

# **COOK INLET RISK ASSESSMENT PROJECT**

## **Monthly Progress Report for Contract #HSCG84-12-C-B17024**

**Submitted by Nuka Research and Planning Group, LLC (Nuka Research)  
June 5, 2014**

This is a Monthly Progress Report submitted to the U.S. Coast Guard for the Cook Inlet Risk Assessment Project (#HSCG84-12-C-B17024). This report includes an account of the work completed from September 15, 2012 – May 31, 2014, as well as identification of any problems encountered or anticipated. Wherever necessary, we also discuss any budget or scheduling impacts and proposed remedies.

### **Overview**

The U.S. Coast Guard contracted Nuka Research to provide procedural expertise and project management during the preparation of the Cook Inlet Risk Assessment. This project began on September 15, 2012. The final project deliverable will be a report presenting recommended risk reduction options for vessel traffic in Cook Inlet.

On September 5, 2013, the U.S. Coast Guard approved Nuka Research's request for a no-cost extension of the contract until September 30, 2014.

### **Task Details**

This section provides an update on the status of the eight project tasks identified in the contract. The tasks are sequential and build directly on each other.

#### **Task 1: Plan and Conduct Consequence Analysis Workshop**

This task is now 100% complete.

#### **Task 2: Develop Consequence Analysis Report**

This task is now 100% complete.

#### **Task 3: Solicit and Describe Risk Reduction Options**

This task is now 100% complete.

#### **Task 4: Estimate the Benefits of Risk Reduction Options**

The Management Team met on August 13, 2013 and approved the proposed steps to evaluate the risk reduction options that were slated for additional analysis or consideration. The next steps essentially incorporate estimating the benefits of the proposed options (Task 4), costs (Task 5), and ease of implementation (Task 6) as appropriate for each proposed risk reduction option.

The risk reduction options are summarized below.

***Towing Analysis***

The Glosten Associates completed their analysis of the availability of tugs of opportunity and an assessment of the potential for a drifting vessel to self-arrest. At the direction of the Management Team, Nuka Research shared the extensive comments received on the studies from the Advisory Panel and a former Alaska Marine Pilot with The Glosten Associates. They have indicated that they will not revise the studies, but provided additional clarification by way of response to the comments. This will be shared with the Management Team and Advisory Panel.

Nuka Research has completed an analysis of the areas of Cook Inlet and how long it would take for a large vessel to drift into shoreline or another hazard based on winds and currents. This will be shared with the Management Team on the next call.

***Construct Cross-Inlet Pipeline from Drift River to Nikiski***

The Glosten Associates estimated the reduced probability of an oil spill based on reducing the number of tanker transits across the Inlet based on input Nuka Research received from Capt. Jack Jensen of Tesoro (an Advisory Panel member).

Nuka Research has identified a method for developing a spill rate estimate from the proposed pipeline, but this requires additional information. After several follow-up efforts, Tesoro provided some of the information initially promised. Nuka Research has shared this information with Northern Economics under a confidentiality agreement, and met with the company on April 18 to review the process and timeline for the analysis.

***Enhance Situational Awareness by Transmitting Weather Information via AIS***

Nuka Research prepared a preliminary list of interview/survey questions and summary materials for this task. However, the Marine Exchange of Alaska indicates that most vessels' AIS software does not support receipt of the broadcasts. The Management Team directed that this task should be concluded with a summary of the issue and potential opportunity, but no evaluation is possible at this time. This will be included in an overall project summary.

***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. The University of Alaska-Fairbanks for the past three years has been conduct ice monitoring in Barrow for the Beaufort Sea using a Furuno radar. Risk assessment project team members met with Dr. Andy Mahoney to discuss the feasibility and potential benefits of establishing ice radar for Cook Inlet. Follow-up discussion with UAF, the Alaska Ocean Observing System and NOAA Ice Forecaster are planned with the goal of developing a scope of work and budget to conduct a trial of ice monitoring radar during the 2014-15 ice season.

***Encourage Third Party Inspections or Audits of Workboats***

Based on input from the Advisory Panel member who suggested this item, a revised letter and survey questions were developed and are were distributed to operators around Cook Inlet in early March. The Management Team directed that this be conducted by the end of the second quarter of 2014.

Thirteen surveys were sent in mid-March to operators in Cook Inlet. Six survey responses have been received. Additional follow-up contacts will be made via the Captain of the Port if willing. The summary is on track to be completed by the deadline.

*In addition, the following tasks were identified from the risk reduction options slated for sustained or immediate implementation.*

***Launch Harbor Safety Committee for Cook Inlet***

Pearson Consulting developed a preliminary process for the establishing a Harbor Safety Committee, in coordination with CIRCAC. A draft scoping document, including key questions related to the Committee's composition and relationship to other committees, was send to the Management Team for their review and input. The Management Team will convene to discuss the relationship of this potential Harbor Safety Committee to the Subarea Committee. Interviews with potentially interested stakeholders are on track to be conducted by the end of the second quarter 2014, pending feedback from the Management Team.

***Convene Webinars to Update AWIOS and Coast Pilot***

The Management Team directed that these webinars be held by the end of the second quarter of 2014. Initial outreach was made to the NOAA personnel responsible for the Coast Pilot, but a follow up is needed due to a change in staff. This follow up will be made in mid-May.

Depending on the results of the ice detection research, additional work may be done in this area to implement a system based on that research.

**Task 5: Estimate the Costs of Risk Reduction Options and Develop Cost-Benefit Ratios**

This task relates directly to the work described in Task 4, as noted above. Northern Economics, Inc. will conduct a cost-benefit analysis for the proposed cross-Inlet subsea pipeline. Nuka Research reviewed the process and data needs with them on a September 30 conference call. In November, Nuka Research convened a call with Northern Economics and the USFWS's Regional Coordinator of Natural Resource Damage Assessment and Restoration to discuss options for data points on the dollar value of spill damages.

**Task 6: Assess the Ease of Implementation of Risk Reduction Options**

This task relates directly to the work described in Task 4, as noted above.

**Task 7: Assess Unintended Consequences of Risk Reduction Options**

This task relates directly to the work described in Task 4, as noted above. The Advisory Panel will also be asked to consider potential unintended consequences of the proposed risk reduction options.

**Task 8: Prioritize Risk Reduction Options, Develop Recommendations, and Prepare Final Report**

The risk reduction options have been organized into those slated for immediate or ongoing implementation and those that require further consideration (based on the research and analysis described above). The Advisory Panel and Management Team will further refine this prioritization. The final recommendations and report will be based on the outcome of Tasks 4-7. Work on the final report has not yet begun.