

Summary of Work Plan for Cook Inlet Risk Assessment: August 2013 – September 2014

Analysis of Risk Reduction Options Requiring Further Consideration August 15, 2013

Introduction The Cook Inlet Risk Assessment (CIRA) Advisory Panel met in February 2013 to review and consider potential risk reduction options that had been suggested via a public solicitation process (December 2012 – February 2013), the Coast Guard Authorization Act of 2010 (which provided partial funding for this project), the Cook Inlet Safety of Navigation Forum (1999), and the Ports and Waterways Safety Assessment (2000). During the meeting, four additional RRO were suggested by Advisory Panel members.

The Advisory Panel recommended eliminating some risk reduction options (RRO) from consideration, and identified [11 options that warranted immediate or sustained implementation](#). Five remaining options, shown in the box below, required further research or analysis to inform the ultimate project recommendations.

Risk Reduction Options Proposed for Further Consideration

- Increase Rescue Towing Capability in Cook Inlet
- Construct Cross-Inlet Pipeline from Drift River to Nikiski
- Enhance Situational Awareness and Communications through Two-way AIS
- Improve Ice Monitoring Capability
- Encourage Third Party Inspections or Audits of Workboats

Work plan for remainder of project The Management Team approved a modified and updated work plan for the remainder of the CIRA to be implemented from August 2013 – September 2014. The next steps are to: (A) Maintain overall project management, (B) Conduct additional research/analysis on five risk reduction options, (C) Implement items related to RROs for immediate or sustained implementation, (D) Review the results of the research/analysis with the Management Team and Advisory Panel to agree on the recommended options, and (E) Prepare a final report on behalf of the Advisory Panel and Management Team with the overall recommendations from the project. The bulk of the remaining effort (and budget) will be dedicated to the research and analysis (Task B).

TASK A. Project management and communications

Includes facilitation of the Management Team and continuation of project communications including project website updates, the newsletter, and maintaining the contact lists.

TASK B. Conduct additional research/analysis on five risk reduction options

This task focuses on the analysis and research associated with the five RROs requiring further consideration.

Task B-1. Towing Analysis

In order to determine whether *additional* towing resources are needed, the project will analyze the ability of the *current* towing resources and ability of a deep draft vessel to self-arrest through answering the following research questions:

- How often would a tug of opportunity be available to control a deep draft vessel that has lost propulsion or steering in Cook Inlet?
- How often could a deep draft vessel that has lost propulsion or steering successfully secure its position by anchoring in lower Cook Inlet?

Task B-2. Construct Cross-Inlet Pipeline from Drift River to Nikiski

With the expectation that the proposed pipeline from Kustatan to Nikiski would displace the need for all cross-Inlet tanker transits, Nuka Research and Pearson Consulting will work with The Glostén Associates and Northern Economics, Inc. to answer the following questions:

- To what extent, if any, will oil spill risk be reduced by moving oil across the Inlet by pipeline instead of tank vessel?
- What are the relative costs and benefits of constructing the subsea pipeline to change the way oil is moved across Cook Inlet?

Task B-3. Enhance Situational Awareness by Transmitting Weather Information via AIS

The next step for the use of AIS to enhance situational awareness in Cook Inlet is to use this technology to deliver weather information directly to the bridge of a vessel. MXAK has been working with the Alaska Ocean Observing System (AOOS) to install the necessary technology and, through the USCG and NOAA, develop the necessary permits and protocols. One of three new combined weather/AIS station was installed in Homer in 2012. Nuka Research and Pearson Consulting will work with MXAK and its project partners to understand how the system in Homer is working and gain information from different perspectives (including mariners) about how the protocols developed (frequency of transmission, length and nature of transmission, etc.) are working and how the information is being applied.

Task B-4. Improve Ice Monitoring Capability

Research will be conducted to determine the best way to improve upon the ice monitoring procedures already established in Cook Inlet. This will include gaining an understanding of how the current camera system is working from different perspectives as well as conducting a review of ice radar systems, in particular the Sigma S6 Ice Navigation system, that may significantly enhance the development and dissemination to mariners of timely information about the nature and location of ice. Based on the feedback received, a demonstration of the Sigma S6 (or similar) system will be developed and potentially implemented, pending the results of the research, costs and feasibility, and Management Team approval.

Task B-5. Encourage Third Party Inspections or Audits of Workboats

There are audit programs available through the International Marine Contractors Association (IMCA) and the American Waterways Operators' Responsible Carrier Program, which establish codes of practice that could be adopted by all Cook Inlet vessel operators. Operators in Cook Inlet will be surveyed to determine the type and frequency of audits (if any), why operators do or do not choose to use an audit program, which one they use (if any) and why, problems they have encountered in implementing such a program in the past, and any barriers to the use of such programs with incentives or suggestions that would overcome these barriers.

TASK C. Implement items related to RROs for immediate or sustained implementation

The Advisory Panel had previously identified some RROs for immediate or sustained implementation. Implementation of some items can begin within the scope of this project, as funds allow (depending on the results of Task B, particularly as related to the ice monitoring research). The first task will be to support the launch of a Harbor Safety Committee. Additional tasks will likely include providing information to the National Oceanic and Atmospheric Administration to update the Coast Pilot and Automated Wreck and Obstruction Information System, and possibly supporting additional ice monitoring capacity.

TASK D. Review the results of the research/analysis with the Management Team and Advisory Panel to agree on the recommended options

The Advisory Panel will be convened via two in-person meetings and webinars as needed to review results of the analysis conducted in Task B, receive updates on activities completed for Task C, and discuss the ultimate recommendations of the group and project results.

TASK E. Prepare a final report on behalf of the Advisory Panel with the overall recommendations from the project

A final report will describe the process used for the CIRA and the final recommendations developed through the project. It will be based on the analysis and discussions from the project and will be circulated in draft form to the Management Team and Advisory Panel prior to being finalized. It will be completed by September 2014.

For more information on the project, see: <http://cookinletriskassessment.com>