

**Minerals Management Service - Alaska Region - Environmental Studies**ESS Home page: <http://www.mms.gov/alaska/ess/index.htm>

| Program Lead   | Region     | Start FY | TITLE  |
|--|------------|----------|--|
| <b>PLANNED NEW STARTS (FY 2008)</b>  |            |          |  |
| MMS  | CH         | 08       | COMIDA: Chemistry and Benthos (CAB)  |
| MMS/NMFS-NMML  | CH         | 08       | COMIDA: Distribution and Relative Abundance of Marine Mammals: Aerial Survey   |
| MMS / NMML   | BS         | 08       | Continuation of Impact Assessment for Cross Island Whaling Activities-Beaufort Sea   |
| MMS  | CH         | 08       | COMIDA: Impact Monitoring for Offshore Subsistence Hunting   |
| MMS / CMI  | NAB        | 08       | Biogeochemical Assessment of the North Aleutian Basin Ecosystem: Current Status & Vulnerability to Climate Change                                      |
| MMS  | NAB        | 08       | Subsistence Study for North Aleutian Basin   |
| <b>Studies Deferred Until FY 2009</b>  |            |          |  |
| MMS  | NAB        | 09       | <b>** Juvenile and Maturing Salmon Use of the North Aleutian Basin Lease Area</b>  |
| MMS  | NAB        | 09       | <b>** Spatial and Temporal Mapping of Nearshore Juvenile Fish &amp; Settling Crab in the North Aleutian Basin</b>                                      |
| MMS / NSB  | CH / BS    | 09       | <b>** Monitoring the Health of Subsistence Harvested Bowhead Whales</b>  |
| MMS / NSSI   | BS         | 09       | <b>** Aggregate Effects Research and Environmental Mitigation Monitoring of Oil Industry Operations in the Vicinity of Nuiqsut</b>                     |
| <b>** Allocation for these studies has been previously approved. Profiles can be found in the Alaska Annual Studies Plan Final FY 2008, pp. 143-148. (USDOI, MMS, Alaska OCS Region, 2007a).</b> |            |          |  |
| <b>ONGOING STUDIES</b>   |            |          |  |
| <b>Physical Oceanography</b>   |            |          |  |
| MMS  | BS         | 06       | Beaufort Sea Mesoscale Meteorology   |
| MMS  | BS         | 03       | Beaufort Sea Nearshore Currents  |
| MMS  | BS         | 06       | Feasibility and Study Design for Boundary Oceanography of the Beaufort Sea   |
| MMS / CMI  | BS         | 06       | Idealized Process Model Studies of Circulation in the Landfast Ice Zone of the Alaskan Beaufort Sea.   |
| MMS  | BS         | 06       | Mapping Sea Ice Overflood Using Remote Sensing from Smith Bay to Camden Bay  |
| MMS  | BS         | 07       | Support of the Collection of Meteorological Data on the North Slope and Beaufort Sea, Alaska   |
| MMS  | BS + other | 04       | Surface Circulation Radar Mapping in Alaskan Coastal Waters: Field Study Beaufort Sea and Cook Inlet   |
| MMS / NASA   | CH / BS    | 03       | Sea Ice Modeling for Nearshore Beaufort and Chukchi Seas   |
| MMS / CRREL  | CH / BS    | 04       | Simulation of Landfast Sea Ice Along the Alaska Coast  |
| MMS  | NAB        | 07       | Modeling of Circulation in the North Aleutian Basin  |
| MMS / CMI  | Cook Inlet | 04       | Seasonality of Biophysical Boundary Conditions for Cook Inlet, Alaska  |
| MMS / CMI  | Cook Inlet | 02       | Water and Ice Dynamics in Cook Inlet   |
| <b>Fates &amp; Effects</b>   |            |          |  |
| MMS / CMI  | BS         | 05       | Assessment of the Direction and Rate of Alongshore Transport of Sand and Gravel In Petroleum Development Region of the North Slope of Alaska           |
| MMS / CMI  | BS         | 06       | Synthesis of Time Interval changes in Trace Metals & Hydrocarbons in Nearshore Sediments of the AK Beaufort Sea: A Statistical Analysis                |
| MMS  | CH / BS    | 04       | Empirical Weathering Properties of Oil in Snow and Ice   |
| MMS / CMI  | CH / BS    | 04       | Sea-Ice-Ocean-Oilspill Modeling System (SIOMS) for the Nearshore Beaufort and Chukchi Seas:Improvement & Parameterization (Phase II)                   |
| MMS  | CH / BS    | 05       | Updates to the Fault Tree Approach to Oil Spill Occurrence Estimators for the Beaufort and Chukchi Sea   |
| <b>Biology</b>   |            |          |  |
| MMS / CMI  | BS         | 08       | Recovery in a High Arctic Kelp Community   |
| MMS / NMFS   | BS         | 07       | Beaufort Sea Marine Fish Monitoring: Pilot Survey and Test of Hypotheses   |
| MMS / CMI  | C.I.       | 04       | Evaluating a Potential Relict Arctic Invertebrate and Algal Community on the West Side of Cook Inlet   |
| MMS / CMI  | BS         | 03       | Foraging Ecology of Common Ravens on Alaska's Coastal Plain and Relationship to O&G Development  |
| MMS/BRD  | BS         | 06       | Arctic Cisco Genetics and Otolith Microchemistry   |
| MMS/BRD  | BS + other | 06       | Use of the Beaufort Sea by King Eiders   |
| MMS  | BS + other | 04       | Review and Monitoring Ambient Artificial Light Intensity in the OCS and the Potential for Effects on Resident Fauna                                    |
| MMS / CMI  | CH         | 07       | Current & Historic Distribution & Ecology of Demersal Fishes in the Chukchi Sea Planning Area  |
| MMS / BRD  | CH / BS    | 08       | Arctic Fish Ecology Catalogue  |
| <b>Protected Species</b>   |            |          |  |
| MMS / CMI  | BS         | 04       | Premigratory Movements and Physiology of Shorebirds Staging on Beaufort Littoral Zone  |
| MMS / Canada   | BS + other | 05       | Assessing Reproduction and Body Condition of the Ringed Seal Near Sachs Harbour, Northwest Territory, Canada, through a Harvest-based Sampling Program |
| MMS / BRD  | CH         | 07       | Monitoring Marine Birds of Concern in the Eastern Chukchi Nearshore Area (Loons)   |
| MMS / NMML   | CH         | 07       | Pinniped Movements and Foraging  |
| MMS / ADF&G / CMI  | CH         | 07       | Satellite Tracking of Walruses in the Chukchi sea: The Planning Phase  |
| MMS / NMFS   | CH / BS    | 04       | Aerial Photography of Bowhead Whales to Estimate the Size of the Bering-Chukchi-Beaufort Population  |
| MMS / ADF&G / AEWC   | CH / BS    | 05       | Bowhead Whale Feeding Program: A. Satellite Tagging & Tracking   |
| MMS / NMML   |            | 06       | Bowhead Whale Feeding Variability in the Western Beaufort Sea: B. Feeding Observations and C. Oceanographic Measurements & Analyses                    |

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|--|------------|----------|---|--|--------------|----|--------------------|------------|-------------|----|------------------------|---------|----------------------|-----|------------|------|-----|----|--|
| MMS / CMI  | CH / BS    | 02       | King and Common Eider Migrations Past Point Barrow  |  |              |    |                    |            |             |    |                        |         |                      |     |            |      |     |    |  |
| MMS / NMML   | CH / BS    | 07       | Monitoring the Distribution of Arctic Whales  |  |              |    |                    |            |             |    |                        |         |                      |     |            |      |     |    |  |
| MMS/ Canada  | CH / BS    | 05       | Population and Sources of Recruitment in Polar Bears  |  |              |    |                    |            |             |    |                        |         |                      |     |            |      |     |    |  |
| MMS / ADF&G / CMI / BRD  | CH / BS    | 05       | Radio Frequency Identification Tags for Grizzly and Polar Bear Research   |  |              |    |                    |            |             |    |                        |         |                      |     |            |      |     |    |  |
| MMS / NMML   | NAB        | 07       | Distribution, Abundance, and Habitat Use of North Pacific Right Whales  |  |              |    |                    |            |             |    |                        |         |                      |     |            |      |     |    |  |
| MMS / NMML   | Cook Inlet | 03       | Distribution and Abundance of Harbor Seals in Cook Inlet  |  |              |    |                    |            |             |    |                        |         |                      |     |            |      |     |    |  |
| MMS / NMML   | Cook Inlet | 04       | Movements and Habitat Use of Harbor Seals in Cook Inlet   |  |              |    |                    |            |             |    |                        |         |                      |     |            |      |     |    |  |
| <b>Social &amp; Economic</b>   |            |          |   |  |              |    |                    |            |             |    |                        |         |                      |     |            |      |     |    |  |
| MMS  | BS         | 02       | Subsistence Mapping of Nuiqsut, Kaktovik and Barrow: Past and Present Comparison  |  |              |    |                    |            |             |    |                        |         |                      |     |            |      |     |    |  |
| MMS / CMI  | CH         | 07       | Traditional Knowledge Regarding Bowhead Whales in the Chukchi Sea   |  |              |    |                    |            |             |    |                        |         |                      |     |            |      |     |    |  |
| MMS  | CH / BS    | 04       | Researching Technical Dialogue with Alaskan Coastal Communities: Analysis of the Social, Cultural, Linguistic, and Institutional Parameters of Public/Agency Communication Patterns |  |              |    |                    |            |             |    |                        |         |                      |     |            |      |     |    |  |
| MMS / CESU (UAF) / NSF   | CH / BS    | 07       | Study of Sharing Networks to Assess the Vulnerabilities of Local Communities to O&G Development Impacts in Arctic Alaska  |  |              |    |                    |            |             |    |                        |         |                      |     |            |      |     |    |  |
| MMS  | AK         | 98       | Publication of a Book/Synthesis on the Socioeconomic Effects of Oil & Gas Industry Activity on the Alaskan OCS  |  |              |    |                    |            |             |    |                        |         |                      |     |            |      |     |    |  |
| MMS  | AK         | 03       | Social and Economic Assessment of Major Oil Spill Litigation Settlement for the Alaska OCS Region   |  |              |    |                    |            |             |    |                        |         |                      |     |            |      |     |    |  |
| <b>Multidisciplinary</b>   |            |          |   |  |              |    |                    |            |             |    |                        |         |                      |     |            |      |     |    |  |
| MMS  | BS         | 03       | Continuation of Arctic Nearshore Impact Monitoring in Development Area (cANIMIDA)   |  |              |    |                    |            |             |    |                        |         |                      |     |            |      |     |    |  |
| <b>Other</b>   |            |          |   |  |              |    |                    |            |             |    |                        |         |                      |     |            |      |     |    |  |
| MMS  | AK         | 08       | Conference Management and Reports on MMS Results  |  |              |    |                    |            |             |    |                        |         |                      |     |            |      |     |    |  |
| MMS  | AK         | 07       | Management, Logistics, and Warehouse Storage of Oceanographic Equipment   |  |              |    |                    |            |             |    |                        |         |                      |     |            |      |     |    |  |
| MMS / CMI  | AK         | 08       | MMS-University of Alaska Fairbanks-State of Alaska Coastal Marine Institute Management  |  |              |    |                    |            |             |    |                        |         |                      |     |            |      |     |    |  |
| <b>Other (Research Partnerships)</b>   |            |          |   |  |              |    |                    |            |             |    |                        |         |                      |     |            |      |     |    |  |
| <table border="1" style="width: 100%;"> <thead> <tr> <th colspan="2">Region Codes</th> </tr> </thead> <tbody> <tr> <td>Beaufort Sea</td> <td>BS</td> </tr> <tr> <td>BS + Other regions</td> <td>BS + other</td> </tr> <tr> <td>Chukchi Sea</td> <td>CH</td> </tr> <tr> <td>Chukchi &amp; Beaufort Sea</td> <td>CH / BS</td> </tr> <tr> <td>North Aleutian Basin</td> <td>NAB</td> </tr> <tr> <td>Cook Inlet</td> <td>C.I.</td> </tr> <tr> <td>All</td> <td>AK</td> </tr> </tbody> </table> |            |          | Region Codes  |  | Beaufort Sea | BS | BS + Other regions | BS + other | Chukchi Sea | CH | Chukchi & Beaufort Sea | CH / BS | North Aleutian Basin | NAB | Cook Inlet | C.I. | All | AK | <p>MMS Technology Assessment and Research Program (TAR)</p> <p>MMS-University of Alaska Fairbanks-State of Alaska Coastal Marine Institute (CMI)</p> <p>Cooperative Ecosystem Studies Unit (CESU); University of Alaska Fairbanks (UAF); University of Washington (UW)</p> <p>USGS/Biological Resources Division (BRD)</p> <p>National Oceanographic Partnership Program; eg. <i>Comprehensive Modeling Approach Towards Understanding and Prediction of the Alaskan Coastal System Response to Changes in an Ice Diminished Arctic</i></p> <p>Federal Inter-agency Agreements: eg. NOAA-National Marine Fisheries Service (NMFS) / National Marine Mammal Laboratory (NMML)</p> <p>National Science Foundation (NSF)</p> <p>North Slope Science Initiative (NSSI)</p> <p>North Pacific Research Board (NPRB); eg. Marine Science Symposium co-sponsor</p> <p>National Aeronautics and Space Administration (NASA)</p> <p>National Fish and Wildlife Foundation</p> <p>Cold Regions Research Engineering Laboratory (CRREL) (US Army Corps of Engineers)</p> <p>Alaska Ocean Observing System (AOOS)</p> <p>Alaska Department of Fish and Game (ADF&amp;G)</p> <p>Industry Studies</p> <p>Arctic Council (AMAP)</p> <p>Canadian Department of Fisheries/Oceans</p> |
| Region Codes   |            |          |   |  |              |    |                    |            |             |    |                        |         |                      |     |            |      |     |    |  |
| Beaufort Sea   | BS         |          |   |  |              |    |                    |            |             |    |                        |         |                      |     |            |      |     |    |  |
| BS + Other regions   | BS + other |          |   |  |              |    |                    |            |             |    |                        |         |                      |     |            |      |     |    |  |
| Chukchi Sea  | CH         |          |   |  |              |    |                    |            |             |    |                        |         |                      |     |            |      |     |    |  |
| Chukchi & Beaufort Sea   | CH / BS    |          |   |  |              |    |                    |            |             |    |                        |         |                      |     |            |      |     |    |  |
| North Aleutian Basin   | NAB        |          |   |  |              |    |                    |            |             |    |                        |         |                      |     |            |      |     |    |  |
| Cook Inlet   | C.I.       |          |   |  |              |    |                    |            |             |    |                        |         |                      |     |            |      |     |    |  |
| All  | AK         |          |   |  |              |    |                    |            |             |    |                        |         |                      |     |            |      |     |    |  |