# Sawmill Cove Industrial Park Feasibility and Planning Studies

**Detailed Proposal – June 11, 2013** 

Prepared for

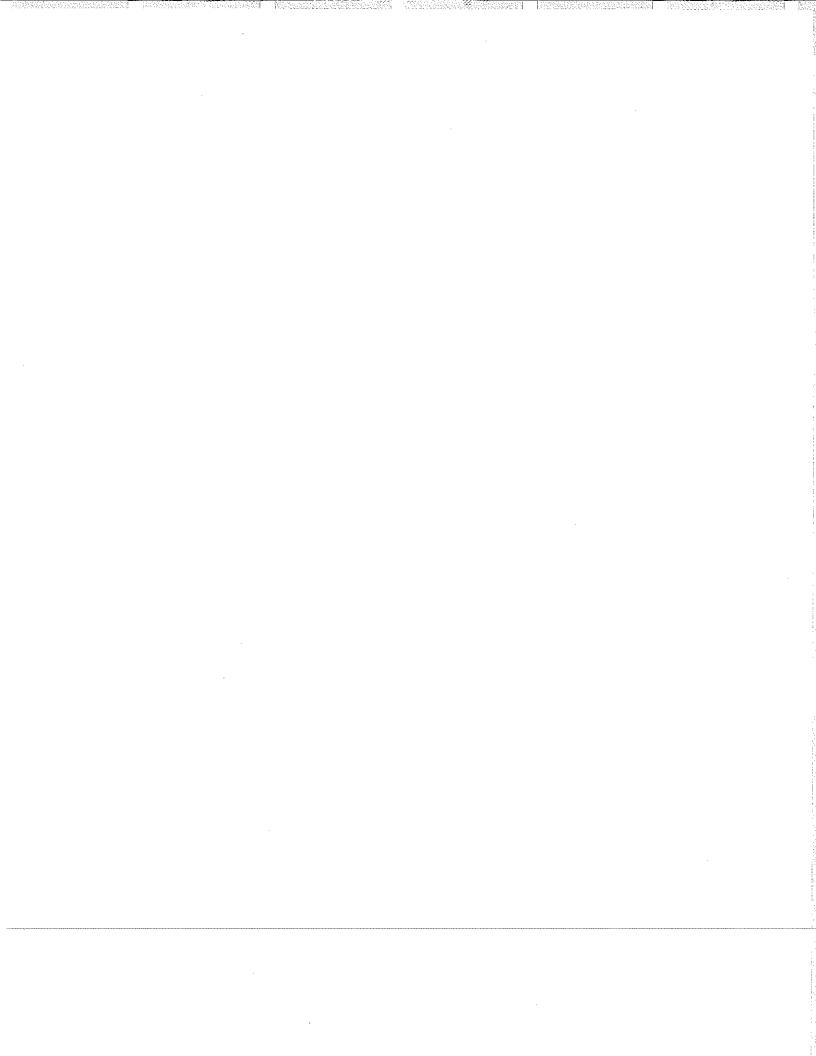
# City and Borough of Sitka

June 11, 2013

Prepared by



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### 1 Introduction

In February 2013, the City and Borough of Sitka (CBS) issued a request for proposals related to an evaluation of feasibility and preliminary planning for the development of a marine industry center at the Sawmill Cove Industrial Park (SCIP) in Sitka, Alaska. Three specific components were identified:

- A marine haul out facility
- A moorage facility for large commercial vessels
- A deepwater dock

In a letter dated April 29, 2013, CBS notified Northern Economics that it was selected to enter negotiations for completing the project. After submitting a detailed proposal on May 10, 2013, CBS provided Northern Economics with comments on the activities to be conducted in Phases 1 and 2 of the proposed scope of work, as well as a split of Phase 2 into two phases, 2A and 2B. This proposal has been revised based on the May 10, 2013 comments.

# 1.1 Background

Alaska Pulp Corporation operated a pulp mill at Sawmill Cove from 1959 to 1993, when operations ceased and equipment was removed. CBS acquired approximately 210 acres of land (80 acres of upland, 130 acres of tideland) in April of 1999 as part of a land transfer and monitoring agreement.

CBS also obtained title to 16 acres of nearby uplands and water rights from Blue Lake, with the latter including 17.4 million gallons of water per day for industrial use and an additional 26.1 million gallons for potential export as bulk or bottled water (CBS, 2013).

Part of the post-operations plans agreed to by the CBS, State of Alaska, and owners of the mill required 40 years of monitoring of wood solids and associated contaminants at the former outfall site.

The first 10-year post-baseline monitoring survey was completed in May 2011 and results indicated approximately 54 percent of the Area of Concern (AOC) has a completely recovered benthic community, a much faster rate than expected (Germano, 2012). Report authors noted organic material from nearby fish processing operations may have a slowing impact on biological improvement of the AOC, but overall the situation has improved greatly.

Economic recovery at Sawmill Cove appears slower than biological recovery. The Sawmill Cove Industrial Park (SCIP) includes the former pulp mill and dock sites; an independent board of directors, appointed by the Sitka Assembly, manages the SCIP. Directors adopted a Sawmill Cove Industrial Park Strategic Plan (June 2009) with three strategic policies:

- Strategy 1 We will develop a comprehensive land use and marketing program for the park.
- Strategy 2 We will develop a plan to build a multi-purpose dock at the park.
- Strategy 3 We will continue to monitor market and local conditions to determine if the
  development, marketing, and management of the Sawmill Cove Industrial Park is appropriate
  or needs adjusting.

SCIP directors and managers work closely with the Sitka Economic Development Association (SEDA) to promote Sitka as a location for business investment. SEDA maintains three websites and also publishes a Sitka Community Profile with information on demographics, the economy, and labor force. SEDA also supports the Sitka Marine Industries Directory (SEDA, 2013) as well as the SCIP web site.

The CBS Comprehensive Annual Financial Report for the year ending June 30, 2012, reports SCIP operating revenues of \$118,401 and Operating Expenses of \$696,825 (including depreciation) for a net operating loss of \$578,424.

As an enterprise fund operated in a business-like fashion, the Sawmill Cove Industrial Complex Fund budget for fiscal year 2013 estimates cash inflows (revenues) of \$261,209 with forecasted operating cash outlays of \$256,887 for essentially a break-even operation.

Revenues are projected from two sources: building rental (\$83,209) and sale of water (\$150,000).

### 1.2 General Location, Sawmill Cove Industrial Park

Figure 1 is a general location map of the Sawmill Cove Industrial Park, showing current parcels, leases, and access, as published and updated from the Park's Land Use Plan (adopted 2008). Note the five lots reserved for Marine Industry Development, immediately north of the deepwater bulkhead, an ideal location.

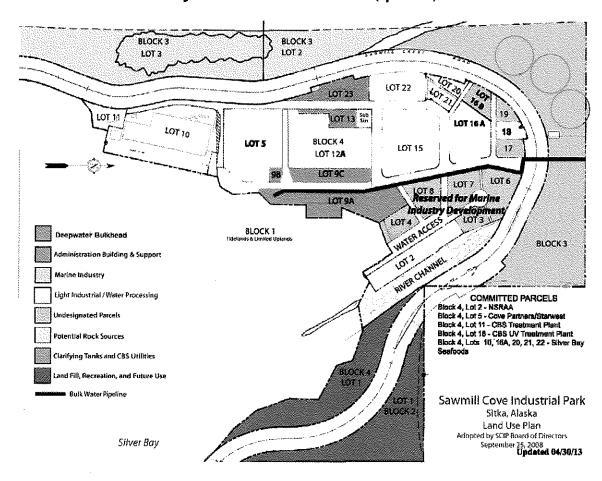


Figure 1. Sawmill Cove Industrial Park (April 2013)

# 1.3 City and Borough of Sitka, Comprehensive Plan

CBS published a comprehensive plan update in 2007, including the following content related to economic growth:

The primary potential for growth in the local economy lies in the continued redevelopment of the Sawmill Cove Industrial Park...Most of the older structures on the site have been removed and a number of the remaining sites have been refurbished. A water bottling plant, seafood processing plant, and chocolate manufacturer are currently located on the site along with a municipally run recycling center and a brown bear habitat. Opportunities for further growth on the site include a multi-use dock to accommodate fisheries and cruise ships, and, water export facilities.

Additional growth potentials include the continued expansion of Mt. Edgecumbe High School and independent tourism...the independent tourist sector and shore based excursions have substantial room for growth.

Fisheries are expected to remain stable with the potential for modest increases following the recovery of the pricing pressure that was evident in previous years.

The other sectors of the local economy are expected to remain fairly stable.

The 2007 CBS Comprehensive Plan is still relatively current and the team will use it as one reference for its project work, with specific options discussed below.

# 1.4 Project Goals

Attachment A to the Request for Proposals provided a more detailed Scope of Work, in a report prepared by Garry White, Director, Sawmill Cove Industrial Park, dated February 4, 2013. Project goals from that attachment are:

- Determine the best type and location of infrastructure to provide deepwater port access to the SCIP based on most likely needs and users.
- Determine the feasibility of a marine haulout facility at the SCIP.
- Determine the feasibility and options for a commercial vessel moorage facility, either at the SCIP or at Herring Cove.
- Identify and analyze options to best incorporate the above three components to make the best use of the SCIP assets.
- Develop a planning document that demonstrates step-by-step procedures to move forward with proposed feasible projects.
- Provide a detailed permitting plan for proposed feasible projects.
- Assist with permitting.

The Scope of Work also required consultant consideration of any negative effects on local businesses from development at SCIP.

Finally, project completion must "...determine if and how the three components...might be developed to support and enhance the local and regional economy and create net new jobs and revenues."

# 2 Proposed Scope of Work

The following subsections provide detail about our proposed scope of work. The work has been divided into phases. In general, these phases represent the following stages of project development:

- Phase 1: Scoping
- Phase 2: Screening-Level Feasibility
- Phase 3: Detailed Feasibility
- Phase 4: Implementation and Business Planning

# 2.1 Phase 1: Scoping and Initial Data Collection

The first phase of work would consist of scoping meetings and initial data collection. The outcome of this phase will be a decision by CBS, SEDA, and the SCIP Board of Directors about what specific market opportunities should be assessed in Phase 2A.

#### Task 1. Kick-off Meeting, Site Visit, and Public Meeting

Our first task will be for the consulting team to travel to Sitka for kick-off, scoping and public meetings. This will be a two- to three-day trip for Mike Fisher, Cal Kerr, Dick Somerville, and Linda Snow.

On the first day of the trip, the team will meet with SEDA and CBS staff. These kick-off meetings will be used to discuss project objectives, open lines of communication, and clarify expectations for the Phase 2A work, including details about a public meeting, how outreach activities such as surveys and interviews will be conducted, and so forth. As time allows, the team will conduct site visits and meet with other key informants as available to gather information and discuss the study.

In the evening of the first day, the team will hold a joint SCIP Board of Directors and Public Meeting. The purpose of the meeting will be to present the scope of work for the study and to solicit public input in the planning process before conceptual designs are prepared. It will be conducted as a presentation to the SCIP Board of Directors, followed by ample time for Q&A and public feedback. Members of the public will also be invited to submit written comment cards.

On the second day of the trip, the team will hold a debrief session with CBS and SEDA staff to discuss what was learned during the site visit and public meeting, and what the next steps will be. The rest of the day will be used for follow-up activities as needed. Cal and Linda will stay for a third day to conduct additional interviews and data collection related to cargo handling and other deepwater dock uses, in preparation for Phase 2A.

#### **Decision Point**

Following the Task 1 trip, team members will nominate specific marketing opportunities to the SCIP Board of Directors and/or CBS. Input from these reviewers will determine what market opportunities the consulting team should consider for screening analyses.

#### Task 2. Development of Phase 2A Scope and Fee

Once the consulting team has received direction about the opportunities to be considered in Phase 2A, it will develop revised scopes and fees for the included studies.

Phase 1 will conclude upon the acceptance of the revised scopes and fees.

# 2.2 Phase 2A: Data Collection, Infrastructure Inventory, and Screening-Level Feasibility Assessment

Once authorized, Phase 2A will consist of information collection and analysis needed to conduct screening-level assessments of the markets and industries anticipated to be served by facilities at Sawmill Cove.

#### Task 1. Competitive Haul-out and Moorage Facility Overview

Potential haul-out and moorage facility users are faced with choices when deciding where to obtain these services. Past studies have developed inventories of competing haul-out facilities in the region and the state. The consulting team will start with these past inventories, and update them to include newly-developed and expanded haul-out and shipyard facilities and the services they offer, and to develop current comparative costs of the services at those facilities.

Potential competing haul-out and large vessel moorage facilities on the west coast of Canada and the U.S. that could reasonably be considered competition with Sitka's planned developments will also be considered in this overview, and the moorage facilities will be inventoried and costs of services determined. This information will be helpful in estimating not only the number of customers who may choose Sitka's planned facilities, but will also help determine what prices could be charged for these services, and what revenues could be earned. It may also be important to estimate capacity and use of both competing haul-out and large vessel moorage facilities to determine market shares, and whether Sitka's planned developments could meet pent up demand for these services.

#### **Task 2. Vessel Owner Survey**

The consulting team will undertake a survey of vessel owners with vessels moored or waitlisted in Sitka, with vessels moored elsewhere in the region, as well as those who transit the region and might reasonably be considered users of Sitka's planned developments. Results of these surveys can tell us what haul-out and shipyard services and large vessel moorage services are required by what types of vessels, and where those services are currently obtained. Survey results can also enlighten us as to why services are obtained where they are now, and how those decisions are made. We can learn what is important to vessel owners requiring these services, what they might be willing to pay, and how far they might be willing to travel for goods and services. In addition, we can find out how these vessel owners get information about haul-out and shipyard facilities and large vessel moorage on the west coast of North America, which will help develop the marketing plan.

Survey participants will include commercial fishing vessels; fish tender and processing vessels; commercial vessels involved in tourism, charter fishing, and cargo movement; and larger pleasure craft. Identification of vessel owners is available through various government databases.

The surveys will be undertaken through a mailing to inform potential participants of a website where the survey itself can be accessed. CBS may want to consider offering some kind of incentive to encourage survey participation. In addition, where it is vital to get a robust response from small but important market segments such as cargo vessels, tourist-industry vessels, fish processing vessels, and possibly some local groups, interviews will be conducted via telephone.

At present, the budget does not include the cost of mailing postcards or any incentives. The team will discuss the best options for conducting the survey during the Phase 1 kick-off meeting and modify the Phase 2A budget appropriately.

#### Task 3. Base Map Preparation

PND will combine available topographic, as-built, aerial, and cadastral survey information collected from the CBS and other potential sources to prepare an initial electronic base map of the study area(s). The base map will be used for general planning purposes to assess site configuration options for the various development opportunities at SCIP. This work will be completed within two weeks of receiving available data.

#### Task 4. Preliminary Site Recommendations

Based on available and new site data and other initial findings, PND Engineers will develop preliminary site recommendations for the proposed facilities. PND will assess navigational corridors, water depths, upland availability, geotechnical conditions, utilities, site access, and adjacent infrastructure throughout Sawmill Cove and Herring Cove to determine the optimal use of space for each of the three potential marine facilities.

#### Task 5. Preliminary Infrastructure and Equipment Recommendations

Based on existing site data and other initial findings, PND Engineers will develop a preliminary set of recommendations for infrastructure and equipment needed at the proposed facilities. These recommendations will be finalized after a market analysis has determined the demand for different types and capacities of equipment and infrastructure.

#### Task 6. Preliminary Conceptual Designs

PND will develop conceptual level designs for the marine haul out facility, deepwater dock, and large vessel commercial moorage facility. Deliverables will include schematic site plans and typical sections illustrating the proposed improvements at each facility.

#### Marine Haul out Facility

Planning for the appropriate features of a proposed haul out facility will include:

- Boat Lift equipment of appropriate capacity to meet to local and regional demand
- Boat haul-out pier suited for various combinations of lift sizes
- Supplemental loading wharf allowing for optional crane operations
- Boat lifting berth with suitable water depth for all tide operations
- Vessel approach and access to the lift with option for temporary moorage float alongside
- Hydraulic trailer for yard operations and efficient on site storage of vessels
- Outside work area spaces
- Sheltered work areas for services to be performed in controlled work space environments
- Storage area spaces
- Wash down pad with optional heated slab for winter usage
- Wash water treatment facilities
- Storm water runoff and discharge treatment facilities
- Security fencing and surveillance
- Water, sewer, power and lighting utilities

 Appropriate environmental & operating permits including NPDES MSGP and Section R SWPPP

#### Deepwater Dock

Planning for the appropriate features of a proposed deepwater dock will include:

- Dock capacity to meet to local, regional, national and international demand
- Various loading operations and configurations necessary for a multi-use facility
- · Freight, bulk cargo and water export needs
- Berth with suitable water depth for multiple marine operations at all tidal stages
- Safe navigational approach and departure lanes
- Shoreside facility needs
- Outside and sheltered storage area spaces
- Storm water runoff and discharge treatment facilities
- Security fencing and surveillance
- Water, sewer, power, and lighting utilities
- Environmental requirements applied to the upland and bay operable units at Sawmill Cove following the closure of the former pulp mill.

#### Large Vessel Commercial Moorage Facility

Planning for the appropriate features of a large vessel commercial moorage facility will include:

- Site access
- Upland parking & staging
- Utilities
- Wind and wave protection
- Water depth
- Channel markers
- Access trestles and gangways
- Moorage floats
- Harbor office
- Public restrooms
- Space for trash receptacles, waste oil containers & parking
- Boat launch ramp with trailer parking options

#### Task 7. Screening-level Assessment of Large Vessel Moorage

The consulting team will use the vessel owner survey results and interview findings to conduct its screening analysis for a large vessel moorage facility.

First, the team will do a brief analysis of the survey results to determine rough estimates of the numbers and sizes of vessels that may be interested in moorage at Sawmill Cove. These numbers will

then be used to develop revenue projections based on current moorage rates in Sitka or alternative rates (at CBS's discretion).

Next, the team will compare revenue generation potential with probable capital, operations, and maintenance costs. The team will develop an annualized estimate of the facility's total cost and then compare that cost with the potential revenue stream to determine what portion of costs might be covered by moorage alone.

Based on the ratio of cost to revenues, the team will provide a recommendation about whether the ratio represents a probable opportunity, strong opportunity, or weak opportunity. The recommendation will be documented in a brief memo and then incorporated in the overall documentation for Phase 2A.

#### <u>Task 8. Screening-level Assessment of Vessel Haul-out Facility</u>

The consulting team will also use the vessel owner survey results and interview findings to conduct its screening analysis for a vessel haul-out facility.

As with the proposed moorage facility, the team will first do a brief analysis of the survey results to determine rough estimates of the numbers and sizes of vessels that may be interested in being hauled out at Sawmill Cove. These numbers will then be used to develop revenue projections for CBS based on competitive rates in the region and for local businesses based on survey results about money spent when vessels are hauled out. Two to three lift sizes will be considered, since the size will affect the number of vessels that can be lifted.

Next, the team will compare potential lift revenues and spending in the community with probable capital, operations, and maintenance costs. The team will develop an annualized estimate of the facility's total cost and then compare that cost with the potential revenue streams to determine what portion of costs might be covered by lift fees.

Based on the ratio of cost to lift revenues—and a consideration of local spending impacts—the team will provide a recommendation about whether the demand represents a probable opportunity, strong opportunity, or weak opportunity. The recommendation will be documented in a brief memo and then incorporated in the overall documentation for Phase 2A.

#### Task 9. Screening-level Assessment of Cargo Handling at Deepwater Dock Facility

The proposed deepwater dock could possibly serve both cruise ships and general cargo vessels and barges as noted in the comprehensive plan:

Lacking a system of highways or railroads, the regional economy of the City and Borough of Sitka relies instead on the Alaska Marine Highway system (state ferry) to move passengers around the region, and ocean barge services for most of its freight and bulk-fuel needs – the alternative being expensive airfreight. The State has a docking facility located six miles from downtown.

The screening level assessment will include an estimate of current cargo volumes in-bound and out-bound from Sitka, along with interviews of barge and cargo shipping companies, including Alaska Marine Lines, Samson Tug and Barge, Northland Services, and Arrowhead Transfer. Estimated cargo volumes will be drawn from generally available reports, such as the Waterborne Commerce data published by the U.S. Army Corps of Engineers. Besides general cargo, whether containerized or not, special attention will be focused on exports of aggregates (including armor rock for breakwaters), ore, and possible compost. In addition, several alternative energy projects in Southeast Alaska have

considered bulk fuel deliveries of bulk wood chips and wood pellets; if any are located, they will be included in the screening analysis.

These estimates will be used as a point of departure for the interviews discussed. Cal Kerr and Linda Snow will contact and interview transportation company representatives, with focus on growth trends, unmet needs, and how a proposed deepwater dock would improve or enhance operations.

#### Task 10. Screening-level Assessment of Deepwater Dock Facility

Sitka is an island-based community with water and air access routes for commerce, recreation, and resource development, as more specifically addressed in the comprehensive plan excerpt below:

Sitka relies on the Alaska Marine Highway System for a year-round passenger and vehicle service. Barge lines move the bulk of commercial freight, including dry goods, fuel and building materials. (Comp Plan)

There is a breakwater at Thomsen Harbor but no deep draft dock. A multipurpose deep water dock is being proposed at Sawmill Cove Industrial Park which will be structurally capable of handling very heavy freight and cargo vessels including bulk water ships, and berthing one cruise ship at a time. Cruise ships currently anchor in the harbor and lighter visitors to shore. A boat launch, marine haul-out, boat repairs and other services are also available.

Cargo vessels (including barges) can dock at Sitka in all months of the year, as identified in Sitka's comprehensive plan (above). More specifically, the following potential dock uses are listed in the SCIP Strategic Plan dated June 2009 (Strategy 2):

- Bulk Water shipment
- Ocean-going freight, in or out of Sitka
- Container transshipment facility tied to Prince Rupert
- Shipment of bottled water
- Shipment of fish processed at SCIP
- Export of rock [and ore]
- Bio-fuel projects using fish waste, wood products, and recycled materials
- Scientific and Marine/Fishing Research vessels
- Cruise Ships

As stated earlier in this proposal, team members will focus on cargo operations. Interviews scheduled for Task 9 (Cargo Handling) will provide cargo estimates for both in-bound and out-bound operations. Task 10 will include specific focus on containerized cargo and whether or not this use of a potential deep water dock fits well with the proposed Marine Industry Development site at lots 3, 4, 6, 7, and 8. These lots are immediately adjacent to the deepwater bulkhead identified on the SCIP Land Use Plan map, updated to April 30, 2013.

#### Task 11. Documentation and Recommendations

The consulting team will consolidate the screening analysis findings into a draft report. The report will provide a discussion about the screening analyses' approaches and findings, along with recommendations about the market opportunities and infrastructure improvements that appear

feasible. After submitting the draft report and receiving one round of comments, the consulting team will make necessary revisions and submit a final report.

#### Task 12. Presentation and Meetings

At the conclusion of the Phase 2A screening analyses, the consulting team will travel to Sitka to present findings and recommendations to the SCIP Board of Directors. If desired, the presentation can be followed by a debriefing and discussion of next steps on day 2.

#### **Decision Point**

Following the Phase 2A presentation, the SCIP Board of Directors and/or CBS will determine which infrastructure improvements and supporting market opportunities the consulting team should consider for in-depth feasibility assessments.

#### Task 13. Development of Phase 2B Scope and Fee

Once the consulting team has received direction about Phase 2B, it will develop scopes and fees for the each of the studies to be included.

Phase 2A will conclude upon the acceptance of the scopes and fees.

# 2.3 Phase 2B: Data Collection, Infrastructure Inventory, and Screening-Level Feasibility Assessment

Once authorized, Phase 2B will consist of remaining tasks needed to conduct screening-level assessments of the markets and industries anticipated to be served by facilities at Sawmill Cove. The following tasks are indicative of the work that could be performed in Phase 2B, though the actual work to be included in Phase 2B will be determined at the conclusion of Phase 2A.

#### Task 1. Topographic, Bathymetric and Sub bottom Geophysical Surveys (Optional)

To supplement the base map preparation, O'Neill Surveying and David Evans & Associates (DEA) are included on our team to provide accurate and up to date onshore and offshore site information as options to the CBS. O'Neill will provide field topographic surveys in areas of the site that lack sufficient topographic definition. Accurate bathymetric and subbottom geophysical surveys would be very beneficial to the planning for all three proposed marine facilities. DEA will provide the offshore marine surveys and are currently under contract for other similar services with the CBS. Should the CBS elect to proceed with this option, DEA would be able to economically complete this work while in Sitka. They are currently scheduled to complete their other work the beginning of August and can commence with the services under this project at that time.

#### Task 2. Screening-level Assessment of Seafood Exports

In order to understand the potential that a deep-water dock at Sawmill Cove could result in seafood exports directly from Sitka, we will first need to answer a series of questions regarding the demand for direct transport services, including the following.

- 1. What is the total product volume and value generated by seafood processors in Sitka?
- 2. Currently, where are the final markets for the various products processed in Sitka?

- 3. Are processors in Sitka already exporting products indirectly—i.e. from Washington State after transport from Sitka?
- 4. How are products processed in Sitka currently being transported to their markets?
- 5. Are processors in Sitka looking to expand to markets they are currently not serving?
- 6. If processors had the option of shipping directly to export markets out of Sitka, how much would they ship?
- 7. Would there be any negative consequences of changing out of the status quo product transport chain?

Once we've investigated the demand side of the issue we would also need to examine the supply side. We would try to answer the following questions:

- 1. Are there communities in Alaska that have significant amounts fish processing and which have the capacity to handle bulk cargo ships, but which do not export fish? If so, why?
- 2. Which communities are currently utilizing direct exports of seafood?
- 3. Which companies are currently involved in transporting direct exports of seafood from Alaska?
- 4. Are there companies that are dealing with volumes similar to those that might be available in Sitka?
- 5. What are shipping rates for processors in similarly situated communities?

The primary means by which most of these questions would be answered would be a series of key informant interviews with fish processors. We would seek to interview each of the major processors in Sitka. We would also seek to interview representatives of processors in other similarly situated communities not only in Southeast Alaska, but also in other Alaska communities. Finally, we will seek to interview operators of seafood transport services—including the current suppliers of transport services in Sitka, as well as operators of cargo ships that that are currently operating in Alaska. Overall, we would expect to conduct as many as 20 interviews.

In addition to the key informant interviews, we will obtain and compile seafood processing data from ADF&G. We have been informed by ADF&G that these data are generally available if we ask for data that combines processors in Sitka with processors in Pelican. If we request data for Sitka alone, much of the information could not be disclosed due to confidentiality rules.

#### Task 3a. Screening-level Assessment of Bulk Water Exports (see third-party review option, below)

In 2004, Alaska's Denali Commission funded a feasibility analysis related to bulk water export from Alaska. That report (Northern Economics, 2004) found that Alaska contained a considerable fresh water resource, much of it located near tidewater and suitable for tanker delivery. The nearest major markets for bulk water export included Los Angeles, Long Beach, and San Diego, although delivery costs, primarily tanker fuel and labor, were rising at a time when desalination costs were dropping.

A spreadsheet model, prepared by team engineers and analysts, suggested delivered costs (2004) of bulk water at \$10,600 per acre-foot, while comparable costs for desalinated water (delivered) of \$230 to \$1,500 per acre-foot, approximately seven times less expensive than bulk Alaska water.

The project team noted bottled water from Alaska, by comparison with bulk water volumes, held considerable market appeal, especially in Southeast Asia. Alaska's pristine mountains and glaciers

were strongly associated with clean, refreshing Alaska water with consumers expressing a decided interest in bottled products.

Costs have changed in the nine years since this report was submitted, especially those related to fuel, while air quality regulations related to marine vessels have also altered their operating cost structures.

As part of its screening assessment for CBS, Northern Economics will update the 2004 spreadsheet with readily available costs and conduct a preliminary re-assessment of potential delivered bulk water costs, especially those related to price differentials between delivered bulk water and desalinated product in southern California.

Along with the cost model update, Northern Economics will review potential markets, adding those who have expressed interest in buying bulk water.

#### Task 3b. Third-party Review of Bulk Water Export Feasibility Study (see screening study option, above)

CBS may have copies of other bulk water feasibility studies; if so, Northern Economics will review these on a third-party basis, using the basic process developed in 2004. Newer costs and more attractive markets may positively affect the CBS bulk water export potential.

#### <u>Task 144 Screening-level Assessment of Cruise Ship Use of Deepwater Dock Facility</u>

Currently, cruise ships lighter passengers from larger vessels to shore-based terminals as shown in Figure 2, a view of the O'Connell Bridge Lightering Facility from the Baranof Castle Hill State Historic Site.

Lightering passengers consumes more time, fuel and effort than a road-based access route, such as that proposed should a deepwater dock be suited for cruise ship mooring. As part of the screening level assessment, team members will contact cruise ship representatives and discuss the potential for moorage at a dock in Silver Bay, versus the current lightering method.

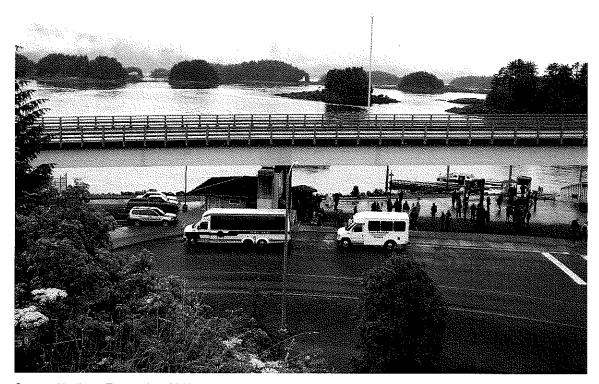


Figure 2. Large Vessel Lightering, O'Connell Bridge, Sitka

Source: Northern Economics, 2010

For this task, Cal Kerr and Linda Snow will contact cruise ship representatives in Juneau, Seattle, and Anchorage, or other relevant locations, to assess their level of interest in a dock suitable for cruise ship passenger embarkation and debarkation.

Questions will relate to time spent on lightering versus bus time to and from the Silver Bay area, security, and liability, especially as related to passengers with special needs (wheelchairs, etc.).

# 2.4 Phase 3: Feasibility Assessments

Phase 3 will consist of detailed feasibility assessments for each of the infrastructure improvements planned for Sawmill Cove. The consulting team proposes the following tasks with the understanding that the scope and effort involved in these tasks will be determined at the conclusion of Phase 2B.

#### Task 1. Large Vessel Moorage Feasibility Study

The comprehensive large vessel moorage feasibility study will expand on the screening-level analysis from Phase 2A to include a more in-depth analysis of moorage demand; quantity and size of slips and/or other mooring infrastructure required; revenue generation potential; and capital, operating, and maintenance costs. The feasibility study will include a life cycle cost analysis to understand the true cost of a mooring facility and what level of revenues will be required to maintain it. The

consulting team envisions an iterative process for sizing the facility based on the trade-offs between potential moorage revenues and the costs associated with providing the necessary facilities.

Once the team has developed an understanding of the financial aspects of the proposed facility, it will:

- Evaluate funding and financing options
- Discuss the effect of various ownership and management options (including mixes of public and private involvement)
- Comment on the facility's competitive position with other moorage facilities in Sitka and elsewhere in the region
- Evaluate the broader economic impacts associated with mooring large vessels at Sawmill Cove

The analysis of economic impacts will consider information gathered from vessel owner surveys, anticipated moorage rates and other fees charged at the facility, information collected from interviews with business owners, and multiplier effects as modeled by the IMPLAN™ input-output modeling software. The team recognizes that impacts may be positive and negative; for example, by attracting vessels to Sawmill Cove that are currently moored in the Sitka's existing public harbors, it may affect the fiscal position of the existing harbor system and CBS as a whole. While vessels on the waiting list might fill in the vacancy in the existing harbor, it may also be the case that the space would remain unused. Also, the availability of services in the community and the decisions of business owners to expand, move, or otherwise change their operations could be a factor. The team will consider all of the effects, positive and negative, in its economic impact analysis.

The feasibility study will also identify, primarily through the surveys and interviews, what uplands facilities might complement the moorage facilities.

#### Task 2. Vessel Haul-out Feasibility Study

The comprehensive vessel haul-out feasibility study will expand on the screening-level analysis from Phase 2A to include a more in-depth analysis of demand for haul-outs; the size and frequency of vessel haul-outs; lift options and infrastructure required; revenue generation potential; and capital, operating, and maintenance costs. The feasibility study will include an analysis of projected revenues for different sizes of lifts, which will aid in the decision-making process. The team has found that communities often purchase lifts sized larger than what is deemed feasible in an initial analysis. Working with the vessel data will allow for an informed decision about the risks and opportunities.

Once the team has developed an understanding of the financial aspects of the proposed haul-out facility, it will:

- Evaluate funding and financing options
- Discuss the effect of various ownership and management options (including mixes of public and private involvement)
- Comment on the facility's competitive position, with respect to capacities, rates, and other terms, with other haul-out facilities in the region
- Evaluate the broader economic impacts associated with hauling out vessels at Sawmill Cove, including the effects on local businesses

Haul-out facilities are rarely profitable for a municipality to own. However, they provide access for vessel owners to work on their vessels and engage local businesses to perform services and provide

goods. While the immediate financial evaluation will look at the ability of projected revenues to cover the haul-out facility's costs, a broader evaluation will also be included to look at money spent in the community as a result of a vessel being lifted out of the water.

This analysis of broader economic impacts will consider information gathered from vessel owner surveys (including not only frequency of lifts but also what level of spending on goods and services is associated with the lift), anticipated lift revenues, information collected from interviews with business owners, and multiplier effects as modeled by the IMPLAN™. As with the moorage feasibility study, the team will consider all of the effects, positive and negative, in its economic impact analysis. The team will not only consider positive impacts of complementary business development in the local area (and attracting new businesses), but it will consider negative impacts to local businesses which would consider this facility as competition as well.

The feasibility study will also identify, primarily through the surveys and interviews, what uplands facilities might be required to maximize the haul-out facility's potential, including wash down pads and work areas, warehouses, storage space, and offices and work areas in which service businesses can operate.

#### Task 3. Deepwater Dock Feasibility Study

The comprehensive deepwater dock feasibility study will expand on the screening-level analysis from Phases 2A/B to include a more in-depth analysis of demand for dock space; the types, frequency, and quantity of usage; revenue generation potential; and capital, operating, and maintenance costs. The feasibility study will analyze projected revenues from the market opportunities deemed appropriate, based on the findings from Phases 2A/B and the SCIP Board of Directors' decision. As part of that analysis, the team will consider the dock's competitive environment, including a review of fees and policies at competing ports as well as the value proposition for users to call at the Sawmill Cove dock versus other locations. There may be tie-ins with Prince Rupert and Panama Canal upgrades, so the consulting team will cast a wide net to understand the competitive environment both today and in the future.

Once the team has developed an understanding of the financial and operational aspects of the proposed dock, it will:

- Evaluate funding and financing options
- Discuss the effect of various ownership and management options (including mixes of public and private involvement)
- Comment on the facility's competitive position, with respect to fees, services, and policies, with similar facilities in the region
- Evaluate the broader economic impacts associated with a deepwater dock at Sawmill Cove, including the effects on local businesses and industries

This analysis of broader economic impacts will consider information gathered from interviews with users, anticipated revenues, information collected from interviews with business owners, and multiplier effects as modeled by the IMPLAN $^{\text{TM}}$ . The team will consider both positive and negative effects in its analysis.

The feasibility study will also identify what uplands facilities might be required to maximize the dock's potential, including land and/or tankage required, as well as cranes, piping, conveyors, and other equipment that might be required.

#### Task 4. Presentation to SCIP Board of Directors

At the conclusion of the feasibility studies, the consulting team will travel to Sitka to present its findings to the SCIP Board of Directors.

#### **Decision Point**

Following the Phase 3 presentation, the SCIP Board of Directors and/or CBS will direct the consulting team about which market opportunities it should include in the implementation and business planning phase.

#### Task 5. Development of Phase 4 Scope and Fee

Once the consulting team has received direction from CBS, it will develop a scope and fee for the final Phase 4 activities.

Phase 3 will conclude upon the acceptance of the Phase 4 scope and fee.

# 2.5 Phase 4: Implementation and Business Planning

The consulting team will conclude its efforts in Phase 4, during which the team will create a final feasibility study report, consolidate its findings into a comprehensive business plan, and develop a marketing plan for Sawmill Cove. The consulting team proposes the following tasks with the understanding that the scope and effort involved in these tasks will be determined at the conclusion of Phase 3.

#### **Task 1. Final Feasibility Study Report**

The final feasibility study report will combine the work done in Phase 3 and integrate each of the proposed infrastructure improvements and market opportunities into a comprehensive study. The team will then add in its final ownership and management recommendations, construction schedule recommendations and options, environmental regulation considerations, and recommended best management practices.

#### Task 2. Business Plan

Team members will draft business plans for those projects that appear feasible and likely to succeed, estimated at no more three plans at this time. Business plan content varies widely, depending on whether the firm is a start-up, expansion, or possibly an enterprise fund operating under the CBJ.

Generally speaking, business plans start with a solid market analysis that further defines the business; next, financial data provide the underpinning of the proposed business; and, third, supporting documents are appended. Typical appendices include legal descriptions, resumes, pro forma cash flows, construction and marketing schedules, personal and corporate financial statements, income tax filings, and appraisals. Management and operations plans will be included in a business plan, as well as an outline of best management practices.

Team members anticipate coordination of these three plans with SEDA, especially with those areas that they have reviewed, as part of the organizations on-going economic development activities.

#### Task 3. Marketing Plan

A sound marketing effort includes the research, focus, and careful monitoring of the firm's customers or potential customers, whether the firm is public or private. Business plans contain marketing sections that address such questions as:

- 1. What business is the firm in?
- What are its products and services?
- 3. Who are current or potential customers?
- 4. Who are competitors and what are market shares?
- 5. What are the firm's strengths and weaknesses, and how do you address them?

The following Marketing Plan outline proves a simple but effective listing of topics and questions for the selected three businesses.

- A. Mission statement, with attention to main markets, products, and services;
- B. Marketing objectives for this and the next three years;
- C. Sales and profit goals for this and the next three years;
- D. Product and services sold, including likely changes, market shifts;
- E. Target Markets;
- F. Market Potential;
- G. Marketing Specifics:
  - a. Overall strategy
  - b. Competitive strategies
  - c. Promotion strategies
  - d. Pricing, place, sales practices
  - e. Marketing and advertising budgets;
- H. Potential problems;
- 1. Metrics on implementation and measurement of milestones;
- Review and evaluation schedules.

In the case of these planned developments, it is potential users, and users of similar services that will be targeted with promotion strategies. Surveys of vessel owners and other potential users developed earlier in this study will enlighten the consulting team about why choices are made to use particular services in particular locations, which will help to focus a marketing plan. In addition, our surveys will ask where potential customers get information about availability of such services. Responses to that question will help to focus a promotion strategy using methods most likely to be noticed by potential users.

#### Task 4. Presentation to SCIP Board of Directors (optional)

As a final, optional task, the consulting team can give a presentation about the comprehensive feasibility study, business plan, and marketing plan to the SCIP Board of Directors.

# 3 Proposed Fee for Phases 1 and 2A

We will complete this work on a time and materials basis with a not-to-exceed amount by phase. Labor rates are the most recently available audited rates for the staff members anticipated to work on this project. If other staff members are required, their labor cost will be billed at their audited rates. Expenses are presented as estimates and will be billed at actual cost.

Table 1 presents a summary of the proposed fees for Phases 1 and 2A.

Table 1. Summary of Proposed Fees

|          | Phase and Option | Estimated Cost (\$) |
|----------|------------------|---------------------|
| Phase 1  |                  | 37,901.89           |
| Phase 2A |                  | 135,423.70          |

Table 2, located on page 19, provides a detailed breakdown of labor costs and expenses by firm for Phase 1. Table 3, located on page 20, provides a detailed breakdown of labor costs and expenses by firm for Phase 2A.

Due to the uncertainty of what work might be included in Phases 2B, 3, and 4, we have not included cost estimated for those phases.

Table 2. Phase 1 Detailed Budget

| 173300000011000000000000000000000000000                  | Hours by Staff Member |        |        |          |          |               |        |              |            |                         |            |            |
|--|-----------------------|--------|--------|----------|----------|---------------|--------|--------------|------------|-------------------------|------------|------------|
|  | Northern Economics    |        |        |          |          | PND Engineers |        |              |            | Southeast<br>Strategies |            |            |
|  |                       |        |        |          |          |               |        | Senior       | Senior     | Admin Tech              | CAD        |            |
| Task   | Cal                   | Diane  | Marcus | Mike     | Michelle | Pat           | Terri  | Engineer VII | Engineer V | ١V                      | Designer V | Linda Snow |
| Principal Oversight and Administration                   |                       | 1.00   |        |          | 2.00     | 1.00          |        |              |            |                         |            | }          |
| Task 1. Kick-off Meeting, Site Visit, and Public Meeting |                       |        |        |          |          |               |        |              |            |                         |            |            |
| Prep work for trip                                       | 8.00                  |        |        | 8.00     |          | 2.00          | 8,00   | 4.00         | 12.00      | 2.00                    | 8,00       | 6.00       |
| Trip to Sitka  | 32.00                 |        |        | 24.00    |          |               |        | 20.00        |            |                         |            | 27.00      |
| Post-trip communication                                  | 2.00                  |        |        | 2.00     |          |               |        | 8.00         |            |                         |            | 8.00       |
| Task 2. Development of Phase 2 Scope and Fee             |                       |        |        |          |          |               |        |              |            |                         |            |            |
| Revise scope and fee estimates for Phase 2               | 8.00                  |        | 4.00   | 8.00     |          | 1.00          |        | 8.00         |            | 2.00                    |            | 8,00       |
| Total Hours  | 50.00                 | 1.00   | 4.00   | 42.00    | 2.00     | 4,00          | 8.00   | 40.00        | 12.00      | 4,00                    | 8.00       | 49.00      |
| Direct Labor Rate (\$/hour)                              | 45.19                 | 35.55  | 58.20  | 39.08    | 21.00    | 69.68         | 24,79  | 60,00        | 34.00      | 29.75                   | 35.00      | 45.08      |
| Standard Audited Overhead Rate / Indirect Costs (%)      | 237.50                | 237.50 | 237.50 | 237.50   | 237.50   | 237.50        | 237.50 | 173.60       | 173,60     | 173.60                  | 173.60     | 142.00     |
| Profit on Direct Labor (%)                               | _                     | -      | -      | _        | -        | -             | -      | 12.50        | 12.50      | 12.50                   | 12.50      | _          |
| Profit on Indirect Costs (%)                             | -                     | -      | -      | -        | -        |               | -      | 15.00        | 15,00      | 15.00                   | 15.00      | _          |
| Labor Rate, Direct and Indirect (\$/hour)                | 152.52                | 119.98 | 196.43 | 131,90   | 70.88    | 235.17        | 83.67  | 180,66       | 102.37     | 89.58                   | 105.39     | 109.09     |
| Fee (on Direct and Indirect Labor Cost) (%)              | 15.00                 | 15.00  | 15.00  | 15.00    | 15.00    | 15.00         | 15,00  | -            | -          | -                       | -          | 10.00      |
| Fully Burdened Labor Rate (\$/hour)                      | 175.39                | 137.98 | 225.89 | 151.68   | 81.51    | 270.45        | 96.22  | 180.66       | 102.37     | 89.58                   | 105.39     | 120.00     |
| Fully Burdened Labor Cost (\$)                           | 8,769.68              | 137.98 | 903.56 | 6,370.53 | 163.01   | 1,081.78      | 769.73 | 7,226.40     | 1,228.49   | 358.31                  | 843.08     | 5,880.15   |
| Expenses   |                       |        |        |          |          |               |        |              |            |                         |            |            |
| Travel Expenses for Kick-off Meeting and Site Visit      | 1,490.00              |        |        | 970,00   |          |               |        | 672.00       |            |                         |            | 970.00     |
| Markup on Expenses (%)                                   | -                     |        |        | -        |          |               |        | 10.00        |            |                         |            | -          |
| Total Expenses   | 1,490.00              | -      | -      | 970.00   | -        |               | -      | 739.20       | -          | -                       | -          | 970.00     |
| Project Cost   |                       |        |        |          |          |               |        |              |            |                         |            |            |
| Northern Economics                                       |                       |        |        |          |          |               |        |              |            |                         |            | 20.656.27  |
| PND Engineers  |                       |        |        |          |          |               |        | [            |            |                         |            | 10,395.48  |
| Southeast Strategies                                     |                       |        |        |          |          |               |        |              |            |                         |            | 6,850.15   |
| Total Project Cost                                       | 1                     |        |        |          |          |               |        |              |            |                         |            | 37,901.89  |

Table 3. Phase 2A Detailed Budget

|   |                    | Hours by Staff Member |          |               |          |          |                           |                    |                         |            |              |            |                |
|---|--------------------|-----------------------|----------|---------------|----------|----------|---------------------------|--------------------|-------------------------|------------|--------------|------------|----------------|
|   | Northern Economics |                       |          | PND Engineers |          |          |                           |                    | Southeast<br>Strategies |            |              |            |                |
| Task  | Cal                | Diane                 | Michelle | Mike          | Pat      | Terri    | Senior<br>Engineer<br>VII | Senior<br>Engineer | Senior                  | Staff      | Admin        | CAD        |                |
| Principal Oversight and Administration              | - Cai              | 1.00                  | 4.00     | wike          | 1.00     | ierri    | VII                       | Vi                 | angineer i              | Engineer V | Tech IV      | Designer V | Linda Snov     |
| Task 1. Haul-out and Moorage Facility Overview      |                    | 1.00                  | 4.00     |               | 1.00     |          |                           |                    |                         |            |              |            | 16.00          |
| Task 2, Vessel Owner Survey                         |                    |                       |          | 32,00         | 2.00     |          |                           |                    |                         |            |              |            | 60.0           |
| Task 4. Base Map Preparation                        |                    |                       |          | 02,00         | 2.00     |          | 2.00                      |                    |                         | 24.00      |              | 8.00       | 0,00           |
| Task 6, Preliminary Site Recommendations            |                    |                       |          |               |          |          | 12.00                     | 8.00               | 16.00                   | 24.00      |              | 8.00       |                |
| Task 7, Preliminary Infrastructure and Equipment    |                    |                       |          |               |          |          | 12.00                     | 12.00              | 16.00                   |            |              |            |                |
| Task 8. Preliminary Conceptual Designs              |                    |                       |          |               |          |          | 32.00                     | 32.00              | 60.00                   | 12.00      |              | 36.00      |                |
| Task 9. Screening Assessment of Moorage             |                    |                       |          | 40.00         | 2.00     |          | 32,00                     | 32.00              | 60.00                   | 12.00      |              | 36.00      | 40.0           |
| Task 10. Screening Assessment of Haul-out Facility  | 1                  |                       |          | 40.00         | 2.00     |          | 1                         |                    |                         |            |              |            | 16.00<br>16.00 |
| Task 15. Screening Assessment of Cargo Handling     | 16.00              |                       |          | 70.00         | 1.00     |          | l                         |                    |                         |            |              |            | 8.00           |
| Task 16. Screening Assessment of Deepwater Dock     | 56.00              |                       |          |               | 2.00     |          |                           |                    |                         |            |              |            |                |
| Task 17. Documentation and Recommendations          | 12.00              |                       |          | 32.00         | 4.00     | 12.00    | 12.00                     |                    |                         | 24.00      |              |            | 8.00           |
| Task 18. Presentation and Meetings                  | 34.00              |                       |          | 38.00         | 2.00     | 4,00     | 40.00                     |                    |                         | 32.00      |              |            | 4.00           |
| Task 19. Development of Phase 3 Scope and Fee       | 4.00               |                       |          | 8.00          | 2.00     | 4.00     | 8.00                      |                    |                         | 32.00      | 2.00<br>2.00 | 8.00       | 19.00          |
| Total Hours   | 122.00             | 1.00                  | 4.00     | 190.00        | 18.00    | 16.00    | 118.00                    | 52.00              | 92.00                   | 92.00      | 4.00         | 50.00      | 8.00           |
| · Down · (co. of) · O                               | 122.00             | 1.00                  | 4.00     | 130.00        | 10.00    | 10.00    | 110.00                    | 52.00              | 92.00                   | 92.00      | 4.00         | 52.00      | 155.00         |
| Direct Labor Rate (\$/hour)                         | 45,19              | 35.55                 | 21.00    | 39.08         | 69.68    | 24.79    | 60.00                     | 55.00              | 36.75                   | 34.00      | 29,75        | 35.00      | 45.08          |
| Standard Audited Overhead Rate / Indirect Costs (%) | 237.50             | 237.50                | 237.50   | 237.50        | 237,50   | 237.50   | 173.60                    | 173.60             | 173,60                  | 173.60     | 173.60       | 173.60     | 142.00         |
| Profit on Direct Labor (%)                          | -                  | -                     | -        |               | _        |          | 12.50                     | 12.50              | 12.50                   | 12.50      | 12.50        | 12.50      | 142.00         |
| Profit on Indirect Costs (%)                        | _                  | _                     | _        | _             | _        | -        | 15.00                     | 15.00              | 15.00                   | 15.00      | 15.00        | 15.00      | _              |
| Labor Rate, Direct and Indirect (\$/hour)           | 152.52             | 119.98                | 70.88    | 131.90        | 235,17   | 83.67    | 180.66                    | 165.61             | 110.65                  | 102.37     | 89.58        | 105.39     | 109.09         |
| Fee (on Direct and Indirect Labor Cost) (%)         | 15.00              | 15,00                 | 15.00    | 15.00         | 15.00    | 15.00    |                           | -                  | 110.00                  | 102.51     | -            | 105.55     | 10.00          |
| Fully Burdened Labor Rate (\$/hour)                 | 175.39             | 137.98                | 81.51    | 151.68        | 270.45   | 96.22    | 180.66                    | 165.61             | 110.65                  | 102.37     | 89.58        | 105.39     | 120.00         |
| Fully Burdened Labor Cost (\$)                      | 21,398.03          | 137.98                | 326.03   | 28,819.06     | 4,868.02 | 1,539.46 | 21,317.88                 | 8,611.46           | 10,180.19               | 9,418.41   | 358.31       | 5,480.02   | 18,600.46      |
| Expenses  |                    |                       |          |               |          |          |                           |                    |                         |            |              |            |                |
| Travel Expenses for Presentation                    | 1,070.00           |                       |          | 1,070.00      |          |          | 1,344.00                  |                    |                         |            |              |            | 750.00         |
| Markup on Expenses (%)                              | ' -                |                       |          | -             |          |          | 10.00                     |                    |                         |            |              |            | 100,00         |
| Total Expenses                                      | 1,070.00           | -                     | -        | 1,070.00      | -        | -        | 1,478.40                  | -                  | -                       | -          | •            | -          | 750.00         |
| Project Cost  |                    |                       |          |               |          |          |                           |                    |                         |            |              |            |                |
| Northern Economics                                  |                    |                       |          |               |          |          |                           |                    |                         |            |              |            | 59,228,5       |
| PND Engineers                                       | ì                  |                       |          |               |          |          |                           |                    |                         |            |              |            | 56,844.6       |
| Southeast Strategies                                |                    |                       |          |               |          |          |                           |                    |                         |            |              |            |                |
| Total Project Cost                                  | <del> </del>       |                       |          |               |          |          |                           |                    |                         |            |              |            | 19,350.46      |
|   |                    |                       |          |               |          |          |                           |                    |                         |            |              |            | 135,423.70     |

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| Task   | Labor Cost | Expenses | Total Cost |
|--|------------|----------|------------|
| Phase 1  | 32,829.14  | 4,169.20 | 36,998.34  |
| Task 0. Principal Oversight and Administration           | 571.44     |          | 571.44     |
| Task 1. Kick-off Meeting, Site Visit, and Public Meeting | 26,786.21  | 4,169.20 | 30,955.41  |
| Task 2. Development of Phase 2 Scope and Fee             | 5,471.49   |          | 5,471.49   |
| Phase 2A   | 131,055.30 | 4,368.40 | 135,423.70 |
| Task 0. Principal Oversight and Administration           | 734.45     |          | 734.45     |
| Task 1. Haul-out and Moorage Facility Overview           | 1,920.05   |          | 1,920.05   |
| Task 2. Vessel Owner Survey                              | 12,594.80  |          | 12,594.80  |
| Task 4. Base Map Preparation                             | 3,661.38   |          | 3,661.38   |
| Task 6. Preliminary Site Recommendations                 | 5,263.23   |          | 5,263.23   |
| Task 7. Preliminary Infrastructure and Equipment         | 5,925.65   |          | 5,925.65   |
| Task 8. Preliminary Conceptual Designs                   | 22,742.08  |          | 22,742.08  |
| Task 9. Screening Assessment of Moorage                  | 8,528.11   |          | 8,528.11   |
| Task 10. Screening Assessment of Haul-out Facility       | 8,528.11   |          | 8,528.11   |
| Task 15. Screening Assessment of Cargo Handling          | 4,036.77   |          | 4,036.77   |
| Task 16. Screening Assessment of Deepwater Dock          | 11,322.96  |          | 11,322.96  |
| Task 17. Documentation and Recommendations               | 14,299.74  |          | 14,299.74  |
| Task 18. Presentation and Meetings                       | 26,457.61  | 4,368.40 | 30,826.01  |
| Task 19. Development of Phase 3 Scope and Fee            | 5,040.36   | •        | 5,040.36   |
| Total, Phases 1 and 2A                                   | 163,884.43 | 8,537.60 | 172,422.03 |

# City and Borough of Sitka PROPOSAL FORM

PART

THIS FORM MUST BE THE FIRST PAGE OF PROPOSAL. Attach criteria responses as explained in Part B - Submittal Checklist. No transmittal letter or cover sheet will be used.

| Submittal Checklist. No transm  | nittal letter or cover   | sheet will be used.  |  |  |  |
|---|--|--|--|--|--|
|   | - Maria Control  | PROJECT  |  |  |  |
| Project Numbers-State/Fede<br>Project Title<br>RFP No   |  | awmi⊪ Cove Industr   | ederal STPD-000<br>ial Park Waterl   | 3(160)<br>front Development  |  |
|   | O  | FFEROR (CONTRA   | CTOR)  |  |  |
| Contractor  |  | orthern Economics,   | Inc.   |  |  |
| Street  |  | nchorage, AK, 9950<br>51276  |  | License is a prerec  | quisite to Proposal.   |
| Individual(s) to sign contract  | P  |  |  |  |  |
| Title(s) Type of business enterprise [ ] Individuat [ ]   | (check one): [   | resident<br>X ] Corporation in<br>] Other(specify)   |  |  |  |
| ALA   | SKA STATUTORY  | PREFERENCES (  | F NO FEDER   | AL FUNDING)  |  |
| Check the applicable prefere [ ] Alaska Bidder (Offeror)  |  |  |  |  |  |
|   | PROP   | OSED SUBCONTR  | RACTOR(S)  | NO.  |  |
| Service, Equipment, etc.  | Subcontractor &  | Office Location  |  | AK Business<br>License No  | DOT&PF DBE<br>Certification No.  |
| Economic and Planning   | Southeast Strate   | egies, Juneau, AK  |  | 264797   | 9900047  |
| Marine Facilities Analysis  | PND Engineers  | , Juneau, AK   |  | 436411   |  |
| Bathymetrics  | David Evans & /  | Associates, Vancou   | ver, WA  | 180088   |  |
|   |  |  |  |  |  |
| 44-1)4-4-4-   |  |  |  |  | · · · · · · · · · · · · · · · · · · ·  |
|   |  | CERTIFICATION  | The state of the s |  | THE PARTY OF THE P |
| I certify: that I am a duly capabilities of the Contractor requirements of the Certifical Federal-Aid Contracts excee Foreign Contracting, 7) DB Certifications are material representations of the Contractor and Subcontractor and Subcontractor. | or and Subcontract tions on page 2 are ding \$100,000, 4) of the Commitment, a presentations of fact Certifications is a roposal to furnish mactors. This proposal | ors identified hereind 3 of this Part D for Cost and Pricing Date and 8) Former Pulot upon which relian fraudulent act. The information deemed all is valid for at least | n for providing or 1) Alaska Li ta, 5) Trade Rollic Officer - ce will be place Contracting A necessary to v  | the services indic<br>censes/Registration<br>estrictions/Suspensional<br>will be complied<br>ed if the proposed of<br>gency is hereby au | tated; and, that the ns, 2) Insurance, 3) sion/Debarment, 6) with in full These contract is awarded. Ithorized to request  |
| Signature   | tal of Brea  | <u> </u>   |  |  |  |
| Name Patric   | k Burden   |  | Date   | : March 26, 2013   |  |
| Title Presid  | ient   | Tele   |  | 907-274-5600   |  |
|   |  |  |  | : 907-274-5601<br>: patrick burden@  |  |
| 1   |  | Pro-   | maii Address   | . Datrick Durden(d)  | በስናውሮሲክ ሶሊሞሳ   |

#### CERTIFICATION FOR ALASKA BUSINESS LICENSES AND REGISTRATIONS

Contractor and all Subcontractors shall comply with the following applicable requirements of Alaska Statutes:



- 1. Alaska Business License (Form 08-070 issued under AS 43,70) at the time designated for opening (i.e., receipt) of proposals as required by AS 36.30.210(e) for Contractor; and not later than five days after a Notice of Intent to Award as required by AS 36.30.210(a) and AS 36.30.250(a) for all Subcontractors. In accordance with Administrative Menual, Section 81.120, proof of application for an Alaska Business license will satisfy this requirement. Per AAM 81.120, acceptable evidence that the offeror possesses a valid Alaska business license consists of any one of the following:
  - a. Copy of the Alaska business license.
  - Certification on the bid or proposal that the bidder/offeror has a valid Alaska business license number and has written the license number in the space provided on the proposal.
  - A canceled check that demonstrates payment for the Alaska business license fee.
  - d. A copy of the Alaska business license application with a receipt stamp from the State's business license office.
  - e. A sworn notarized affidavit that the bidder/offeror applied and paid for the Alaska business license.
  - f. Other forms of evidence acceptable to the Department of Law.
- Certificate of Registration for each individual to be in "responsible charge" (AS 08.48.341(14)) for Architecture, Engineering or Land Surveying (Form 08-2407 issued under AS 08.48.211) issued prior to submittal of proposal. Associates, consultants, or specialists under the supervision of a registered individual in "responsible charge" are exempt from registration requirements (AS 08.48.331).
- 3. Certificate of Authorization for Corporate Practice for incorporated Contractors and incorporated Subcontractors for Architecture, Engineering or Land Surveying (Form 08-2407 issued under AS 08:48:241). Corporations oftening to provide Architectural, Engineering or Land Surveying services do not need to be registered for such disciplines at the time proposal is submitted provided they observed registration before contract award (AS 08:48:241).
- 4. Certificate of Incorporation (Alaska firms) or Certificate of Authorization for Foreign Firm ("Out-of-State" firms). All corporations, regardless of type of services provided, must have one of the certificates (AS 10.06.218 and other sections of Title 10.06 Alaska Corporations Code).
- 5. Current Board of Director's Resolution for incorporated Contractors and incorporated Subcontractors for Architecture, Engineering or Land Surveying (reference AS 08.48.241) which names the person(s) designated in "responsible charge" for each discipline. Such persons shall be licensed in Alaska and shall participate as project staff in the Contract/Subcontracts.
- 6. All partners in a Partnership to provide Architectural, Engineering, or Land Surveying must be legally registered in Alaska prior to submitted of proposal for at least one of those disciplines (AS 08.48.251) which the Partnership offers.
- 7. Joint Ventures, regardless of type of services provided, must be licensed/registered in the legal name of the Joint Venture as used in this proposal (AS 43.70.020 and 43.70.110(4)).
- 8. Contracts for Architecture, Engineering or Land Surveying may not be awarded to individuals, corporations or partnerships not in compliance, respectively, with the provisions of paragraph 2, 3, and 6, above (AS 36.90.100).

[For information about licensing, Offerors may contact the Alaska Department of Commerce and Economic Development, Division of Occupational Licensing at P.O. Box 110806, Juneau, AK 99811-0806, or at Telephone (907) 465-2550, or at Internet address: <a href="http://www.dced.state.ak.us/gcc/home-bus-licensing.html">http://www.dced.state.ak.us/gcc/home-bus-licensing.html</a>.]

#### **CERTIFICATION FOR INSURANCE**

Contractor will ensure that it and all Subcontractors have insurance coverage to effectuate the requirements of DOT&PF Form 25A269, indemnification and insurance.

#### CERTIFICATION FOR FEDERAL-AID CONTRACTS EXCEEDING \$100,000

The individual signing this proposal certifies to the best of his or her knowledge and belief, that:

- (1) No federal appropriated funds have been paid, by or on behalf of the Contractor, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, toan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the Contractor shall complete and submit Standard Form-LLL. Disclosure of Lobbying Activities, in accordance with its instructions. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

This certification is a material representation of fact upon which reliance will be placed if the proposed contract is awarded. Submission of this certification is a prerequisite for making or entering into the proposed contract imposed by Section 1352, Title 31, U.S. Code. The Contractor also agrees by submitting this proposal that Contractor shall require that the language of this certification be included in all tower tier subcontracts which exceed \$100,000 and that all such Subcontractors shall certify and disclose accordingly.



#### **CERTIFICATION - COST AND PRICING DATA**

In accordance with AS 36.30.400, any cost and pricing data submitted herewith, or in any future price proposals for the proposed contract, will be accurate, complete and current as of the date submitted and will continue to its accurate and complete during the performance of the contract, if awarded.

The contractor certifies that all costs submitted in a current or future price proposal are allowable in accordance with the cost principles of the Federal Acquisition Regulations of Title 48. Code of Federal Regulations (CFR), Part 31 and that the price proposal does not include any costs which are expressly unaflowable under the cost principles of the FAR of 48 CFR 31. In addition, all known material transactions or events that have occurred affecting the firm's ownership, organization and indirect costs rates have been disclosed.

#### CERTIFICATION - TRADE RESTRICTIONS AND SUSPENSION AND DEBARMENT

The individual signing this proposal certifies to the best of his or her knowledge that the Contractor and any subcontractors are in compliance with DOT&PF 25A262 Appendix A, General Conditions, Article A25 and Article A26.

#### **CERTIFICATION - FOREIGN CONTRACTING**

For state funded projects: by signature on this solicitation, the offeror certifies that all services provided under this contract by the Contractor and all subcontractors shall be performed in the United States. Failure to comply with this requirement may cause the state to reject the bid or proposal as non-responsive, or cancel the contract.

#### **CERTIFICATION -- DBE COMMITMENT**

For federal-aid projects with DBE goals: if the Contractor submits a utilization report that proposes to use certified DBE's in the performance of work, the Contractor certifies that every effort will be made to meet or exceed the proposed percentage.

In addition, the Contractor certifies that a Consultant Registration form shall be submitted to the DBE/Civil Rights Office for their firm and each subconsultant prior to award.

#### **CERTIFICATION - FORMER PUBLIC OFFICER**

Any proposer listing as a member of the proposer's team a current public officer or a former public officer who has left state service within the past two years must submit a sworn statement from that individual that the Alaska Executive Branch Ethics Act does not prohibit his or her participation in this project. If a proposer fails to submit a required statement, the proposal may be deemed nonresponsive or nonresponsible, and rejected, depending upon the materiality of the individual's proposed position.

The Ethics Act bars a public officer who leaves state service from representing, advising or assisting a person for compensation regarding a matter —

that was under consideration by the administrative unit in which the officer served, and in which the officer participated personally and substantially through the exercise of official action.

for two years after leaving state service. See AS 39.52.180(a). "Public officer" includes a state employee, a member of a state board and commission, and a trustee of the Exxon Valdez Oil Spill Trust. "Official action" means a recommendation, decision, approval, disapproval, vote, or other similar action or inaction. Possible remedies for violating the bar include penalties against the former public officer and voiding the state grant, contract or lease in which the former public officer is involved.

Additionally, former public officers may not disclose or use information acquired in the course of their official duties that could in any way result in a benefit to the former public officers or their families, if the information has not been disseminated to the public or is confidential by law, without appropriate authorization. See AS 39.52.140

Each current or former public officer is responsible for determining whether he or she may serve in the listed capacity on this project without violating the Ethics Act. A form that a former public officer may use to certify their eligibility is attached. Current public officers may seek advice from their designated ethics supervisors concerning the scope and application of the Ethics Act. Former public officers may, in writing, request advice from the Office of the Attorney General, Ethics Attorney concerning the application of the Ethics Act to their participation in this project. It is the responsibility of the individual and the proposer to seek resolution in a timely manner of any question concerning the individual's eligibility.

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#### Former Employee's Certification of Eligibility Under the Alaska Executive Branch Ethics Act (AS 39.52.140, AS 39.52.180)

I am a former employee of the State of Alaska and left state service within the last two years. My last position with the state was [job title] with the [name of state agency and administrative unit]. I propose to work on [describe state contract or other matter] on behalf of [name of current employer]. This work will not involve any matter (a) that was under consideration by the state administrative unit that I served, and (b) in which I participated personally and substantially during my state service through the exercise of official action ("official action" means a recommendation, decision, approval, disapproval, vote, or other similar action or inaction). I am therefore eligible to participate in this [contract or matter] under the Alaska Executive Branch Ethics Act. I also understand that as a former public officer I may not disclose or use information acquired in the course of my official duties that could in any way result in a benefit to me or my family, if the information has not been disseminated to the public, or that is confidential by law, without appropriate authorization.

I certify under penalty of perjury that the foregoing is true.

certificate and include the following statement in the text: A notary or other official empowered to administer

gaths is unavailable.

# 1 Objectives and Services

Sitka is in an excellent location with proximity to major fishing grounds and access to the Culf of Alaska. Many fishing, fish processing, cargo, and other types of vessels transit the area. With the proposed commercial vessel mooring facility, vessel haul out, and deepwater dock located at Sawmill Cove, Sitka could capture the business of some of those vessels by provided moorage, docking, and uplands services. A new moorage facility could also alleviate the waitlist for Sitka's existing harbors and allow additional vessels to locate in the community.

With new facilities and appropriate uplands services and facilities, Sitka may be able to attract NOAA research vessels. These vessels have five missions: nautical charting, fisheries research, oceanographic research, ocean exploration, and environmental assessment. Currently, six research vessels are based on the West Coast and two are in Hawaii. One fisheries research vessel, the Oscar Dyson, is in Ketchikan and a nautical charting vessel, the Fairweather, is in Kodiak. Sitka is in an excellent location to undertake NOAA's five missions and might offer a better location than Ketchikan or Kodiak.

We understand the City and Borough of Sitka (CBS) is seeking a qualified contractor to evaluate if these proposed facilities for the Sawmill Cove Industrial Park (SCIP) are competitive, financially sustainable, and economically viable in relation to similar facilities in the region, with consideration given to effects on the local economy and maritime support industry. Further, CBS would like an evaluation of the changes that are expected to occur in Sitka's economy as a result of development of SCIP and the additional support services and other facilities that would be needed to support the development of the maritime industry at Sawmill Cove. Northern Economics, with PND Engineers and Southeast Strategies as subcontractors, is confident it can address CBS's needs for economic analysis, engineering, and planning services to support appropriate development at Sawmill Cove.

We have reviewed the scope of work outlined in the Request for Proposals' (RFP) Attachment A. In general, it represents what we feel is an appropriate range of considerations for development of this nature. In the Methods section of our proposal, we discuss our approach for addressing the scope of work and meeting CBS's needs. We have developed the approach based on our experience in evaluating maritime development and determining sustainable rates for services.

The scope of work is sufficiently explicit and includes the major requirements for the feasibility study as well as details about specific elements that should be included in each section. Further, we believe the scope of work represents a good outline for the feasibility study report, with some minor modifications addressed in the Methods section below. RFP Attachment A states that each task will be authorized individually. We believe this is a good approach and will allow the findings of the economics and market demand studies to determine if it is feasible for CBS to pursue further development of options, preliminary designs, and preliminary plans for development at SCIP.

The scope of work included with the RFP notes that CBS would like a business plan in addition to a feasibility study. We would propose completion of a comprehensive feasibility study, as outlined in the scope of work, followed by the development of standalone business and marketing plans. The focus of these standalone plans would be to serve as a guide to the proposed development at SCIP as well as to promote the facility to potential partners, developers, operators, users, and/or other parties interested in seeing these facilities and services developed at SCIP.

Development at Sawmill Cove would provide several positive impacts for Sitka. However, it could also cause a few negative impacts, particularly on businesses. Our team recognizes the challenge of balancing the positive and negative impacts of development and has proposed a targeted approach for working with vessel owners and business owners who would be affect by SCIP's development as well as a more general public involvement plan to address community-wide interests and concerns.

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The RFP requests a comment on the feasibility of the expressed or implied schedule. In general, we estimate a feasibility study of this nature could require four to six months to reach a draft report. Separating work into individual tasks will allow for several intermediate milestones during this period. These are initial estimates and would be adjusted to meet CBS's needs.

#### 2 Methods

RFP Attachment A includes a detailed Scope of Work and four tasks that will be authorized individually. Rather than duplicate the detail shown in the Scope of Work, we will provide a high-level overview of how we would approach this scope of work and our recommended changes to the scope of work. The following discussion outlines how we would address the different components of the scope of work and feasibility study within each task. This proposed arrangement of the scope of work is intended to provide CBS with the information it needs for each task in order to determine if the subsequent task should be authorized. Our team is flexible on the timing and arrangement of these work activities and will change this work plan to best fit CBS's needs.

#### Task 1: Data Collection and Infrastructure Inventory

Task 1 would begin with a kick-off meeting in Sitka, followed by a site visit and initial meetings with CBS staff, business owners, and other stakeholders. The goal of Task 1 would be to collect the necessary data in order to evaluate the feasibility of development of SCIP. Specific scope of work elements addressed in Task 1 would include:

**Kick-off Meeting and Site Visit:** An important first step in this study will be to hold a kick-off meeting and site visit with key members of the project team. The goal of the kick-off meeting will be to discuss project objectives, confirm important details associated with the analysis, and establish lines of communication. During the rest of the trip, the team will visit Sawmill Cove, meet with CBS and SCIP staff, and meet with business owners and other stakeholders.

Public Involvement: Community satisfaction with the development of this project can best be realized by involving the public in the process to the extent desired by the SCIP Board and the CBS. This requires not only listening to the needs expressed at meetings but the experience to provide innovative and economical planning and design solutions that stand the test of time in a harsh marine environment. NEI and PND are proud of our reputations as leaders in the economics and marine engineering and construction community. PND continues to evolve new designs based on our over thirty three years of experience in Alaska to meet current technical standards and today's environmental regulations. PND will work with NEI and CBS to create a Public Involvement Plan to solicit public comment that will meet the specific needs of this project.

Market Analysis and Demand Projections: The markets for the proposed marine haul out and commercial moorage facilities could include commercial, recreational, and government vessels. With its geographic location and existing marine activity, vessels currently moored in Sitka, on a waiting list for Sitka moorage, and those owned by Sitka represent major sources of demand for the proposed facilities. Vessels operating in or transiting the area around Sitka, including commercial, recreational, and government vessels, are another market that SCIP could serve. The proposed deepwater dock could serve some of these users as well as industrial users. An assessment of the potential market will be based on information from a variety of sources, including:

- Brainstorming and discussions with CBS and SCIP staff to determine relevant market
- Sitka Harbormaster's office

- Alaska Department of Transportation and Public Facilities
- Alaska Commercial Fishing Entry Commission (CFEC) vessel license files
- National Marine Fisheries Service license files
- Merchant Vessel Data Base
- Fishing Vessels of the U.S.
- Surveys of vessel owners

The Sitka Economic Development Association (SEA) conducted a Marine Industries Market Survey in 2007. The survey provided a comprehensive look at the market for marine service offered in Sitka. Our team would recommend developing a new survey based on the 2007 survey not only to provide updated information but with the additional focus of collecting information needed for this feasibility analysis. The target population for the survey would include current and waitlisted users for marine facilities in Sitka as well as other vessels that operate in the region, such as those involved in the region's fisheries. The survey results would provide the team with information on a variety of topics to help with the demand analysis, potential marketing efforts, and evaluation of the impacts of SCIP development on Sitka's economy.

In addition to looking at market demand, the team will evaluate the supply of marine services and facilities in the region. This will allow us to determine areas of unserved or underserved demand and to evaluate Sitka's competitive position in the region. The supply study will include development of an inventory of similar facilities in the region, their rates, their characteristics, and other information.

On the supply side, our team would consider a variety of means for gathering information. Southeast Strategies would conduct interviews with selected businesses to inform both the supply analysis and an analysis of effects of SCIP development on the local economy. Northern Economics and Southeast Strategies would also develop a business owner survey to gather information from a broader group.

Base Map Preparation: PND will combine available topographic, bathymetric and boundary survey information collected from our past marine projects at SCIP with civil design and survey information from other recent onshore improvements to prepare an overall base map of the study area(s). Accurate bathymetric survey data would be very beneficial to the planning for all three proposed marine facilities. We have included David Evans & Associates (DEA) on our team to provide bathymetric surveys should the owner elect to proceed with this option. DEA is currently under contract for other similar services with the CBS and should be able to economically complete this optional work while in Sitka.

Bathymetric and Subbottom Surveys (Optional Task): To make the best use of resources, DEA proposes to mine existing data for as much information as possible to assist in the feasibility study. The most recent contemporary bathymetric survey was conducted in 2004 by NOAA (H11123). Although the work was completed with a high resolution multibeam system, the survey was conducted for the purpose of navigation and nautical chart updates, not construction. The horizontal and vertical positioning accuracy is much lower than would be suitable for design and construction; however, a good deal of information can be gleaned from a planning perspective.

In the event that additional information is required for the feasibility study, a field team would be deployed to collect multibeam, sidescan or sub-bottom data. Multibeam data may be collected only in areas where the NOAA survey did not attain adequate coverage, such as near shore or along existing structures, or where existing data is problematic. This type of data provides a very dense dataset that can be used for accurate depth and volume of material determination, as well as navigation clearance. Sidescan data can be used to image the seafloor and provide for detection of objects and seafloor characterization. Sub-bottom-data can-be-used-to-determine-sediment depth.

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Additional services DEA could provide that may be of benefit to the project would include water level monitoring or Acoustic Doppler Current Profiler (ADCP) measurements inside or outside of the coves. ADCP measurements could be obtained from a vessel with the instrument configured in a downward looking orientation. Transects are typically run by the survey vessel at differing stages of the tidal cycle to quantify the current speed and direction in discrete bins over the entire water column along a predetermined line. A moored ADCP could also be deployed for a long period of time to measure the water column velocities at one point.

For any field work that may occur, equipment would be shipped to Sitka via air cargo services where a local vessel would be chartered and mobilized. The multibeam system would be mounted using DEA's custom vessel of opportunity mount. A Reson 7101 high resolution multibeam bathymetric sonar would be used in conjunction with an Applanix POS/MV inertial navigation system. The 7101 is a 240 kHz sonar with a user selectable swath up to 210 degrees with up to 511 individual soundings per ping. The wide swath would be reduced to approximately 45 degrees each side of nadir during most of the survey, but tilted to the side, looking up the bank on shoreline or breakwater passes. This technique develops a very dense dataset over the entire project area, including steep vertical walls, while keeping the vessel in safely navigable water.

For sidescan surveys, DEA would mobilize one of our four EdgeTech 4200FS digital dual frequency towfish with a hydraulic winch, slip rings and cable counter. Subbottom data would be acquired using a 3.5kHz subbottom profiler or chirp subbottom profiler.

Positioning and water levels would be determined using RTK GPS with raw observables logged for later post-processing if necessary. A base station would be established on an existing project survey control point that would broadcast corrections to the survey vessel.

The bathymetric and subbottom surveys would be performed in compliance with U.S. Army Corps of Engineers EM 1110-2-1003, "Hydrographic Surveying", dated January 1, 2002 in accordance with requirements for "Navigation & Dredging Support Surveys." All work would be supervised and final plans approved by a DEA American Congress on Surveying and Mapping (ACSM) Certified Hydrographer as well as an Alaska licensed Professional Land Surveyor (PLS).

**Preliminary Site Recommendations:** Based on existing site data and other initial findings, PND Engineers will develop preliminary site recommendations for the proposed facilities.

**Preliminary Design:** PND will develop preliminary designs for the marine haul out facility, deep water dock, and large vessel commercial moorage facility.

#### Marine Haul out Facility

PND has previously completed conceptual designs and cost estimates for two boat haul out facility options at SCIP adjacent to the NSRAA Hatchery. The latest estimate was prepared for SEDA in August 2012. PND will build upon its previous work to incorporate any new improvements or options found necessary through the planning process. Planning for the appropriate features of a proposed haul out facility will include:

- Boat Lift equipment of appropriate capacity to meet to local and regional demand
- Boat haul out pier suited for various combinations of lift sizes
- Supplemental loading wharf allowing for optional crane operations
- Boat lifting berth with suitable water depth for all tide operations
- Vessel approach and access to the lift with option for temporary moorage float alongside
- Hydraulic trailer for yard operations and efficient on site storage of vessels
- Outside work area spaces

- Sheltered work areas for services to be performed in controlled work space environments
- Storage area spaces
- Wash down pad with optional heated slab for winter usage
- Wash water treatment facilities
- Storm water runoff and discharge treatment facilities
- Security fencing and surveillance
- · Water, sewer, power and lighting utilities
- Appropriate environmental & operating permits including NPDES MSGP and Section R SWPPP

#### Deep Water Dock

PND has previously completed several conceptual designs and cost estimates for deep water dock options at SCIP adjacent to the former Utility Dock and Pulp Dock. The latest plans and budget estimates were prepared for SEDA in October 2008. At that time, due to funding constraints, options were presented to develop a heavy load deep water dock under a two phase implementation strategy. The concept involved a heavy central loading bulkhead with breasting and mooring dolphins extending out in opposite directions. PND will build upon its previous work to incorporate any new improvements or options found necessary through the planning process. Planning for the appropriate features of a proposed deep water dock will include:

- Dock capacity to meet to local, regional, national and international demand
- Various loading operations and configurations necessary for a multi-use facility
- Freight, bulk cargo and water export needs
- Berth with suitable water depth for multiple marine operations at all tidal stages
- Safe navigational approach and departure lanes
- Passenger vessel considerations
- Vehicle loading considerations
- Shoreside facility needs
- Outside and sheltered storage area spaces
- Storm water runoff and discharge treatment facilities
- Security fencing and surveillance
- Water, sewer, power and lighting utilities
- ADEC and CBS agreements and environmental requirements applied to the upland and bay operable units at Sawmill Cove following the closure of the former pulp mill.

#### Large Vessel Commercial Moorage Facility

PND has previously completed several conceptual designs and cost estimates for new commercial moorage facilities located at Sawmill Cove and Herring Cove. The most significant plan that increased moorage capacity for Sitka was a study performed in 2002 for a proposed new marina in Herring Cove. Herring Cove is a naturally protected water body in Silver Bay. It is accessible from the existing public road system and has adequate water depth of over ten fathoms for a significant boat moorage basin. It is protected from prevailing southeasterly winds by Bear Mountain and two small islands to the west provide protection from winds and waves produced in Eastern Channel.

PND's prior conceptual designs included three phases of facility development. The project first included upland parking and access, channel markers at the entrance to Herring Cove, two access

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trestles and gangways leading to a headwalk float, three mainwalk floats with sixty-six, 60-foot moorage stalls. Upland development included a harbor office, public restrooms, space for trash receptacles, waste oil containers, parking and a two lane boat launch ramp with trailer parking. The second phase of development included extension of the three main floats and the addition of seventy-four 60-foot moorage stalls. The third phase included extension of the headwalk float and an additional main float with thirty-eight additional 60-foot moorage stalls.

The 2002 layout was developed to address the stated local demand for additional moorage to serve larger boats. Since that time the demand has likely changed somewhat due to other more recent facility improvements at Thomsen Harbor and those currently being planned for ANB Harbor. A fresh look at demand is needed to properly plan for new commercial moorage facility.

Herring Cove has several detractions, including wood and bark accumulation on the bottom. Although some information about the seafloor is available from dive surveys, existing seafloor sub-bottom and pile driving conditions are not known. At this stage of development, it is conservative to assume that piles would have to be socketed.

**Preliminary Infrastructure and Equipment Recommendations:** Based on existing site data and other initial findings, PND Engineers will develop a preliminary set of recommendations for infrastructure and equipment at the proposed facilities. These recommendations will be finalized in Task 2, after a market analysis has determined the demand for different types and capacities of facilities.

Preliminary Ownership and Management Options: There are a number of options for owning, managing, and operating haul out, moorage, and deep water dock facilities. Many municipalities own and operate facilities, while others contract with a private operator to provide services. Our team will review ownership and management arrangements in place around Southeast Alaska and elsewhere in the state that could be used as a model for SCIP. These options will be considered further in Task 2.

Preliminary Consideration of Potential Effects on Sitka's Economy: The proposed facilities at SCIP would provide an economic stimulus to Sitka. However, Sitka will need to have the appropriate services and infrastructure in place in order to maximize the potential benefits of this investment and enhance other economic development opportunities. A key component of this will be to identify the services and facilities that can support the vessel haul out facility, moorage facility, and any associated uplands activities. A preliminary consideration of the potential effects of SCIP development on Sitka's economy will rely on information collected from local businesses about the marine-related services that are currently available. Further evaluation of these effects, including both positive and negative impacts, will occur in Task 2.

#### Task 2: Analysis

In the second task, our goal would be to determine what improvements or combinations of improvements would be feasible at SCIP. This goal would guide our team's analysis of the information collected in the first task. Specific scope of work elements under Task 2 would include:

Market Analysis and Demand Projections: We will analyze data collected in Task 1 to determine the supply and demand for marine hauf out, commercial moorage, and deepwater dock facilities at SCIP. This will include, among other work, analysis of survey data, synthesis from interview findings, and quantitative models to determine usage patterns.

**Final Infrastructure and Equipment Recommendations:** After the market analysis is complete, PND will finalize its infrastructure and equipment recommendations. A number of site-specific factors will contribute to these recommendations. For example, the team has observed that a haul out facilities

may need to use wider equipment to account for locally-constructed vessels such as Allen Marine's catamarans that are lighter and wider.

**Final Site Recommendations:** After the market analysis is complete and it has made its final infrastructure and equipment recommendations, PND will address any layout issues and finalize its site recommendations.

**Cost Estimates:** Based on the final site, infrastructure, and equipment recommendations, PND will develop construction and capital cost estimates for each facility. PND will also work with Northern Economics to develop operating cost estimates, based on the infrastructure and equipment recommendations for SCIP. To the extent possible, the team will work with financial information from similar facilities in order to estimate probably O&M costs.

Options for Funding and Financing: Northern Economics will evaluate options for funding and financing, based on the final cost estimates prepared by PND. A variety of sources exist for marine facilities and industrial development in general. Harbor facilities are eligible for funding through the State of Alaska's Harbor Facility Grant Program. Other facilities may also be eligible for funding, depending on the nature of the facility. Sources of funding and financial for industrial development include the Alaska Industrial Development and Export Authority, Alaska Municipal Bond Bank Authority, U.S. Economic Development Administration, U.S. Department of Agriculture Rural Development, and others. Northern Economics has interacted with these agencies on other projects; for SCIP development, Northern Economics will contact these agencies to develop a rough plan for the use of funding and financing mechanisms to construct the facilities.

**Revised Ownership and Management Options:** Once the team has a better understanding of the demand, costs, and funding and financing sources for SCIP development, Northern Economics will evaluate ownership and management options to determine with options would best fit with SCIP.

In preliminary research, Northern Economics has found that the size of the market is often a determining factor for ownership and management arrangements. Smaller markets and facilities often require more public involvement, whereas the private sector becomes increasingly interested in management and then ownership as the market grows. Northern Economics will consider the size of the market as one of the factors for ownership and management options.

Another factor considered will be the ability of CBS to add more marine facilities to its portfolio. CBS Harbor staff have been very effective in operating five harbors and a port facility. However, since Sawmill Cove is several miles from these other facilities, consideration would need to be given to the logistics of adding the proposed facilities. Opening a second harbor office, adding harbor staff, and other required changes would have a financial impact that will be considered in this task.

Financial Evaluation: Northern Economics will conduct a financial evaluation of each of the proposed SCIP facilities individually and as a whole to evaluate their financial feasibility. This analysis will begin with a life cycle cost analysis model to determine rates required to fund the facilities and result in rate recommendations for services at SCIP and pro forma income and cash flow statements. Task 1 data collection will have included rate information for competing facilities, which will be useful to benchmark the cost of operating SCIP facilities with similar facilities in the region. It is important to note, however, that while competing facilities' rates are useful for benchmarking, SCIP's unique situation (including its facilities, cost, cost structure, demand, and other factors) must ultimately drive the rates charged for the use of its facilities. Agencies offering funding and financing will want to see financially sustainable development. Northern Economics will work with PND and CBS after the initial financial evaluation with the goal of optimizing rates.

Analysis of Potential Effects on Sitka Economy: Based on our analysis of market demand and the feasibility of improvements at Sawmill Cove, Northern Economics will use an input-output model

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(IMPLAN™) to look at the high-level, city and borough-wide economic impacts of the marine industry at SCIP. Southeast Strategies will then use this information to on-the-ground work and possible a business owner survey to add detail to the IMPLAN™ findings and to investigate the types and sizes of businesses needed. The initial investigation could begin as part of data collection under Task 1, but the IMPLAN™ results will allow for a more comprehensive look at the less-obvious types of businesses that could be affected (including businesses primarily serving residents), along with the level of impact.

Southeast Strategies will also interview the primary types of community businesses that would see an impact, such as marine services, to determine how they would respond to facilities at Sawmill Cove. It will be important to evaluate how development at SCIP might shift demand for products and services from existing Sitka businesses. For example, it might help existing businesses and encourage expansion, encourage new businesses to locate in Sitka, or even damage existing businesses in Sitka. A preliminary list of businesses to be surveyed would include:

- Local businesses offering goods and services directly related to marine repair, etc.
- Local businesses relying on marine facilities, such as tour operators or charter fishing operators
- Local businesses/residents using these services who may now spend more money in Sitka due to availability of the services/facilities
- Nonlocal businesses who may begin using the Sitka services/facilities

Preliminary questions for these businesses would include topics such as:

- Products/services provided
- Markets (local, private, commercial, government, tourism, fishing, etc.)
- Business trends (their own and their industry)
- Opinions of needed local facilities and services
- Future plans with and without a new facility
- How development at SCIP might affect their business
- How their business might change (including possible relocation) with development at SCIP
- Ideas about how SCIP might be operated, funded, and marketed

The team understands that some businesses could perceive development of SCIP as competition to their operations. It will be important to get these businesses' opinions about SCIP to ensure a well-rounded view of SCIP's impacts. Discussions with these businesses will be treated as confidential to avoid targeting any individuals or businesses in the analysis.

In addition to direct impacts, additional marine industry activity will have indirect and induced effects in the community. Using IMPLAN \*\* and the demand analysis, Northern Economics will consider the broader economics and fiscal effects of SCIP development. Many facilities are infeasible from a purely financial sense, at least initially, but can be justified based on the economic development that occurs throughout the economy and from the resulting sales taxes and other fiscal benefits.

Analysis of Feasible Facilities: Following the completion of the financial analysis, the team will determine which of the proposed facilities would be feasible from engineering, financial, and economic perspectives.

**Presentation of Results:** Following the completion of the Task 2 analysis, the team will present its results to CBS. The team is flexible on the means of providing its findings and is willing to give presentations to CBS or the public, written reports, and/or other types of communication, as needed.

Following the presentation of results, CBS would determine if further study is advised (if some or all of the proposed improvements at SCIP are feasible) or if the project should be terminated. If CBS opts to continue the project, the project team would seek authorization to begin Task 3.

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#### Task 3: Strategies and Options

If authorized, Task 3 would involve the development of recommended strategies and options for SCIP development. Specific scope of work elements addressed in Task 3 would include:

Final Ownership and Management Recommendations: The team will provide final ownership and management recommendations based on input from CBS and other stakeholders.

Construction Schedule Recommendations and Options: A number of market factors may affect the cost of facility construction. PND will provide recommendations for the construction schedule and any options for development.

**Environmental Regulation Considerations:** The following major permits requiring federal and state authorizations are anticipated. Other state and local permits and/or plan reviews may also be required depending upon the final scope of improvements:

- U.S. Army Corps of Engineers Section 10 of the Rivers and Harbors Act of 1899
- U.S. Army Corps of Engineers Section 404 of the Clean Water Act
- U.S. Army Corps of Engineers Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972
- Department of Environmental Conservation Section 401 of the Clean Water Act and Alaska Water Quality Standards, Certificate of Reasonable Assurance
- Department of Environmental Conservation Solid Waste Disposal Authorization
- National Pollution Discharge Elimination System (NPDES) Permit
- EPA/NPDES Multi-Sector General Permit and/or Construction General Permit

**Best Management Practices:** PND will provide a set of Best Management Practices for operating the proposed facilities, based on the facilities chosen for development and the latest regulations and practices affecting those types of facilities.

#### Task 4: Preliminary Development Plan and Recommendations

The final task, Task 4, would include development of a written feasibility study report, any presentations CBS requires, and any needed follow-on documentation. Scope of work elements that would be address in Task 4 would include:

Final Feasibility Study Report, Presentations, and Other Documentation: The team will develop a comprehensive feasibility study that summarizes the work conducted in previous tasks, and provide CBS with a draft feasibility report. After collecting comments on the report, the team will develop a final version. The team will also provide any presentations and supporting information as needed.

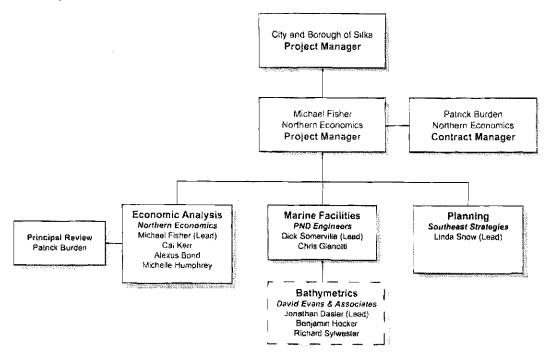
**Business Plan:** RFP Attachment A mentions the need for "a business plan that would serve as a guide for the development of a marine services industry at the industrial park, including permitting of the project." The information required for a business plan will be covered in detail in the feasibility study. The team will work with CBS to develop a concise business plan that can be used to guide development, seek funding, and otherwise support creation of a marine services industry at SCIP.

Marketing Plan: Following completion of the analysis, Northern Economics and Southeast Strategies will develop a marketing plan for the proposed SCIP facilities. The 4 Ps of Marketing are product, price, place, and promotion. Product and price will have been developed in the feasibility study. Place (where to market the facility) and promotion (how to market the facility) will be developed by the team based on the vessel owner and business owner surveys conducted in Tasks 1 and 2. The team will also consider other successful facilities as case studies for SCIP's development. Finally, the team will put together a marketing budget and propose tracking metrics and development milestones.

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# 3 Management

Mike Fisher will serve as overall Project Manager, with Principal Pat Burden serving as Contract Manager and providing Principal Review. Dick Somerville, P.E. (Registration No. CE8845), will serve as Project Manager for PND Engineers, and be "responsible-in-charge" and lead the Marine Facilities task. Linda Snow of Southeast Strategies will serve as Planning Task Lead. For the optional bathymetric task, Jonathan Dasler of David Evans and Associates will serve as task lead. The proposed project team's organization is illustrated in the chart below.



Work will be performed by Northern Economics in Anchorage, by PND Engineers and Southeast Strategies in Juneau, and, if CBS wishes to include a bathymetric survey, David Evans and Associates in Vancouver, WA. Project staff will schedule travel to Sitka to support site visits, information gathering, meetings, and presentations, as needed. Northern Economics employs a "no surprise" approach, maintaining communications between the team and the client throughout the project, which provides flexibility to adapt to meet the client's needs. Findings are discussed with the client in advance of written submittals, so there are no surprises in work products submitted for approval.

Communication within the team and with CBS and other stakeholders will primarily take place by e-mail, phone calls, and online meetings facilitated through GoToMeeting or a similar tool. Regular meetings (weekly or more frequent if required) will be held between the Northern Economics team and CBS's project managers to ensure schedule, direction, and budget are being maintained. Most meetings will be conducted by phone and they can be held quickly and at any time requested. This forum will be used to discuss progress, focus direction, and address challenges.

# 4 Proposed Project Staff

#### Michael Fisher, Senior Consultant, Northern Economics, Inc., Alaska Resident

Mike Fisher will serve as Project Manager for this project. Mike is a senior consultant for Northern Economics with a focus on financial and market demand analysis. Mr. Fisher has worked on several port and harbor development projects, including infrastructure feasibility studies, harbor rate studies, and long-term harbor development plans. Mike's relevant experience includes a number of waterfront development projects around the state, including a marine center feasibility study for the City of Wrangell, a feasibility study and market analysis of a travel lift in Cordova, and a feasibility study of multiple future operations options for the Seward Marine Industrial Complex. He also recently assisted the US Army Corps of Engineers with a comprehensive study on port and harbor infrastructure needs in Alaska for the 2010 to 2030 period.

Mike has been a presenter at seven of the Alaska Association of Harbormasters and Port Administrators (AAHPA) conferences since 2004, including presentations on the Harbor Economic Impact Model and its applications, setting sustainable rates in harbors, and how ports and harbors can create economic development. He also maintains a personal website at www.HarborModel.com that contains the Harbor Economic Impact Model and slides from each of the presentations he has done for AAHPA. Mike holds an MBA, an M.S. in Project Management (MSPM), and the Project Management Professional (PMP) certification. In addition to his work at Northern Economics, Mike is the instructor of graduate courses in Operations Research, Cost Estimating, and Project Cost Management, and a guest instructor for other graduate courses in the Project Management program at the University of Alaska Anchorage. He has also taught risk, quality, and cost segments of the university's PMP preparation course.

**References:** Marty Owen, Harbormaster, Port of Kodiak, AK: 907-486-8080; Greg Meissner, Harbormaster, City of Wrangell: (907) 874-3736; Gary Hennigh, City Manager, City of King Cove; 907-274-7563

#### Patrick Burden, President and Principal Economist, Northern Economics, Inc., Alaska Resident

Pat Burden will serve as Principal-in-Charge and Contract Manager for this project. Pat has been involved in economic consulting for more than 30 years and has conducted more than 250 projects for private and public sector clients—projects ranging from small tasks for local entities to large, multidisciplinary projects of international scope. His expertise includes economic base studies, land use studies, commodity demand/supply analysis and forecasting, transportation pricing studies, socioeconomic assessments, small boat harbors and navigation studies, fisheries resource assessments, and recreation/tourism. Pat has conducted marine facilities feasibility and waterfront planning studies for a number of Alaska communities, including the feasibility study of a marine center for Wrangell, AK; feasibility analysis and marketing plan for the Ketchikan Shipyard; feasibility analysis of a Travelift and tidal grid for the Port of Kodiak; feasibility assessment of 250-ton Travelift and uplands development for the City of Seward; and a market analysis and demand projections for deepwater draft dock and upland facilities, for the City of King Cove. Pat's recent and ongoing projects in Southeast Alaska includes the Southeast Alaska Transportation Plan User Benefits Analysis and the Southeast Mid-Region Access Study. These studies involve evaluating all the available transportation modes in Southeast Alaska (e.g., highways and roads, ferries, tugs and barges, aviation) and assessing different scenarios of future development in the region.

References: Marty Owen, Harbormaster, Port of Kodiak, AK: 907-486-8080; Greg Meissner, Harbormaster, City of Wrangell: (907) 874-3736; Chris Hladick, City Manager, City of Unalaska, 907-581-1251

#### Cal Kerr, Senior Consultant, Northern Economics, Inc., Alaska Resident

Cal Kerr will assist with funding and financing, ownership and management options, and financial evaluation. Cal's work for Northern Economics focuses on feasibility studies, project management, and financial analysis. His relevant project experience includes a market and financial analysis for a proposed expansion of the Anchorage Neighborhood Health Center facility. Work included analysis of existing financial and operational information, forecasting of market demand and development of pro forma financial statements. He has also completed two feasibility studies for industrial parks in Girdwood and Nikiski, both of which required financial analysis of alternatives, and conducted a twostage financial and economic analysis for Brechan Enterprises, Inc., based in Kodiak. The financial analysis focused on cost impacts for a potential operational move and end-product cost increases due to the move. Mr. Kerr holds two master's degrees from the University of Alaska, Anchorage, including an MBA. With this background, he worked as an Investment Officer with the former Alaska Renewable Resources Corporation (ARRC), a venture capital firm established to develop businesses in the forestry, fishing, farming and renewable energy sectors. Cal is certified as a Project Management Professional by the Project Management Institute, and has taught courses in project communication and human resources for the University of Alaska's School of Engineering. He has also taught courses at Anchorage Community College, including Financial Management, Analysis of Financial Statements, and Organization Supervision and Management.

**References:** Mike Franger, Senior Trust Resource Manager, Mental Health Land Trust Office; 907-269-8658; Christopher Poag, Attorney, Alaska Department of Law, 907-465-3600; Margaret O'Neal, Director Of Operations, Juneau Economic Development Council, 907-523-2326

#### Alexus Bond, Project Consultant, Northern Economics, Inc., Alaska Resident

Alexus Bond will provide market analysis, economics impacts, and financial evaluation. Alexus is a Project Consultant with Northern Economics, where she performs research and analysis on a variety of topics including infrastructure development and market dynamics. Alexus has a Master of Arts in Global Finance, Trade & Economic Integration, from the University of Denver, and a Bachelor of Arts in Latin American Studies and Spanish from Tulane University. Her recent project work includes a number of marine infrastructure projects, including the Harbor System Master Plan for the City and Borough of Sitka, for which Northern Economics developed a life-cycle cost model for each facility within the Sitka Harbor System. In 2012, she led a screening analysis for port development in Haines to support inbound and outbound cargo and fuel needs for mining projects and other development in Yukon Territory, as well as other maritime activity in the community and region. For Haines Borough. She recently conducted a study for the Port of Seward that looked at the feasibility, benefits, and funding and financing of developing facilities to allow for the homeporting of Community Development Quota (CDQ) fishing vessels in Seward. She also recently assisted with a an independent, third-party analysis of the wharfage rate at the public oil docks on liquid bulk cargo payable by the crude oil refiners at the Port of Corpus Christi, TX. Tasks included creation of a lifecycle cost model to estimate the revenues that would be necessary to compensate the port for the facilities and services it provides, and a market analysis comparing the port's recommended and current wharfage rate to other ports.

**References:** Mark Earnest, Borough Manager, Haines Borough; (907) 766-2231 x29; Marty Owen, Harbormaster, Port of Kodiak, AK: 907-486-8080; Mack Funk, Harbormaster, City of Seward, 907-224-3138.

#### Dick Somerville, P.E., Senior Engineer/ Vice President, PND Engineers, Inc., Alaska Resident

Dick Somerville, P.E. will serve as Marine Facilities Manager for PND. Mr. Somerville is a long time resident of Southeast Alaska, and is familiar with the goals and objectives for the SCIP. He will engage

a proactive approach with the CBS to ensure successful continuation of planning activities. Mr. Somerville has over 33 years of similar experience, is a principal of the firm, manager of PND Juneau and is committed to serving the SCIP Board as the Marine Facilities Manager for this feasibility and preliminary planning study. This project will require principal level participation to properly plan the proposed facility upgrades and improvements at the Pulp Dock Warehouse while maintaining multiple tenant operations. To be successful, this project will require considerable coordination with CBS staff, SCIP facility operators, lease tenants and PND. Mr. Somerville brings that added level of experience to the project. He will participate with presentations, scoping studies, design oversight, permitting and engineering services during construction. He will manage technical reviews of all engineering to assure that the professional level of care required for this high-profile project has been provided to the CBS. Mr. Somerville graduated Cum Laude from the University of Alaska with a B.S. in Civil Engineering and is a Registered Professional Engineer in the State of Alaska (CE 8845). Mr. Somerville specializes in civil and structural marine projects. His background includes planning, design, permitting and construction management for a variety of public and private clients. Following five years of employment with the Alaska DOT&PF, he has worked in the private sector since 1980. and joined PND in 1987. Mr. Somerville is a principal of the firm and the manager of PND's Juneau Office, where he manages a staff of 22 engineers, surveyors and technicians. Mr. Somerville was recognized by the Juneau Chapters of ASCE and ASPE as the 2008 Engineer of the Year for his work on marine facilities throughout Southeast Alaska.

Mr. Somerville's engineering experience includes both design and construction phase engineering services. Projects include commercial and industrial buildings, bridges, docks, dolphins, cranes, moorage floats, boat launch facilities, boat haul out piers, erosion control, water and sewer utilities, dredging, rock quarries, retaining walls, sheet pile structures, roadways, parking, staging and site grading projects. As a design manager he has conducted public presentations, developed needs assessments, scoping studies, condition assessments, produced final designs, technical specifications, contract documents, permits and cost estimates on several hundred projects, all in Alaska. Mr. Somerville has provided engineering services on several projects at SCIP. These include marine facility planning for Global Water Resources, master planning assistance for the 2002 Waterfront Development Plan, concept designs and cost estimates for a multi-purpose ocean dock at the Utility Dock renovations to the Pulp Dock and Warehouse, a proposed boat haul out facility near NSRAA, as well more recent dock condition inspections. Mr. Somerville has recently completed marine haul out facility planning and designs for other Southeast communities including the Wrangell Marine Service Center and the Hoonah Marine Service Center. Further, he has provided planning and design services for an array of communities for large commercial vessel moorage facilities and deep water docks, most recently at the Carl E. Moses Boat Harbor in Unalaska, and the City and Borough of Juneau's Downtown Cruise Ship Docks berth replacement project currently underway.

**References:** Gary Gillette, AIA, Port Engineer, City and Borough of Juneau, 907.586.0398; Steve Corporon, Ketchikan Port and Harbors Director, 907.228.6049; Greg Meissner, Wrangell Harbormaster, 907.874.3736.

# Chris Gianotti, P.E., Senior Engineer/Vice President, PND Engineers, Inc., Alaska Resident

Mr. Gianotti will bring his past Sawmill Cove Industrial Park experience and knowledge to the project. Mr. Gianotti performed an inspection and analysis of the Pulp Dock and Utility Dock at Sawmill Cove in Sitka. He was instrumental in the development of user guidelines at the deteriorating concrete deck and steel pile supported docks. He also performed the Ocean Docks Condition Assessment and Waterfront Master Plan at SCIP in 2011-2. His past project experience gives him a comprehensive understanding of the overall area and the goals of the SCIP Board. Mr. Gianotti holds both an M.S. and a B.S. in Civil Engineering and is a Registered Professional Engineer in the State of Alaska (CE

7559) with over thirty years of structural design experience. He has been responsible for the design of new construction; structural analysis of existing buildings being remodeled; the inspection and analysis of existing structures; plan reviews for code compliance, the analyses of failed buildings; development of performance specifications for design/build projects; has designed foundations for pre-engineered metal buildings on design/build projects and the design of several dock and marine projects. He has designed numerous government/public buildings for local state and federal agencies. Work has been with pile supported structures, conventional spread footing foundations, reinforced concrete, structural steel, timber, light gage metal framing and aluminum. He has assisted in all phases of projects including scooping, conceptual to final design, preparation of construction documents, bid phase assistance, periodic and full time inspection.

**References:** Pua Maunu, UAS Facilities Planning and Construction, 907-465-6484; Nathan Coffee, CBJ Architectural Project Manager, 907-586-0895; Cliff Richter, P.E.; Baranof Island Housing Authority, 907-747-5088

#### Linda J. Snow, Principal and Senior Economist, Southeast Strategies, Alaska Resident

Linda Snow will serve as Planning Manager for this project and will assist with economics impacts, marketing and other tasks. Linda is principal and senior economist for Southeast Strategies, a firm providing economics and planning services for a variety of clients in Alaska since 1999. She has a thorough understanding of marine, fisheries, visitor, and transportation industries in Southeast Alaska, and has provided demand and feasibility analyses for several marine, fish processing, and energy facilities in the region. Linda has over 27 years experience as an economist, planner, researcher and policy and fiscal analyst. She has a B.A. in Economics (with honors) from the University of Hawaii at Hilo, and ABT towards an M.S. in Resource Economics from the University of Alaska at Fairbanks. Her work experience includes over 17 years as an economic consultant in the private sector (including nearly 14 years as owner/operator of Southeast Strategies), 4 years as an analyst with the Alaska Legislature, and 3 years as a transportation planner with the Alaska Department of Transportation and Public Facilities. Linda has volunteered as a Director for the Board of Southeast Conference (2003-2010), and was the chair of the Economic Development and Transportation Committees for that organization. She has also served on the City and Borough of Juneau Planning Commission, the Board of Directors of the Alaska Committee, and the Board of Directors of the National Association of Business Economists, Portland, Oregon Chapter. Linda's relevant experience includes several Southeast Alaska marine facility and cold storage demand and feasibility studies, and numerous benefit/cost evaluations for proposed energy projects throughout Alaska. She has also performed economic and transportation planning studies in Southeast Alaska, giving her a broad understanding of the region. Linda's long working tenure in Alaska has allowed her to develop many contacts and a thorough working knowledge of the systems, institutions, industries, politics, issues, attitudes, and peoples of Alaska. She has excellent research, writing and analytic skills, and is known to be thorough, accurate, and efficient in developing work product. Southeast Strategies is a woman-owned small business, and is certified as a Disadvantaged Business Enterprise.

**References:** Rollo Pool, former Executive Director of Southeast Conference, currently residing in Sitka, 907-747-4823; Jeff Ottesen, Director of Program Development, Department of Transportation and Public Facilities, 907-465-6971; Robert W. Ward, City Manager, City of Umatilla, Oregon, 541-922-3226 ext. 103.

# Jonathan Dasler, PLS, PE, CH, Vice President, Director of Marine Services, David Evans And Associates; Washington Resident

Mr. Dasler will lead the optional bathymetric task. He is a professional land surveyor, a professional engineer, and an ACSM-THSOA Certified Hydrographer. He has a B.S., Civil Engineering, from the

University of Portland. His experience includes 37 years of surveying, including 28 years managing hydrographic and land surveying contracts with NOAA, the U.S. Army Corps of Engineers (USACE), port authorities, and the maritime industry. He was the lead hydrographer on the 3 prior hydrographic surveys in the harbor on St George Island; hydrographic and geophysical investigations in Seward, Yakutat, and Wrangell Narrows, Alaska; and several cable route surveys for Alaska Electric Light and Power. Based on his extensive experience in hydrography, geodesy and geospatial data management, he provides consultation and acts as a trusted advisor to clients, and has been selected to serve on several federal advisory boards, including seven years of service on NOAA's Hydrographic Services Review Panel. He has over 10 years of service on the ACSM Hydrographer Certification Board and is the past Chair of the American Council of Engineering Companies of Oregon / USACE Liaison Committee.

References: Jerry Vincent, USACE Sacramento District (Pyramid Lake Project), 916-557-7452; Kelvin Anderson, Idaho Power, 208-388-2929; Roel Aldersebaes, Port of Portland, 503-415-6304.

# 5 Workload and Resources

The following table summarizes the current and potential time commitments of our proposed project staff and team firms to all clients. None of the firms on the Northern Economics team have any current contracts with the City and Borough of Sitka.

| Firm/Staff Member        | Current and Potential Time<br>Commitments (%) | Availability (%) |
|--------------------------|---|------------------|
| Northern Economics, Inc. | 65  | 35               |
| Michael Fisher           | <b>5</b> 5                                    | 45               |
| Pat Burden               | 65  | 35               |
| Cal Kerr                 | <b>4</b> 5                                    | 55               |
| Alexus Bond              | 55  | 45               |
| PND Engineers            | 50  | 50               |
| Dick Somerville, P.E.    | 60  | 40               |
| Chris Gianotti, P.E.     | 55  | 45               |
| Southeast Strategies     | 55  | 45               |
| Linda Snow               | 55  | 45               |

#### Ability to meet an accelerated schedule

The Northern Economics team knows that even the best report loses value if it isn't affordable and timely, and they take pride in their ability to complete projects on schedule and within budget. The team firms have the staff and technical resources needed to fulfill our responsibilities in a manner that emphasizes excellence, timeliness, and cost-effectiveness.

Northern Economics has a staff of 12 consultants, all with formal training in project management, available to assist with data gathering and research and administrative personnel to provide technical editing, graphic, and accounting support. In addition to the company's staff of experts, our technical resources include high quality networked computers, fully networked and protected by a daily tape backup. The company has licenses to a variety of software programs to support different types of analyses and to generate electronic documents that are compatible with client software packages.

PND offices maintain modern administrative systems and communications equipment. All team members utilize current industry-standard equipment and use compatible programs and software

conducive to ensure the seamless interchange of materials and timely, accurate products to the SCIP Board in preferred formats. Engineering, surveying and drafting departments are equipped with industry-current software and hardware, and can create tailored digital products and produce hard copy products on virtually any media and in a range of sizes and dimensions. PND maintains an extensive library of codes, industry standards and construction product information, and aerial photography for use in layouts. The firm updates holdings on a regular basis.

David Evans and Associates owns and operates four complete high-resolution multibeam systems. These systems include multibeam sonars, inertial and RTK GPS positioning systems, sound velocity profilers, automated tide monitoring stations and all hardware and software required to conduct high-resolution multibeam surveys. In addition, DEA has ready access to subbottom profiling and other marine geophysical equipment for a sub-bottom investigation.

PND can make available ample meeting space for work sessions or conferencing among team members and SCIP Board representatives. A full-time staff courier is available. All of the team firms' consultants are accustomed to handling multiple projects. This capacity, capability, and diversity will allow the Northern Economics team to maintain a comprehensive offering of services even on short notice, and the flexibility to reassign individuals due to delays, accelerated schedules, changes in design criteria and other situations.

## 6 Past Performance

The Northern Economics Team is made up of four firms, each with strong skill sets, and all with both relevant waterfront community planning experience and familiarity with Southeast Alaska and its unique challenges and opportunities. This section provides a brief description of each firm and specific examples, with references, of relevant past projects.

**Northern Economics, Inc.** is Alaska's leading economics consulting firm, with over 30 years of experience assisting clients with transportation, port and harbor, fisheries, tourism, and export-oriented resource development projects. The company's work has encompassed nearly every community in Alaska, with consulting assignments from Metlakatla in Southeast Alaska to Barrow in the Arctic, and as far west as Adak in the Aleutian Chain. Local governmental entities frequently rely on Northern Economics' expertise in transportation and maritime infrastructure planning—expertise that has been demonstrated in numerous major projects throughout coastal Alaska. The firm is uniquely qualified to evaluate complex issues related to waterfront planning, not only because of its particular experience in port development, but because of its vast experience advising industries that rely on ports, including transportation; commercial and recreational fishing; and oil, gas, and mining. No one knows Alaska economics better.

PND Engineers, Inc., (PND) is a dynamic civil engineering firm with over 100 full-time employees. Founded in 1979 PND is headquartered in Anchorage with branch offices in Juneau and Seattle. PND is ranked among Alaska's largest engineering firms and is on ENR's Top 500 Design Firms list. PND's clients range from private individuals to Fortune 500 corporations to various governments, encompassing the wide diversity of groups in between. We are especially proud of our reputation for devising innovative design solutions for our varied clients. Many of our projects have received national awards and worldwide press attention. Efficiency in design and the resultant savings in construction and operation costs are attractive to those organizations that must operate within a stringent financial environment. PND has long enjoyed the challenge of working for such clients and exhibits a "can do" attitude. PND's vast experience in marine facilities planning and engineering helps us recognize the importance of Sawmill Cove to Sitka's local economy and its significance to Southeast Alaska in general. PND is a designer of award winning marine terminals, deep water docks, commercial

moorage and boat haul out facilities and we are considered a premier marine and waterfront planning and design firm. We consider marine facility planning and design as our primary focus. PND's engineers have a vested interest and desire to ensure Southeast Alaska's waterfront facilities receive high quality professional services and are planned in harmony with their environment. PND has had great success in the development and planning of marine facilities throughout the region.

**Southeast Strategies** is a Juneau, Alaska Planning and Economics Firm, providing Local and regional economic profiles; Economic impact studies; Economic development planning; Feasibility studies; Community planning; Land use planning; Transportation planning; Public involvement planning and facilitation; and more. Principal Linda Snow is a Lifelong Alaskan with a deep understanding of rural Alaska economic issues. She has over 27 years experience as an economist, planner, researcher and policy and fiscal analyst, including: 17 years as an economic consultant in the private sector; 1.5 years as an employment economist with the Oregon Employment Department; 4 years as a policy and financial analyst with the Alaska Legislature; and 3 years as a transportation planner with the Alaska Department of Transportation and Public Facilities.

**David Evans and Associates, Inc. (DEA)** is an employee-owned, multidisciplinary consulting firm headquartered in Portland, Oregon. Founded in 1976, DEA employs more than 650 professionals in 18 offices located throughout seven states. In response to increasing demand from industry and government for hydrographic surveying and related data acquisition services, the Marine Services Division of DEA was established in 1989, further strengthening our position as a full service land and hydrographic surveying company. Headquartered in Vancouver, Washington, DEA's Marine Services Division is entirely dedicated to coastal and marine data collection, analysis and processing. DEA is peer-recognized as one of the most respected hydrographic surveying companies in the United States, evidenced by the selection of DEA personnel to serve on advisory panels for hydrographic surveys for NOAA and the Department of the Interior.

# Project Examples

#### Feasibility of a Marine Center in Wrangell, AK

Team Firms (and staff): Northern Economics (Fisher, Burden), PND (Somerville)

In this study for the City of Wrangell, Northern Economics evaluated the construction of a marine center to stimulate economic development in the community. This facility included a Marine Travelift for hauling out vessels, an uplands area for vessel storage and repair services, and space for businesses to offer their services in proximity to the facility. The study included a market analysis for the various services, cost estimates for the recommended facilities and equipment, suggested user fees, pro forma income statements, and an estimate of the additional economic activity generated in the community by the facilities. PND provided planning, feasibility, site studies, permitting, design, contract administration and inspection services for the City of Wrangell Marine Service Center. Following a community planning phase, PND assisted the City in acquiring all environmental permits and preparing final design and contract documents for a 150-ton boat haul out pier and five acres of uplands storage and marine service yard with wash down and treatment facilities. This EDA funded project required a phased approach to implementation. Following completion of the feasibility study, the city moved forward with the marine service center development, which opened recently.

Project Cost: \$31,783

Client Reference: Greg Meissner, Harbormaster, City of Wrangell; 907-874-3736

#### Travel Lift Feasibility Study for Cordova, AK

Team Firms (and staff): Northern Economics (Fisher), PND (Somerville)

For this project, the Northern Economics team evaluated the feasibility of a travel lift in Cordova, including a market analysis, location and size recommendations, and an assessment of the financial impacts of operation. Market analysis included estimating the number of vessels that might use a travel lift, based on the current and expected fleet composition, and phone interviews with vessel owners operating in Prince William Sound.

Project Cost: \$42,129

Client Reference: Dale Muma, Harbormaster, retired. Current Harbormaster is Tony Schinella; 907-424-6400.

#### Sitka Harbor System Master Plan

Team Firms (and staff): PND (Somerville), Northern Economics (Fisher, Burden)

Northern Economics contributed to the economic analysis and rate setting portion of this project for the City and Borough of Sitka's harbor system. The rate setting portion utilized a life cycle costing approach for each of the facilities to determine the level of moorage revenue needed. The cost was then used to determine an appropriate rate plan to address future needs.

Project Cost: \$131,507

Client Reference: Dan Tadic, Senior Engineer, Public Works Department, 747-1807.

#### Sawmill Cove Industrial Park Waterfront Development Plan

Team Firms (and staff): PND (Somerville, Gianotti)

In November 2001, the Sawmill Cove Industrial Park Board through the City and Borough of Sitka (CBS) Public Works Department retained PND to develop a waterfront development plan for the Sawmill Cove Industrial Park. The intent of the Waterfront Development Plan was to identify waterfront improvements that would enhance the Sawmill Cove Industrial Park and follow the mission management statement of the SCIP Board. The improvements recommended in the waterfront development plan were designed to adhere to the stipulations of the Memorandum of Agreement between the CBS and the Alaska Department of Environmental Conservation, signed when CBS acquired ownership of the Sawmill Cove Industrial Park. The report summarized the findings of a needs assessment and provided concept plans, conceptual design narratives, and cost estimate for improvements identified during work sessions with the Board. Specific improvements included:

- Boat harbor in Herring Cove
- Large vessel berth between the mouth of Sawmill Creek and Libra Point
- Improvements to the sand spit between Sawmill Cove and Sawmill Creek, and at the head of Sawmill Cove
- Replacement of Utility Dock and future expansion
- Large vessel floating moorage berth with landing at existing rail transfer bridge
- Repair or replacement of Pulp Dock Warehouse
- Large vessel berth between Buck Point and Entrance Point (Whale Park)

Although rough order magnitude cost estimates for planned improvements were prepared and a needs assessment was generated, economic feasibility of these improvements was not evaluated.

Project Cost: \$46,718

Client Reference: Hugh Bevan (former CBS employee), City and Borough of Sitka, now with S&S Construction in Sitka, 907-747-8725

#### Sawmill Cove Ocean Dock

Team Firms (and staff): PND (Somerville)

PND was retained by the Sitka Economic Development Association to prepare concept plans and preliminary cost estimates for a multi-purpose dock at Sawmill Cove. Concepts included six mooring and breasting dolphins and an OPEN CELL® sheet pile bulkhead with high energy fenders to allow large ship berthing for vessels up to 950 ft. A new dock with security/office building was also planned.

Project Cost: \$1,000 & \$2,000

Client Reference: Hugh Bevan (former CBS employee), City and Borough of Sitka, now with S&S Construction in Sitka, 907-747-8725

#### Sawmill Cove Ocean Docks Inspection and Evaluation

Team Firms (and staff): PND (Gianotti, Somerville)

PND Engineers, Inc. was retained by the City and Borough of Sitka to inspect and evaluate the Utility Dock and Pulp Dock at the Sawmill Cove Industrial Site. These docks were originally constructed in the late 1950s as part of the Alaska Pulp Company mill. The Utility Dock is 210 feet long by 85 feet wide, has a reinforced concrete deck and is supported by steel piles. The Pulp Dock is 600 feet long by 75 feet wide, has a reinforced concrete deck and is supported by steel piles. PND inspected all piles near shore that were accessible at low tide. PND retained Foreshore Technologies Inc. (FTI) to inspect the seaward piles. FTI visually inspected the majority of piles and inspected a representative sample using ultrasonic equipment. PND drilled core samples of the concrete deck, visually inspected the top and underside of the concrete deck, inspected the bullrail, mooring cleats and fender system. The deck was checked for delamination by the dragging chain method. Both docks were found in poor condition. Piles exhibited considerable corrosion, with some piles having no capacity to support vertical loads. The fender system was essentially nonexistent. Concrete strengths were well below design values and the deck was delaminated. PND performed a structural analysis and developed allowable operating loads on the docks, considering their current condition. Concept plans were developed for dock repairs and replacements. Rough order magnitude cost estimates for replacement and repair were also developed.

Project Cost: \$45,000

Client Reference: Hugh Bevan (former CBS employee), City and Borough of Sitka, now with S&S Construction in Sitka, 907-747-8725

#### Sawmill Cove Pulp Dock Concepts

Team Firms (and staff): PND (Gianotti, Somerville)

PND completed a conceptual design study for the Sitka Economic Development Association for major improvements at the former Pulp Dock and Warehouse. The basic intent of the study was to evaluate facility concepts that would stabilize the existing building, maintain current tenant operations and provide a work platform at the north end to support fish processing operations. A second objective was to expand the dock facility with fixed and/or floating structures towards the south. Three concept level drawings and associated cost estimates were developed to satisfy those objectives.

Project Cost: \$7,500

Client Reference: Rich Riggs, formerly with the City and Borough of Sitka, now CEO, Silver Bay Seafoods, 966-3110

#### SCIP Fish Processing Warehouse and Dock Structural Upgrades

Team Firms (and staff): PND (Gianotti, Somerville)

In 2007, PND was retained by the CBS to prepare concept designs and budget level cost estimates for upgrading the structural condition of the fish processing warehouse and dock. PND met with the CBS

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and SCIP Board at four work sessions to describe the deteriorated conditions of the existing facility and to receive input on the upgrades. PND then prepared eight conceptual designs and associated cost estimates for implementing the upgrades around a busy processing facility. PND also prepared a Master Plan for a SCIP Marine Terminal that consisted of two primary components – a commercial fisheries terminal and a deep water ocean dock.

Project Cost: \$9,560

Client Reference: Dan Jones, formerly with City and Borough of Sitka, 747-6373.

#### Feasibility of a Hoonah Bulkhead and Boat Haul out Facility

Team Firms (and staff): Southeast Strategies (Snow)

In this study for the City of Hoonah, Southeast Strategies subcontracted to R&M Engineering to evaluate the feasibility of building a marine facility that included a sheetpile bulkhead and barge ramp, a launching pier with a 100-ton boat haul out, a wash down area, and upland areas for lease to ship repair and related businesses. Southeast Strategies prepared market analysis and demand projections, purchasing, funding, and operations options, and marketing recommendations for the facility, and assisted R&M with environmental regulations information, and recommendations. For the analysis, Southeast Strategies surveyed a large sample of boat owners who live in, or transit the region to determine where they obtain boat repair services and why, surveyed other regional facilities about their operations, customers, and future plans, and researched various methods of operating the facility, and developed potential costs and revenues from operation.

Project Cost: \$10,000

Client Reference: Mark Pusich, Vice President, R&M Engineers, Juneau; 907-780-6060

#### Burro Creek Hydroelectric Upgrade Feasibility Study Team Firms (and staff): Southeast Strategies (Snow)

In this study for Burro Creek Holdings, LLC, Southeast Strategies teamed with Polarconsult Alaska to evaluate the feasibility of expanding the current hydroelectric facility at Burro Creek near Skagway. Southeast Strategies researched and documented current and possible future power producing facilities in the Upper Lynn Canal area, researched and evaluated the potential market for power produced by the expansion (including future power demand from cruise ships and nearby mining operations in Alaska and Canada), and documented potential environmental issues and permitting needs of an expansion. Southeast Strategies also performed benefit/cost and other economic feasibility analyses for expansion of the facility, and took the lead on producing the report.

Project Cost: \$10,000

Client Reference: Jan Wrentmore, President, Burro Creek Holdings, LLC, Skagway; 907-612-0702

#### Demand for a Cold Storage in Craig

Team Firms (and staff): Southeast Strategies (Snow)

Southeast Strategies evaluated the demand for, and required capacity of a cold storage facility at Craig. Southeast Strategies surveyed area fish processors, commercial and charter fishers, lodges, area businesses, sports hunters and fishers, and others who might use cold storage capacity, and estimated current area capacity and use, and excess demand for current capacity. In addition, management costs and alternatives, and feasibility of building and operating a new facility were evaluated. Options for shipping fresh and frozen fish products to market were also examined.

Project Cost: \$8,280

Client Reference: Jon Bolling, City Administrator, City of Craig; 907-826-3275

# City and Brough of Sitka

# DISADVANTAGED BUSINESS ENTERPRISE UTILIZATION REPORT

Federal-Aid Competitive Sealed Proposals

|  |  | THE STATE OF THE S |                                   |  |
|--|--|--|-----------------------------------|--|
| Sawmill Cove Indu  | strial Park Waterfront Development                     | , Agreement Number, Al   | CSAS 69600                        |  |
| The undersigned hereby certification. A. It is is is not | es on behalf of the Contra<br>a DOT & PF certified DBE |  | bura                              |  |
| B. Listed below are the certified I                      |  | -  |                                   |  |
| and portions of work to be per                           |  | tite DDE goal, III   | cinded are the firm hance         |  |
| DBE FIRM NAME  | WORK OR PRO  | DUCT   | PROPOSAL PARTICIPATION PERCENTAGE |  |
| Southeast Strategies                                     | Economic and Plan                                      | nning Analysis   | 10%                               |  |
| If more room is necessary, submit additional,            |  |  |                                   |  |
| DBE Utilization % of Estimated Proposal                  |  | Property   | 10 %                              |  |
| DBE Project Goal   |  | •  | 5 %                               |  |
| Bettel X Bull  |  | President  |                                   |  |
| Signature of Authorized Company Represe                  | ntaffye  | Titte  |                                   |  |
| Northern Economics, Inc. Company Name                    |  | 880 H Street, Suite 210, Anchorage, AK 99501 Company Address (Street or PO Box, City, State, Zip   |                                   |  |
| March 26, 2013   |  | ( 907)274-5600   |                                   |  |
| Date   |  | Phone Number   |                                   |  |
| ·  |  |  |                                   |  |