

COOK INLET RISK ASSESSMENT PROJECT

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

**Submitted by Nuka Research and Planning Group, LLC (Nuka Research)
January 6, 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 – December 31, 2013, 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. Nuka Research will share this information with the Management Team and Advisory Panel and develop a summary and presentation of the tugs of opportunity data in January 2014.

Construct Cross-Inlet Pipeline from Drift River to Nikiski

The Glosten 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 was not yet received as of January 1, and follow-up requests will continue to be made.

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 latest update from the Marine Exchange of Alaska indicates that most vessels' AIS software does not support receipt of the broadcasts. This task may require re-direction from the Management Team, as the plan to evaluate the effectiveness of the weather broadcasts cannot be implemented until mariners are actually receiving the broadcasts. Follow-up with the Management Team will be conducted accordingly.

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 conducted an ice-monitoring study in the Beaufort Sea using a Furuno radar; the next step will be to learn what equipment they have used, for what purpose, and how well it worked. In addition, the project team will be contacting Buccaneer Alaska LLC who's considering setting up a Sigma-6 ice radar near Anchor Point, Cook Inlet to monitor ice in the south-central location, which is typically the southern extent for ice in the Inlet.

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. The survey will be implemented in January/February and the results summarized in March.

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. During the 1st quarter of 2014 the following will be initiated:

- Process of interviewing key players to establish the goals/objective and potential participants;
- Identifying existing local/regional committees (ad hoc and formal) whose purpose is to identify and recommend actions to improve the safety, security, mobility and environmental protection of a port or waterway;
- Evaluate the composition of representatives on the existing local/regional committees and potential need to expand or contract stakeholder composition.

Convene Webinars to Update AWIOS and Coast Pilot

These webinars are planned for February 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.