

# **COOK INLET RISK ASSESSMENT PROJECT**

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

**Submitted by Nuka Research and Planning Group, LLC (Nuka Research)  
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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 – January 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 Glostén Associates completed their analysis of the availability of tugs of opportunity and an assessment of the potential for a drifting vessel to self-arrest. Nuka Research shared this information with the Management Team on a January 24, 2014 conference call. The Management Team directed that the self-arrest study be sent for review by Alaska pilots and the tug of opportunity study should be sent to the Advisory Panel for review. In addition, Nuka Research will develop a summary presentation of the tugs of opportunity study results. This summary will be shared with the Advisory Panel by March 15. Nuka Research will prepare an overall summary of the studies and comments when the Advisory Panel and Management Team have reviewed all documents.

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

The Glostén Associates revised their estimate of 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 from the pipeline operator, which is being sought from Tesoro. A meeting was held with Tesoro to discuss data needs for the Benefit Cost Analysis, resulting in an agreement from the company to provide all information requested. The information has not been received. Follow-up requests will continue to be made, and the Management Team has engaged in supporting efforts to obtain this information.

***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 conducting 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***

Nuka Research developed a summary of how voluntary safety management systems are implemented and a set of survey questions and survey recipients based on operators in Cook Inlet. This was shared with the Advisory Panel member who suggested the risk reduction option, and we are currently following up with him to clarify his feedback and amend the survey accordingly. The Management Team directed that this be conducted by the end of the second quarter of 2014.

*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. Pearson Consulting will prepare a list of key players in the Harbor Safety Committee and a list talking points/questions for interviews. Pearson Consulting will work with the Management Team in scheduling these interviews. The Alaska Harbor Master's and Port Directors will be contacted as part of this effort. Interviews will be conducted by the end of the second quarter 2014.

***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.

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.