

Appendix A
USER NEEDS ASSESSMENT
May 1, 2004 draft

DRAFT

Organization	Contact	Mission	Current Activities/Needs	Future Needs
AK Dept of Fish & Game - Juneau	Kevin Duffy, Commissioner Doug Woodby, John Clark, SE biometrician Steve Gebert, analyst programmer	Manage, protect, maintain, and improve the fish, game and aquatic plant resources of Alaska. The primary goals are to ensure that Alaska's renewable fish and wildlife resources and their habitats are conserved and managed on the sustained yield principle, and the use and development of these resources are in the best interest of the economy and well-being of the people of the state.	Management concerns with salmon, some groundfish, scallops, crab, and herring/forage fish. Also with aquaculture & mariculture operations. Salmon now managed primarily using escapement model. Coded wire tag database with NPAFC. Federal funds – for nearshore developing fisheries, Bering Sea crab, AYK and Norton Sound salmon fisheries.	Have expertise/staff in Southeast (Juneau & Sitka), Kodiak, & Dutch Harbor. Need sea bottom and sea surface temperatures to manage crab and scallops. Also currents/advection for larval dispersal. Would help with SE Gulf Synthesis/Needs assessment.
ADF&G - Kodiak	Denby Lloyd – area supervisor – 486-1801 Doug Pengilly – crab/shellfish researcher – 486-1865	Manage Kodiak region commercial fisheries	Conduct annual small mesh trawl surveys (25 yrs). GOA crab & groundfish. State observer program in crab fishery to manage for bycatch.	Pick sentinel location – keep measuring over time physical & chemical. Improve pink salmon forecast (nearshore SST seems to be related to early marine survival).
AK Fisheries Development Foundation www.afdf.org	Marc Jones, Executive Director mjones@afdf.org	To add value to Alaska commercial fisheries	Primarily focused on fisheries development and marketing projects, including bycatch reduction. Also doing protected resource research: 1 project to develop low cost, robust remote video observing system (no live feeds). Have some capacity to do conferences and workshops.	Anything that helps commercial fishermen catch targeted species more efficiently.
AK Fisheries Science Center http://www.afsc.noaa.gov/	Doug Demaster, Director	The mission of the Alaska Fisheries Science Center is to generate scientific information necessary for the conservation, management, and utilization of the region's living marine resources.	Support needs of NMFS AK region and North Pacific Fisheries Management Council. Fish surveys. FOCI project with PMEL.	PACOS initiative – extend CALCOFI transects up Pacific coast. About \$40 m a year cost. Add Bering Sea - \$2-3 m. Need for sea level measurements. Aleutians – different habitat – steller sea

**Appendix A
USER NEEDS ASSESSMENT
May 1, 2004 draft**

DRAFT

			Marine mammal – endangered species needs. Steller Sea Lion Research Initiative.	lions, otters – ecosystem effects.
AK Maritime National Wildlife Refuge	Greg Siekaniec, Refuge Mgr Vernon Byrd Dave Rosenau Art Sowls 907-235-6546 http://alaska.fws.gov/nwr/akmar/index.htm Islands and Oceans Visitor Center 95 Sterling Hwy, suite 1 Homer, AK 99603	To conserve marine mammals, seabirds and other migratory birds, and the marine resources upon which they rely. Refuge’s 4.9 million acres include the Aleutian and Pribilof islands and many other islands and headlands in the Gulf of Alaska and Bering and Chukchi seas that provide essential habitat for some 40 million seabirds, representing more than 30 species.	Use \$150 data loggers at seabird monitoring sites – 1-2 per site. Take ocean temp, 10 m below surface., every minute for 24 hrs for 1-3 months. Stores data. Download at end of season. Once a year, use research vessel Tiglax to assess characteristics of nearshore environment at one annual monitoring location. Annual monitoring emphasizing seabirds at selected sites. Contribute to Pacific Seabird Database.	Very interested in sea temp in upper meter. Manage upper trophic level organisms, and need understanding of ecosystem processes. Need more forage fish info. Very interested in dramatic events taking place in Chukchi: Polar ice thinner Ice edge further north Breakup often occurs earlier Weather patterns have changed, in last 4 years only 2 boatable days in about 18 weeks at Cape Lisburne – affects activities such as eggging, sealing, whaling Need old historic data sets – military and weather service
AK Native Science Commission 429 L Street Anchorage www.nativescience.org www.nativeknowledge.org	Patricia Cochran, Executive Director Greg Nothstine – data administrator	To endorse and support scientific research that enhances and perpetuates AK Native cultures and ensures the protection of indigenous cultures and intellectual property. To provide information to AK Native Communities regarding science and research that impacts their health, life, culture and environment.	AK Native Community Resources Directory AK Traditional Knowledge and Native Foods Database – www.nativeknowledge.org . Developing Alaska Native regional research plans – Northwest Alaska and Southcentral are done. Long-term cooperative agreement with NSF. Facilitate research. Archives. Clearinghouse.	Interest – incorporating local and traditional knowledge into observing systems.
Anchorage Water &	Mark Premo, General Manager	Anchorage Water & Wastewater Utility	Because only primary treatment, NPDES	

**Appendix A
USER NEEDS ASSESSMENT
May 1, 2004 draft**

DRAFT

<p>Wastewater Utility</p> <p>3000 Arctic Blvd. Anchorage, AK 99503-3898</p> <p>http://www.awwu.biz</p>	<p>Mark.Premo@awwu.biz 907-786-5506</p> <p>Mark Spano, Water Quality Supervisor Mark.Spano@awwu.biz 907-751-2217</p>	<p>exists to provide competitive, reliable, quality water and wastewater service to their customers in a professional and courteous manner.</p>	<p>permit (issued every 5 years) requires extensive ongoing monitoring - \$1.3 m for 5 years. Annual monitoring program report.</p> <p>Influent, effluent & sludge: monitored daily, weekly, monthly for BOD, TSS, chlorine residual, pH, temp, DO, fecal coliform, ammonia; quarterly for toxicity; twice a year - major scan for toxic pollutants & pesticides.</p> <p>1 X a yr – Water quality monitored at discharge point & nearshore waters. Check: pH, turbidity, temp, DO, chlorine residual, fecal coliform, salinity, color, dissolved metals, total metals, cyanide, hydrocarbons.</p> <p>In year 4 – sediment & bioaccumulation study – scrape near wastewater/sewage outfall (no sediments, all cobble). Check for bioaccumulation of pollutants in algae on mudflats.</p>	
<p>Anchorage, Port of</p> <p>2000 Anchorage Port Road Anchorage, AK 99501</p> <p>www.portofanchorage.org</p>	<p>Bill Sheffield, Director Kevin Bruce, Director Communications & Business Development</p> <p>Roger Graves, Manager Government/Environ Affairs/Community/Public Affairs</p>	<p>The Port's mission is to provide a modern, safe, and efficient Regional Port which stimulates economic development and the movement of goods into and out of South-central Alaska.</p>	<p>Port is open 365 days a year – need weather and tide info, winds & currents, bathymetry. Have tidal and ice gauges. PORTS for navigation aids.</p> <p>NOAA doing major tidal & current study of Upper Cook Inlet.</p> <p>For barge traffic need real time ice monitoring.</p> <p>Dredging in summer – measuring sedimentation. Work with Corps of Engineers – Orson Smith – engineering & Alan Churchill, dredging.</p>	<p>Port expansion –allow larger ships tie up at docks. Need deeper water at docks. Add barge terminal.</p> <p>Additional real time data needs: SE Dixon Entrance</p>
<p>ARCUS</p>	<p>Wendy Warnick, Executive Director</p>		<p>Provide staff support to Arctic research community. Long-term agreement with NSF.</p>	

Appendix A
USER NEEDS ASSESSMENT
May 1, 2004 draft

DRAFT

<p>Arctic Research Consortium of the United States</p>	<p>Helen Wiggins – project coordinator Allison York – project coordinator</p>		<p>Office of Polar Programs – Tom Pyle (oceanographer) Arctic Systems (global change) – Neil Swanberg Arctic Natural Sciences Program – Jane Dion, Bill Weisman, basic science & oceanography/global change Arctic Social Sciences Program – Anna Kerttula. Logistics Program – ship – simon Stephenson Coordinated SEARCH open science meeting. (SEARCH – estimated at \$50 m for 5 years) Supporting BEST science planning. (\$15 million for 5 years) Developed Arctic Logistics Report. Will staff NSF planning effort for Arctic network.</p>	
<p>Bering Sea Fishermen’s Association</p>	<p>Henry Mitchell, Executive Director henry@cdqdb.org 725 Christensen Drive, Suite #3 Anchorage, AK 99501 279-6519 Karen Gillis, Program Director Karen@cdqdb.org</p>		<p>Board represents Bristol Bay, Kotzebue Sound, Norton Sound, Yukon-Kuskokwim, and St. Paul. Goals: revitalize local Bering Sea fisheries: using economic development, advocacy and science. Major interests in salmon & herring. May get pass-through money for BASIS studies. Funds for projects:</p>	
<p>Coast Guard Anchorage</p>	<p>Captain Ronald Morris, MSO Sea Marshall program Lt. Tim Callister – 271-6709 Chris Friese – 271-6720, asst. Chief of</p>	<p>Primary concerns: Port security and oil spill response</p>	<p>Port security – ship tracking & identification. Larger ships must have pilots in all U.S. waters. Have 96 hours to report. Smaller ships – not required. Who will pay for transponders on board? AK Maritime Agency: www.alaskamaritime.com -</p>	

**Appendix A
USER NEEDS ASSESSMENT
May 1, 2004 draft**

DRAFT

	Port Operations		supported by operators/agents. Oil spill response – wind & current data for circulation models; where will oil hit beach; water temp & salinity – help determine how/if oil floats. Participate in regional response planning teams: www.akrrt.org . Ice in winter means extra rules for Cook Inlet. Get info from NWS.	
Cook Inlet Keeper	Bob Shavelson, ED P.O. Box 3269 3734 Ben Walters Lane Anchorage, AK 99603 907-235.4068 www.inletkeeper.org	Citizen-based non-profit group dedicated to protecting Alaska’s Cook Inlet watershed and the life it sustains through water quality monitoring, environmental education, and advocacy.	Citizen Environmental Monitoring Program at numerous sites. Data available: www.inletkeeper.org/cemp/cempd1.asp	Interested in more monitoring in inlet itself.
Fishery Industrial Technology Center – University of Alaska Kodiak	Scott Smiley, Director University of Alaska Fairbanks Kodiak, AK 99615-7401 907-486-1500 907-486-1540 (fax) fitc@sfos.uaf.edu Loren Buck Bob Foy Kate Wynne	The mission of the UAF Fishery Industrial Technology Center is to increase the value of Alaska's fishing industry and marine resources through research, technological development, education and service. FITC has two major academic programs, Sustainable Harvesting and Seafood Processing . We direct our programmatic efforts across five major research and service areas: harvesting technology, processing technology, seafood quality and safety, contaminants and collaborative ecosystems research directed towards building the prudent and		Fish biomass & distribution Seabird productivity Marine mammals Prey distribution Essential fish habitat Nearshore/shallow water Shelf break

**Appendix A
USER NEEDS ASSESSMENT
May 1, 2004 draft**

DRAFT

		sustainable utilization of Alaska's fisheries resources.		
Groundfish Data Bank	Julie Bonney	Research groundfish – data trends, economics, processing, background info for groundfish fleet & processors	Weekly catch report Council newsletter at end of each NPFMC mtg Bi-monthly state perspective on fisheries	
Homer Charter Association	Leah Jenkins, president (at Chamber of Commerce Phil Warren, v.p. – 235-1374 Bob Ward, secretary (on board of NACO – natl organization) Donna Bondioli, 235-4114 P.O. Box 148 Homer, AK 99603 907-235-2282 www.homercharterassociation.com	The Homer Charter Association is an association of Charter companies with the purpose of promoting safety and operating conditions, as they affect the charter industry, for the best interests of charter companies, operators, and their clients.	Charter operations very important economically to Homer – fishing, bear viewing, flight seeing, whale watching. Homer is halibut capital of world. Support increased met and oceanographic observations for about 45-50 member boats. (About 100-125 boats at peak of fishing season). Homer is only actual port on CI side of peninsula – Deep Creek and Kenai, launch off beach or trailer down to Homer.	Would like to see more observations – the more real time the better. Weather in area is very localized. 3 major tide rips between Homer & Barren Islands – need more info on tides and currents. NWS had buoy at Kennedy Entrance, but lost due to extreme weather conditions. Need to figure out technology to keep buoy there.
Kachemak Bay Research Reserve	Terry Thompson, Actng Director, Education Director terry_thompson@fishgame.state.ak.us Scott Pegau, Acting Science Director Scott_pegau@fishgame.state.ak.us Rick Foster, Coastal Training Director Rick_foster@fishgame.state.ak.us 95 Sterling Highway Homer, AK 99603 907-235-6377 www.kbayrr.org	We are a team of researchers, educators and support staff working to develop a better understanding of ecological processes in the Gulf of Alaska, with emphasis on Lower Cook Inlet and Kachemak Bay We operate as a partnership between the federal government, the state government and the local community. Our goal is to conduct ecosystem-based research and to provide outreach of current research findings to foster a life-long appreciation and understanding of the coastal environment for people of all ages.	System Wide Monitoring Program (SWMP) -Sediment transport -Remote sensing -What's new in the bay -Basic oceanographic conditions 2 sensors – surface & bottom – Homer & Seldovia docks Met station at Lands End 4 moorings Expertise in user needs assessments; training; facilitation; market analysis. The Kachemak Bay Research Reserve (KBRR) is a unit of the NOAA National Estuarine Research Reserve (NERR) system. Our core atmospheric, oceanic, and benthic monitoring programs are partially supported by a NOAA grant to the Alaska Department of	HFR being put in by Karen Grissom (NOAA) at Nanwalek & Anchor Pt. Coordinate with Kasitsna Bay – they want to cable the bay for sensors.

**Appendix A
USER NEEDS ASSESSMENT
May 1, 2004 draft**

DRAFT

			Fish and Game. All other projects are funded through competitive grants. The KBRR is developing a science program with a vision to becoming the leading research facility for the Lower Cook Inlet and surrounding Gulf of Alaska waters.	
Kodiak Borough	Pat Carlson, Borough Manager – 486-9300			
Kodiak Chamber of Commerce	Wayne Stephens, also pres of SWAMC (Southwest Alaska Municipal Conference) board – 486-5557		Sponsors annual Kodiak ComFish event	Fish is mainstay to Kodiak economy.
Kodiak City	Linda Freed, city mgr 486-8640			
Marine Exchange of Alaska (MXAK) 2 Marine Way, Suite 222 Juneau, AK 99801 907-463-2607 www.mxak.org <i>This organization has the best overall contacts with the maritime community. Interested in being involved in AOOS.</i>	Captain Ed Page, Exec Director Bill Benning, Manager Communications, Technology & Vessel Tracking Systems	Non-profit established to link diverse AK maritime community (commercial and recreational/non-commercial) with mutual goal of ensuring safe, secure, efficient and environmentally responsible maritime operations. Part of WNI Oceanroutes – a global marine services division of Weathernews, the world’s largest publicly traded full-service weather company	Developed Automated Secure Vessel Tracking System (ASVTS) that uses satellite transponders to track & communicate with vessels. Can view vessel locations over secure website. Cost about \$2 a day. Now proof of concept. Maritime Database provides info on maritime services, port data, supplies, navigation and weather info via internet. Huge need for more accurate real-time weather and any information that improves decisions on what course to take – for safety, scheduling and fuel economy reasons.	Possible – put weather sensors on tracked ships; have vessels call in local weather.
Minerals Management Service <i>Very interested in participating. MMS is member of NOPP. Most immediate opportunities in Arctic and Cook Inlet.</i>	John Goll, AK Regional Director Cleve Cowles, Environmental Studies Section Chief Paul Stan, Reg. Supervisor Leasing & Environment Richard Prentki, Oceanographer	MMS manages nation’s oil, gas and other resources on outer continental shelf. Environmental Studies Program – define info needs and implement studies to assist in predicting, projecting, assessing, and managing potential effects on human, marine and coastal environments of OCS and coastal areas that may be affected by gas and oil development. FY 2004 AK Annual Studies Plan	Primary focus is Beaufort Sea and Cook Inlet. Some in Chukchi & Norton Sound. Overall needs – physical oceanography: wind, currents, tides, ice, temperature. Need for circulation and oil spill trajectory models. Better bathymetry. Knowledge of major oceanographic & meteorological processes and their influence. Long term changes in marine food webs. Socioeconomic effects. Effects on bowhead whales & other key species such as polar bears, seals, waterfowl	Possible activity in No Aleutian Basin (Bristol Bay). Energy bill has funding for future offshore industries such as liquid natural gas and hydrates. Interested in radar mapping of surface currents.

**Appendix A
USER NEEDS ASSESSMENT
May 1, 2004 draft**

DRAFT

			<p>or fish.</p> <p>Extended monitoring effort (8 yrs) Central Beaufort Sea. Track hydrocarbons, trace metals and other pollutants.</p> <p>Operate 5 met stations along Beaufort Sea Coast: www.resdat.com/mms. Data collected on wind speed, wind direction, barometric pressure, relative humidity, solar radiation, and air temperature.</p>	
<p>National Weather Service</p>	<p>Sam Albanese, Warming Coordination Meteorologist 266-5115; sam.albanese@noaa.gov</p> <p>Russell Page – regional ice forecaster Russell.Page@noaa.gov</p> <p>Gary Hufford – regional scientist, data acquisition 271-3886</p> <p>Amy Devaris, regional marine specialist, 271-3507</p>	<p>Develop weather information and forecasts including public forecasts, marine forecasts, and observations from land stations and marine buoys.</p>	<p>Provide access through Alaska Weather Line toll-free telephone service or at web site www.arh.noaa.gov.</p> <p>7 Doppler radar stations (including 1 on Middleton I.) – shows reflectivity – moisture in atmosphere and winds at higher elevations.</p> <p>Weather forecasts in AK based on sparse data: 8 NDBC buoys in AK total out of about 130 nationwide. 9 Drifter Buoys track currents, SST, conductivity, submergence, barometric pressure, & irradiance.</p> <p>Buoys provide sea surface temps, which are critical to surface ice conditions.</p> <p>1 NDBC buoy in Bering Sea, some drifters. 2 buoys in GOA, 1 drifter, some coastal land stations. Without dense observations, use models. Combine with ship transit maritime observations into models run out of Suitland, MD. Mesoscale modeling for AK (more terrestrial/atmosphere) done at UAF.</p> <p>Southcentral & Interior regions have more dense met stations giving synoptic observations every 6 hours (temp, dew pt, wind, pressure – no sea height). Met stations are more important for aviation – have ceilings, precipitation, fog, visibility.</p>	<p>Super structure icing – 1 of most significant hazards for vessels – also issue for buoys. Combination of cold air & cold vessels & freezing spray. Changes center of gravity.</p> <p>Wind-driven seas add to fuel costs if unforecasted.</p> <p>Need precipitation info from buoys.</p> <p>Big need – buoy north of Barren Islands. Difficult to keep in place.</p> <p>Homer Recreational Charter Association (Bob Ward) – want additional buoy for weather forecasts – small craft conditions.</p> <p>Need funding, R&D for arctic climate buoys that are maintainable.</p> <p>Need better satellite info – SAR imagery rough, need finer detail.</p> <p>Bering Sea – no buoys around Dutch Harbor – rely on ship & land observations.</p> <p>Bristol Bay – problems with sea ice. Need drifters that can be put out seasonally.</p> <p>S side of AK Peninsula</p>

**Appendix A
USER NEEDS ASSESSMENT
May 1, 2004 draft**

DRAFT

			<p>9 C-MANS are mostly wind w/temp not as important.</p> <p>Use balloons for upper atmosphere observations, and military rockets as needed.</p> <p>Use satellite imagery (SAR – Synthetic Aperture Radar from UAF) for general information – can see through clouds & weather, but roughly – waves & sea ice. Can see which waters are closest to freezing – by roughness. “Leaden seas” – ice needles smooth out the sees. Contact – Lew Shapiro.</p> <p>QUICKSCAT – cruder resolution in determining ice edge.</p> <p>Marine clients in Bering Sea and greater GOA: big ships tug & barge, commercial fishing</p> <p>PWS, Cook Inlet, - more recreational boaters</p> <p>SE – recreational & commercial fishermen, AK ferries, tug& barge.</p> <p>WS AK wave model – based on limited buoy data & ship observations. Wind determines wave size & height & speed of wave travel. Especially critical in transition from open water to shallow.</p>	<p>SE Fairweather Fishing Ground – buoy 83 – is bad area w/confused seas.</p> <p>PWS – use buoy & cmann stations. Got another buoy near Whittier. Had been over forecasting seas (calling them 8 ft when they were 5 ft).</p> <p>Issue – NW passage over Russia.</p> <p>Ice forecasting – Native subsistence (AK Eskimo Whaling Commission, Barrow, No. Slope Borough, Kotzebue, Foss – interest in shorefast ice). Marine freight. Navy subs.</p>
<p>NOAA Fisheries – Juneau</p>	<p>Jim Balsiger, Regional Director Dave Ackley – GIS, fisheries mgmt specialist Bridget Mansfield Cindy Hartman, Essential Fish Habitat Coordinator</p>		<p>Need to know where fishermen are and what they’re fishing – sea surface observations. Use VMS transponders now on large portion of fleet.</p> <p>Interested in Gulf (Kodiak/Shelikof Straits)</p>	<p>SARS or satellite images for major surface conditions & fleet dispersion.</p> <p>Effects of climate change & ecosystem</p>

Appendix A
USER NEEDS ASSESSMENT
May 1, 2004 draft

DRAFT

	Steve Ignell Lisa Eisner		and Bering Sea. Location of fish stocks. Participating in BASIS program with Russians & Japanese. Covers entire Bering Sea with transects – physics & biology.	change in North Pacific, and Bering Sea in particular. Stationary buoys w/temp, current & salinity at various depths could help predict stock location & fishing effort. Sea floor mapping - habitat. Indicators. (e.g., FATE – Fisheries and the Environment, Anne Hollowed).
NOAA Fisheries - Kodiak	Lew Rugalo Bob Otto Robert.s.otto@noaa.gov Brad Stevens	Main focus – shellfish (incl. crab) research – especially Bering Sea crustaceans. Support work of NPFMC Also, local bairdi (tanner) & red king crab Oscar Dyson – new NOAA vessel to be based in Kodiak – 300 days a year schedule – 210’ fishery research vessel w/hydroacoustics	Chiniak Bay – natural laboratory for life history & behavior of king & tanner crab.	Would like to see permanent buoys under ice in Bering Sea. Info on inshore waters – influence of fresh water & land formations. Inner shelf - @ 15 meters water. Mooring & cabled observatory in Chiniak Bay. FOCI (Kevin Bailey in Seattle) – would like quarterly surveys, now only summer
Oceana	Jim Ayers, Pacific Director	Oceana is a non-profit, international advocacy organization dedicated to restoring and protecting the world's oceans through policy advocacy, science, law and public education.		Would like to see 100% onboard observers. They should be federal employees who are trained to do a multitude of observations, including weather, water temp, salinity as well as bycatch and bird and marine mammal sitings.
Pacific Marine Environmental Lab 7600 Sand Point Way N.E. Seattle, WA 98115 www.pmel.noaa.gov	Dr. Eddie Bernard, Director Bernard@pmel.noaa.gov	Conducts interdisciplinary oceanographic and atmospheric research in support of NOAA’s mission in these areas: <ul style="list-style-type: none"> • Climate forecasts • Predicting environmental change • Building sustainable fisheries • Short-term warnings & forecasts • Environmental technology • Environmental information 	El Nino research – TAO Array; thermal modeling & analysis Fisheries Oceanography (FOCI) – fish and shellfish recruitment in GOA and Bering Sea Tsunami Project – West Coast/Alaska Tsunami Warning Center, 910 S. Felton St., Palmer AK. 4 buoys S of Aleutians. Ocean observing systems - & instruments	Need all planet approach – global in nature. Include oceans, terrestrial, atmospheric, & subterranean. Arctic Oscillation – second only to ENSO in influence on weather/atmospheric conditions. Monitor imported pollution. Need for long-term buoys in Bering Sea.

**Appendix A
USER NEEDS ASSESSMENT
May 1, 2004 draft**

DRAFT

			Cooperative Institute for Arctic Research (CIFAR) - UAF	<p>GLOBEC coming to end – need places for long-term monitoring.</p> <p>Recruitment predictions. Timing of bloom. Temperatures on sea bottom. Drifter info.</p> <p>Weather service forecasts – substandard in AK compared to continental U.S. Need more ocean observations & more attention to AO.</p>
<p>U.S. Coast Guard – Juneau</p> <p><i>Very interested in AOOS. Need to figure out chain of command for authorizing participation.</i></p>	<p>Capt. Rich Preston, Fisheries Law Enforcement</p> <p>Capt. Bruce McQueen, Homeland Security</p> <p>Commander Mike Kendall, Search & Rescue</p> <p>Commander Spencer Wood, Marine Environmental Protection</p> <p>Paul Webb</p>	<p>Maritime safety, mobility and security. National defense and protection of natural resources.</p> <p>Search & Rescue. Fisheries enforcement.</p>	<p>Marine safety – ships need wave height, sea temp & sea ice conditions.</p> <p>Aircraft safety – need weather enroute & at destination</p> <p>Fisheries law enforcement – for high seas salmon interceptions, use sea surface temps to determine where hi seas salmon drifters would be.</p> <p>Crab openings – dependent on weather – possibly delay if bad weather.</p> <p>Oil spill response – use current data to predict oil spill trajectory.</p> <p>Search & rescue – need precise wind direction & speed to predict where people in life rafts would drift before being rescued, or where derelict ships would drift to.</p>	<p>Would like land based station on Barren Islands. Shorelights there are always taking a beating.</p> <p>Kennedy Entrance – has ferry traffic & all the container ships – need better info about weather & tides.</p> <p>Northwest Passage – what assets would you need to start forecasting weather & ice conditions there.</p> <p>Rise in sea level & storm surges – affect navigation & buoy tenders.</p> <p>Homeland security – need vessel detection.</p> <p>Weapons of mass destruction – water & atmospheric transport of chemicals.</p> <p>Glacial warming – increased ice impacts ship traffic – Malaspina Glacier near Yakutat, PWS, maybe Kenai Fjords.</p>

Appendix A
USER NEEDS ASSESSMENT
May 1, 2004 draft

DRAFT

<p>University of Alaska Southeast 11120 Glacier Highway Juneau, AK 99801</p> <p><i>UAS could provide support for monitoring systems and use Ketchikan and Sitka as bases, but would have to develop personnel support there.</i></p>	<p>Brendan Kelly, Dean of Arts & Sciences</p> <p>John Pugh, Chancellor</p>	<p>Primarily a teaching campus. Main campus is Juneau, with smaller sites in Ketchikan and Sitka. Plan to have a masters program in marine biology. UAF School of Fisheries has faculty and students there.</p> <p>Does not have research centers – no general funds designated for research</p>	<p>SE node of UA’s GINA – Geographic Information Network of Alaska (www.gina.alaska.edu/) - is located on Juneau campus (Carl Byers).</p> <p>Some of faculty work with USGS BRD – Jim Taggart and others – in Glacier Bay, which is managed as a marine reserve.</p> <p>A Juneau Science Consortium meets periodically to talk about mutual needs/interests.</p>	<p>A major need is some kind of workshop bringing together managers, researchers, and stakeholders to talk about needs of the Southeast Alaska portion of the Gulf of Alaska.</p>
<p>USGS – Alaska</p>	<p>Bill Seitz, AK Regional Director</p>			