capacity. BCS also has an IQF belt freezer capacity of 200,000 pounds (daily) and blast freezing capacity of 400,000 pounds (daily) (BCS, 2011).

BCS charges a range of prices for services based on various factors. These factors include species, packaging type, weekday/weekend, bulk, regular/OT rate, etc. Initial freezing and handling range from \$.07 to \$.18 per pound. Handling costs range from \$.01 to \$.04 per pound. And the monthly storage rate ranges between \$.01 and \$.02 per pound. Fresh fish processing ranges between \$.032 and \$.231 per pound. There are additional charges for ice, services, labor, and miscellaneous (BCS, 2011).

BCS has its own 1,000 ft. deepwater dock with warehouses located directly on the pier. It is the closest continental U.S. dock located to the Far East and has around-the-clock vessel loading. BCS also offers a variety of special services that include bar-coding, U.S. customs bonded warehouses, real-time internet access to inventory information, box stamping/relabeling, and much more.

A copy of the Bellingham Cold Storage tariff, dated January of 2011, is contained in Appendix C.

2.3.2 Wrangell

Wrangell's port ranked as the 76th largest port by value and the 79th largest port by volume for seafood harvested in the United States in 2010 (National Oceanic and Atmospheric Administration, 2011).

Trident Seafoods manages and operates a 15,000 sq. ft. cold storage facility owned by the City of Wrangell; before this contract was enacted, Trident was a primary tenant of a public cold storage facility in Petersburg, but moved its cold storage to Wrangell, a larger facility. The city acquired the cold storage facility in 2009 as part of the Wrangell Seafoods bankruptcy.



Part of the current leasing agreement requires Trident to provide public cold storage for a five-year duration. The facility has a capacity of 4,500,000 pounds and charges \$.01 per pound/per month, and another \$.01 for handling. With the exclusion of one major processor, Trident's public cold storage business consists of about 10 percent of Trident's business (Jacques, 2011).

This facility approximates the size of the facility nominated in 1998 for Juneau; if this facility succeeds financially in the next several years, it may serve as a surrogate for the Juneau-Douglas area. A key factor is whether capital costs are recovered through user tariffs.

2.3.3 Petersburg



In 2010 Petersburg ranked as the 24th largest port by value and 21st largest port by volume for seafood harvested in the United States (National Oceanic and Atmospheric Administration, 2011). Within the community, Petersburg's Economic Development Council owns and operates the Petersburg Community Cold Storage (PCCS), completed in 2006 with funding from the state and the City of Petersburg.

PCCS is a 6,500 sq. ft. facility capable of freezing up to 75,000 pounds of product in 24 hours, and it can hold up to 500,000 pounds of product at -10°F (Petersburg Economic Development Council, 2009). The facility charges a rate of \$30 per pallet/per month (approx. 1,000 lbs.), and \$10 a pallet for handling (King 2011).

PCCS is the only public cold storage in Petersburg and serves many of the region's top seafood processors (King 2011). The PCCS was constructed through grants from the State of Alaska's Fisheries Economic Development Program (\$1.7 million) and the City of Petersburg Economic Fund (\$500,000) (Alaska Journal of Commerce, 2007).

The facility and its funding required a resolution from the Petersburg City Council to allow the Petersburg Economic Development Council (PEDC) to lease 8,400 square feet of filled tidelands. The resolution passed unanimously on July 7, 2005 (Pilot, 2005) following discussion about the action. Several comments from that meeting are pertinent to public cold storage at Juneau:

- The City approved \$1.7 million as its part of the funds, but one speaker noted the facility would not solve the basic transportation issue (at Petersburg). He suggested that time and resources go to transportation, especially of fresh fish. Another spoke of a bottleneck with transportation, not processing, that the facility was heading in the wrong direction.
- Commercial processors (Petersburg Fisheries, Icicle Seafood) asked how the facility would operate and whether it would or could unfairly compete with the private sector.
- Another speaker noted, again, that the problem was transportation ...someone needs to coordinate shipments for Alaska Airlines to get fish out. This year has been bad for getting fish out of town.

2.3.4 Sitka

In 2010 Sitka saw throughput of more than 90 million pounds of seafood, making it the 11th largest port by value and 19th largest port by volume for seafood harvested in the United States (National Oceanic and Atmospheric Administration, 2011).

In Sitka, the Seafood Producers Cooperative (SPC) and Sitka Sound Seafoods (SSS) share responsibilities under a lease from the city to provide public cold storage (Smith, 2011).



SPC operates a state of the art, 16,000 sq. ft. fish processing facility where hook and line caught halibut, sablefish, salmon, rockfish and albacore are processed (Smith, 2011). Owned and operated

by over 500 fishermen, the SPC maintains a cold storage facility for its own business as well as for public use (Seafood Producers Cooperative, 2011). The cold storage facility charges a rate of \$.01 per pound/per month for storage, and another \$.01 for handling. The facility has roughly 20 public customers a season (Smith, 2011). SPC's cold storage facility has a capacity of 4,500,000 pounds – or about 5 percent of the total seafood volume passing through Sitka.

This facility also approximates the size of the cold storage facility nominated for Juneau in 1998. Analysts examined Sitka's 2010 Comprehensive Annual Financial Report (CAFR) but noted the facility is operated as an Enterprise Fund within the City and Borough of Sitka. It is leased, as noted above, and only lease payments are reported on the city's financial statements. Actual financial results are difficult to consolidate.

2.3.5 Other Cold Storages, Summary

Table 2 summarizes public cold storage information for the four communities of Bellingham, Petersburg, Sitka and Wrangell, illustrating location, operator, size, capacity, and monthly product storage rate (rounded to the nearest \$0.01).

		Facility Size		
Facility	Operator	(sq ft)	Capacity (Ibs)	Rate (\$/Ib)
Bellingham	Bellingham Cold Storage	550,000	160,000,000	0.02
Petersburg	Petersburg Economic Development Council	6,500	500,000	0.10
Sitka	Sitka Producers Cooperative	16,000	4,500,000	0.03
Wrangell	Trident Seafoods	15,000	4,500,000	0.02

Table 2. Summary, Cold Storages

Source: Northern Economics, Inc.

3 Financial Analysis

JEDC requested a financial analysis of the proposed cold storage facility based on *prudent financial practices* as stated in its January 11 RFP (Juneau Economic Development Council, 2011).

This financial analysis includes comparison of key informant input, especially capital costs, with RMA annual statement studies (Risk Management Association, 2011), and results from the 1998 analysis.

Analysts found the key factor for viable financial operation is cold storage facility size. Small facilities (under \$2 million in total assets) struggle, on the average, while medium and larger sized facilities (\$2 to 10 million in assets and over \$10 million, respectively) averaged 8 to 10 percent of gross sales as profits before taxes.

3.1 Financial Results, 1998 Report

Figure 2 illustrates projected annual and cumulative net revenue for the cold storage facility requirements discussed in the 1998 report. Prospective numbers for 2011 will be different, but the major financial relationships remain approximately the same or worse, acknowledging that there is a decline in demand.

First, the 1998 facility was projected to operate at a loss from start-up to Year 7, when net revenues grew positive; and, second, relatively low net annual revenues remained flat until Year 17, when they eliminated the cumulative net loss of approximately \$1.3 million.



Figure 2. Juneau Cold Storage Pro-forma Net Revenues, 1998

Source: Northern Economics, 1998

Current demand is much lower than that estimated in 1998, and it is unlikely a medium-size facility could reach break-even, assuming user fees must be set to recover both capital and operating costs. A smaller facility, such as that built at Petersburg, could be constructed, but financial results discussed in the following report section suggest that smaller facilities are less efficient, have a lower profit margin, and are more likely to operate at a loss.

If a cold storage were built using grant funds from federal, state, or local sources, financial results would potentially be more positive, but this would depend on how grant funds are treated in calculating tariffs. Any price less than full cost (capital and operating) could be considered a subsidy.

3.2 RMA Annual Financial Statements, Cold-Storage Facilities

Financial analysis started with balance sheet comparisons of small, medium, and large facilities, based on total assets, as published in the 2010 – 2011 Annual Statement Studies by RMA.

Many banks use RMA statements to evaluate specific loan requests against industry standard ratios, as represented by industry segments within each NAICS (North American Industrial Classification System) industry segment.

Alaska firms operate within different markets and their ratios do not always compare well with industry standards from the rest of the U.S.; however, for this project it is the relative size characteristics of each segment that are significant.

Common-Size Financial Statements

Northern Economics' analysts have found the relative ranking very useful when comparing one industry segment to another, whether by sales or assets. In particular, analysts use a technique known as *common sizing* to calculate an average balance sheet and income statement for each segment's reports. Total reported assets and sales are combined with the average percentages for each line account for all reported firms and generate a representative balance sheet (for assets) and income statement (for sales).

Common-size financial statements refer to balance sheets and income statements in which all elements are represented as a percentage of assets (balance sheet) or a percentage of sales (income statements). Among many uses, analysts use common-size financial statements to analyze trends (Helfert, 2001) and, for this project, to compare and size a profitable facility.

For this analysis, team members developed common-size financial statements for three different-sized industry segments. Within Alaska, two segments are represented: the small-size industry facility (Petersburg) and the medium size (Wrangell, Sitka) categories. Outside of Alaska, Bellingham Cold Storage is a large-size firm.

3.2.1 Small Firms

For the 2010 – 2011 RMA Annual Statement Studies, small cold-storage companies consisted of 15 firms with average assets of \$2 million and under; medium-sized firms were based on facilities with average assets between \$2 million and \$10 million; and large firms had assets that exceed \$10 million. The four public cold storage facilities included at least one facility in each size category.

The15 firms within the smaller RMA category struggled financially; they had an average negative net worth (owed more than they owned) of minus \$194,000 with an average total of \$1.2 million of

assets. On the average, these firms had \$4.3 million of gross sales and averaged \$120,000 of profit before taxes, with a ratio of \$3.50 of sales per \$1 of assets and a 2.8% profit margin before taxes.

Appendix D contains a common-size balance sheet for the averages published for these smaller firms.

3.2.2 Medium Firms

The 43 firms within the medium category had an average positive net worth of approximately \$1.3 million within a total of \$5.0 million of assets. They averaged \$9.2 million of gross sales and \$1.0 million of profit before taxes, for a ratio of approximately \$2 of sales per \$1 of assets.

Appendix E contains a common-size balance sheet for the averages published for medium-sized firms.

3.2.3 Large Firms

The 35 firms within the large category had a positive net worth of \$7.7 million and average total assets of \$24.8 million. They averaged \$17.1 million of sales with a profit ratio of 8.8 percent before taxes, with a ratio of \$0.75 of sales per dollar of assets.

Appendix F contains a common-size balance sheet for the averages published for these medium size firms.

3.3 Financial Results

Table 3 summarizes results for the 93 cold storage firms that reported financial results to RMA for the current annual statement studies report (2010 - 2011). Smaller firms have a negative net worth, suggesting more liabilities, such as loans, than assets. Sales per dollar of assets are good, at approximately \$3.45 but small firms only average \$120,300 of profit before taxes, a ratio of 2.8 percent of sales.

Medium and large sized firms have stronger asset bases and generate positive net worth figures as well as higher profit margins at 11.3 and 8.8 percent of sales, respectively.

Size	Total Assets (\$)	Total Liabilities (\$)	Net worth (\$)	Gross Sales (\$)
Small	1,242,700	1,436,500	-193,800	4,298,000
Medium	4,977,600	3,673,400	1,304,100	9,235,900
Large	24,810,800	17,094,600	7,716,200	17,136,100

Table 3. Summary, Cold Storage Financial Data, Three Sizes, 2010 to 2011

Source: Northern Economics, adapted from RMA Annual Statement Studies, 2010-2011.

These results suggest a cold-storage facility of approximately the same size as those located at Sitka and Wrangell would meet financial needs. The characteristics of this potential facility compare very closely to those specified in 1998, suggesting the facility was sized appropriately for financial purposes.

4 Summary

Northern Economics conducted a cold-storage facility demand assessment of four target segments in the City and Borough of Juneau and several outlying areas. The four groups who provided key informant interview responses were:

- Direct Marketers
- Processors
- Commercial firms, wholesale
- Retail firms

Interview responses were collected and discussed with the project team, as well as staff specialists at the JEDC.

In addition, the project team conducted a financial analysis of cold-storage firms, based on 2010 – 2011 Annual Statement Studies prepared by RMA. Results indicated that smaller firms struggled financially with medium and larger-sized firms generating profits before taxes of 8 to 10 percent.

The size of the 1998 facility meets financial needs for successful cold storage operation and, in this characteristic, there is no change seen over the past 13 years. However, the current demand assessment of 2,540,000 pounds is only 47 percent of the 1998 estimate of 5,460,000 pounds. This is a major change and one that is hard to overcome.

The combination of a medium-sized facility (for financial purposes) and a steep decline in estimated demand places real constraints on any potential construction of a public cold storage in Juneau at this time.

4.1 Demand Assessment

Results from key informant interviews and financial analysis suggest a drop in cold storage demand, from the 1998 estimate. Direct marketers, in particular, accounted for almost this entire decline. In general, direct marketers process relatively small amounts of product and need seasonal storage to complete the majority of shipments by the year-end holidays.

As noted in discussions with interviewees, smaller firms used chest freezers, small commercial freezers, and 20-foot freezer vans to store product. A centralized cold-storage facility did not fit well with their business models, and several firms expressed concerns about transportation costs.

Processors also noted a seasonal spike for cold-storage needs, from late July to early October, reaching a relatively low point during the December to May months. Processors noted storage in the Pacific Northwest provided lower costs and a much closer location for buyers to check product and submit orders. Bellingham Cold Storage was named most often, though other firms in the Puget Sound area have capacity.

One exception to this pattern was a retailer who was forced to buy cold storage space from a processor and clearly had a use for a local cold storage facility. The firm was willing to pay a premium for this service, as small local transfers out of processor cold storage generally had lower priority.

4.2 Financial Analysis

Project team members tried to determine why a facility such as the one analyzed in the 1998 report was not built. Although no single answer was found, general comments related to cheaper storage prices elsewhere, closeness to markets, and the risks of building a facility that was large enough to be financially successfully but potentially over-size for local and regional demand.

RMA statements supported the concept that small facilities, under \$2 million in total assets, see limited or negative financial results. Medium-sized firms, in the \$5 million average (total assets) size, and those with larger asset bases (averaging \$25 million), demonstrate strong financial results, both as measured by profits (in the 8 to 10 percent of sales ranges) and net worth, in the 26 and 31 percent (of total assets) categories.

5 References

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6 Appendices

There are several appendices, including the following:

- A. JEDC list of contacts.
- B. Questions asked during interviews.
- C. Bellingham Cold Storage tariff sheets.
- D. Common Size Balance Sheet, Small-sized Firms
- E. Common Size Balance Sheet, Medium-sized Firms
- F. Common Size Balance Sheet, Large-sized Firms

Appendix A – Cold Storage, Selected Interview List, from JEDC

Category	Facility Name	Facility Address	City	State	Zip
Shore side	Alaska Seafood Company Inc	5731 CONCRETE WAY	Juneau	AK	99801
processor					
Shore side	Excursion Inlet Facility	PO BOX EXI	Juneau	AK	99801
processor					
Shore side	Alaska Glacier Seafoods Inc	13555 GLACIER HWY	Juneau	AK	99801
processor				A 1/	00001
Shore side	Horst's Sealoods Inc	2315 INDUSTRIAL BLVD	Juneau	AK	99801
Shora sida	Taku Smokeries	550 S EDANKI IN ST	lunoau	٨ĸ	00201
nrocessor	Taku Sinokenes	JJU J I KANKLIN JI	Juneau		77001
Shore side	Northern Keta Caviar	5720 CONCRETE WAY	luneau	AK	99801
processor			Juneau	7.03	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Shore side	Huna Fish Company	321 C HARBOR WAY	Hoonah	AK	99829
processor					
Distributor	Food Service of America	5451 Commercial Blvd	Juneau	AK	99801
Distributor	Sysco Food Service of Alaska	9105 Mendenhall Mall Road	Juneau	AK	99801
Distributor	Costco	5225 Commercial Boulevard	Juneau	AK	99801
Grocery Store	Juneau Alaskan & Proud Market	615 WILLOUGHBY AVE	Juneau	AK	99801
Grocery Store	A&P	615 W. Willoughby Avenue	Juneau	AK	99801
Grocery Store	Wal-Mart	6525 Glacier Highway	Juneau	AK	99802
Grocery Store	Fred Meyer	8181 Old Glacier Highway	Juneau	AK	99801
Grocery Store	Safeway	3033 Vintage Blvd	Juneau	AK	99801
Grocery Store	Super Bear	9103 Mendenhall Mall Road	Juneau	AK	99801
Restaurant	Tracy's Crab Shack	356 S. Franklin	Juneau	AK	99802
Direct Marketer	Heather Anne F/V	3152 PIONEER AVE	Juneau	AK	99801
Direct Marketer	Morgan Anne F/V	923 A ST	Juneau	AK	99801
Liguor/other	Thibodeau Liguors	617 W Willoughby Avenue	Juneau	AK	99801
Shore side	Jerry's Meats & Seafoods	5165 GLACIER HWY STE B	Juneau	AK	99801
processor					
Shore side	Roy's Select Alaskan Catch	PO BOX 20481	Juneau	AK	99801
processor					
Shore side	Dejon Delights LTD	PO BOX 712	Haines	AK	99827
processor			a .		
Shore side	Pep's Packing	PO BOX 23	Gustavus	AK	99826
processor	Drooze In	2200 Trout Streat	luncou		00001
Storos	Breeze III	2200 Hout Street	Juneau	AK	99801
Convenience	Duck Creek Market	9951 Stenhen Richards Meml Dr	luneau	ΔK	99801
Stores		7761 Stephen Menards Menil Di	Juncau		77001
Convenience	DeHarts	11735 Glacier Highway	Juneau	AK	99801
Stores					
Direct Marketer	Kirsten Anna F/V	AURORA BASIN F-2	Juneau	AK	99801

Source: JEDC, adapted by Northern Economics.

Appendix B – Survey Monkey, Questions Asked

Demographics and Intro

Hi, my name is XXXXXXXXX and I work for Northern Economics. How are you today? We've been hired by Juneau Economic Development Corporation to do a feasibility study for a cold storage facility in the Juneau area and they suggested that we call your company as part of the study. May I please speak with whomever is responsible for managing product storage at your company?

1. What previously identified (JEDC)category does this interviewee belong in?



2. What is the interviewee's business name?

Other (please specify)

3. Who are you interviewing?

4. What is their phone number?

Cold Storage

The page records current cold storage handling practices, likelihood of needing/using other available cold storage, and
product inflows/outflows.
5. Which category best describes your business?
Non-firect market fisherman
Direct market fisherman (catches and processes own fish)
O Direct market fishermen (catches and processes own fish AND processes fish caught by others)
Seafood processor
Distributor
Food service
Retail
6. Do you currently hold perishable food in food storage facility? If so, are you an owner,
renter, or both at this facility?
Yes-Owner
Yes-Renter
Yes-Own a facility and rents at another facility
No
7. If you are an owner of a facility,
A) How much capacity do you have?
B) Is your facility open to other people?
C) How much spare capacity to you have and how does it vary through the year?

8. Describe how you currently handle cold storage for your business.

Interviewer- Target information for this question includes seasonality, volume, current cost per pound, current location, etc.

9. Do you ever run short of cold storage space in the Juneau area during the year?

() Yes

10. From your point of view, when do you think a local cold storage facility in Juneau becomes uncompetitive with regards to price?

Less than \$0.05/pound
 \$0.05 - \$0.10/pound
 \$0.11 - \$0.15/pound
 \$0.16 - \$0.20/pound
 \$0.21 - \$0.25/pound
 More than \$0.25/pound
 Don't know
 Decline to Answer

 11. How likely is it that you would utilize a new cold storage facility in Juneau assuming that facility were available at a similar price to what you are paying now for cold storage?

 1-Definitely would not use

 2-Very unlikely to use

 3-Somewhat unlikely to use

 4-Neutral

 6-Very likely to use

 7-Definitely would use

12. If a new cold storage was available in the Juneau area how much product (in pounds by month) do you think you would:

1) Move into the facility

2) Move out of the facility.

In addition, how many transactions do you think you would have in each month? Each "one-way" movement of product counts as a transaction.

	Product In	Product Out	Number of Transactions	Primary Product
January				
February				
March				
April				
Мау				
June				
July				
August				
September				
October				
November				
December				
Other (please specify)				

13. If you have additional notes for Question 12 put them here....

14. Interviewer Name

.

Appendix C – Tariff Sheet, Bellingham Cold Storage



MISCELLANEOUS SERVICES

UPDATED January 2011

Please Note:

24 hour advance notice is required for all shipments, inspections, or processing. If under 24 hours BCS takes no responsibility for accuracy of counts or product loaded.

Bellingham Cold Storage Co. does not insure the property held in its storage for the account of its customers.

All invoices are due and payable upon receipt. Bellingham Cold Storage Co. claims a lien for all lawful charges or expenses for storage and preservation of such goods or for the like charges or expenses in relation to other goods, whenever deposited, and to secure lawful claims or charges by the warehousemen for interest, insurance, transportation, labor, weighing, packing and all other charges and expenses in relation to such goods or in relation to other goods whenever deposited. A 1.5% Finance Charge will be assessed on outstanding balances after 30 days.

Bellingham Cold Storage Co. disclaims responsibility for any delay or for any loss or damage to any goods received for storage except in the event of its own negligence, or its wanton or willful misconduct. Liability of the warehousemen for delay, loss of or damage to goods shall in no case exceed 50 cents per pound.

Rates are subject to change. In this event every effort will be made to contact those customers who may be affected.





BCS Headquarters

2825 Roeder Avenue P O Box 895 Bellingham, WA 98227-0895 Phone: (360) 733-1640 Accounting Fax: (360) 671-2587 Toll Free: 1-800-628-5542

lce F	Regular Time	Overtin	ne
Block Ice	\$ 31.00 each	\$ 36.00	ea.
Flake Ice	68.00 ton	79.00	ton
(Minimum charge)	54.00 ½ ton	64.00 1/2	ton
Services			
Rail Car: Load/Unload; Totes and Barrels, Palletized Products	\$.55 cwt	\$.74	cwt
Rail Car: Load/Unload; Cases, Bags, Pails, Handstowed Products	.90 cwt	1.22	cwt
Rail Car: Load/Unload; Slipsheeted Products	.69 cwt	.93	cwt
Container: Load/Unload; Bags, Cases & Pails 5 lots & Under	.90 cwt	1.22	cwt
Container: Load/Unload; Bags, Cases & Pails 5 - 10 lots	1.12 cwt	1.51	cwt
Container: Load/Unload; Bags, Cases & Pails Over 10 lots	1.42 cwt	1.92	cwt
Container: Load/Unload; Slipsheeted Products	.60 cwt	.81	cwt
Truck Reloading, CASH ONLY, \$60.00 Minimum	hourly		
Weekend loading palletized per Truck		\$ 135.00	-
Labor	Regular Time	Overtin	ne
Forklift and Driver	\$ 50.00 hour	\$ 68.00 h	hour
Heavy Duty Labor	38.00 hour	52.00 h	hour
Marine - Forklift and Driver (Upon Bequest)	56.00 hour	77.00	hour
Marine - Labor (Unon Request)	46.00 hour	62.00 t	hour
Shin Load/Inload	Rate	s Available Upon Reg	uest
Sorting		ha	ourly
Labeling ** Set Up Fee \$50.00 Removing labels or hand marking weights will be charged hourly ** BCS takes no responsibility for the accuracy and or acceptability of cust	Printing .17 each	Application .28 e	each
Physical Transfer of Goods	.92 cwt	1.24	cwt
Inspections / Photos \$50.00 added charge for same day request or no sho	ow 50.00 hour	68.00 H	hour
1/2 hour minimum on all labor charges.			-
Miscellaneous Charges	动物的 和1993	all a start and a start of the	
Minimum Monthly Storage Charge per Lot		S 14.00 e	each
Book Transfers		25.00	each
Minimum Monthly Storage Charge per Customer		250.00	mo.
Crossdock / Shorthold	billed at hand	ling rate plus daily sto	orage
Customer Maintained Dry Storage (500 sq ft minimum)		.57	sq/ft
Dry Storage Handling	50.00 hour	68.00 I	hour
USDA Services			
Inspection Services (USDA Inspector, stamping/labeling, handling)		ho	ourly
Documents Preparation (per certificate)		150.00	each
Unreturned Pallets (Subject to pallet costs)		9.00	each
Extra Administrative Services		ho	ourly
Product Received in BOND - Per warehouse receipt		200.00	each
Transfer GOOD totes onto Treated pallets (does not include cost of pallet)		4.50	each
Unload & Stage Fresh Product for customer retrieval & processing		1.30	cwt
Container plug in per customer request		55.00	day
Government Seizure accounts - On Hold accounts will be charged at a high	her rate		

U.S. Customs Bonded Warehouses Available

Squalicum Waterway Facility

2825 Roeder Avenue Bellingham, WA 98225 Phone: (360) 733-1640 Traffic Fax: (360) 671-1259

Orchard Drive Facility

600 Orchard Drive Bellingham, WA 98225 Phone: (360) 671-2258 Fax: (360) 671-2321

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SEAFOOD TARIFF UPDATED January 2011



All Rates Based On Gross CWT	Freezing & H	andling In/Out	Handlin	Daily*	
(Per Hundred Ib. weight)	Weekday	Weekend	Weekday	Weekend	Storage
Seafood		No. 15 Acres 10			
Halibut Loose/Totes	\$8.54	\$10.77	\$2.14	\$2.89	\$0.043
Salmon, Tuna, Other Fish Loose, Totes	11.45	14.35	2.14	2.89	0.043
Fish Fillets, Portions, Steaks Loose, Totes	10.29	12.92	2.14	2.89	0.043
Black Cod Loose, Totes	14.72	18.38	2.14	2.89	0.043
Halibut,Salmon,Tuna, Other Fish, Roe, Fillets Un/100# Cases			2.72	3.67	0.047
Halibut,Salmon,Tuna, Other Fish, Roe 100# + Cases			2.43	3.28	0.044
Sashimi Tuna Cases -20 degrees storage			2.72	3.67	0.059
Sashimi Tuna Loose/Totes -20 degree storage			2.14	2.89	0.054
Whole Fish Blocks in Bags			1.56	2.11	0.040
Salmon Roe, Herring Roe, Milt Cases/Pails	12.40	13.32	2.63	3.55	0.046
Roe Herring IQF Totes			2.14	2.89	0.043
Roe Herring IQF Cases Un/100#			2.72	3.67	0.047
Block Shellfish Meat	7.97	8.41	1.26	1.70	0.039
Shellfish in Shell Bulk Over 40# cases/totes			2.05	2.77	0.047
Shellfish in Shell IQF Finished Cases Under 40#			2.39	3.23	0.053
Shellfish IQF Meat Cases (Shrimp, crab)			2.15	2.90	0.059
Whole Crab in Cases			2.65	3.58	0.065
Pet Food, Fish Scrap, Bait Bags/Cases/Pails	6.96	7.36	1.14	1.54	0.030
Surimi, Shatter pack, Blocks			1.02	1.38	0.034
Seafood Analogs Cases	7.10	7.74	1.83	2.47	0.042
Dogfish Cases	5.79	6.71	2.63	3.55	0.047
Oils Totes / Drums			2.35	3.17	0.045
Salmon Burger Meat Bags/Cases	6.96	7.51	1.56	2.11	0.034
Sardines, Herring, Hake Cases/Totes	7.46	8.05	1.68	2.27	0.034
Grocery Items & Prepared Food	Carl Branch	States and States	and the second		e an a bhair a s
Cases	7.67	8.64	\$2.76	\$3.73	\$0.049
Loose	7.67	8.74	3.07	4.14	0.052
Totes	5.40	6.15	2.14	2.89	0.043



*Daily storage is charged upon initial receipt of the goods. There is no advance first month storage charge. Billing is on actual days in storage. Storage quoted on a split month basis is calculated by multiplying the daily rate x 30 and is billed on receipt and then the 1st of each month in advance.

Weights

Note: BCS charges a minimum monthly storage charge per customer of \$250.00.

Fresh Fish Processing	Processing rates based on Net
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Bellingham Cold Storage does not offer custom salmon dressing, but we can refer you to sources for this and other on site custom processing.

Salmon	Beg	OT
Fish Pump & Operator (fresh fish)	.037 lb	\$ 0.050 lb
Wash & Grade	.080 lb	0.108 lb
Tote Fresh *	.100 lb	0.135 lb
Box Fresh * * Add 02/lb for under 4 lb fish	.145 lb	0.196 lb

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Black Cod					R	eg	0.	т.
Boat Unload					\$.038	lb	\$.051	Ib
Wash & Grade					.118	lb	.159	lb
Tote Fresh					.130	lb	.176	lb
Box Fresh					.184	lb	.248	lb
Halibut								
Boat unload, Head, Grade					.056	lb	.076	lb
Boat unload, Head, Grade, Wash for freezing					.067	lb	.090	Ib
Grade. Wash for freezing					.056	lb	.076	lb
Tote Fresh					.101	lb	.136	Ib
Box Fresh					.171	lb	.231	lb
					S. Autor	(Income)	SARASA I	1
Minimum Packing Charge					\$130	.00	\$175	.00
Under 5,000 lb. orders will be charged at a higher rate.		Pac	kaging	Materials, ice o	or gel-ice n	ot included	in the above ra	tes.
Frozen Fish Packing								
Halibut					R	eg	0.	Т.
Up to 5,000 lbs					ho	urly		
Over 5,000 lbs					.108	lb	.146	Ib
Halibut Trimming, with glaze					.075	lb	.101	Ib
Halibut Toting, 5,000 lb minimum					.061	lb	.082	Ib
Trim. Spray Glaze. Box 5.000 lbs minimum					.139	lb	.188	Ib
Trim. Spray Glaze, Tote 5.000 lbs minimum					.111	lb	.150	lb
Even Weight or Two/Three Fish Cartons, add up to					.032	lb	.043	Ib
Excess Halibut Grading add up to					.057	lb	.077	lb
Salmon	1101-0101	Expor	t		D	omest	ic	
Lin to 5 000 lbs	All Incoments of the	hourly				hourly		
5 001 - 9 099 lbs	136	lb	184	lb	115	lb	155	Ib
Over 10 000 lbs	112	lb	152	lb	102	lb	120	Ib
Solmon Toting 5 000 lb min	.113	10	.155	10	.103	Ib	.139	Ib
Samon Former, 5,000 to min.	057	Ib	077	lb	.007	ID Ib	.090	ID
Under 6 lb fich. Up 100 lb beyon odd up to	.037	Ib	.0/7	Ib	.037	ID	.077	ID
Black Cod	.051	10	.042	10	.031	ID	.042	ID
		hourly				hourly		
5 001 0 000 lbs	155	hourry	200	IL	104	nourry	107	Ib
0,001 - 9,999 lbs	104	Ib	167	ID	109	ID	.107	ID
Over 10,000 lbs	.124	ID	.107	D	.108	10	.140	ID
Black Cod Toting 5,000 ib min.	000				.067	ID	.090	ID
Excess Black Cod grading add up to	.060	ID	.081	ID	.060	ID	.081	Ib
Under 6 lb fish, Un 100 lb boxes add up to	.035	lb	.047	Ib	.035	Ib	.047	lb
Minimum Packing Charge					\$13	0.00	\$175	5.00
All product being shipped by export container is req responsibility for accuracy of counts or product load	uired to be pa led.	cked 24 h	ours pr	ior to shippin	g. If under	24 hours E	ICS takes no	
Fillets								
Up to 5,000 lbs							ho	urly
Over 5,000 lbs						Availab	le upon requ	est
Packaging Materials, ice or gel-ice not included in the a	bove rates.							
Discover	Wel	OPTICS:	BCS's	free, secure				
BCS To get SIC	access to yo GNED UP toda	ur invent y, email:	nanc	shipping acco y.waterma hsite at:	n@bellc	nation. old.com		
Weboptics"	< ww	w.be	llco	old.com	5			
BCS	Sc	ualicum \	Naterw	ay Facility			Orchard Drive	e Fa
2825 Roeder Avenue	28	25 Roede	Avenu	e			600 Orchard D	Drive
2 O Box 895 Bellingham WA 98227-0895	Be	one: (260)	WA 98	225			Bellingham, W	IA 98
Phone: (360) 733-1640	Tr	offic Eav. (260) 67	1,1250			Fax: (360) 6	271

Bellingham, WA 98227-0895 Phone: (360) 733-1640 Accounting Fax: (360) 671-2587 Toll Free: 1-800-628-5542

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Appendix D – Small Cold Storage, Common Size Balance Sheet

Assets	Account	Per Cent	Standard Amounts \$
	Cash & equivalents	5.9%	73,317
	Trade receivables (net)	17.5%	217,467
	Inventory	11.2%	139,179
	All other current	0.2%	2,485
	Total current	34.8%	432,448
	Fixed assets, net	62.8%	780,395
	Intangibles, net	0.6%	7,456
	All other non-current	1.8%	22,368
	Total Assets	100.0%	1,242,667
Liabilities			
	Notes payable, short term	6.0%	74,560
	Current Maturity of Long Term Debt	4.4%	54,677
	Trade payables	6.2%	77,045
	Income taxes payable	0.2%	2,485
	All other current	56.0%	695,893
	Total current	72.8%	904,661
	Long term debt	24.1%	299,483
	Deferred taxes	0.0%	0
	All other non-current	18.7%	232,379
	Total liabilities	115.6%	1,436,523
Net Worth			
	Net worth	-15.6%	-193,856
Total Liabilities, Net Worth		100.0%	1,242,667

Common Size Balance Sheet, Small Cold Storage Facility

Source: Northern Economics, RMA Annual Statement Studies, 2010 - 2011

Appendix E – Medium Cold Storage, Common Size Balance Sheet

The next larger category, in reported total assets, consists of firms with \$2 million to \$10 million of assets, a category similar to that in Sitka and other locations in Alaska. The table below shows a common size balance sheet for this segment.

Assets	Accounts	Percent	Standard Amounts \$
	Cash & equivalents	6.7%	333,496
	Trade receivables (net)	15.9%	791,432
	Inventory	3.8%	189,147
	All other current	4.0%	199,102
	Total current	30.4%	1,513,178
	Fixed assets, net	55.8%	2,777,477
	Intangibles, net	4.2%	209,057
	All other non-current	9.6%	477,846
	Total Assets	100.0%	4,977,558
Liabilities			
	Notes payable, short term	11.1%	552,509
	Current Maturity of Long Term Debt	7.8%	388,250
	Trade payables	6.4%	318,564
	Income taxes payable	0.5%	24,888
	All other current	3.8%	189,147
	Total current	29.6%	1,473,357
	Long term debt	39.9%	1,986,046
	Deferred taxes	0.8%	39,820
	All other non-current	3.5%	174,215
	Total liabilities	73.8%	3,673,438
Net Worth			
	Net worth	26.2%	1,304,120
Total Liabilities, Net Worth		100.0%	4,977,558

Common Size Balance Sheet, Medium Cold Storage Facility

Source: Northern Economics, RMA Annual Statement Studies, 2010 - 2011

Appendix F – Large Cold Storage, Common Size Balance Sheet

Assets	Accounts	PerCnt	Stnd Amts
	Cash & equivalents	9.2%	2,282,594
	Trade receivables (net)	6.6%	1,637,513
	Inventory	1.8%	446,594
	All other current	1.8%	446,594
	Total current	19.3%	4,788,484
			0
	Fixed assets, net	74.4%	18,459,235
	Intangibles, net	0.9%	223,297
	All other non-current	5.4%	1,339,783
	Total Assets	100.0%	24,810,800
Liabilities			
	Notes payable, short term	2.6%	645,081
	Cur Mat LTD	5.2%	1,290,162
	Trade payables	2.4%	595,459
	Income taxes payable	0.0%	0
	All other current	4.8%	1,190,918
	Total current	15.0%	3,721,620
	Long term debt	46.3%	11,487,400
	Deferred taxes	1.0%	248,108
	All other non-current	6.6%	1,637,513
	Total liabilities	68.9%	17,094,641
Net Worth			
	Net worth	31.1%	7,716,159
Total Liab + NW		100.0%	24,810,800

Common Size Balance Sheet, Medium Cold Storage Facility

Source: Northern Economics, RMA Annual Statement Studies, 2010 – 2011