

**Project Number:** 040776

**Project Title:** Applied Research Related to Lingering Oil, Resource Recovery, and Management and Monitoring of Impaired Water Bodies

**PI Name:** Lucinda Jacobs, Integral Consulting, Inc.

**Time Period Covered by Report:** September 2004– August 2005

**Date of Report:** September 30, 2005

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## 1. Work Performed:

- **Task 1: Project Scoping and Meetings**— Scoping activities include initial document compilation and review; meetings and discussions with ADEC staff, Trustee council members, and agency scientists; and identification of the different library resources, technical experts, and data/mapping sources to determine what available work on resource characterization, monitoring design, and restoration should be incorporated into this applied research. A platform presentation for the 2005 Symposium on Marine Science in Alaska was prepared and presented by Lucinda Jacobs on January 24, 2005. Two statements of work on expert review of Herring populations in PWS and evaluation of oil remediation technologies applicable to lingering oil in PWS were also prepared in January 2005.

**Task 2: Evaluate Lingering Oil Studies**— Publications and reports by Jeff Short, Stanley Rice, and others were reviewed to assess the strengths and weaknesses of the technical approach, statistical design and interpretation, and to characterize the inherent uncertainty of the technical findings regarding the presence, amount, and bioavailability of lingering oil. Related work and analyses performed by David Page, Paul Boehm, and others was also evaluated. This task included research to identify and obtain key reference documents and development of a project library to readily access those publications. Activities performed over the last year were primarily associated with the identification of relevant technical reports and addition to the project library.

**Task 3: Evaluate Resources Injury and Recovery**—Under this task, Integral staff independently assess work performed related to the various factors affecting resources and habitat in Prince Williams Sound (and other areas affected by the oil spill), distill the information to the core technical arguments, and reassess the technical basis for the recovery status classification (recovering, not recovered). Development of the final report, *2005 Assessment of Lingering Oil and Resource Injuries from the Exxon Valdez Oil Spill* is in progress, and will be completed in December 2005.

**Task 4: Identify Areas of Concern**—Information relevant to the identification of areas of concern is being identified, reviewed, and distilled to develop a map or series of maps of current shorelines, shoreline areas, adjacent water bodies, and sediment areas of concern due to lingering oil. This work will be included in the final report prepared under Task 3.

**Task 5: Develop a Long-term Monitoring and Management Plan**—The budget for this task has been reallocated to other tasks to accommodate changes in scope.

**Task 6: Development of Restoration Options**— Work under this task has not yet been initiated.

**Task 7: Public Communication**—Work under this task has not yet been initiated.

**2. Future Work:** Work continues on the *2005 Assessment of Lingering Oil in Prince William Sound*, which includes sections on lingering oil, killer whale, Harlequin Duck, seabirds, pacific herring, harbor seal, sea otter, intertidal resources, clams, and mussels. Deadlines for submittal of the technical report containing these analyses have been extended to December 2005 to accommodate delays in obtaining information from Trustee scientists.

**3. Coordination/Collaboration:** Lingering oil and resource evaluations involve routine communication with Trustee scientists who are conducting research related to lingering oil, Harlequin duck, sea otter, and other injured resources.

**4. Community Involvement/TEK and Resource Management Applications:** Not applicable.

**5. Information Transfer:** This project was initiated in spring 2004. A report will be prepared in December 2005.

**6. Budget:** As of August 2005, there were no changes to the budget of \$650,000.



**Signature of PI:** \_\_\_\_\_

**Project Web Site Address:** [www.integral-corp.com](http://www.integral-corp.com)