MEMORANDUM OF UNDERSTANDING BETWEEN Exxon Valdez Oil Spill Trustee Council AND Prince William Sound Science Center

Regarding the Hinchinbrook Entrance/Montague Straits Project

1. PURPOSE

This Memorandum of Understanding (MOU) establishes an agreement between the Exxon Valdez Oil Spill Trustee Council (EVOSTC) and the Prince William Sound Science Center (PWSSC) for enhancement of the Hinchinbrook Entrance/Montague Straits project within the Prince William Sound Ocean Observing System, one of several sub-regions within the nascent regional Alaska Ocean Observing System. Through this MOU, the PWSSC is authorized to prepare the narrative and budgets to initiate a contract For EVOSTC to receive a Congressional earmark titled "Gulf of Alaska Ecosystem Monitoring" included in HR 2673, the FY04 Omnibus appropriations bill. Upon receipt of the funds by EVOSTC they will be made available to PWSSC in the amounts and on the schedules specified in the narrative and budgets. The essence of this agreement is to enhance the abilities of the signatory organizations to meet their respective legislative mandates and obligations.

2. BACKGROUND

The Gulf Ecosystem Monitoring and Research Program, GEM, serves as the Alaskan regional contact for the Integrated and Sustained Ocean Observing System (IOOS) now being developed by the federal interagency organization known as Ocean.US. Since the geographic scope of GEM is limited to southcentral Alaska (Prince William Sound, Kenai Peninsula, Cook Inlet, Kodiak and the northern Alaska Peninsula) GEM has networked extensively with other marine science organizations in the state, and was instrumental in the formation of the state-wide Alaskan Ocean Observing System (AOOS). AOOS was formed in order to provide a geographically all-encompassing successor to GEM as the regional contact for IOOS. AOOS does not yet have the legal status to receive funds (FFY 2004), hence GEM will continue to serve as a coordinating body to implement IOOS in Alaska during FFY 2004.

GEM and the Prince William Sound Science Center (PWSSC) have long been partners in implementing ocean observing systems and their precursors in Alaska. PWSSC is the leader in its region in implementing ocean observing systems, and other AOOS partners, including GEM, look to PWSSC for leadership in planning, coordinating and integrating efforts within Prince William Sound and adjacent areas. Starting in 1998, the Prince William Sound Science Center developed a quasi-operational Nowcast Forecast System (NFS) for Prince William Sound primarily through funding support from the Oil Spill Recovery Institute (OSRI) with assistance from EVOSTC. Although the NFS was developed to enable detection and prediction of oil-spill related impacts, it also has utility in fisheries oceanography, marine resource management and marine safety. The NFS is evolving into the Prince William Sound Ocean Observing System (PWSOOS) because its observing components support implementation of the seven national goals of the IOOS. In recognition of established capabilities of the NFS; the PWSOOS was recently chosen to be AOOS' first pilot program within the Alaska region.

In advance of passage of the IOOS funding legislation, Congress appropriated two earmarks for development of regional ocean observing programs in which GEM was the named recipient. The second earmark is in the FY04 omnibus appropriations in the amount of \$750,000 for the Gulf of Alaska Ecosystem Monitoring Program to support a regional ocean observing program. Due to the collaborative initiative already underway in Prince William Sound, it was determined by the EVOS Trustee Council that the FY 2004 earmark was to be applied to the PWSOOS. The specific interest of the Trustee Council in the PWOOS is the measurement of the timing and volume of the exchange of water between the Gulf of Alaska and Prince William Sound. The seasonal patterns of water exchange are of interest to the Trustee Council in order to interpret the status of species injured by the 1989 oil spill and to further other purposes of the GEM Program. Understanding the circulation and the patterns of water exchange will provide a solid scientific foundation for addressing fisheries and ecosystem management needs related to long-term oceanic and climatic variability. It will also improve detection and prediction of oil-spill related impacts.

3. SCOPE / RESPONSIBILITIES OF THE PARTIES

The Exxon Valdez Oil Spill Trustee Council was formed to oversee restoration of the injured ecosystem through the use of the \$900 million civil settlement. The Council consists of three state and three federal trustees who head the Alaska Department of Law, the Alaska Department of Environmental Conservation, the Alaska Department of Fish and Game, The National Oceanic and Atmospheric Administration, the Department of the Interior, and the U.S. Forest Service (or their designees). The Trustee Council will administer the initiation of the contract for the funds with the National Ocean Service Coastal Services Center and see that the funds are provided to the PWSSC. In addition, the Trustee Council will provide administrative support during the life of the resulting NOS contract in concert with administrative personnel of PWSSC to include processing of financial reports and progress reports.

The Prince William Sound Science Center, a private non-profit (501c(3)) entity based in Cordova, Alaska, will compile the grant application for submittal to the National Ocean Service (NOS) and will develop the narrative and budgets for the work to be conducted in concert and cooperation with other collaborators who implement the PWSOOS. The narrative and budgets will address infrastructure improvements and other enhancements to the PWSOOS with a particular focus on improving our understanding of the mechanisms and exchange rates of water between the Gulf of Alaska and Prince William Sound. In addition the PWSSC will provide administrative support during the life of the resulting NOS contract in concert with administrative personnel of EVOSTC to include processing of financial reports and progress reports.

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5. SCIENTIFIC REVIEW, COORDINATION AND COMMUNICATION

Initial scientific review of the activities of PWOOS to be accomplished under this funding will be conducted by the peer review process of NOAA's Coastal Services Center. Thereafter the program will be subject to periodic review by the scientific advisory committees of GEM and PWSSC/OSRI during the life of the contract. The OSRI Science Director, a staff member at PWSSC, will work to keep the Science Director of EVOSTC and the advisory committees abreast of progress as it happens. The expectation is that the Science Directors will keep in close touch as improvements to PWSOOS are implemented. Close communication between Science Directors is preferred to formal reporting requirements. It is also expected that administrative staff of EVOSTC and PWSSC will form a close working relationship to meet the reporting requirements of the contract.

6. STANDARDS

All aspects of the work conducted under this MOU will be in accord with applicable standards and protocols of the IOOS, the GEM Program Document, GEM, EVOSTC, OSRI and PWSSC.

7. OWNERSHIP OF EQUIPMENT

All equipment purchased through this application will be owned by the Prince William Sound Science Center. Deployment and use of this equipment will be focused in Prince William Sound and the Copper River Delta.

8. DURATION OF AGREEMENT

This agreement will become effective when signed by both parties. The agreement will terminate on acceptance of a final report by the NOS for the grant. It is anticipated that the grant final report will be completed by no later than April 1, 2007.

9. LIMITATIONS

Nothing in this agreement shall be construed to contradict or change the legislative mandates and regulations under which the PWSSC and EVOSTC operate. No financial obligations whatsoever are stated or implied by this agreement beyond the \$750,000 of the FY 2004 earmark. Future financial support of PWSOOS by the EVOSTC is at the discretion of EVOSTC, and may be considered as part of its annual funding cycle.

It is agreed that the NOS grant narrative and budgets will focus on infrastructure development toward understanding the circulation and seasonal and geographic patterns of water exchange between the Gulf of Alaska and Prince William Sound. It is further agreed that this work will be completed in collaboration with other interested parties in the region and be effectively non-duplicative, and that the data results will be readily available to all interested in a timely manner.

Should disagreement arise on the interpretation of the provisions of this agreement, or amendments and/or revisions thereto, that cannot be resolved at the operating level, the area(s) of disagreement shall be stated in writing by each party and presented to the other party for consideration. If agreement on interpretation is not reached within thirty days,

the parties shall forward the written presentation of the disagreement to respective higher officials for appropriate resolution.

Nancy Bird

President & C.E.O., Prince William Sound Science Center

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Gail Phillips Executive Director EVOS Trustee Council

4-05-04 Date