

# 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 – September 30, 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

The risk reduction options identified at the February 2013 Advisory Panel meeting have been divided into two groups: those recommended for immediate or ongoing implementation and those that require additional research or analysis. A [document describing the first set of RROs](#) was released and distributed with the newsletter in early July after review by the Advisory Panel and Management Team. In August 2013, with approval from the Management Team, the [descriptions of the risk reduction options](#) requiring additional consideration were finalized and distributed to the full project distribution list via the project newsletter.

The Management Team approved the Facilitation Team to take the first steps on RROs that were identified for immediate or sustained implementation:

- **Launch a Harbor Safety Committee.** The Cook Inlet Regional Citizens Advisory Council has agreed to house a Harbor Safety Committee (HSC). Nuka Research identified an opportunity for someone representing this entity to participate in a meeting of West Coast HSCs at the end of October; arrangements are being made.
- **Update Coast Pilot.** A webinar will be held in the winter of 2013-2014 to provide an opportunity for input to the Coast Pilot maintained by the National Oceanic and Atmospheric Administration (NOAA).
- **Update AWOIS databases.** A webinar will be held in the winter of 2013-2014 to provide an opportunity for input to NOAA's database of subsea infrastructure.
- **Ice monitoring demonstration project.** Depending on the results of the research into options to enhance ice monitoring, a demonstration project may be implemented to test new technology or current ice monitoring methods may be enhanced.

#### **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. Scopes of work and work authorizations have been developed and issued to subcontractors.

#### ***Towing Analysis***

The Glostén Associates was contracted to conduct an analysis of the availability of tugs of opportunity to control a deep draft vessel that has lost steering or propulsion. The necessary AIS data was purchased from the Alaska Marine Exchange in September and will be transferred to The Glostén Associates in October (currently the data includes the location of all vessels with AIS in the Inlet; it needs to be pared down to show only towing capable vessels).

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

The Glostén Associates and Northern Economics, Inc. were contracted to provide support on this task. The Glostén Associates estimated the reduced probability of an oil spill based on reducing the number of tanker transits across the Inlet. Nuka Research will estimate the potential increased probability of a spill from the

proposed pipeline by the end of October. Northern Economics, Inc. will use this information to conduct a benefit-cost analysis.

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

Nuka Research will work with the Marine Exchange of Alaska and Alaska Ocean Observing System (AOOS) to understand how a new weather-transmitting system installed 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. Initial conversations have taken place with the project partners.

***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 has ice-monitoring experience; the next step will be to learn what equipment they have use, for what purpose, and how it has worked.

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

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. Beyond initial scoping, work has not yet started on this sub-project..

**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.

**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.