

Example Re Mammal/Noise Interaction Research:

- MMS has conducted at least 42 studies and more than \$37 million on bowhead whale research – local organizations and industry have done many as well. Over the years various studies have been jointly planned and funded, with particular acknowledgement to the sustained interest, support, and endorsement by the NSB and AEWC. Much has dealt with bowhead/noise interaction questions. To give a sense of scale, a partial view of work done,

RETURN TO ENV.

STUDIES

Investigation of the Occurrence
and Behavior Patterns of Whales
in the Vicinity of
the Beaufort Sea Lease Area

✓ 1983 November

CSU 02

Bolt Beranek and Newman Inc.

Report No. 5366

**Investigations of the Potential Effects of
Underwater Noise from Petroleum Industry
Activities on Migrating Gray Whale Behavior**

November 1983

Prepared for:
U.S. Department of the Interior

BBN Laboratories Incorporated

A Subsidiary of Bolt Beranek and Newman Inc.

Cowlin



Report No. 6509

OCS S
MMS8

**Prediction of Drilling Site-Specific Interaction of
Industrial Acoustic Stimuli and Endangered Whales
in The Alaskan Beaufort Sea**

FINAL REPORT

Contract No. 14-12-0001-30295

November 1987

Prepared for:
U.S. Department of the Interior
Minerals Management Service
Alaska OCS Office

Halbard

PROCEEDINGS
OF THE
FIRST CONFERENCE ON THE BIOLOGY OF THE BOWHEAD WHALE
BALAENA HYSTRICETUS
POPULATION ASSESSMENT

28-29 January 1982
Anchorage, Alaska



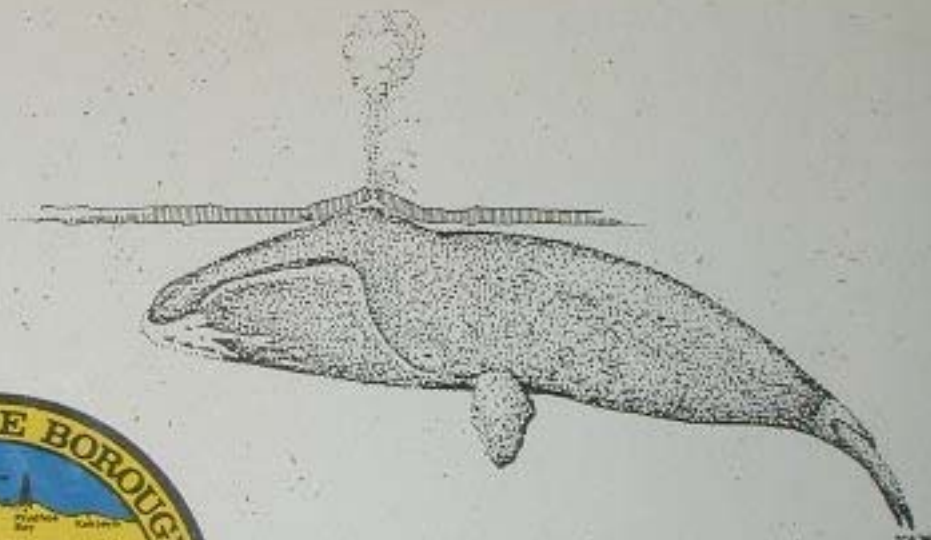
Sponsored by

ALASKA ESKIMO WHALING COMMISSION

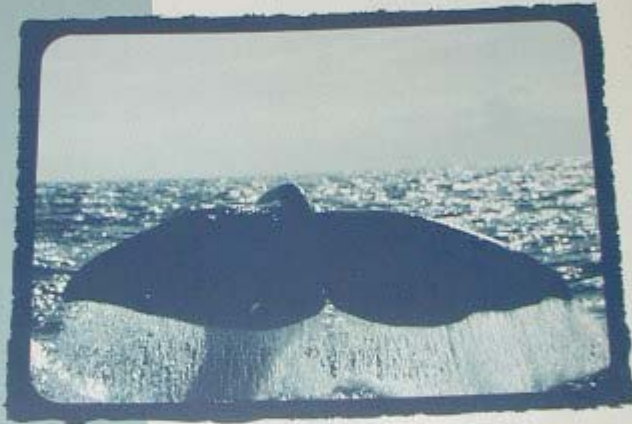
Barrow, Alaska

FIFTH CONFERENCE ON THE BIOLOGY OF THE
BOWHEAD WHALE, BALAENA MYSTICETUS

APRIL 1-3, 1990
ANCHORAGE, ALASKA



MARINE MAMMALS AND NOISE



W. John Richardson
Charles R. Greene, Jr.
Charles I. Malme
Denis H. Thomson



Carlson

OCS Study
MMS 97-0014

**ARCTIC SEISMIC SYNTHESIS AND
MITIGATING MEASURES
WORKSHOP**

PROCEEDINGS

*March 5 and 6, 1997
Barrow, Alaska*



U.S. Department of the Interior
Minerals Management Service
Alaska OCS Region

OCS Study
MMS 2002-071

**GIS Geospatial Database
of Oil-Industry and Other Human Activity
(1979 – 1999) in the Alaskan Beaufort Sea**

Volume 1

by

P. Wainwright
Wainwright Limited, Sidney, BC

Prepared for:

U.S. Department of the Interior

NCE REPORT 06-003



*Controlling Underwater Noise from Offshore Gravel Islands
During Production Activities*

MMS Noise Project #538

Jesse Spence

April 4, 2006

Prepared for:
Joseph Mullin



1979





1985





1990



1993



2006

Bowheads and Noise...

- NRC 1994 evaluation of MMS Environmental Studies Program (ESP) in Alaska that “This is an extremely complicated issue that is unlikely to be resolved by scientific study, no matter how much money is spent”.
- Alternative to additional studies: “...a reasonable solution is for MMS, the industry, and North Slope residents to attempt to reach agreement on the controversial matters-and how they should be adjusted, remedied, or mitigated in lieu of or concurrent with additional studies.

Mar. Mammals and Noise

- “it would be prohibitively costly, if not impossible to obtain all the information necessary to accurately predict the possible direct and indirect effects of the proposed action on every species and population that could be affected”.
 - Marine Mammal Commission
1997

Planning Process

- Sent Final ASP FY 2006 to stakeholders Sept 2005 for comment and
- Requested proposed studies for FY 2007 from external stakeholders

