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HIGHLIGHTS OF ITEMS IN THIS ISSUE:

- Current studies update
- 2002 priorities established
- Amended Management Board Listing

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Current Studies Update

On 7-8 September 2000, ESRF sponsored a workshop in Halifax to Develop Methodologies for Conducting Research on the Effects of Seismic Exploration on the Canadian East Coast Fishery. The workshop was designed to draw on the experience of renowned experts in the field to determine the most efficient manner of going forward with research on the effects of seismic exploration on the East Coast. Some studies required to fill gaps in present knowledge will be relatively simple and inexpensive and others will be costly, complex and of relatively long duration. These studies must build on what has already been learned in other areas. The workshop report has been published as ESRF Report 139, Proceedings of a Workshop to Develop Methodologies for Conducting Research on the Effects of Seismic Exploration on the Canadian East Coast Fishery, Halifax, Nova Scotia, 7-8 September 2000.

Further to ESRF Report 138, Seabird Attraction to Offshore Platforms and Seabird Monitoring from Offshore Support Vessels and Other Ships (Literature Review and Monitoring Designs) the Management Board has agreed to fund a study which should aid in the conservation of marine animals and the ecosystem on which they depend. It will attempt to address this issue by piloting the monitoring of regional aggregations and distributions of marine birds on the northern Grand Bank. A major objective will be to identify gaps in knowledge about marine birds and mammals that will be of benefit to oil spill response and sensitivity mapping. The ESRF Management Board has provisionally approved this study for a second year (2002) which will be confirmed upon receipt of a written progress report in November 2001.

ESRF has contributed to an ongoing program to **Update the CSA Offshore Structure Standards**. This work is in its second year and is progressing well. Linkages are being made between Canadian and international standards and specific attention is being given to Arctic applications.

A project for the Identification of Ecologically and Commercially Important Areas in the Southern Gulf of St. Lawrence is in the final stages. A draft report has been received from Jacques Whitford Environment Limited, and a final report is expected shortly. When approved by the Management Board, this report will be published as ESRF Report #140, Identification of Ecologically and Commercially Important Areas in the Southern Gulf of St. Lawrence.

The ESRF Management Board has provided funding to the Arctic Institute of North America's (AINA) ongoing Arctic Technology Preservation Program to catalogue and abstract existing reports related to oil and gas development in the North. Specifically, the ESRF contribution will allow the Arctic Institute to complete the abstracting of the CANMAR library, which was donated to AINA some time ago. Approximately 1530 reports remain to be abstracted.

The ESRF Management Board has provided funding to the Department of Fisheries and Oceans (DFO) to undertake three studies. Ron Pierce is the ESRF Management Board contact for information about these projects.

- A project on *Field Verification of Benthic Boundary Layer Modeling Effects*. The fate and environmental impacts of discharged drilling muds are ongoing issues to operators, regulators, government agencies and environmentalists, particularly with multiple development sites in close proximity of each other. Sound scientific assessments of the fate and impacts for different mud/discharge scenarios can provide a basis for cost-effective strategies that minimize both real and perceived adverse impacts. Validated or calibrated dispersion models can be an effective tool in waste management planning and in a generic assessment approach presently under development by CNSOPB.
- A study on *Deep Water Benthic Community* Study is underway to expand knowledge on the distribution, abundance, habitat requirements and ecological importance of deepwater corals in Atlantic Canada. This study will include the analysis and interpretation of existing data collected by DFO during groundfish trawl surveys and will use video and photographic equipment on research cruises, as well as similar data that are available from other sources.
- A study on Evaluation of Mud Dispersion Models. Modelling studies in association with oil development applications will provide a level of predictive information on cutting dispersion and thickness, but the key questions requiring a level of predictability in relation to cumulative effects are biological in nature and include the following: What level of cutting thickness produces significant impacts on sediment habitat? How much of the impact is simply physical as opposed to chemical? What are projected recovery rates in relation to cutting thickness? Will major impact zones be mostly physical and restricted to a maximum of a km or so of rig sites or will some oil fields have potential for overlap and cumulative effects through a combination of physical and chemical factors. Answers to these questions have major regulatory and economic ramifications for industry and regulators in relation to "Habitat" provisions of the Fisheries Act.

The ESRF Management Board is currently in the process of establishing contracts to conduct the following work:

© Oil Pollution Seabird Mortality Assessment on the Sable Island Bank with Applications on the Grand Banks. The ESRF Management Board Advocate for this study is Geoff Hurley.

Seabirds are the most vulnerable marine animals to oil pollution at sea and once oiled are the most detectable animal indicators of marine pollution events. The potential effects of offshore petroleum activities upon seabird populations were identified as a concern by interveners in the Hibernia, Terra Nova and White Rose environmental assessment processes. The proposed work should aid in the conservation of marine animals and the ecosystem on which they depend. In order to determine if regular beached bird surveys conducted on Sable Island can effectively monitor mortality of seabirds due to oil releases from oil rigs, specially calibrated drift blocks will be released from rigs at the Sable Island Bank. Further drift block releases will be made from rigs on the Grand Banks and along the Newfoundland shore at several times of year. Regular beach surveys on Sable Island will be conducted (Environment Canada will carry out regular beached bird surveys on the Avalon Peninsula and the Government of France will participate with parallel surveys on St.Pierre and Miquelon). In addition, beached birds and tar balls will be recorded and collected using standardized techniques, and the oil analyzed to determine its source.

- Cumulative Effects Air Shed Monitoring on Sable Island Study. The ESRF Management Board advocate for this project is Joe Kozak. The ESRF Management Board will, in conjunction with the Department of the Environment, establish an Air Monitoring System on Sable Island which will be tied into the existing the National Air Pollution Surveillance (NAPS) Network
- Funding has been provided to Geological Survey of Canada to combine ROV investigations of an existing ice berg scour with a scheduled offshore field work program in July 2001. The ESRF Management Board advocate for this project is Urban Williams.
- An RFP has been issued and the competition closed for a Northern Gap Analysis which is currently in circulation to the Management Board for review and comment. It is anticipated the RFP will be issued in late August.

2002 Priorities Established

In the last issue of Update, the ESRF Management Board invited public input for the purpose of establishing priority areas for 2002. We received approximately 25 responses which could be grouped as follows:

East Coast - primary concerns are cumulative effects, discharges and effects of seismic exploration.

North - with the exception of Cumulative Effects and possibly some work on waste management, the Management Board will await completion of the Northern Gap Analysis which will assist in finalizing priorities for the North

West Coast - although a moratorium on offshore activity is in place on the West Coast, the Management Board was pleased to receive submissions from the Haida on several key issues.

The Environmental Studies Research Funds (ESRF) Management Board met on May 8 & 9, 2001 to establish priority areas for 2002. The Management Board supports the three areas of primary concern on the East Coast.

Cumulative effects will remain a priority. The Management Board will use the recent workshop report published as ESRF Report No. 137 to clarify ongoing areas of focus. The advocate for this will be Ron Pierce. A Technical Advisory Committee will include but not be limited to a DOE, Atlantic Region representative, Dave Burley, and Urban Williams.

As previously reported, the seismic workshop report is available in pre-print format. A Technical Advisory Committee will be established to take the workshop recommendations forward as follow-on projects. The advocate for this will be Andy Parker. A Technical Advisory Group will include but not be limited to Urban Williams, existing advisory committee and a CAPP-NS representative.

Discharges, which include produced water; mud/cuttings; and contaminants, will be a priority area; the advocate is Urban Williams. The Offshore Waste Management Guidelines (work ongoing) are close to completion and will be utilized to determine future needs. A Technical Advisory Committee will include but not be limited to a CNSOPB representative, a NEB representative, Dave Burley; a DOE east coast representative, a DOE northern representative, Northern Aspect representation from CAPP-north, DIAND and DFO.

In 2002, the Management Board will utilize the results of the northern Gap Analysis to define priority areas for new studies in the north. The advocate will be David Stone. However, the Management Board wishes to go forward in 2 areas given the speed of development in the North. Work on Cumulative Effects will be championed by Ian Scott, with a Technical Advisory Committee including representation from NEB; DOE; DIAND; DFO; Inuvialuit; Gwich'in; Deh Cho; Sahtu; CARC; and the existing frameworks group.

Waste management issues are a priority in the North and the Management Board wishes to proceed this calendar year with a study. We will request an accelerated gap analysis specific to waste issues. The advocate will be Bonnie Gray. A Technical Advisory Committee will include but not be limited to representation from NEB; DIAND; CAPP; DOE; Inuvialuit.

What are you doing?

The ESRF Management Board wishes to establish links to other research programs to maximize benefit from limited research funding. If your research coincides with or complements an area of ESRF work, please take time to get in touch by phone or e-mail and provide us an update. Forward your ideas and comments or requests for information/publications to:

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