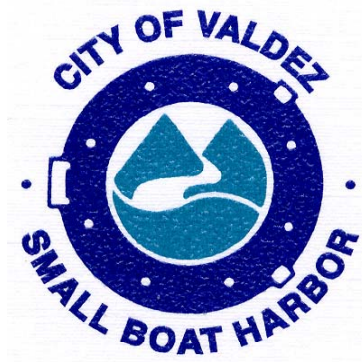


# **A Report on the State of the Harbor**

## **Valdez Small Boat Harbor February 2002**



Prepared by  
Alan Sorum – Harbormaster  
Marci Cornell – Account Representative  
Jenny Benda – Account Representative

## State of the Valdez Small Boat Harbor Report

This report is an attempt by the Harbor staff to better communicate the state of the Valdez Small Boat Harbor (VSBH) to our City Council, City Administration, Ports and Harbor Commission and the boating public. We have found that those who use this facility and those who formulate its policy and help determine the Harbor's future course need accurate information concerning the VSBH. It is said that the Small Boat Harbor is important economic driver for the overall community, yet there is no single resource available that explains why this might be so. This report hopes to explain the claim and also how harbor operations fit within the goals and aspirations of the community.

Information presented within this report is drawn from no single source. It is derived from personal and professional experience, published studies, our new Master Plan, user experiences and the lessons learned from other harbors throughout the State. Many concepts presented in this report may seem new or untried. This is not the case; they are ideas that have worked in other facilities, and in the staff's opinion, can work in our facility while benefiting our community. Valdez needs a complete picture of the harbor, which often seems to be a puzzle with many conflicting pieces

### **Introduction and Overall Goals for Valdez Harbor**

The purpose of our paper is two fold; first, it will produce an accurate description of all existing harbor infrastructures and second, it will provide a tangible model of the harbor's operational schemes and its role within the community. It is the harbor staffs' goal to provide value to our customers through the use of progressive business practices, identifying alternative funding sources, developing partnerships and conducting exhaustive research to support good decision-making.

The staff of the VSBH is committed to providing outstanding customer service, sound management, diverse facilities and services, compliance with ordinances, maintenance of existing infrastructure, developing partnerships, protecting the community's investment in the harbor and coordination with other agencies to avoid duplication of services.

Valdez Small Boat Harbor must work to keep and protect our customers, employees and visitors from harm or injury. Staff must be proactive in the role of accident prevention. All available best management practices (BMP), current practices and applicable regulations need to be continuously reviewed. An example of this is the process of collecting used oil and bilge water. The current process could be more efficient. A building that will facilitate improved collection methods had been identified in the Harbor Master Plan.

We must determine the true value of harbor infrastructure and the actual cost of operations and maintenance (O&M). VSBH must strive to be self-supporting and charge fees based on the actual cost of doing business. Staff will collect adequate engineering and research data to support good O&M decision-making. The harbor needs to build a library of O&M manuals, bid documents and as-built drawings that describe all installed infrastructure. All decisions must be prioritized based on life-safety, public welfare, ability and availability of resources to the harbor. Staff needs to implement a comprehensive infrastructure maintenance management program.

Research on the value of the harbor's operation to the local and regional economies must continue. Key players include commercial fishing, oil spill response (industry and environmental), shipping via landing craft, large barges & tenders, tourism, subsistence, and recreational vessels.

**Successful achievement of these overall goals for the Valdez Small Boat Harbor will require:**

- **Collaboration between the Port Commission and staff to solve conflicts.**
- **Rates should reflect operation, maintenance and replacement costs.**
- **Aesthetics and access.**
- **Well-trained staff.**
- **Consistent enforcement of approved ordinances, policies and procedures.**
- **Proactive risk management.**
- **Environmentally sound operational practices.**
- **Protecting the community's investment through quality maintenance.**

# Infrastructure

## Basin

The original Valdez Small Boat Harbor was located in “Old Town” and authorized under the River and Harbor Act of 1938. The harbor was completed in the 1939 and was approximately three acres in size. The harbor was modified with new breakwaters in 1957 authorized under the River and Harbor Act of 1954. A tsunami wave generated by the 1964 earthquake destroyed the harbor. The River and Harbor Act of 1964 authorized a new harbor.

A new 10-acre harbor basin was funded by the Office of Emergency Planning and constructed by the US Army Corps of Engineers (USACE) in 1966. The City of Valdez expanded the harbor basin to the east in 1985. Currently the mooring basin is approximately 38 acres in size, measures 1,920' x 867', and is dredged to -12' MLLW. Expansion lengthened the basin and adversely changed its aspect ratio. Aspect ratio is the relationship between length and width. A harbor is normally self-flushing if the length is no more than two times its width. Due to the dimensions of the basin, stagnation and debris are major problems for the VSBH.

Alaska Department of Transportation and Public Facilities has received a Water Quality Grant from the Department of Environmental Conservation to complete a modeling project for water quality. This Water Quality Modeling project will develop computer modeling tools and a manual for permit reviewers and harbor designers to help evaluate internal basin circulation and improve water quality. The study will use the results of work done at University of Washington to calibrate the models and extend the results to quantify water quality.

Valdez has the worst harbor in the state with respect to water quality and circulation. The length of the basin is four times longer than the width and there is a long entrance channel. Despite the high tidal range, this high aspect ratio creates areas of poor water quality within the basin. In the portion of the harbor furthest from the entrance, there is essentially no flushing. Upon completion of this modeling project, it will provide the tools needed to evaluate alternatives for modifying the harbor to improve the water quality.

The lack of circulation also creates a major problem with ice build-up in the basin. On calm, cold days the basin freezes solid, creating hazards in case of fires or other emergencies and prevents access into and out of the harbor. A change implemented in the snow removal procedures in 2002, which reduces the amount of snow dumped in the harbor, will assist in reducing the problem of icing.



**Construction of new harbor in 1965**

## **Fisherman's Dock**

The Fisherman's Dock is a sheet-pile construction and accommodates three hoists and a tidal grid. The hoist on the right can lift 7,000 pounds, the middle hoist is good for 4,000 and the left hoist can lift 1,500 pounds.

An adjacent parcel of city owned land has been identified as a possible location for a new office per the Master Plan. City and harbor officials have determined that the existing Harbor Master's Office must remain in use until a new harbor is constructed. As planning for the new harbor proceeds, a more centrally located site may be selected on the parcel of land adjacent from Fisherman's Dock. If the parcel is not used for office space, it should be retained by the City to support the Fisherman's Dock.

## **Hoists**

The Budget for 2002 includes money for "card lock access" to the hoists. Currently the harbor does not have a convenient, safe system in place for keeping track of hoist usage. By implementing a card access system, the VSBH staff can electronically log usage times, as well as keep track of people using the hoists. This will also help staff offer training to those requesting an access card.

Ongoing recertification and maintenance efforts are being made on this equipment.

## **Tidal Grid**

The tidal grid rental fee is \$0.75 per foot for the first 2 low tides and \$1.00 per foot for each consecutive 2 low tides. The grid is located on the Fisherman's Dock and currently has little supervision. The grid can be viewed from the Harbormaster's office, but there are still environmental and BMP (Best Management Practices) concerns. The harbor staff is investigating improved management techniques for the Tidal Grid.



**Fisherman's Dock and Hoists**

## **Floats**

The general layout of floats within the harbor is satisfactory. Construction materials vary with the installation date of the floats.

- Float "A" – This float was completely replaced in 2000. This float was designed to accommodate commercial vessels and heavier usage. Construction consists of pressure treated wood over coated polystyrene foam billets and utilizes galvanized steel pilings.
- Floats "B-E" – These floats were built in 1966 as part of the USACE harbor relocation project. Construction consists of heavy timber over polystyrene foam billets and utilizes wooden pilings. Deteriorated timbers, inadequate flotation and numerous other maintenance problems exist. These floats have been in place beyond their expected service life. The master plan has these floats scheduled for replacement in the years from 2002 to 2006.
- Floats "F&G" – These floats were installed by the State of Alaska in 1978. Construction is of concrete, with polystyrene foam flotation and utilizes wooden pilings. The surface of these floats is spalled and was covered with rough-cut lumber in 1999. These floats have been in place beyond their expected service life. The master plan has these floats scheduled for replacement in the years from 2002 to 2006.
- Floats "H-K" – The City of Valdez expanded the harbor eastward in 1985 and added these new floats. Construction is of concrete, with polystyrene foam flotation and utilizes galvanized steel pilings. The primary maintenance planned for these floats is pressure washing and chemical sealing every five years. The master plan identified no other needs or issues for these floats. The projected lifespan for these floats is to 2015.
- Tour Boat Dock – The City of Valdez constructed this facility in 1987. The float is heavy constructed concrete, with polystyrene foam flotation and utilizes galvanized steel pilings. Improvements are needed in the potable water and sewage collection systems. The primary maintenance planned for these floats is pressure washing and chemical sealing every five years. The master plan identified no other needs or issues for these floats. The projected lifespan for these floats is to 2015.



Crowding along "A" and "B" floats shows the need for additional moorage space.

## In-water Fish Cleaning Stations

Currently the harbor has three fish cleaning stations on the floating docks. These are located at "E", "I" and "J" floats where they intersect with "M" float. All of the stations are in need of major repair. A grant through the Wallop-Breaux Boating Access Program has been received to pay for replacement of the stations. The proposed project will build five portable and one large fixed facility. The portable stations will be built on an independent float that can be removed from the harbor in the winter. Private fish cleaning stations will not be allowed once the new facilities are in place. Each location will be served by a "humpy dumpster". The contract for the new cleaning tables has been awarded and final completion of the project is scheduled for March 2002.



Fish cleaning station at "E" float



New aluminum fish cleaning station

## Launch Ramp

The existing boat launch ramp is located at the extreme east end of the mooring basin. It was constructed in 1986 and was repaired/expanded in 1997. The ramp is built of concrete and has two lanes, with a courtesy float between them. The Valdez Small Boat Harbor operates the only all-tide launching facility in the Valdez area. During the summer season of 2001, there were several occasions when the ramps were congested and difficult to access. Harbor staff developed a number of recommendations to help improve utilization of the facility:

### **Improvements to Boat Launch Capability; Descriptions and Costs**

1. Silver salmon season is in full swing by August. Adding one additional temporary employee for the month would cost about \$2,250. It is anticipated that collection of parking and launch fees that would normally be missed would probably recoup much of labor costs.
2. Parking Lot Project: PN&D is sending design documents to finalize the layout plan. The majority of the vessels stored in this area were moved prior heavy snowfall. Area can be clear of snow early in season if there are no boats stored.
3. Designated Long-term Parking: The area at the east end of the harbor has been identified as an area that could be used for long-term parking. The area is close to the launch ramp and can accommodate truck/trailer combinations. This area would be reserved for boaters gone longer than a week. This area should be shifted to the harbor for oversight and control.
4. Additional Courtesy Floats: Move some of our old floats stored in the Pipe Yard into the southeast corner of the harbor. A number of river boaters pulled up on the shore and were able to load their vessels. Adding floats to the area would extend the amount of time boats could be along the shore with the changes of tide. Cost would be the labor needed to move the old float sections into the water; this would require help from the public works department.
5. Brochure: Harbor staff will develop a informational brochure and map for visiting boaters that will outline launch ramp use, designated parking areas, temporary moorage locations and other helpful hints that could speedup use of the facility.
6. Directional Launch Ramp Sign: Warning Lights of Alaska estimates a cost of \$750 to construct an informational sign that would incorporate changeable panels the direct the traffic flow at the ramp.
7. Third Launch Ramp Lane: Work has begun to design and install a third lane at the launch ramp. Survey work will be conducted to also determine the potential extension of the courtesy float and an addition launch ramp lane near "J" float.

## State of the Valdez Small Boat Harbor Report



Line of vehicles waiting for boat launch during Silver Salmon Season

### Office Building

The harbor office building is currently in a good location that oversees most operations occurring within the mooring basin. This building is a two-story, concrete and wood structure. Access for persons with disabilities is unavailable. The building also houses the public restrooms and showers for the Small Boat Harbor. If a new commercial harbor is constructed, that would be the appropriate time to build a new office in more central location and provide ADA access.



Valdez Small Boat Harbor Office with Attached Shop

### Shop

The current harbor shop is located adjacent to the Harbor Master's Office and is inadequate and undersized. The shop is used for storage and maintenance. A new shop is in the CIP plans for 2005. Ideally, this shop would be much larger and capable of storing bulk repair materials, such as timber, and other items used by harbor staff. This would allow the harbor to purchase material in bulk quantities at a reduced cost.



**The Harbor Shop**

## **Restrooms**

The harbor currently has two restroom facilities located on North Harbor Drive. The first is located downstairs in the Harbor Master's Office. This restroom facility provides public showers that require the purchase of a \$4.00 token. The second facility is new and located in the middle of the harbor. This facility does not provide showers. It has unfortunately been the victim of frequent vandalism incidents, causing short-term (less than 24 hours) closures for cleaning and maintenance. It is closed throughout the entire winter.

A location for a third restroom facility has been identified in the master plan. Construction of the new restroom should follow that for the existing new facility, except that public showers would be a consideration.

## **Boatlift and Lift Dock**

Currently the harbor operates a 60-ton boatlift. Future plans for a commercial boat harbor will transition the current facility to a more recreation based harbor. The Master Plan determined that the current lift and dock would remain in their current location. There are plans to certify the boatlift once a list of maintenance tasks are completed. The boatlift is scheduled for replacement in 2005. There are no major maintenance concerns for the lift dock. Decking on the dock needs to be replaced as it wears. An improved vessel-boarding float might be considered.



## Upland Fish Cleaning Station

One upland fish cleaning station has been installed near the harbor office. This station and a shell for a second facility were built in 1999. Initially this project was quite controversial due to the cost and location. Now the station is often overcrowded and difficult to access due to its popularity. The current master plan has scheduled completion of the second facility in 2002. A design flaw was discovered in the existing slide for fish waste. The slide is not steep enough to allow fish waste to move freely to the disposal container. A slide gate was developed to create head pressure which forces waste down the slide upon opening. Design of the new station will remedy this problem.



Upland fish cleaning station below harbor office

## Upland Storage

In the spring of 2002, the East Lay Down yard will be paved and used as a vehicle and trailer parking area. The parking area will be improved with a storm water collection system that will collect and convey storm water across Kobuk Drive to the bay. An oil/water separator may be required by the Alaska Department of Environmental Conservation (ADEC) to treat the runoff before it enters the bay.

The area directly north of the lay down area was also designated as additional parking. In this vicinity the master plan calls for a multi-use boat haul out area that will include wash-

## State of the Valdez Small Boat Harbor Report

down stations, maintenance stations and short-term parking slips for vessels. The wash-down stations will be capable of handling a 60-foot vessel, and will be constructed of concrete slabs (these stations will be available for a daily charge).

There will be eight maintenance stations also capable of handling 60-foot vessels. Public water and electric will be provided at the wash-down stations. Small boat storage will also be provided at this location for vessels up to 60 feet in length. Approximately 46 stalls can be arranged in three separate rows. Boat storage will only be allowed from October 1 to June 1 each year.



Vessel lay down yard north of Harbor Drive

### Used Oil Collection

The existing used oil collection facility is located in a small building across from the harbor office. The design of the current collection facility does not prevent storm water from entering the building and flooding the oil sumps. Flooding creates an oil cleanup issue for the harbor. Improvements to curbing and grading are to be accomplished in FY2002. There is also an effort to employ better management of the facility. Harbor staff are brainstorming ideas on how to increase public awareness and knowledge concerning the collection facility. The master plan has developed the concept of constructing a new bilge water treatment building next to the used oil collection site.



## Utilities

Utilities include water, electric, telephone, cable television and pumpout facilities. Water service is accomplished by a system of submerged polyethylene pipes with hose bibs mounted on the float service. There are sections of iron pipe supply line under floats "B" through "G". Many portions of this line have failed and underwater repair of supply lines is a major expense for the harbor. Water main access is from the approach trestles. Valdez City Council has approved expenditure of funds for a temporary water system that will serve "B" through "G" floats. Plumbing supplies have been purchased and the system has been installed on the floats. The new system will be connected to the City water main when the ground thaws in the spring. The project completion date is spring of 2002.

The electrical system is in fair to good shape. Both water and electrical system will be replaced in the "B" through "G" float replacement project. Improvements will also include an approved firewater standpipe system for floats "A" through "G". Continuous freeze protection has been discussed, by possibly utilizing a closed loop system. Water currently must be left on to prevent freezing and provide winter access.

The City of Valdez has installed one large water meter at the top of "B" float, which measures the water used from "A" to "G" floats. Plans are to install two new meters in conjunction with upcoming paving projects, which will cover the remaining floats. The City Water Department has also installed two small water meters on the Tour Float to study the water use by tour vessels moored there. The harbor will eventually be charged for its water use, when adequate metering and a history of use are in place.

Telephone service continues to expand throughout the harbor. Wiring is included in all new floats being installed in the basin. Customer demand appears to be satisfied to this point.

Utility lines are often hung over the edge of floating docks and across piling hoops. Wear and marine growth cause early failure of telephone and electrical lines. New float construction design for the harbor will include raceways within the float structure to accommodate the necessary utilities. Marine grade electrical panels will be used as the floats are replaced.

Marine sewage pumpout service is available along the Tour Boat Float. The current Master Plan dictates that new pumpout facilities will be included in all new float construction projects.

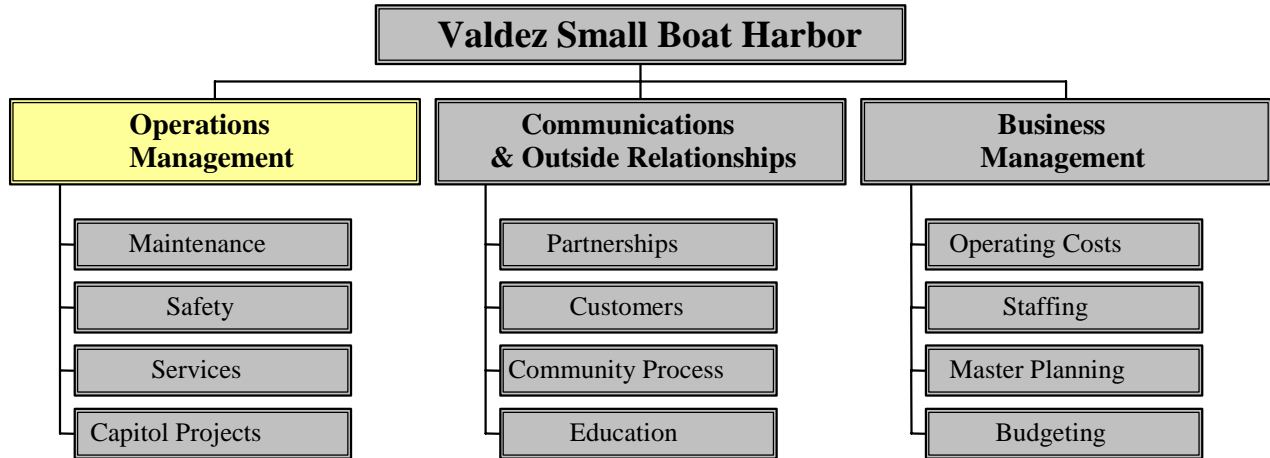
## **ADA Accessibility**

The Valdez Small Boat Harbor is mandated to comply with requirements of the Americans with Disabilities Act (ADA) within the next couple of years. Two areas of concern for this effort are accessible ramps and designated moorage.

Planning provided through the master plan and design work in progress with Tryck Nyman Haynes, Inc. has identified the ramps at "B", and "E" floats as likely beginning points. The most recent draft consensus of the final ADA regulations will allow the use of a continuous 80' gangway to accommodate a tidal height of more than 10'. The approach docks at "B" and "E" float will need to be shortened to accept the longer ramps. This should not be a problem since both approach docks have been in service beyond their useful life and are scheduled to be replaced.

Reserved accessible boat slips may be more of a problem to implement. The proposed final ADA regulations require 3% of the total number of slips in the harbor be reserved for access to ADA compliant gangways. Our harbor has 510 slips, so 3% the final rule would require 15 accessible slips. Accessible slips shall be located on the shortest route leading to public amenities.

The harbor staff will start reserving likely ADA accessible slips through attrition, rather than forcing customers out of their slips at a later date. Harbor staff and commission established a policy of retaining slips closest to the ramps for transient use, until the final ADA rules are adopted.



## Operations Management

### Maintenance

Maintenance priorities must be based on cost, benefit, public health and safety, available resources and overall strategic planning. VSBH needs an overall inventory of harbor facilities that reflects the total replacement cost of all installed harbor infrastructure.

There must be an overarching maintenance program developed. Components and abilities should include:

- Ability to track time and material costs.
- Integrates O&M manual recommendations with work in the field.
- Automatically generates work orders on a timely basis using O&M recommendations.
- Maintains an overall database of infrastructure values and historical maintenance costs for the improvements.
- Provides predictions of useful life and time of most economical replacement for structures.
- GIS interface and interface with City of Valdez system already in place. GIS should integrate a library of as built drawings and O&M manuals for entire harbor system.
- Library of O&M manuals and as built drawings for harbor infrastructure.
- Determine appropriate level of maintenance funding needed to adequately preserve harbor improvements.

The harbor will need to evaluate future staffing and need for employees with specialized maintenance skills.

### Safety

OSHA requires tracking of Material Safety Data Sheets (MSDS) for all chemicals used by the harbor department. This program is known as the OSHA *Right to Know* regulation. The harbor has purchased *Right to Know* display center for office. Staff is collecting MSDS sheets and identifying the chemicals used within the harbor. A database is being developed to track the harbor's chemical inventory and relate each to a MSDS sheet.

## State of the Valdez Small Boat Harbor Report

Unsafe access to docks exists in several areas:

- 1) There were three falls this year, one by an employee.
- 2) At extreme low tides, the gangways are extremely difficult to negotiate.
- 3) Rescue throw ropes or life rings will be installed on floating docks, in case an employee or other person falls into water.
- 4) Emergency telephone access is needed on the floats.

OSHA requires the travelift and hoists be certified. Training and standards are needed for hoist use. Cranes are available to the public without reservation or supervision. Staff is soliciting bids for a card lock access system for the hoists. Funding for this project is included in the FY2002 budget.

Boats are blocked up in dry storage without final inspection by harbor staff. Quality of vessel blocking is important. There is a danger to the public and other vessels if the dunnage used is not adequate.

VSBH has an approved fire safety plan in place. The plan must be updated to conform to revised NFPA 303. Staff should develop a harbor inspection checklist per the fire plan. This inspection could be done everyday along side the hot-berth inventory. The informational signage described in the CIP list is also a component of the plan. The new signage will identify slip locations and positions of safety equipment like fire extinguishers. Inter-departmental training to pre-delegate duties during emergencies and disasters, as well as reporting duties after an incident will be developed with the Fire Department.



Safety communications to users continue to be improved. The harbor office is a natural clearinghouse for US Coast Guard, State Office of Boating Safety, National Weather Service and NOAA safety publications. The harbor newsletter, website and brochure all provide opportunities the promote safety. The Harbormaster is currently qualified to administer commercial fishing vessel safety (CFVE) inspections and vessel safety checks (VSC). VSBH will continue to promote safety programs like the 5 Star program for charter vessels, CFVE inspections for fishing vessels and VSC inspections for recreational boaters. The *Commercial Kayak Operations Policy* outlines some suggestions for contact with this user group.

Staff will continue improvement to *Panic File*. This file is a guidebook that outlines the appropriate actions employees should take in case of an emergency. Use of the *Panic File* also provides documentation of the incident.

## State of the Valdez Small Boat Harbor Report

The harbor officer training program being developed by the Alaska Association of Harbormasters and Port Administrators (AAHPA) covers the issues of vessel operation, pumping, towing and line handling vessels. All employees of the harbor will participate in the development and trial of this new program with other member facilities. An On-The-Job program is scheduled to begin during the 2002 boating season.

VSBH works with the Alaska Office of Boating Safety, US Coast Guard Auxiliary and SERVS to promote the *Kids Don't Float* lifejacket loaner program. This service has been well received within the community. Coverage was expanded to cover the City Dock as well. VSBH will continue to partner with other agencies and support this project. Participants have suggested that the harbor obtain more adult-sized life jackets. This has begun and SERVS has donated several life jackets to the program already.

The International Marina Institute (IMI) has developed a prototype operations manual for the use of its members. Staff has begun work to tailor this manual to our unique operations.

## Services

### Snow Removal

The harbor has a good program in place for snow removal. Work needs to continue to improve the coordination with Public Works Department in the removal and storage of snow. Staff must ensure that snow is placed where damage to harbor infrastructure is limited. It is important for staff to seek cooperation with harbor users regarding vessel condition, tenting/tarpping and keeping fingers clear. Currently there are no standards in place for structures placed over vessels. Owners currently put snow-shedding houses on their vessels, even when it jeopardizes harbor infrastructure or other vessels. Fingers are not always cleared by vessel owner and seasonal employees are hired to do the snow removal. The failure of tenants to remove snow from their finger floats causes damage due to submersion and excessive loading which increases costs for all tenants.

New snow removal methods to minimize the snow being dumped into the harbor basin began in 2002. Continued improvement in this area will reduce freezing and lessen damage to the harbor infrastructure.



## Environmental Waste

The basic process of collecting used oil is flawed. There are constant problems with transportation and storage. Used oil is not burned through the summer and collection is unsteady. This causes delays and problems for our customers. If the harbor is going to collect waste oil, we need to have a facility to accommodate the volume and adequate ways to get rid of it. The design of the current collection facility does not prevent storm water from entering the building and flooding the oil sumps. Flooding creates an oil cleanup issue for the harbor.

Shortly after the Exxon Valdez Oil Spill Trustees Council (EVOS) was established, grants were given by the council to provide a building equipped with harbor related oil collection and clean-up equipment to communities within Prince William Sound. The Valdez EVOS building is located at the bailer facility. This has proven to be ineffective for many reasons. ADEC and ADOT-PF requirements limit transportation options away from the waterfront. People in the community find the harbor facility to be much more accessible than the bailer as well. A DEC approved building needs to be placed at the harbor to house the equipment provided by the EVOS trustees. Users need easy access to dispose used oil, antifreeze, filters, oily bilge water, batteries, contaminated diesel and gasoline. These materials must be collected at the source to insure they are not introduced into the water.

## Harbor Capital Projects

### Projects that currently have approved funding:

- **East Lay Down Area** **\$385,000**  
The east lay down area is to be cleared of stored vessels and used to allow parking of truck/boat trailer combinations. A storm water collection system with oil-water separators will be included.
- **Float Located Fish Cleaning Stations** **\$292,000**  
There needs to be additional, improved fish cleaning stations provided for harbor users.
- **Upland Fish Cleaning Station** **\$50,000**  
Complete the second major upland fish cleaning station. Exterior building is already complete.
- **Informational Signage** **\$15,000**  
Signage is needed to aid the public and emergency responders in locating safety equipment and slip locations.
- **Major Repair of Water System** **\$28,000**  
Water system for "B" through "G" floats has failed. HDPE system similar in design to "A" float is being installed.
- **Maintenance Stations** **\$150,000**  
Eight vessel maintenance stations, each able to accommodate a sixty-foot vessel, will be installed. Provisions for power, water and collection of wastewater will be included.
- **Washdown Stations** **\$100,000**  
Two washdown stations will be installed adjacent to the travelift to allow hull cleaning of hauled and trailed vessels. Provisions for power, water and collection of wastewater will be included.
- **Short-Term Storage** **\$190,000**  
Paved storage areas will be provided for approximately 46 vessels in three separate rows.

State of the Valdez Small Boat Harbor Report

**2002 (Council Approved)**

- **Tour Boat Dock – Improve Water Supply System** **\$18,000**  
Distribution system for potable water needs improvement.
- **New Harbor Planning** **\$175,000**  
Funding to assist with the next stage of planning for a new harbor east or west of SERVS.
- **Small Boat Harbor Improvements/Investments** **\$224,000**  
Funding to implement improvement that could have an immediate economic impact on the community.
- **Harbor Expansion** **\$500,000**  
Funds to assist with the City's share of costs for a new harbor.
- **Improvements to Harbor Office Heating System** **\$30,000**  
Installation of zone valves, thermostats and insulation to improve efficiency of office heating system.

**2003 (Projected)**

- **Parking Improvements North of Kobuk** **\$340,000**
- **Replace "B" Float** **\$590,000**  
Float has been in place beyond its reasonable lifespan and is failing.
- **Replace "C" Float** **\$950,000**  
Float has been in place beyond its reasonable lifespan and is failing.
- **Extension of Bulkhead Float** **\$200,000**  
Increased transient moorage capacity and possible improvement to ADA access/capacity. Possible access grant project.
- **ADA Access and gangway replacement for "B" float** **\$150,000**  
Improvements are needed to provide ADA access to the harbor facilities. Gangway at "B" is beyond its service life and needs replacement. Construction should be in conjunction with replacement of "B" float.
- **Harbor Expansion** **\$3,500,000**  
Funds to assist with the City's share of costs for a new harbor.

**2004 (Projected)**

- **Bilge Water/Waste Oil Treatment Building** **\$200,000**  
Construct a DEC approved building to house existing bilge water/waste oil treatment equipment. Building will provide ready access to harbor users at the waterfront.
- **Shelter at Public Sanitary Dump Station** **\$16,000**  
Cover for waste dump to protect access to facility in poor weather.
- **Replace "D" Float** **\$900,000**  
Float has been in place beyond its reasonable lifespan and is failing.
- **Replace "E" Float** **\$900,000**  
Float has been in place beyond its reasonable lifespan and is failing.
- **ADA Access and gangway replacement for "E" float** **\$150,000**  
Improvements are needed to provide ADA access to the harbor facilities. Gangway at "E" is beyond its service life and needs replacement. Construction should be in conjunction with replacement of "E" float.

**2005 (Projected)**

- **Restroom at North Side of Harbor** **\$80,000**  
The east end of the harbor was identified as a location for an additional public restroom to help meet future growth in user demands.
- **Boardwalk Replacement North of Harbor Office** **\$265,000**

State of the Valdez Small Boat Harbor Report

The boardwalk north of the harbor office is in poor conditional and will require replacement.

- **Harbor Maintenance and Storage Garage** **\$150,000**

A larger shop is needed to allow storage of bulk maintenance materials and harbor capital equipment like trailers and loaders.

**2006 (Projected)**

- **Replace "F" Float** **\$750,000**

Float has been in place beyond its reasonable lifespan.

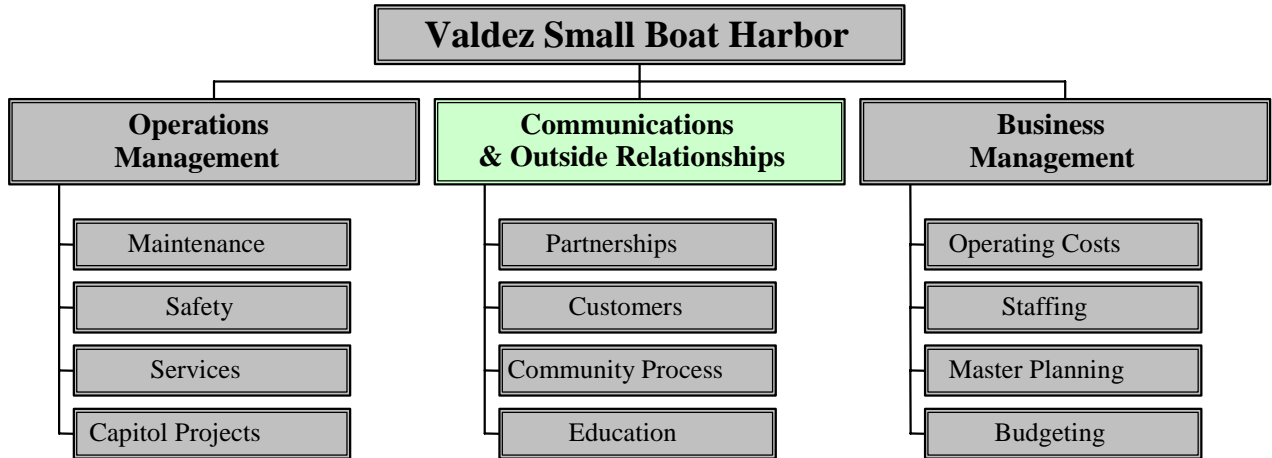
- **Replace "G" Float** **\$660,000**

Float has been in place beyond its reasonable lifespan.

**2007 (Projected)**

- **High Mast Lighting Improvements** **\$490,000**

Four high mast towers need modification or replacement to allow ready access the fixtures.



## Communications and Outside Relationships

### Partnerships

- Commercial Fishing Industry Associations.
- Charter Fishing Associations.
- Cruise or Sightseeing Vessel Associations.
- Valdez Harbor Users Association.
- Subsistence users of Prince William Sound (Valdez Tribe, AHTNA Inc., Chugach Inc., AFN, DOI, USDA and USFWS).
- State of Alaska including ADOT&PF, ADEC, ADF&G, and ADNR.
- Federal agencies including USDA-FS, DOI, DOT, NPS, USCG, OSHA and EPA.
- Oil industry including SERVS and Alyeska Pipeline Service Company.
- City of Valdez interdepartmental relations.
- Seek to identify other interests parties.

### Customers

Who are our potential customers? All users of the harbor including commercial fishing vessels, oil spill response agencies, shippers, fishing tenders, tourism businesses, subsistence users, recreational vessels and commercial businesses that provide support services to the harbor users.

### Community Process

#### Communication Tools

The harbor publishes a newsletter approximately four times per year. It is our goal that the content of the newsletter reflects and compliments our mission. A variety of issues are currently discussed in the newsletter, however, we will continue to increase the amount of

## State of the Valdez Small Boat Harbor Report

technical information conveyed within the newsletter. In addition, we will tailor the contents to a variety of user groups within the harbor. Continuing a positive outlook and focus in the newsletter and avoiding long lists of negative directions tops our list of priorities. We see this medium as an opportunity to pass on good information, stimulate collaboration and gather information through polls and surveys.

The VSBH web site is another great resource for harbor customers that provides access to boating safety information, weather forecasts, policies and procedures, ordinances, links to other agencies and helps reinforce the mission of the harbor department. Future additions will include more links to outside agencies, more harbor forms and a more professional layout. Improvements are being made to departmental computers and software.

The City of Valdez sponsored a successful AAHPA conference in November 2000 and will host it again in 2005. VSBH will continue to promote the AAHPA as a common voice in public policy and management of Alaskan harbors. The harbor will encourage its employees to become associate members and participate in the continuing education programs being developed by the association.

The harbor brochure has proved to be very effective. Staff will continue to update and modify the brochure to further meet the mission of the harbor. Adequate funding for this important tool is a priority for the future.

A new brochure is being developed for the 2002 boating season that will address good boat launching practices. The brochure will provide suggestions on vessel loading, moorage instructions and preferred traffic patterns around the launch ramp.

## Community Impacts

Valdez Small Boat Harbor should be considered as an inter-modal facility that connects marine activities with the greater community. Waterfront access to Prince William Sound is essential for economic development and the quality of life needed to sustain community growth. The harbor needs to always be able to facilitate public access to Prince William Sound and the greater Gulf of Alaska.

The boat harbor must be kept clean and attractive to visitors. Initial appearances establish the tone present within the harbor towards business and the public. Facilities should be designed to aid in this effort and be able to withstand the severe weather.

Valdez Small Boat Harbor is an ideal point of contact for the public and the many partners that collaborate with the harbor. The harbor can easily facilitate boating safety, registration and regulatory efforts. Substantial support can be provided to our users and customers.

The harbor can help mitigate environmental impacts to the community and surrounding waters. Best management practices (BMP), current policies regarding protection of the environment and research of the issues must be considered in every thing we do. The overall relationship of the Harbor Master Plan to the Valdez Comprehensive Plan should be reviewed periodically.

## Education

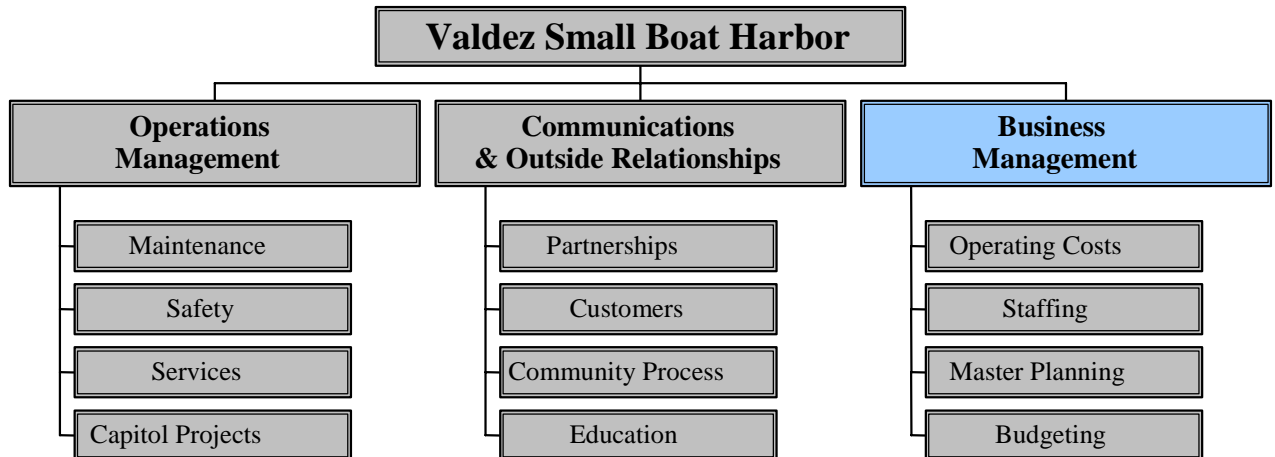
OSHA requires approved Travelift training for all operators. Staff contacted Marine Travelift and IMI and scheduled a class on the West Coast. The harbor sent one employee to the

## State of the Valdez Small Boat Harbor Report

training. A training program will be developed with input from this training experience. State and federal OSHA compliance offices will review the Travelift plan.

The Alaska Association of Harbormasters and Port Administrators (AAHPA) is developing a harbor officer-training program. Elements of the program will include regulations, law enforcement, fire safety, water safety, vessel operations, towing, pumping, marine salvage, radio use, public relations, customer service, record keeping and internal reporting. Terry Johnson of Sea Grant is coordinating the program with the University of Alaska – Fairbanks. The course will be available for distance delivery via the internet.

Continuing education for employees is important for improved productivity and retention. A report outlining the merits of City support for continuing education has been forwarded to the City's employee benefits committee.



## **Business Management**

### **Operating Costs**

The cost of doing business will continue to increase for the harbor. New and varied tools need to be used to help cover these additional expenses. Some ideas are to:

- Track true costs and budget for actual cost of operations and maintenance activities.
- Develop a continuous fee review for all charges made by the harbor. Provide a tie-in with the Anchorage Consumer Price Index (CPI) and plan rational, progressive rate increases. Waiting to implement rate increases for several years can be a shock to users and does not adequately address current costs for the harbor.
- Reinforce the idea that the harbor must be run in a businesslike manner to all involved.
- Be proactive in risk management. Consider contacting insurance company for formal review.
- Review Marina software to determine needs for upgrades or improvements.
- The total billable moorage on a lineal basis needs to be determined. This data will provide a better baseline for any discussion of harbor costs.

### **Staffing**

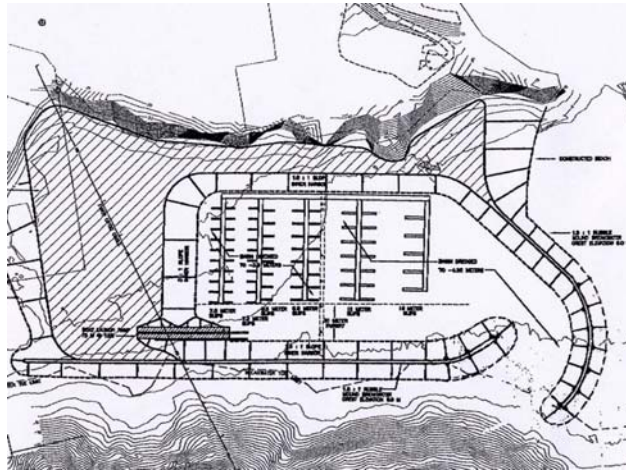
As the harbor department adds new infrastructure and works to support the economic development of Valdez, there are a number of staffing questions this need to be addressed. They include:

- Is harbor staffing adequate and reflects current services provided to users?
- Is the harbor organizational structure flawed and can the department be better organized to serve the public?
- Is staff performance acceptable and how do we secure good feedback on this performance?
- Is staff pay and benefits comparable with other similar facilities or related industries?

## Master Planning - Future Projects

These are some projects that have been discussed or are being developed for the harbor.

- Replacement and extension of float beneath the sheet pile bulkhead near the Tour Boat Dock. Grant funding has been identified from US Fish and Wildlife Service Boating Infrastructure Grant Program. Design must include a section that removable to facilitate snow removal.
- Continue to update and refine policies and procedures.
- New Harbormaster Office – Construction of a new office will be delayed until final determination of harbor expansion is complete. Current office is not ADA accessible or energy efficient.
- Commercial Boat Harbor – Cooperative project with the Army Corps of Engineers to expand harbor facilities. Proposed project will accommodate approximately 225 large vessels.



- 150 Ton Travelift – A larger travelift has been identified as a desired project if the new commercial harbor becomes a reality. This could possibly be provided in partnership with private enterprise.



- Landing Craft Capable Launch Ramp – A larger launch ramp has been identified as an improvement for the new harbor. The ramp needs to be able to handle large landing craft. Landing craft often hold their position on a loading ramp by remaining in gear,

which creates a prop wash. Any new ramp needs to accommodate this current and erosion caused by it.

- Charter Boat Row – The Ports and Harbor Commission is considering at charter boat float with special accommodations for these commercial users.
- Viewing Area – Harbor users have identified the need for a public viewing area that overlooks commercial operations occurring within the harbor. An area could be designed that overlooks fish offloading and commercial operations.

## Closing Comments

Valdez Small Boat Harbor is an economic driver for the community. Attaching a specific value to its overall benefits however, is burdensome. Approximately 54% of the harbor's permanent slip holders are from out of town, accounting for 277 slips. In addition, 150 boaters without permanent slips pay annual transient moorage in the harbor each year.

Mr. C. Peter McRoy recorded his annual expenses incurred during 1998 while boating out of Valdez. Mr. McRoy spent \$3,659.69 with 15 different merchants in Valdez. Statistically speaking, spending information from one visitor may not accurately translate to the overall population. However, if we use Mr. McRoy's figure of \$3660 as an estimate, it produces a calculation that says permanent slip holders and transient boaters that pay annual moorage from out of town spend at least \$1,560,000 per season in our community. There are no estimates available for funds expended by the 235 permanent slip holders living in Valdez.

The harbor database holds 2,600 unique transient vessel records. Currently there is not a good system in place to quantify the total number of transient boaters visiting the harbor. Staff intends to attempt a change in its office procedures to see if any values can be gathered during the next season. Based on revenue derived from launch fees in 2001, the harbor estimates that 2,500 short-term transient boaters visited the harbor in 2001.

The report produced by Northern Economics for the harbor master plan estimates that there are 2 large and 25 smaller full-time charter operators in Valdez. One small operator we contacted stated the company booked 224 customers in 2001. The Valdez Charter Boat Association and Alaska Department of Fish and Game had no information readily available on the total number of charter boats or customers operating out of the harbor. A rough estimate would be a minimum number of 6,500 customers per season. We have not found any information on the income derived to the community from each customer.

The Port of Valdez reported 65,396 visitors ashore from major cruise ships at the Valdez Container Terminal. Prince William Sound Cruises (Stan Stevens), which operates out of the harbor, reported 25,000 visitors in 2001. Cruise West/Alaska Sightseeing reported 50,000 visitors ashore from the City Dock.

Other economic interests depend on the harbor for operational support. These include support to the oil industry, piloting, law enforcement, commercial fishing and subsistence. It is apparent after discussing the data collected by various agencies (Alaska Maritime, Valdez Convention and Visitors Bureau, Valdez Chamber of Commerce, City of Valdez Community Development Department, Valdez Charter Boat Association and Alaska Department of Fish and Game) in the Valdez area; there is no organized approach in place to measure visitor impact to the community. Each agency tracks specific items of interest to them, but there is no global information collected. It is also apparent that regardless of each individual user group's contribution, their combined impact to the Valdez economy is substantial.

## Works Cited

- Beckham, James B. A Report on the State of the Harbor. City of Seward, 2000.
- Lowell, Leonard P. Harbor Electrical Guidelines for Maintenance and Operations, Design and Construction. Alaska Department of Transportation and Public Facilities, Juneau, 1997.
- McRoy, C. Peter. *Valdez Estimates*. Letter. 24 April 2001.
- Neil Ross Consultants & Concepts Unlimited. BMP Examples for Alaska. State of Alaska – Office of the Governor, June 1995.
- Peratrovich, Nottingham & Drage, Inc. City of Valdez Small Boat Harbor Master Plan. City of Valdez, January 2001.
- Peratrovich, Nottingham & Drage, Inc. A Guide to Maintenance of Small Craft Harbors. Alaska Department of Transportation and Public Facilities, 1985.
- Port of Anacortes. Management Practices for Handling Used Oil. Anacortes, WA.
- Tryck Nyman Hayes, Inc. Expedited Reconnaissance Study of Boat Harbor Improvements. U.S. Army Corps of Engineers, July 1998.
- U.S. Coast Guard. Managing Waste at Recreational Boating Facilities: A Guide to the Elimination of Garbage at Sea. Washington, DC, April 1994.
- Winchester, James. Comparative Analysis Valdez Boat Harbor. City of Valdez, February 1996.