

CAMERAS

- Utilize pan / tilt / zoom feature to locate and evaluate ice pans, size, and thickness
- Establish location of "hard edge"
- Locate and track oil in ice in the winter and spill movement during summer months

COOK INLET RCAC

The Cook Inlet Regional Citizens Advisory Council is an independent non-profit corporation, organized under the provisions of Section 5002 of the Oil Pollution Act of 1990. Our thirteen-member Board of Directors represents seven cities and boroughs within the region, along with commercial fishing groups, aquaculture associations, Alaska Native interests, recreation groups, State Chamber of Commerce and environmental groups.

MISSION

The mission of the Council is to represent the citizens of Cook Inlet in promoting environmentally safe marine transportation and oil facility operations in Cook Inlet.

FOR MORE INFORMATION

Visit our website at www.circac.org



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COOK INLET ICE FORECASTING NETWORK



Cook Inlet Regional Citizens Advisory Council

COOK INLET

LENGTH: 170 Miles

WIDTH: 12 to 54 miles

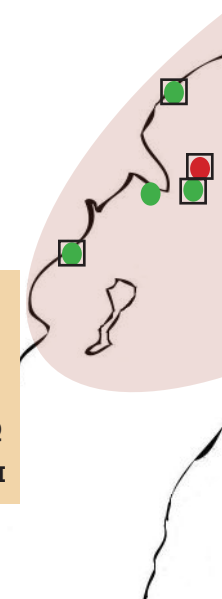
DEPTH: Less than 65 ft to over 220 ft (average 200ft)

MEAN TIDAL RANGE: 10 ft at entrance to 30 ft at Anchorage

EXTREME TIDAL RANGE: Approaching 40 ft

CURRENTS: Average 1 to 2 knots (up to 8 kts)

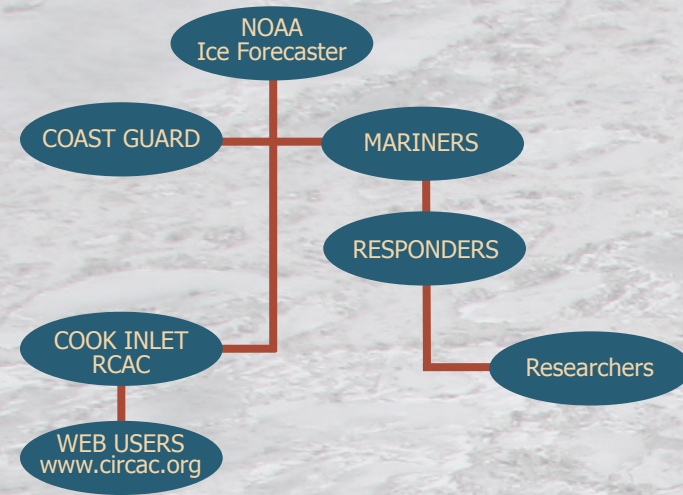
- First Camera Installation Sites
- Future Camera Installation Sites
- Off-Shore Platform Camera Site
- ★ Primary Network Terminal - NOAA HQ
- ★ Secondary Network Terminal - CISPRI



THE NETWORK

By utilizing existing Cook Inlet facility infrastructure, a North to South digital video camera network providing area-wide coverage will have the ability to track tidal progression and wind driven movement of ice throughout the upper half of Cook Inlet.

NETWORK USERS



NOAA - produce a very accurate ice analysis and forecast with the real time video feed, satellite radar imagery, and live on-scene observations

USCG - confirm conditions prior to issuance of local notice to mariner broadcasts or additional winter guidelines

MARINERS - aid transit during the winter months

SPILL RESPONDERS - locate and track oil in ice and spill movement during summer months

RESEARCHERS - study ice dynamics via the video archive.



COOK INLET ICE RISKS

Cook Inlet is one of the most dynamic bodies of water in the world. Challenges for safe navigation include extreme tides, swift currents, and severe winds. Combine these conditions with heavy ice and winter navigation and marine operations can become quite treacherous. Some recent ice-caused incidents are listed below:

1999 A collision with a heavy ice floe cracked a starboard wing tank of the T/V Chesapeake Trader.

2006



Heavy ice ripped the **T/V Seabulk Pride** from its mooring, while it loaded cargo at the Kenai Pipeline dock. In only eight minutes the vessel was pushed north, a half mile. At low tide, the **propeller** and bow were out of the water.



2009



The **Offshore Supply Vessel Monarch** was pushed by ice into the offshore platform **Granite Point**, resulting in the sinking of the vessel. The tug **Vigilant** arrived too late.



ICE FORECAST

An accurate ice forecast provides crucial information for vessel arrivals, dock availability, and loading times. Without an accurate ice forecast, port activity could slow to a stop if vessels voyaging North through Cook Inlet find themselves forcing ice, requiring them to turn back and anchor until ice conditions improve.

Because Coast Guard winter guidelines require a voyage plan for barge movement, tug operators moving barges need a reliable ice forecast to aid them in planning arrivals and departures for a safe voyage through the ice.

In order to conduct an effective oil spill response, constant updates on weather and sea conditions are required. Accurate and readily available ice condition reports are likewise imperative to winter oil spill response.



The installation of a video ice forecasting network will create a safer, more efficient marine transportation route to Alaska's largest port and vastly improve winter navigation and marine operations in Cook Inlet.