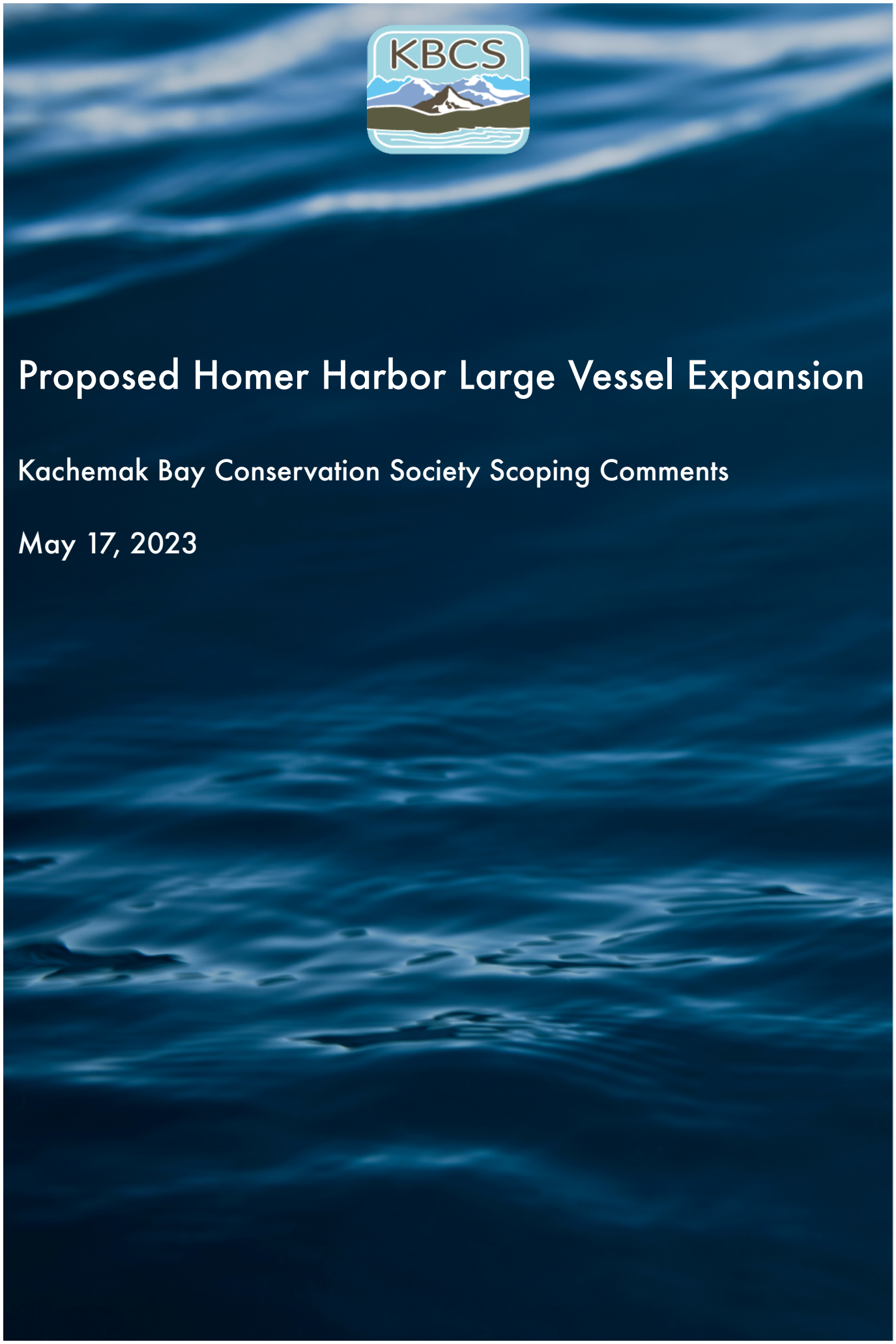

Proposed Homer Harbor Large Vessel Expansion

Kachemak Bay Conservation Society Scoping Comments

May 17, 2023

Kachemak Bay Conservation Society wants to better position Homer's harbor – the good jobs and culture it supports – for a future that is desirable to the residents of Greater Homer, is economically viable, and environmentally sustainable. We support a cost benefit analysis of three alternatives:

1) Improvement of our existing harbor and facilities, including:
   - Investment into the $72.6+ million in repairs for our current harbor.
   - "Greening" our port by modernizing and decarbonizing its infrastructure and operations.
   - Marine trades education in Homer.
   - Improvement of marine industry infrastructure--including roads, water and power for some transient moorage, travel lift, racks for winter storage of smaller vessels, spit erosion mitigation, covers for large vessels being worked on on the Spit, etc.
   - Efficiency improvements at harbor, including investment in public transportation and reducing demand for slips during certain months.
   - Affordable housing for tradespeople.
   - No Action on a large-vessel harbor expansion.

2) Expanding the harbor basin within the existing footprint of the spit by dredging out the area where the chip pile used to be, and possibly some of the area where trucks and trailers are now, with the expectation that there will be fewer trailers needed if there is more moorage available for small vessels. Without the need for a new breakwater, we expect that this could lower the cost and impact significantly.

3) Expanding the basin to meet current demand for moorage (small and large vessels on the wait list + Coast Guard vessels) as long as no road expansion or man-made islands are needed to accommodate these needs.

For any alternative evaluated by the Corps, please consider the following.

Estimate costs to the City for the project, associated infrastructure, and maintenance over a 50 year timeframe.

- According to the "Agreement Between the Department of the Army and the City of Homer for the Homer Navigation Improves, AK Study," authorized by Section 101 of WRDA 1986, the City will be required to pay 25% of cost to dredge any basin over 20' deep, and build the breakwater; the city will be responsible for paying 100% of all associated infrastructure costs.[1]
    - Consider Nome, "the Nation's Arctic Port" where Feds have offered $250 million for a deep water port. Nome needs to come up with $83 million in local sponsor matching funds and $93 million to pay for associated infrastructure. Suddenly, the project doesn't seem like such a winner for Nome.
- What will be the cost to the City of building the following to support the project?
    - Roads
    - Parking
    - Travel lift
    - Storage for goods
    - Fuel storage
    - Boat storage
    - Shipyard
    - Maintenance of port and infrastructure
- Homer Electric Association has said that the power lines that run out to the harbor cannot accommodate an expansion. What will be the cost to ratepayers of running new lines?
- Inflation and price increases must be priced in.
    - The importance of good price estimates is underlined by the fact that the price of steel doubled in the past few years.
- What will be the impact on local taxes?
- What will be the impact on rates and fees for harbor users?
- City staff claim that "over-use" is causing premature damage to our floats and that expansion will result in maintenance savings, yet many Alaskan harbors of a similar age also need to be rebuilt, and many floats in the Homer Harbor that do not have multiple boats tied up to them also need to be replaced. What evidence is there that it is overuse rather than use and time that is causing the harbor deterioration?
    - Do not calculate a "benefit" in maintenance savings unless the City's claim can be substantiated.

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[1] "The Non-Federal Sponsor shall provide 10 percent of construction costs allocated by the Government to that portion of the Project with a channel depth not in excess of 20 feet; 25 percent of construction costs allocated by the Government to that portion of the Project with a channel depth in excess of 20 feet but not greater than 50 feet; and 50 percent of construction costs allocated by the Government to that portion of the Project with a channel depth in excess of 50 feet." The depth of large vessel ports are generally excess of 20 feet.

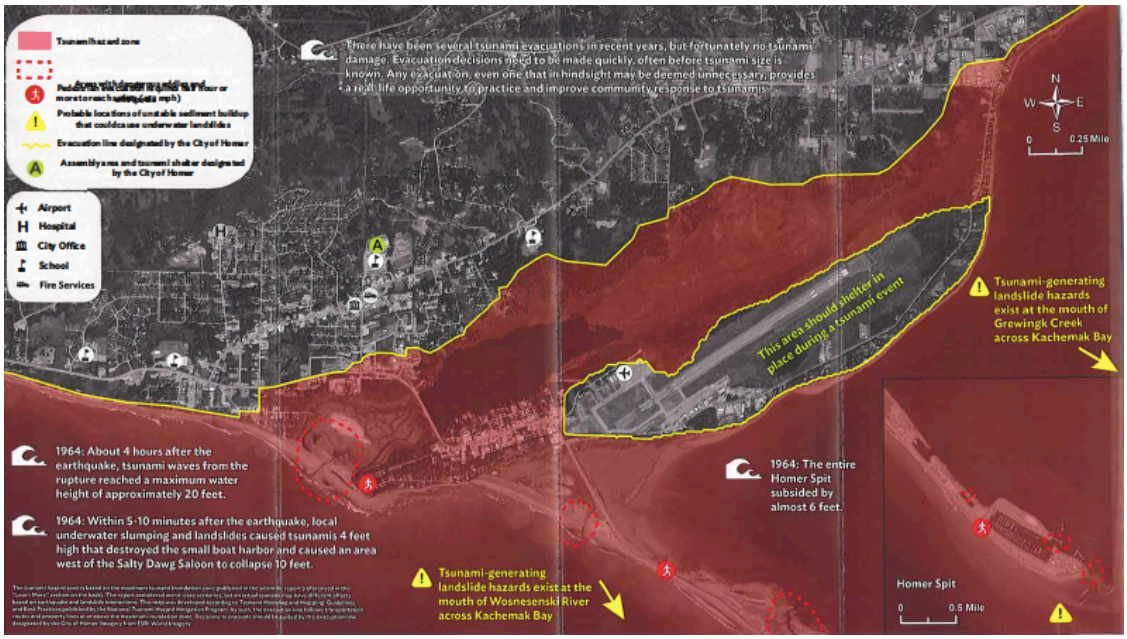
    - If it it is over-use, isn't one obvious solution the reduction of the number of boats in transient moorage? Please consider this solution.
- The City of Homer's proposal to dispose of dredge spoils on beaches or in the water instead of dewatering them on the uplands helps make the expansion feasible. What is the cost of moving dredged material away from the spit and outside the Kachemak Bay Critical Habitat Area?
- Disposing of dredge spoils on to the beach doesn't seem to be a particularly good solution. The combination of sea level rise and erosion are still causing the spit to wash away. The image below shows a power pole that used to serve RVs. Now it's in the surf.

Bringing many large and small vessels into our town would likely have undesirable impacts on housing, roads, parking, tourism, environment, quality of life, community character, and local small businesses. All of the following must be considered in a cost-benefit analysis:

- The feasibility study should be clear about the **number of people an expansion would add to our community**.
    - We need community buy-in on population growth. Please make sure that the General Investigation includes a public survey for the greater Homer

area that asks people if they want to increase the population, traffic, and boat traffic in our area.

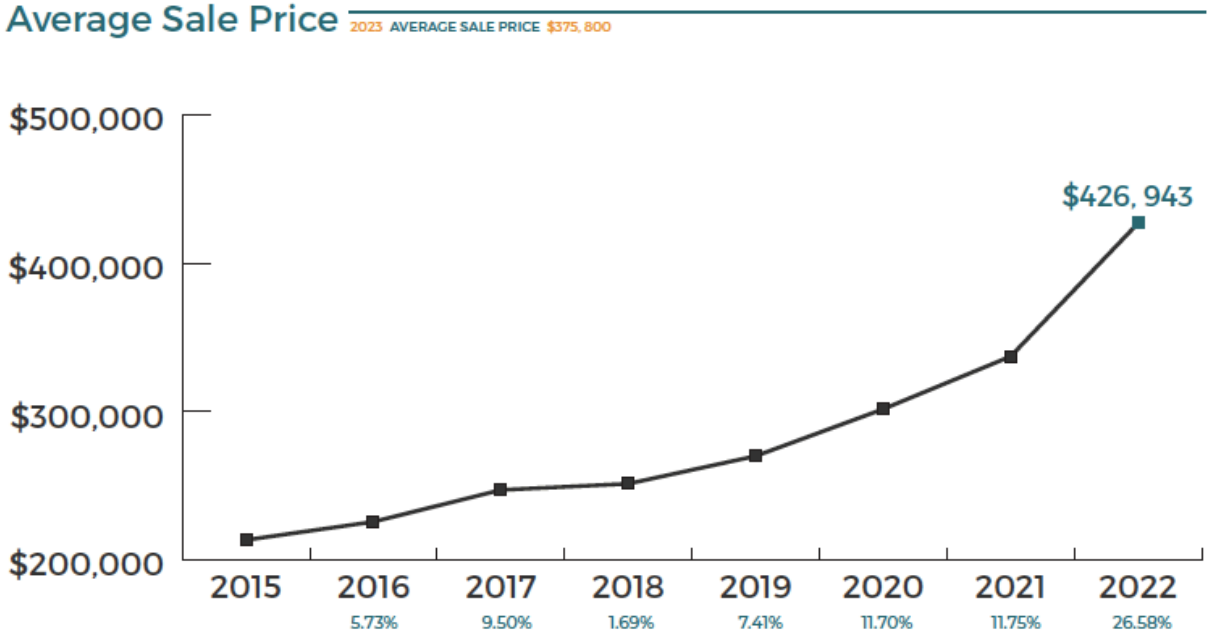
- Associated infrastructure needs will be significant.
    - At what point would we need to expand the Spit road and other roads through town?
        - Expanding into Mud Bay would have unacceptable environmental impacts (see below).
        - What are the implications of expanding the harbor to tsunami evacuation?



    - How much additional parking would be needed and where would it go?
    - Where would boats be hauled out and what would be the environmental impacts of constructing those pads?
    - For all associated infrastructure, what is the plan for stormwater management? Green spaces? Habitat projection?
- We share the desire of proponents to support the trades in Homer, but where would people learn to work on these boats?
    - There is already a shortage of marine trades people for the existing demand.
    - Lack of education opportunities and high cost of living is a big force keeping the trades from growing.
- Where would people live?
    - Kodiak shipyard says that they have to provide housing for a significant percentage of their employees.
    - According to documents pulled together for City of Homer Greater Homer Housing Conversation “The most common rule of thumb to determine how

much you can afford to spend on housing is that it should be no more than 30% of your gross monthly income, which is your total income before taxes or other deductions are taken out…Average monthly rent in Homer is $1,232 according to American Community Survey data. A person

Kenai Peninsula Borough Residential Inventory



https://www.cityofhomer-ak.gov/sites/default/files/fileattachments/economic_development/page/77236/inventory.pdf

earning minimum wage ($15.51/ hour) would need to work approximately 185.5 hours per month [$46 a week] to afford housing at 30% of their total income, assuming a monthly rental cost of $1,232."[2]

- The price of housing on the Kenai Peninsula and in Homer is on a rapid upward trajectory—pricing tradespeople out. What is the plan?

- Please engage with Selovia Village Tribe, Port Grahm, Nanwalek and Nanilchik Villiage Tribe on potential impacts to cultural history and substance harvest.
- We do not want a cruise ship economy
  - Hurt small businesses.
  - Cruise ships generate 2,800 tons of CO2 a week. That's the equivalent of 600 gasoline-powered cars driving for an entire year.
  - Cruise ship noise interferes with whales

[2] https://www.cityofhomer-ak.gov/sites/default/files/fileattachments/economic_development/page/77236/living_wages_v2.pdf

Provide clear evidence that new vessels being designed for would be highly likely to 1) come to Homer, 2) stay here, 3) create good jobs for residents, 4) substantially pay for the cost of expansion, associated infrastructure, and maintenance.

- Only two large vessels out of about 1,000 said they would move to Homer in the City's 2017 survey.[3] This is a staggeringly poor result.
    - What reason is there to doubt the validity of this survey?
    - We believe that a survey like this is probably one of the most reliable indicators of interest in moorage in Homer.
- We understand that there is some interest in using the GPS trackers on large vessels to guess what boats might come use a new large-vessel harbor. But, It is not enough to show that boats are passing by, that they are swinging in, or that they are registered here.
    - Why would they stay here? Where do they overwinter now?
    - Are they willing to sign contracts here?
    - What jobs would they create?
- Whatever method is used to calculate the fleet, please state the exact methodology employed to answer that question; state clearly the assumptions of the analysis; ensure that sources are provided and that calculations are reproducible.
- How will the new fleet pay for the harbor expansion, associated infrastructure, and the maintenance of facilities? How long will it take?
- Many proponents believe a harbor expansion will provide year-round jobs in the marine trades. To the extent that this is a goal the study is investigating and a benefit that is being weighed, the viability of this aspiration must be assessed. Year-round jobs in the trades don't come from a harbor, they come from a shipyard and the growth of companies to meet this demand.
    - Speak directly to owners and operators of Highmark Marine in Kodiak and JAG Shipyard in Seward to learn from them about how to investigate the limits and prospects for shipyard development in Homer.
    - HIghmark Marine in particular has carefully considered the viability of a shipyard in Homer and has deemed it not economically viable.
    - Members of the Homer Charter Association say that you already can't get boat work done in Homer because there aren't enough people working in

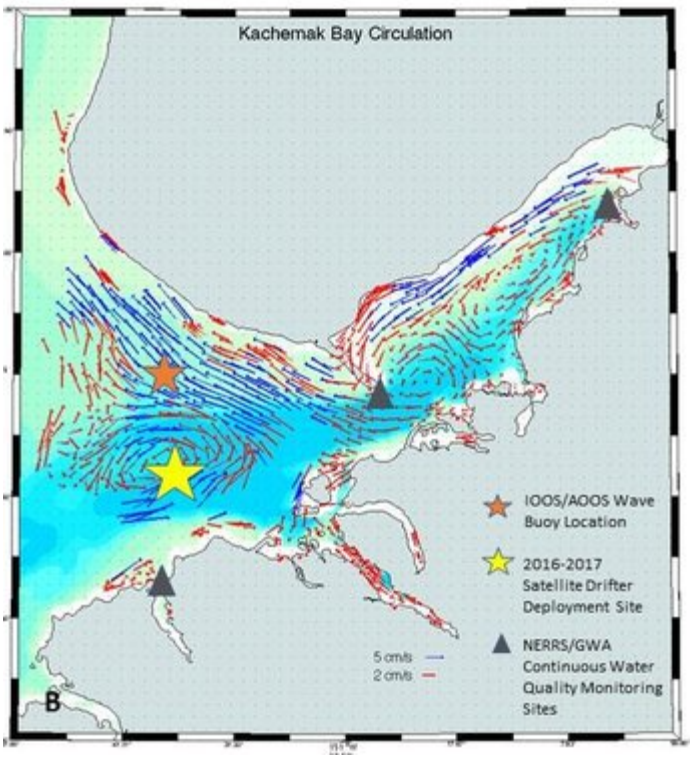
[3] "Homer Planning Assistance to States (PAS) Section 22 Navigation Improvements Technical Report" May 2019

the trades—a limiting factor in this regard is the fact that Homer is unaffordable for many trades people. If the study wants to claim that an expansion will create marine trades jobs, it needs to solve the housing problem. See above.

Large-scale industry in the harbor would likely have significant impacts on the ecosystem health of Kachemak Bay and greater Homer. Please account for the following environmental costs–and resulting losses to our businesses and culture– in the analysis:

- Invasive species from ballast water.
- Noise pollution.
- Pollution and carbon emissions from large and small vessels.
- If additional boat work is occurring on the Spit, how will that impact water quality of Kachemak Bay?
- To what extent does this plan involve filling of the Beluga Wetlands or other wetlands to accommodate storage of additional smaller vessels?
- Impacts to Marine Mammals due to strikes, noise pollution, and other impacts.
- What will new industries–and related pollution and noise pollution–do to key species, their habitats, and food sources?
    - Halibut
    - Black and Yelloweye Rockfish
    - Shorebirds
    - Sea ducks.
    - King salmon.
    - Recovery of Kachemak Bay crab, shrimp, clams, and herring.
- How will industrial activity and its impact affect tourism businesses?
- If we plan to source rock from Diamond Point near the Iliana Haul Road, what will be the impact to brown bears. Please refer importance of he brown bear tourism industry here.
- Impacts to people in the the tourism/ non-motorized economy need to be considered. Outreach to this group is essential.
- Impacts to the Cultural Cite of Mud Bay—a birding hotspot for well over 50 years, and home of the Homer Shorebird festival—should be considered.
- How will increasing the number of small boats hurt the charter industry (increased competition) or the fisheries (increased pressure) the charter industry relies on. Those fisheries are king salmon, halibut, and rockfish.

Investigate potential impacts to Kachemak Bay Currents, distribution of nutrients, sediment, and oxygen.



- "KBRR would recommend that once a final construction option has been selected, that a detailed circulation and sedimentation study be developed. A model of circulation and sedimentation patterns with the proposed option in place would help inform users of potential effects on subtidal organisms."[4]
    - Impacts to Nick Dudiak Fishing Lagoon and tourism, especially the Heritage Park RV site.
    - Impacts to Western Hemisphere Shorebird Reserve Network
    - Impacts to movement of nutrients, zooplankton, phytoplankton, oxygen and the impacts of those impacts on other organisms.
    - Studies done after the last harbor was constructed showed a 30% change to currents in the area. This study is supposedly a paper copy in the harbormaster's office and should be tracked down. In any case, future studies of changes in currents and the impacts to marine and intertidal life is essential.

Investigate impacts to the Western Hemisphere Shorebird Reserve Network

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[4] "Any alteration to the current shoreline and or substrate topography by way of construction could have the potential to change the circulation patterns in this area. If the circulation pattern changes there is the potential to increase or decrease flow and thereby altering sediment transport. An increase in sediment transport would likely begin to scour the area and transport sediment away from this region. Since any construction that occurs will likely add artifacts and dimensionality to the spit, we believe a more complicated circulation pattern will result, thereby decreasing the flow and increasing sedimentation. Increased sedimentation rates could result in further alteration of the landscape creating sand bars and or backfilling areas where sedimentation was historically not a problem. This would be of particular concern with regard to the adjacent Nick Dudiak Fishing Lagoon where the ADF&G operates a stocking program to enhance fishing opportunities on the spit. Increased sedimentation in this area could cut off and or fill in this lagoon making it impossible to operate an enhancement program in this area and difficult for anglers to access adult fish returning to this region."

- Investigate impact to Kachemak Bay Western Hemisphere Shorebird Reserve Network Site, especially Mud Bay and threatened species.[5]
    - Change in currents that deliver essential nutrients to Mud Bay.
    - Potential changes in intertidal sedimentation patterns.
    - Soundscape impacts to nesting birds.
    - In 1994, the City nominated Mud Bay as a Western Hemisphere Shorebird Reserve Network.

The Corps has identified fishing and oil and gas vessels as potential sources for new large-vessel moorage.[6] A rational person expects declines in both AK fisheries (due to warming and acidifying oceans) and oil and gas (due to easily extractable supply running out) over the next 50 years. What is the plan then?

- **All expectations about the future demand used to develop the cost benefit analysis need to be clearly identified. All of the following factors should be integrated into the analysis**
- **The majority of large vessels currently in the Homer Harbor work as tenders of fishing vessels, but climate**

[5] Steller's Eiders are listed as Threatened. Steller's Eiders are often found in Mud Bay. There is a requirement to consult with Fish and Wildlife Service per their "Endangered and Threatened Wildlife and Plants; Final Determination of Critical Habitat for the Alaska-Breeding Population of the Steller's Eider" Kittlitz's Murrelet are listed as Threatened. Surveys in 1993 indicated that a sizable portion of the world population of Kittlitz's Murrelet was found in LCI (Kendall & Agler 1998). More recently (July 2005–2007), the population in Kachemak Bay alone was ~2050 birds, or ~4–7% of the estimated global population of Kittlitz's Murrelet.The east side of LCI, and Kachemak Bay in particular, are clearly foraging hotspots for murrelets and are relatively accessible for study. Kachemak Bay is also unique in the relatively high number of Kittlitz's Murrelet juveniles observed at sea in late summer (Kuletz et al. 2008), suggesting a consistent "core" breeding population.

[6] May 2019 "Homer Planning Assistance to States (PAS) Section 22 Navigation Improvements Technical Report"

change gives Alaska's fisheries a poor outlook. We should expect—and plan for—a decline in demand for large fishing vessels.
    - Com Fish Report
    - State of Salmon
    - Bering Crab
    - Bering Crab
    - Area M
    - Cod
    - Bering Sea Stock Vulnerability
    - Bering Sea Climate

- **Cook Inlet Oil and Gas is Declining, with the possibility of contracts not being renewed in the near future.**
    - Outlook is not good for Oil and Gas Exploration in Lower Cook Inlet
    - While there is a possibility that a natural gas pipeline will be built from Prudhoe Bay to Nikiski, there are many reasons that would not happen, and it would be unwise for Homer to build an enormously expensive expansion based on this possibility.

- **Projections of future economic demand should account for the fact that Alaskan oil and gas keeps our economies afloat, and we are running out. How do models of future fleet demands account for the impact to our economy from declines in Alaskan oil?**
    - The Trans-Alaska Pipeline System (TAPS) is now running at a quarter of its capacity. In recent years, Alaska has fallen from second to sixth in U.S. oil production.
    - Oil production has funded up to 90 percent of the state's unrestricted funds.
    - The oil industry accounts for one-quarter of Alaska jobs and about one-half of the overall economy when the spending of state revenues from oil production is considered. In other words, without oil, Alaska's economy would be half its size.
    - The risks of offshore oil and gas development make investment in those fields undesirable to investors.

- **Distribution of goods to South Central and Western Alaska is a subject that has been mentioned quite a bit by Homer Harbor Staff.**
    - How many vessels in the Homer Harbor distribute goods to Western Alaska? What is the basis for that assessment?

- What indication is there that more vessels want to be going to western Alaska? Or that villages want more goods coming to them? What is the basis for these assessment? How much more? For what reason?
- See below for more on other harbors serving Western Alaska.

- **We do not want a cruise ship economy**
  - Cruise ships hurt local businesses.
  - Cruise ships change the culture of our town.
  - Cruise ships are a very important issue that need to be treated deliberately and carefully. A survey should be sent out to the greater Homer area asking if people want more cruise ships in town.
  - Cruise ships generate 2,800 tons of CO2 a week. That's the equivalent of 600 gasoline-powered cars driving for an entire year.
    - Seattle Cruise Control, calculated that the total climate impact of a typical Alaska cruising season, beginning and ending in Seattle (including flights), is equivalent to one-third of the city's entire annual carbon emissions.
  - Cruise ships dump 800,000 liters of treated sewage and 6.3 million liters of gray water per week.
  - Cruise ship noise interferes with whales.
  - Scrubber washwater kills fish.

One thing that is certain is climate change. Climate adaptation and mitigation need to be addressed during the planning of this major project.

- A warming climate is causing sea level rise. The spit and the harbor are at risk of this. Please plan for this problem.
  - "While sea rise is estimated to be occurring globally at around 3 millimeters per year, the land on the Kenai Peninsula is rising faster than that rate, scientists have shown. Baird said studies show Homer is rising at a rate of about 8 millimeters per year, while the Homer Spit is rising at only 5 millimeters per year. The studies say the rising land is occurring in part because of the bulge of tectonic plates colliding and in part because of the lost weight of melting of glaciers."[7]

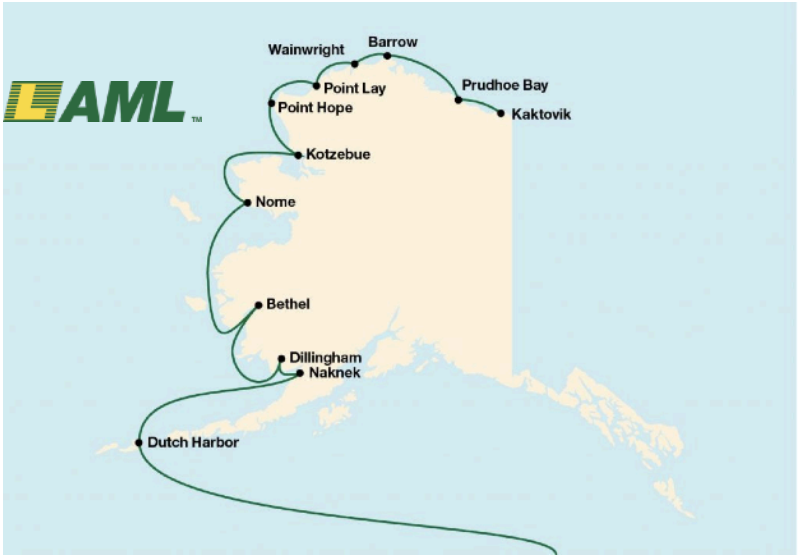
[7] Kachemak Bay Research Reserve has the source data for this, but this quote comes from an ADN story: https://www.adn.com/alaska-news/kenai/2017/02/12/erosion-at-the-end-of-the-homer-spit-is-speeding-up/

- Adaptation actions included in the City of Homer's 2009 Climate Action Plan include:
    - Developing management plans specific to Port & Harbor facilities on the Homer Spit (construction, maintenance, dredging, etc.) that take into account climate change impacts.
    - Taking climate change into consideration in all long-range planning efforts (e.g., transportation, land use, Homer Spit, emergency management, economic development).
    - To date, efforts to reduce emissions from Harbor and Port operations have been the conversion to LED lights and to gas heating.
- Examine how the City might lead in the "greening" of American ports by upgrading, modernizing, and decarbonizing its port infrastructure and operations, as outlined in the White House's Ocean Climate Action Plan.
- As outlined above, like it or not, Climate Change gives our fisheries a poor outlook, and we must adapt.
- The 6 th IPCC Report states if global warming is to be kept below 1.5ºC. before 2050, we must achieve carbon neutrality.
    - The City of Homer's "Port & Harbor facilities produced…35 percent of total [City] emissions," 2009 City of Homer Climate Action Plan.
    - How can the emissions from expanding the harbor during construction and maintenance and supporting an expanded energy-intensive maritime industry and recreation be offset?
    - What evidence supports the claim of the 2019 Homer Planning Assistance to States (PAS) Section 22 Navigation Improvements Technical Report" that will be fewer emissions from boats whose owners will choose to home-port in Homer instead of in other ports in Alaska or the Pacific Northwest? What evidence supports the claim that boats from the Pacific Northwest would stay here?

Identify where the fleet that would come to Homer is currently being served; identify the reasons they would come here over that other place.

- How would construction of a larger large-vessel port in Homer take away from other Alaskan communities' economies? How will this conflict affect the effort to access state or federal dollars?

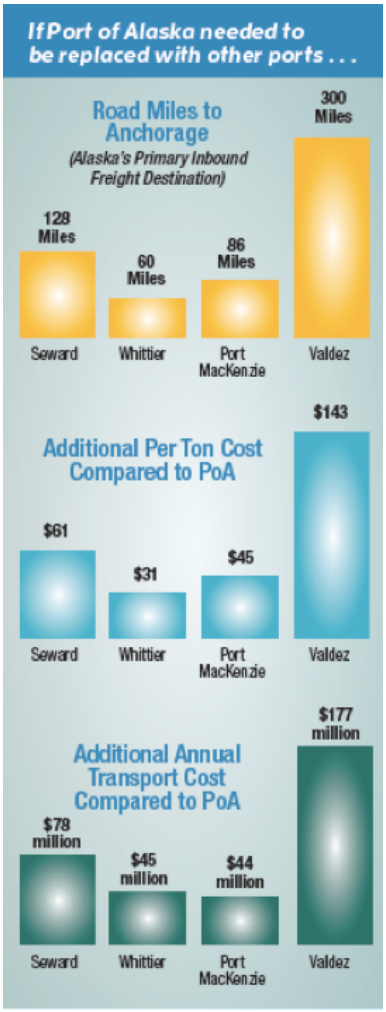
- To what extent are we seeking to cut in on markets already being served in Kodiak, Seward, Dutch Harbor, Anchorage, Ketchikan, etc.? Why do we expect we can draw marketshare away from those already-established industrial hubs?



● Seattle, Anchorage, Dutch Harbor and Nome serve as the 'regional service hubs' that Homer says it wants to provide to Western Alaska and/or South Central Alaska.

○ Where is the evidence that there is unmet demand for boats distributing goods to Western Alaska? How many boats serving Western Alaska want to come to Homer?

- **Dutch Harbor - <u>#1 Fishing Port in the United States</u>**
  - Vessels carrying goods to Western Alaska pass through Dutch Harbor.
  - The Unalaska Marine Center (UMC) and the USCG Dock consists of approximately 2,051 linear feet of dock face. The UMC offers cargo, passenger, and other port services. Horizon Lines operates both a 30-ton and a 40-ton crane and rail system for containerized cargo, and North Pacific Fuel operates fueling facilities. Potable water, warehouse space, sewage pump-out and upland storage areas are available. Depth at mean lower low water (MLLW) alongside the berthing area is 40 feet.
  - **Nome-** Selected as "the Nation's Arctic Port", serves as a "regional hub" for North-West Alaska.
  - **Seattle** - Lower Cost of Goods and Services are available in Seattle than Alaska. Nearly all the goods in Alaska come from Seattle.
  - **Anchorage -** More than half (54%) of the state's population is within an hour's drive of the Port of Alaska.
    - "5,167, 935 tons of fuel and freight moved across Port of Alaska docks in 2022. This business increase continues a five-year trend that is driven by shippers taking advantage of supply chain efficiencies available in Anchorage and nowhere else in Alaska. Port of Alaska is the state's primary



inbound cargo facility that handles half of all inbound freight and fuel that is delivered to final destinations statewide."[8]

■ "If PoA were to gradually or suddenly become inoperable, Seward and other ports would likely be used to fill the gap, though all **at substantially increased cost.** Relying on other ports would also require **major investment in highway improvements.** Moving more than 100,000 vans and containers each year would add heavy traffic to an already busy Seward Highway, impacting public safety and convenience (PoA truck traffic totals more than 300,000 trips annually)."[9]

■ "Other Southcentral ports cannot individually or together replace PoA's ability to reliably and economically meet Alaska's inbound freight needs."

●Proponents of a harbor expansion speak of the value of generating year-round jobs in the marine trades. For this aspiration to materialize, ships not don't necessarily need moorage in Homer, they need to haul out and get worked on. Shipyard services are already provided by Kodiak, Seward and Ketchikan and Seattle.

○Where is the evidence that more shipyard services are needed in the region? At what scale?

○ Shipyard is already occurring on the Homer Spit—what is the relationship between an expansion the harbor and an expansion of shipyard activity and the marine trades?

- **Seward** has a train and Shipyard. JAG Alaska, who provides shipyard services in Seward says they are not turning boats away.
- **Kodiak-** Shipyard and #2 Fishing port in the US**.** Highmark Marine, who offers shipyard services in Kodiak, says that they are not turning boats away. They also say that you need a lot of vessels to make a shipyard profitable; even with the 70 ships they haul out every year, they are just making a profit. What indication is there that over 70 large vessels—not currently served by Kodiak, Seward, Ketchikan—would come to Homer for Shipyard.

[8] portofalaska.com

[9] portofalaska.com

- **Ketchikan** - Vigor operates the Ketchikan shipyard, which includes a brand new 70,000 square foot assembly hall along with an adjacent indoor fabrication shop.The yard is one of the most modern in the United States and provides an excellent year-round location for new builds, repair, and refit to support nearly any vessel working Alaska's waters.
- **Seattle** - Why would boats stay in Homer instead of going to Seattle, where goods and services are cheaper? How many would do that? While it is true that it costs money to run down there, many boats decide that it's worth it: 44% of all gross earnings from the North Pacific Fisheries are from boats based in Seattle.

Thank you for your consideration of these important issues. We look forward to the interactive dialogue and continuing conversation.

Sincerely,

Roberta Highland,

President, Kachemak Bay Conservation Society