

Exxon Valdez Oil Spill Final and Annual Reports

December 2018



Exxon Valdez Oil Spill Trustee Council

Table of Contents

General Information	3
Exxon Valdez Oil Spill Trustee Council Project Final Reports (2013-present)	5
Exxon Valdez Oil Spill Restoration Project Final Reports (1993-2012)	. 10
Exxon Valdez Oil Spill Gulf Ecosystem Monitoring and Research Project Final Reports (2002-2009)	. 33
Exxon Valdez Oil Spill State/Federal Natural Resource Damage Assessment Final Reports (1989-1992)	35
Exxon Valdez Oil Spill Restoration Project Annual Reports	. 45
Exxon Valdez Oil Spill State/Federal Natural Resource Damage Assessment Annual Reports	66

General Information

EVOSTC Final Reports

Since 1989, the *Exxon Valdez* Oil Spill Trustee Council (EVOSTC) has funded projects to assess the impacts of the oil spill and restore the environment. Over the years, projects have included natural resource damage assessment (NRDA) studies, restoration projects and Gulf Ecosystem Monitoring and Research Program (GEM) projects. To date the Council has published these final reports in the following series:

- *Exxon Valdez* Oil Spill Trustee Council Project Final Reports (2013- present)
- *Exxon Valdez* Oil Spill Restoration Project Final Reports (1993-2012)
- Exxon Valdez Oil Spill Gulf Ecosystem Monitoring and Research Project Final Reports (2002-2009)
- *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Reports (1989-1992)

EVOSTC Annual Reports

Prior to 2002, annual progress reports for multi-year NRDA and restoration projects were published in two report series listed below. Annual reports for projects funded since 2002 are not published in a series, but are available at the EVOSTC web site in the Project Search database.

- Exxon Valdez Oil Spill State/Federal Natural Resource Damage Assessment Annual Reports
- Exxon Valdez Oil Spill Restoration Project Annual Reports

Project and Report Numbers

For purposes of identification each project funded by the EVOS Trustee Council is assigned a unique number. Project reports have the same number. Final reports for multi-year projects are numbered according to the year in which the work was completed. Over time the Trustee Council's project numbering system has evolved to meet the changing needs of the Restoration Program.

<u>NRDA studies</u>: Funded from 1989 to 1992, NRDA studies were assigned an alpha-numeric study number indicating the topic of the study. Examples: Air/Water 1, Bird 3, and Fish/Shellfish 4.

<u>Restoration projects and GEM projects prior to 2003</u>: Restoration and GEM projects funded between 1993 and 2002 have five-digit numbers. The first two digits indicate the funding year. The last three digits identify the project. Since FY 1994, the three-digit project identifier has remained the same each year for multi-year projects. Example: Hydrocarbon Data Analysis – 94290, 95290, 96290.

<u>Restoration and GEM projects funded between 2003 and 2009</u>: Although some GEM *transition* projects were funded in 2002, most GEM projects were funded between 2003 and 2009. These project numbers have six digits. The first two digits indicate the funding year. The last three digits identify the project and remain the same each year for multi-year projects. The third digit was added to give the numbering scheme the potential to handle a larger number of projects funded in a long-term program. Example: Dynamics of the Alaska Coastal Current – 030670, 040670.

<u>Restoration projects funded from 2010</u>: Beginning in 2010, projects numbers contain eight digits. The first two digits designate the current funding year, the second two digits represent the year the initial funding was authorized by the Trustee Council, and the last four digits are the project identifier.

In 2012, the Long-Term Monitoring Program, Long-term Herring Research and Monitoring Program, Lingering Oil projects and NOAA Harbor Protection program were initiated. Final reports for these projects and programs are published in a new series named "*Exxon Valdez* Oil Spill Trustee Council Project".

How to Find EVOSTC Reports

A list of EVOSTC final and annual reports is maintained at the EVOS Trustee Council website.

EVOSTC reports are available as listed below. Reports are also submitted to the Alaska State Library and the National Technical Information Service in fulfillment of state and federal depository requirements.

Final reports are available full-text at:

- <u>EVOS Trustee Council website</u>. The Trustee Council's database of restoration projects is searchable via Project Search by project number, researcher, or project title.
- <u>ARLIS</u> catalog. The catalog is searchable by title, project number, principal investigator, additional authors, series title, subject heading, and keywords. A searchable notes field in the catalog record describes the report and provides additional access points. From the catalog record, a link takes the researcher to the full-text report. Paper copies of reports are available for check out at ARLIS and are loaned worldwide through interlibrary loan.
- <u>National Technical Information Service (NTIS)</u>. Copies of most final reports can be purchased in electronic, paper or microfiche formats through NTIS at (703) 487-4650 or www.ntis.gov.

Annual reports are available full-text at:

- <u>EVOS Trustee Council website</u>. The Trustee Council's database of restoration projects is searchable via Project Search by project number, researcher, or project title.
- <u>ARLIS</u> catalog. Annual reports for projects funded prior to 2002 are available full-text through the ARLIS catalog, which is searchable by title, project number, principal investigator, additional authors, series title, subject heading, and keywords. A searchable notes field in the catalog record describes the report and provides additional access points. From the catalog record, a link takes the researcher to the full-text report. Paper copies are available for check out and are loaned worldwide through interlibrary loan.

For assistance in locating EVOSTC publications, contact:

Alaska Resources Library and Information Services (ARLIS) 3211 Providence Drive, Suite 111 Library Building Anchorage, AK 99508

(907) 27-ARLIS (272-7547) reference@arlis.org www.arlis.org

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL REPORTS December 2018

* = new additions to this list

Exxon Valdez Oil Spill Trustee Council Project Final Reports

Final reports in this series cover Trustee Council projects funded from FY 2013 to the present.

*12120114-F

Coletti, H. A., and T. L. Wilson. 2018. Nearshore marine bird surveys: Data synthesis, analysis and recommendations for sampling frequency and intensity to detect population trends. *Exxon Valdez* Oil Spill Long-Term Monitoring Program (Gulf Watch Alaska) Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 12120114-F). *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*13120111-I

Heintz, R., F. Sewall, L. Schaufler, and C. Fugate. 2018. Fatty acid analysis as evidence for winter migration of age-0 herring in Prince William Sound. *Exxon Valdez* Oil Spill Long-Term Herring Research and Monitoring Program Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 13120111-I), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*13120111-J

Vollenweider, J.J., J. Maselko, and R.A. Heintz. 2018. What is the age at first spawning for female herring in PWS? *Exxon Valdez* Oil Spill Long-Term Herring Research and Monitoring Program Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 13120111-J), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*13120111-N

Moffitt, S.D. and Haught, S. 2018. Scales as Growth History Records *Exxon Valdez* Long-Term Herring Research and Monitoring Program Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 13120111-N). *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*14120111-В

Bishop, M.A. 2018. Tracking seasonal movements of adult Pacific herring in Prince William Sound. *Exxon Valdez* Oil Spill Long-Term Herring Research and Monitoring Program Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 14120111-B), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*15120111-D

Boswell, K.M., A.M. Zenone, and W.S. Pegau. 2018. Non-lethal sampling: In situ estimation of juvenile herring sizes. *Exxon Valdez* Long-Term Herring Research and Monitoring Program Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 15120111-D), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*15120111-G

Rand, P.S. 2018. PWS Herring Program - Intensive surveys of juvenile herring, *Exxon Valdez* Oil Spill Long-Term Herring Research and Monitoring Program Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 15120111-G), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*15120111-R

Pegau, W.S. 2018. Aerial survey support. *Exxon Valdez* Oil Spill Long-Term Herring Research and Monitoring Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 15120111-R), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120111

Pegau, S., et.al. 2018. Herring Research and Monitoring Program. *Exxon Valdez* Oil Spill Long-Term Herring Research and Monitoring Program Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 16120111), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120111-A

ishop, M.A. and S. Lewandoski. 2018. Validation of acoustic surveys for Pacific herring (*Clupea pallasii*) using direct capture. *Exxon Valdez* Oil Spill Long-Term Herring Research and Monitoring Program Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 16120111-A), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120111-С

Bochenek, R., Buckelew, S., Turner, C., Koeppen, W. 2018. Data management support for the *Exxon Valdez* Oil Spill Trustee Council Herring Research and Monitoring Program Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 16120111-C). *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120111-Е

Rand, P.S. and R.E. Thorne. 2018. Expanded adult herring surveys. *Exxon Valdez* Long-Term Herring Research and Monitoring Program Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 16120111-E). *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120111-F

Rand, P.S. 2018. Juvenile herring abundance index. *Exxon Valdez* Oil Spill Long-Term Herring Research and Monitoring Program Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 16120111-F), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120111-Н

Hoover, H., and W.S. Pegau. 2018. Herring Research and Monitoring Outreach. *Exxon Valdez* Long-Term Herring Research and Monitoring Program Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 14120111-H), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120111-К

Hershberger, P.K. 2018. Herring Disease Program, *Exxon Valdez* Oil Spill Long-term Herring Research and Monitoring Program Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 16120111-K), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120111-L

Gorman, K.B., T.C. Kline, M.E. Roberts, F.F. Sewall, R.A. Heintz and W.S. Pegau. 2018. Herring Condition Monitoring. *Exxon Valdez* Oil Spill Long-Term Herring Research and Monitoring Program Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 16120111-L), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120111-0

Pegau, W.S. 2018. Herring Research and Monitoring coordination and logistics. *Exxon Valdez* Long-Term Herring Research and Monitoring Program Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 16120111-O), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120111-P

Wildes S. L., Hv. Nguyen, and J. R. Guyon. 2018. Genetic stock structure of herring in Prince William Sound. *Exxon Valdez* Long-Term Herring Research and Monitoring Program Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 16120111-P), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120111-Q

Branch, T.A. 2018. Modeling the population dynamics of Prince William Sound herring. *Exxon Valdez* Oil Spill Long-Term Herring Research and Monitoring Program Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 16120111-Q), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120112

Jennings, L., E. Ammann and D. Landsman. 2018. NOAA Harbor Protection Program/Project Management, NOAA Harbor Protection Program Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 16120112), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120112-A

Patton, I.R. 2018. Harbor water quality improvement program. *Exxon Valdez* Oil Spill NOAA Harbor Protection Program Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 16120112-A), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120114

McCammon, M., K. Hoffman, K. Holderied. D. R. Aderhold, and T. H. Neher. 2018. Long-term monitoring of marine conditions and injured resources and services. *Exxon Valdez* Oil Spill Long-term Monitoring Program (Gulf Watch Alaska) Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 16120114), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120114-A

Batten, S.D. and R. Brown. 2018. Long-term monitoring of plankton populations on the Alaskan shelf and in the Gulf of Alaska using Continuous Plankton Recorders. Long-Term Monitoring Program (Gulf Watch Alaska) Final Report, (*Exxon Valdez* Oil Spill Trustee Council Project 16120114-A), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120114-В

Hoffman, K. C., and M. E. McCammon. 2018. Long-term monitoring: program coordination and logistics and outreach. Long-term Monitoring Program (Gulf Watch Alaska) Final Report, (*Exxon Valdez* Oil Spill Trustee Council Project 16120114-B), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120114-С

Bishop, M. A. 2018. Long-term monitoring of seabird abundance and habitat associations during late fall and winter in Prince William Sound. *Exxon Valdez* Oil Spill Long-Term Monitoring Program (Gulf Watch Alaska) Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 16120114-C), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120114-D

Bochenek, R., S. Buckelew, C. Turner, W. Koeppen. 2018. Data management support for the EVOSTC Long-Term Monitoring Program. *Exxon Valdez* Oil Spill Long-Term Monitoring Program (Gulf Watch Alaska) Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 16120114-D). *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120114-Е

Campbell, R. W. 2018. Long term monitoring of oceanographic conditions in Prince William Sound. *Exxon Valdez* Oil Spill Trustee Council Project Final Report (Project 16120114-E), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120114-G

Doroff, A., and K. Holderied. 2018. Long-term monitoring of oceanographic conditions in Cook Inlet/Kachemak Bay to understand recovery and restoration of injured near-shore species. *Exxon Valdez* Oil Spill Long-term Monitoring Program (Gulf Watch Alaska) Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 16120114-G), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120114-Н

Holderied, K., and D. Aderhold. 2018. Science coordination and synthesis for the long-term monitoring program. Long-term Monitoring Program (Gulf Watch Alaska) Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 16120114-H), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120114-I

Hollmén, T. E., L.A. Sztukowski, S.A. Sethi. 2018. Long-Term Monitoring: Synthesis and conceptual modeling - conceptual ecological modeling. *Exxon Valdez* Oil Spill Long-Term Monitoring Program (Gulf Watch Alaska) Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 16120114-I), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120114-J

Hopcroft, R. R., S. L. Danielson, S. L. Strom, and K. Kuletz. 2018. The Seward Line: Marine ecosystem monitoring in the Northern Gulf of Alaska. *Exxon Valdez* Oil Spill Long-Term Monitoring Program (Gulf Watch Alaska) Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 16120114-J). *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120114-К

Kaler, R., E. Labunski, and K. J. Kuletz. 2018. Prince William Sound marine bird surveys. *Exxon Valdez* Oil Spill Long-Term Monitoring Program (Gulf Watch Alaska) Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 16120114-K), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120114-L

Konar B., K. Iken, and A. Doroff. 2018. Long-term monitoring: nearshore benthic ecosystems in Kachemak Bay. Long-term Monitoring Program (Gulf Watch Alaska) Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 16120114-L). *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120114-M

Matkin, C., D. Olsen, G. Ellis, G. Ylitalo, R. Andrews. 2018. Long-term killer whale monitoring in Prince William Sound/ Kenai Fjords. *Exxon Valdez* Oil Spill Long-term Monitoring Program (Gulf Watch Alaska) Final Report (*Exxon Valdez* Oil Spill Trustee CouncilProject 16120114-M), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120114-N

Moran, J. R. and J. M. Straley. 2018. Long-term monitoring of humpback whale predation on Pacific herring in Prince William Sound. *Exxon Valdez* Oil Spill Long-Term Monitoring Program (Gulf Watch Alaska) Final Report (*Exxon Valdez* Oil Spill Trustee Council Project: 16120114-N), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120114-0

Arimitsu, M. L., J. F. Piatt, B. Heflin, V. von Biela, S. K. Schoen. 2018. Monitoring long-term changes in forage fish distribution, abundance and body condition. *Exxon Valdez* Oil Spill Long-term Monitoring Program (Gulf Watch Alaska) Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 16120114-O). *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120114-P

Weingartner, T. J. and S. L. Danielson. 2018. Long-term monitoring of oceanographic conditions in the Alaska Coastal Current from hydrographic station GAK1 over 1970-2016. *Exxon Valdez* Oil Spill Long-Term Monitoring Program (Gulf Watch Alaska) Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 16120114-P), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120114-R

Coletti, H., D. Esler, B. Ballachey, J. Bodkin, G. Esslinger, K. Kloecker, D. Monson, B. Robinson, B. Weitzman, T. Dean, and M. Lindeberg. 2018. Gulf Watch Alaska: Nearshore benthic systems in the Gulf of Alaska. Long-Term Monitoring Program (Gulf Watch Alaska) Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 16120114-R), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120114-S

Lindeberg, M. R., M. G. Carls, and J. Maselko. 2018. Lingering oil: Extending the tracking of oil levels and weathering (PAH composition) in Prince William Sound through time. *Exxon Valdez* Oil Spill Long-Term Monitoring Program (Gulf Watch Alaska) Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 12120014-S). *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16120120

Jones, M. B., R. Blake, J. Couture and C. Ward. 2018. Collaborative data management and holistic synthesis of impacts and recovery status associated with the *Exxon Valdez* oil spill. *Exxon Valdez* Oil Spill Long-Term Monitoring Program (Gulf Watch Alaska) Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 16120120), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16150114 –Т

Bochenek, R., S. Buckelew, C. Turner, W. Koeppen. 2018. Supplemental data management support for EVOSTC monitoring programs. Long-Term Monitoring Program (Gulf Watch Alaska) Final Report; Long-Term Herring Research and Monitoring Program Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 16120114-T). *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

*16160111-S

Bishop, M.A. 2018. Annual herring migration cycle: expanding acoustic array infrastructure. *Exxon Valdez* Oil Spill Long-Term Herring Research and Monitoring Program Final Report (*Exxon Valdez* Oil Spill Trustee Council Project 16160111-S), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

Exxon Valdez Oil Spill Restoration Project Final Reports

Final reports in this series cover restoration projects funded from FY 1993 to FY 2012, and also three projects that were funded in FY2015 (indicated by *)

93003

Sharr, S., J.E. Seeb, G.B. Bue, A. Craig, and G.D. Miller. 1994. Injury to salmon eggs and preemergent fry in Prince William Sound, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 93003), Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Cordova, Alaska. (NTIS No. PB95-966003)

93012/94255-2

Seeb, L.W., C. Habicht, W.D. Templin, J.W. Fetzner Jr., R.B. Gates, and J.E. Seeb. 1995. Genetic diversity of sockeye salmon (*Oncorhynchus nerka*) of Cook Inlet, Alaska, and its application to restoration of injured populations of the Kenai River, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 93012 and 94255-2), Alaska Department of Fish and Game, Division of Commercial Fisheries Management and Development, Genetics Laboratory, Anchorage, Alaska. (NTIS No. PB98-134042)

93017

Miraglia, R.A. 1995. Subsistence Restoration Project, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 93017), Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska. (NTIS No. PB95-966008)

93024

Willette, T.M., G.S. Carpenter, S.R. Carlson, and G.B. Kyle. 1995. Restoration of the Coghill Lake sockeye salmon stock, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 93024), Alaska Department of Fish and Game, Cordova, Alaska. (NTIS No. PB99-106973)

93033-1

Patten, S.M., Jr., R. Gustin, and T.W. Crowe. 2002. Restoration monitoring of harlequin ducks (*Histrionicus histrionicus*) in Prince William Sound and Afognak Island, Alaska, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 93033-1), Alaska Department of Fish and Game, Division of Wildlife Conservation, Anchorage, Alaska. (NTIS No. PB2003-102848)

93034

Sanger, G.A. and M.B. Cody. 1994. Survey of pigeon guillemot colonies in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 93034), U.S Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB96-194808)

93035

Andres, B.A. 1996. Effects of persistent shoreline oil on reproductive success, chick growth rates and foraging ecology of black oystercatchers, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 93035), U.S. Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB99-110173)

93038

Gibeaut, J.C. and E. Piper. 1997. Shoreline oiling assessment of the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 93038), Alaska Department of Environmental Conservation, Juneau, Alaska. (NTIS No. PB99-137192)

93042/94092

Dahlheim, M.E. and C.O. Matkin. 1994. Assessment of injuries and recovery monitoring of Prince William Sound killer whales using photo-identification techniques, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 93042/94092), U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Seattle, Washington. (NTIS No. PB96-194667)

93043-2

Bodkin, J.L. and M.S. Udevitz. 1996. 1993 Trial aerial survey of sea otters in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 93043-2), National Biological Service, Anchorage, Alaska. (NTIS No. PB96-194683)

93043-3

Udevitz, M.S., B.E. Ballachey, and D.L. Bruden. A population model for sea otters in western Prince William Sound, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 93043-3), National Biological Service, Anchorage, Alaska. (NTIS No. PB96-194691)

93045

Agler, B.A., P.E. Seiser, S.J. Kendall, and D.B. Irons. 1994. Marine bird and sea otter population abundance of Prince William Sound, Alaska: trends following the *T/V Exxon Valdez* oil spill, 1989-93, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 93045), U.S. Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB96-194873)

93047 (Subtidal Study 2A)

Jewett, S.C., and T.A. Dean, R.O. Smith, M. Stekoll, L.J. Haldorson, D.R. Laur, and L. McDonald. 1995. Effects of the *Exxon Valdez* oil spill on shallow subtidal communities in Prince William Sound, Alaska 1989-93, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 93047, Subtidal Study Number 2A), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska. (NTIS No. PB96-194865)

93047-1

O'Clair, C.E., J.W. Short, and S.D. Rice. 1996. Recovery of sediments in the lower intertidal and subtidal environment, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 93047-1), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska. (NTIS No. PB96-194832)

93047-2

Braddock, J.F. and Z. Richter. 1995. Microbiology of subtidal sediments: monitoring microbial populations, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 93047-2), University of Alaska Fairbanks, Fairbanks, Alaska. (NTIS No. PB96-194816)

93049

Roseneau, D.G., A.B. Kettle, and G.V. Byrd. 1995. Common murre restoration monitoring in the Barren Islands, Alaska, 1993, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 93049), U.S. Fish and Wildlife Service, Alaska Maritime National Wildlife Refuge, Homer, Alaska. (NTIS No. PB96-204334)

93051

Sundet, K., M.N. Kuwada, and J. Barnhart. 1994. Stream habitat assessment project: Prince William Sound and Lower Kenai Peninsula, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 93051), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska. (NTIS No. PB96-195029)

93051B

Kuletz, K.J., D.K. Marks, N.L. Naslund, N.G. Goodson, and M.B. Cody. 1994. Information needs for habitat protection: marbled murrelet habitat identification, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 93051B), U.S. Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB96-196886)

93051B - Forest Service Component

DeVelice, R.L., C. Hubbard, M. Potkin, T. Boucher, and D. Davidson. 1995. Characterization of upland habitat of the marbled murrelet in the *Exxon Valdez* oil spill area, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 93051B, Forest Service Component), USDA Forest Service, Chugach National Forest, Anchorage, Alaska. (NTIS No. PB96-194931)

93051-3

Burns, R.A., L.M. Pretash, and K.J. Kuletz. 1994. Pilot study on the capture and radio tagging of murrelets in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 93051-3), U.S. Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB2000-102847)

93065/94217

Menefee, W. and S. Hennig. 1995. Prince William Sound recreation project, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 93065/94217), Alaska Department of Natural Resources and U.S. Department of Agriculture, Chugach National Forest, Anchorage, Alaska. (NTIS No. PB2006-104368)

93067

Sharr, S., C.J. Peckham, D.G. Sharp, D.G. Evans, and B.G. Bue. 1995. Coded wire tag recoveries from pink salmon in Prince William Sound salmon fisheries, 1993, Exxon *Valdez* Oil Spill Restoration Project Final Report (Restoration Project 93067), Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Anchorage, Alaska. (NTIS No. PB96-196928)

93068/94137

Sharr, S., C.J. Peckham, D.G. Sharp, J.L. Smith, T.M. Willette, D.G. Evans, B.G. Bue, S. Gehlbach, and R.R. Riffe. 1996. Stock identification of chum, sockeye, chinook, and coho salmon, in Prince William Sound, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 93068 and 94137), Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Anchorage, Alaska. (NTIS No. PB98-115447)

94007-1

Bittner, J.E. and D.R. Reger. 1995. 1994 EVOS report, spill area site and collection plan, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 94007-1), Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation, Office of History and Archaeology, Anchorage, Alaska. (NTIS No. PB96-196910)

94039

Roseneau, D.G., A.B. Kettle, and G.V. Byrd. 1995. Common murre restoration monitoring in the Barren Islands, Alaska, 1994, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 94039), U.S. Fish and Wildlife Service, Alaska Maritime National Wildlife Refuge, Homer, Alaska. (NTIS No. PB2000-102402)

94043B2

Hodges, K. and K. Buckley. 1995. Rocky Creek cutthroat trout habitat enhancement, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 94043B2), U.S. Department of Agriculture, Forest Service, Cordova, Alaska. (NYIS No. PB99-106957)

94102

Kuletz, K.J., D.K. Marks, D.A. Flint, R. Burns, and L. Pretash. 1995. Marbled murrelet foraging patterns and a pilot productivity index for murrelets in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 94102), U.S. Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB98-154552)

94139B1

Wedemeyer, K. and D. Gillikin. 1995. In stream habitat and stock restoration for salmon, Otter Creek barrier bypass subproject, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 93139B1), USDA Forest Service, Anchorage, Alaska. (NTIS No. PB96-194774)

94139B2

Wedemeyer, K. and D. Gillikin. 1995. In stream habitat and stock restoration for salmon, Shrode Creek barrier bypass subproject, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 93139B2), USDA Forest Service, Anchorage, Alaska. (NTIS No. PB96-194766)

94159

Agler, B.A., S.J. Kendall, P.E. Seiser, and D.B. Irons. 1995. Winter marine bird and sea otter abundance of Prince William Sound, Alaska: trends following the *T/V Exxon Valdez* oil spill 1990-94, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 94159), U.S Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB96-194881)

94173

Hayes, D.L. 1995. Recovery monitoring of pigeon guillemot populations in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 94173), U.S Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB96-194790)

94266-1

Irvine, G.V., D.H. Mann, and J.H. Short. 1996. Geomorphic position, weathering, and possible biotic impacts of oil mousse persisting on a high energy coastline distant from the *Exxon Valdez* spill. *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 94266-1), U.S. Geological Survey, Anchorage, Alaska. (NTIS No. PB2002-104732)

94266b

Munson, D. 1996. Shoreline assessment and oil removal in Prince William Sound, Alaska. *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 94266b), Alaska Department of Environmental Conservation, Spill Prevention and Response, Anchorage, Alaska. (NTIS No. PB98-126501)

94279

Miraglia, R.A. and A.W. Chartrand. 1997. Subsistence restoration project: food safety, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 94279), Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska. (NTIS No. PB98-126493)

94320L

Olsen, J., H. Ferren, and C. Kerns. 1994. Prince William Sound system investigation: experimental manipulation, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 94320L), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska. (NTIS No. PB96-208434)

94428/95428

Fall, J.A. 1995. Subsistence restoration planning and implementation, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 94428/95428), Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska. (NTIS No. PB96-208426)

95007B

Yarborough, L.F. 1995. Site specific archaeological restoration at SEW-440 and SEW-488, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 95007B), Chugach National Forest, Anchorage, Alaska. (NTIS No. PB98-154545)

95021

Hatch, S.A., P.M. Meyers, D.M. Mulcahy, and D.C. Douglas. 1996. Seasonal movements and pelagic habitat use of murres and puffins determined by satellite telemetry, Exxon *Valdez* Oil Spill Restoration Project Final Report (Restoration Project 95021), National Biological Service, Anchorage, Alaska. (NTIS No. PB97-112726)

Braddock, J.F., J.E. Lindstrom, and S.F. Sugai. 1997. Hydrocarbon monitoring: integration of microbial and chemical sediment data, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 95026), University of Alaska Fairbanks, Fairbanks, Alaska. (Not available from NTIS)

95027

Gibeaut, J.C., E. Piper, and D. Munson. 1996. 1995 Kodiak shoreline oiling assessment of the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 95027), Alaska Department of Environmental Conservation, Juneau, Alaska. (NTIS No. PB98-126485)

95029

Bowman, T.D. and P.F. Schempf. 1996. Population survey of bald eagles in Prince William Sound, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 95029), U.S. Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB99-112237)

95031

Kuletz, K.J., S.J. Kendall, and D.A. Nigro. 1997. Relative abundance of adult and juvenile marbled murrelets in Prince William Sound, Alaska: developing a productivity index, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 95031), U.S. Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB99-146235)

95038

Warheit, K.I., C.S. Harrison, and G.J. Divoky, editors. 1997. *Exxon Valdez* oil spill seabird restoration workshop, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 95038), Technical Publication Number 1, Pacific Seabird Group, Seattle, Washington. (NTIS No. PB98-136864)

95041

Byrd, G.V., E.P. Bailey, and W.H. Stahl. 1995. Introduced predator removal from islands, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 95041), U.S. Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB97-155980)

95060

Parry, B.L. and S.W. Albert. 1998. Spruce bark beetle infestation impacts on injured fish and wildlife species, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 95060), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska. (NTIS No. PB2001-101286)

95074

Carls, M.G., S.W. Johnson, R.E. Thomas, and S.D. Rice. 1997. Health and reproductive implication of exposure of Pacific herring (*Clupea pallasi*) adults and eggs to weathered crude oil, and reproductive condition of herring stock in Prince William Sound six years after the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 95074), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska. (NTIS No. PB98-108566)

95086C

Highsmith, R.C., M.S. Stekoll, P.G. van Tamelen, S.M. Saupe, T.L. Rucker, L. Deysher, and A.J. Hooten. 2000. Herring Bay monitoring and restoration studies, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 95086C), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska. (NTIS No. PB2002-101225)

95089

Fries, C., M. Gorham, D. Mortenson, and K. Zeiner. 1997. Exxon Valdez Oil Spill research and restoration information project, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 95089), Alaska Department of Natural Resources, Anchorage, Alaska. (This CD-ROM is not available from NTIS.)

Babcock, M.M., P.M. Harris, M.G. Carls, C.C. Brodersen, and S.D. Rice. 1998. Mussel bed restoration and monitoring, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 95090), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska. (NTIS No. PB99-168882)

95106

Jewett, S.C. and T.A. Dean. 1997. Effects of the *Exxon Valdez* oil spill on eelgrass communities in Prince William Sound, Alaska, 1990-95, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 95106), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska. (NTIS No. PB98-115454)

95115

Prince William Sound Economic Development Council. 1996. Sound waste management plan, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 95115), Alaska Department of Environmental Conservation, Valdez, Alaska. (NTIS No. PB96-198551)

95121

Worthy, G.A.J. and T.S. Miculka. 1997. Proximate composition and fatty acid signatures of selected forage fish species in Prince William Sound, Alaska, Exxon *Valdez* Oil Spill Restoration Project Final Report (Restoration Project 95121), National Oceanic and Atmospheric Administration, Seattle, Washington. (NTIS No. PB98-134034)

95163D

Piatt, J.F., D.D. Roby, L. Henkel, and K. Neuman. 1997. Tufted puffins as samplers of forage fish, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 95163D), U.S. Geological Survey, Biological Resources Division, Anchorage, Alaska. (NTIS No. PB99-110405)

95266

Loeffler, R.M., E. Piper, and D. Munson. 1996. Workshop report: residual shoreline oiling, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 95266), Alaska Department of Environmental Conservation, Juneau, Alaska. (NTIS No. PB98-126477)

95279

Shemet, K. and R.A. Miraglia. 1999. Resource abnormalities study, Exxon *Valdez* Oil Spill Restoration Project Final Report (Restoration Project 95279), Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska. (NTIS No. PB2000-105784)

95285

O'Clair, C.E., J.W. Short, and S.D. Rice. 1996. Subtidal monitoring: recovery of sediments in the northern Gulf of Alaska, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 95285), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska. (NTIS No. PB98-108541)

95320Q

Bishop, M.A. and S.P. Green. 1998. Sound Ecosystem Assessment (SEA): Avian predation on herring spawn in Prince William Sound, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 95320Q), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska. (NTIS No. PB2000-105787)

95320Y

Scheel, D. and K.R. Hough. 1997. Salmon fry predation by seabirds near an Alaskan hatchery, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 95320Y), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska. (NTIS No. PB99-106981)

95505B

Olson, R.A. 1995. Use of aerial photograph, channel-type interpretations to predict habitat availability in small streams, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 95505B), USDA Forest Service, Chugach National Forest, Anchorage, Alaska. (NTIS No. PB96-194923)

96009D

Scheel, D., R. Dodge, T.L.S. Vincent, and K. Hough. 2002. Survey of octopuses in intertidal habitats, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 96009D), Prince William Sound Science Center, Cordova, Alaska.

96012A-2

Worthy, G.A.J. and A.G. Abend. 1997. Impact of killer whale predation on harbor seals in Prince William Sound: a preliminary assessment of diet using stable isotope and fatty acid signature analysis on blubber biopsies, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 96012A-2), National Oceanic and Atmospheric Administration, Seattle, Washington. (NTIS No. PB99-110199)

96048-BAA

Ruggerone, G.T. and D.E. Rogers. 1998. Historical analysis of sockeye salmon growth among populations affected by the *Exxon Valdez* oil spill and large spawning escapements, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 96048-BAA), Natural Resource Consultants, Seattle, Washington. (NTIS No. PB99-168841)

96154

Johnson, L. 1996. Comprehensive community plan for the restoration of archaeological resources in Prince William Sound and lower Cook Inlet, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 96154), Chugach Development Corporation, Anchorage, Alaska. (NTIS No. PB99-112286)

96159

Agler, B.A. and S.J. Kendall. 1997. Marine bird and sea otter population abundance of Prince William Sound, Alaska: trends following the *T/V Exxon Valdez* oil spill, 1989 – 96, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 96159), U.S. Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB99-110181)

96163P

Anderson, J.W. and J.M. Jones. 1997. Assessment of PAH contamination of populations of the forage fish, sand lance (*Ammodytes hexapterus*), inhabiting clean and oil-impacted sediments, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 96163P), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Office of Oil Spill Damage Assessment and Restoration, Juneau, Alaska. (NTIS No. PB98-136880)

96214

Lastufka-Taylor, F., J. Butzke, and W.E. Simeone. 1997. Alutiiq pride: a story of subsistence, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 96214), Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska. (Videotape. Not available at NTIS.)

96255-1

Waltemyer, D.L. and K.E. Tarbox. 1997. Use of hydroacoustic techniques to assess the abundance of salmon in the Central District of Upper Cook Inlet, 1995-96, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 96255-1), Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Soldotna, Alaska. (NTIS No. PB99-106940)

96255-2

Seeb, L.W., W.D. Templin, K.E. Tarbox, R.Z. Davis, and J.E. Seeb. 1997. Kenai River sockeye salmon restoration, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 96255-2), Alaska Department of Fish and Game, Division of Commercial Fisheries Management and Development, Anchorage, Alaska. (NTIS No. PB99-106932)

96258A-1

Edmundson, J.A., T.M. Willette, J.M. Edmundson, D.C. Schmidt, S.R. Carlson, B.G. Bue, and K.E. Tarbox. 2003. Sockeye salmon overescapement (Kenai River Component), *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 96258A-1), Alaska Department of Fish and Game, Division of Commercial Fisheries, Anchorage, Alaska. (NTIS No. PB2004-102220)

96258A-2

Swanton, C. O. 2002. Sockeye salmon overescapement (Kodiak Island component), *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 96258A-2), Alaska Department of Fish and Game, Division of Commercial Fisheries, Homer, Alaska. (NTIS No. PB2006-104372)

96259

Edmundson, J.A., G.B. Kyle, S.R. Carlson, and P.A. Shields. 1997. Trophic level responses to nutrient treatment of meromictic and glacially influenced Coghill Lake, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 96259), Alaska Department of Fish and Game, Division of Commercial Fisheries, Soldotna, Alaska. (NTIS No. PB99-151151)

97001

Fadely, B.S., J.M. Castellini, and M.S. Castellini. 1998. Recovery of harbor seals from EVOS: condition and health status, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 97001), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska. (NTIS No. PB2000-102970)

97115

Prince William Sound Economic Development Council. 1998. Sound waste management plan environmental operations and used oil management system, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 97115), Alaska Department of Environmental Conservation, Valdez, Alaska. (NTIS No. PB99-110215)

97139A1

Honnold, S.G. 2001. Little Waterfall Creek barrier bypass improvement: pink and coho salmon habitat enhancement, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 97139A1), Alaska Department of Fish and Game, Division of Commercial Fisheries, Kodiak, Alaska. (NTIS No. PB2003-102850)

97139C1

Hodges, K. 1998. Montague Island riparian rehabilitation, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 97139C1), USDA Forest Service, Cordova, Alaska. (NTIS No. PB2000-102401)

97161

Goatcher, B., D. Zwiefelhofer, R. Lanctot, S. Talbot, B. Pierson, D. Esler, and K. Scribner. 1998. Differentiation and interchange of harlequin duck populations within the North Pacific, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 97161), U.S. Fish and Wildlife Service, Lafayette, Louisiana. (NTIS No. PB99-168858)

97163C

Sturdevant, M.V., T.M. Willette, S.C. Jewett, E. Debevec, L.B. Hulbert, and A.L.J. Brase. 1999. Forage fish diet overlap, 1994-1996, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 97163C), National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska. (NTIS No. PB2000-100700)

97165

Seeb, J.E., S.E. Merkouris, L.W. Seeb, J.B. Olsen, P. Bentzen, and J.M. Wright. 1998. Genetic discrimination of Prince William Sound herring populations, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 97165), Alaska Department of Fish and Game, Genetics Laboratory, Anchorage, Alaska. (NTIS No. PB2001-100977)

Willette, T.M., G.S. Carpenter, K. Hyer, and J.A. Wilcock. 1999. Herring natal habitats, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 97166), Alaska Department of Fish and Game, Division of Commercial Fisheries, Cordova, Alaska. (NTIS No. PB2001-100968)

97186

Riffe, R.R. and D.G. Evans. 1998. Coded wire tag recoveries from pink salmon in Prince William Sound fisheries, 1994 to 1997, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 97186), Alaska Department of Fish and Game, Division of Commercial Fisheries, Cordova, Alaska. (NTIS No. PB2000-102929)

97191A-2

Seeb, J.E. and C. Habicht. 1999. Laboratory examination of oil-related embryo mortalities that persist in pink salmon populations in Prince William Sound, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 97191A-2, Alaska Department of Fish and Game, Genetics Laboratory, Anchorage, Alaska. (NTIS No. PB2000-105788)

97194

Murphy, M.L., R.A. Heintz, J.W. Short, M.L. Larsen, and S.D. Rice. 1998. Recovery of pink salmon spawning areas after the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 97194), U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska. (NTIS No. PB99-110207)

97230

Isaacs, J., D. Erikson, M. Stephl, K. Osowski, and K. Moss. 1998. Conceptual plan for the Valdez Duck Flats project, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 97230), Alaska Department of Natural Resources, Anchorage, Alaska. (Not available from NTIS due to large folded color pages.)

97251

Coggins, L.G., Jr. and N.H. Sagalkin. 1998. Akalura Lake sockeye salmon restoration, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 97251), Alaska Department of Fish and Game, Division of Commercial Fisheries, Kodiak, Alaska. (NTIS No. PB2001-100972)

97254

Edmundson, J.A., M. Dickson, and W.A. Bucher. 2001. Limnological and fishery investigation concerning sockeye salmon production in Delight and Desire Lakes, Exxon *Valdez* Oil Spill Restoration Project Final Report (Restoration Project 97254), Alaska Department of Fish and Game, Division of Commercial Fisheries, Soldotna, Alaska. (NTIS No. PB2003-103641)

97302

Schelske, M., K. Hodges, and D.E. Schmid. 1998. Prince William Sound cutthroat trout, Dolly Varden char inventory, Exxon *Valdez* Oil Spill Restoration Project Final Report (Restoration Project 97302), USDA Forest Service, Cordova, Alaska. (NTIS No. PB2001-103006)

97304

Montgomery Watson. 1998. Kodiak Island Borough master plan for waste management, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 97304), Kodiak Island Borough, Kodiak, Alaska. (NTIS No. PB99-110165)

97427

Rosenberg, D.H. and M.J. Petrula. 1998. Status of harlequin ducks in Prince William Sound, Alaska after the *Exxon Valdez* oil spill, 1995-1997, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 97427), Alaska Department of Fish and Game, Division of Commercial Fisheries, Anchorage, Alaska. (NTIS No. PB2000-102976)

98043B

Gillikin, D. 2000. Cutthroat trout and Dolly Varden rehabilitation in Western Prince William Sound, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 98043B), U.S. Forest Service, Glacier Ranger District, Girdwood, Alaska. (NTIS No. PB2003-107061)

98076

Wertheimer, A.C., R.A. Heintz, J.F. Thedinga, J.M. Maselko, A.G. Celewycz, R.F. Bradshaw, and S.D. Rice. 1999. Effects of oiled incubation substrate on survival and straying of wild pink salmon, Exxon *Valdez* Oil Spill Restoration Project Final Report (Restoration Project 98076), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska. (NTIS No. PB2001-108560)

98142

Day, R.H. and D.A. Nigro. 1999. Status and ecology of Kittlitz's murrelet in Prince William Sound, 1996-1998, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 98142), ABR, Inc., Fairbanks, Alaska. (NTIS No. PB2000-102975)

98145

Currens, K.P., K.E. Griswold, and G.H. Reeves. 2003. Relations between Dolly Varden populations and between coastal cutthroat trout populations in Prince William Sound, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 98145), USDA Forest Service, Pacific Northwest Research Station, Corvallis, Oregon. (NTIS No. PB2004-104992)

98149

Reger, D. and D. Corbett. 1999. Archaeological site stewardship in the *Exxon Valdez* oil spill area, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 98149), Alaska Department of Natural Resources, Anchorage, Alaska. (NTIS No. PB2000-105786)

98162

Kocan, R.M., G.D. Marty, and C.J. Kennedy. 1999. Investigations of disease factors affecting declines of Pacific herring populations in Prince William Sound, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 98162), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska. (NTIS No. PB2001-100976)

98163N

Roman, M.D., D.D. Roby, J.F. Piatt, and A. Kitaysky. 2000. Effects of diet on growth and development of nestling seabirds, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 98163N), USGS - Oregon Cooperative Fish and Wildlife Research Unit, Oregon State University, Corvallis, Oregon. (NTIS No. PB2001-102736)

98170

Schell, D.M. and A.C. Hirons. 1999. Isotope ratio studies of marine mammals in Prince William Sound, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 98170), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska. (NTIS No. PB2001-100971)

98191A-1

Craig, A.K., T.M. Willette, D.G. Evans, and B.G. Bue. 2002. Injury to pink salmon embryos in Prince William Sound field monitoring, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 98191A-1), Alaska Department of Fish and Game, Division of Commercial Fisheries, Cordova, Soldotna, and Anchorage, Alaska. (NTIS No. PB2003-102846)

98220

Hodges, K. and D.E. Schmid. 1999. Eastern Prince William Sound wildstock salmon habitat restoration, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 98220), Alaska Department of Fish and Game, Division of Wildlife Conservation, Anchorage, Alaska. (NTIS No. PB2000-101759)

Fall, J.A., V. Vanek, M. Riedel, and K. Wynne. 1999. Community-based harbor seal management and biological sampling, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 98244), Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska. (NTIS No. PB2000-102930)

98274

Lastufka-Taylor, F., J. Butzke, and W.E. Simeone. 1999. Changing tides in Tatitlek, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 98274), Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska. (Videotape. Not available from NTIS)

98286

Native Village of Eyak Traditional Council. 2001. Native Village of Eyak youth/elders conference on subsistence, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 98286), U.S. Department of Interior, Bureau of Indian Affairs, Anchorage, Alaska. (NTIS No. PB2002-107439)

98289

Murphy, S.M. and T.J. Mabee. 1999. Status of black oystercatchers in Prince William Sound after the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 98289), ABR, Inc., Fairbanks, Alaska. (NTIS No. PB2001-101725)

98311

Kline, T.C., Jr. 1999. Pacific herring productivity dependencies in the Prince William Sound ecosystem determined with natural stable isotope tracers, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 98311), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska. (NTIS No. PB2002-101223)

98320

Cooney, R.T. 1999. Sound Ecosystem Assessment (SEA): An integrated science plan for the restoration of injured species in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 98320), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska. (NTIS No. PB2003-102844)

99007A

Reger, D., D. Corbett, A. Steffian, P. Saltonstall, T. Birkedal, and L. Yarborough. 2000. Archaeological index site monitoring: final report, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 99007A), Alaska Department of Natural Resources, Anchorage, Alaska. (NTIS No. PB2002-103563)

99025

Holland-Bartels, L.E., editor. 2002. Mechanisms of impact and potential recovery of nearshore vertebrate predators following the 1989 *Exxon Valdez* oil spill, volume 1, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 99025), U.S Geological Survey, Alaska Biological Science Center, Anchorage, Alaska. (NTIS No. PB2004-100060)

99025

Holland-Bartels, L.E., editor. 2002. Mechanisms of impact and potential recovery of nearshore vertebrate predators following the 1989 *Exxon Valdez* oil spill, volume 2 - appendices, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 99025), U.S Geological Survey, Alaska Biological Science Center, Anchorage, Alaska. (NTIS No. PB2004-100076)

99131

Brooks, K.M., J. Agosti, J. Hetrick, and D. Daisy. 2001. Clam restoration project, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 99131), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska. (NTIS No. PB2003-102849)

Roseneau, D.G., A.B. Kettle, and G.V. Byrd. 2000. Common murre population monitoring at the Barren Islands, Alaska, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 99144), U.S. Fish and Wildlife Service, Alaska Maritime National Wildlife Refuge, Homer, Alaska. (NTIS No. PB2001-104548)

99180

Weiner, A. 2000. Kenai River habitat restoration and recreation enhancement project, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 99180), Alaska Department of Natural Resources, Anchorage, Alaska. (NTIS No. PB2004-100053)

99188

Joyce, T.L. and D.G. Evans. 1999. Otolith marking of pink salmon in Prince William Sound salmon hatcheries, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 99188), Alaska Department of Fish and Game, Division of Commercial Fisheries, Cordova and Anchorage, Alaska. (NTIS No. PB2003-102847)

99304

Stevens, G. 2004. Kodiak Island Borough master waste management plan, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 99304), Kodiak Island Borough, Kodiak, Alaska. (NTIS No. PB2006-104363)

99306

Robards, M.D. and J.F. Piatt. 2000. Ecology and demographics of Pacific sand lance, *Ammodytes hexapterus* Pallus, in Lower Cook Inlet, Alaska, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 99306), U.S. Geological Survey, Alaska Science Center, Anchorage, Alaska. (NTIS No. PB2004-102223)

99314

Erikson, D.E., J.D. Isaacs, K.P. Morris, and P.L. Butler. 2000. Homer Mariner Park habitat restoration project, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 99314), URS Dames and Moore, Anchorage, Alaska. (NTIS No. PB2000-107414)

99328

Carls. M.G., G.D. Marty, and J.E. Hose. 2001. Synthesis of the toxicological and epidemiological impacts of the *Exxon Valdez* oil spill on Pacific herring in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 99328), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska. (NTIS No. PB2003-100050)

99330-1

Okey, T.A., and D. Pauly, (eds.). 1999. Trophic mass-balance model of Alaska's Prince William Sound ecosystem, for the post-spill period 1994-1996, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 99330-1), Fisheries Centre, University of British Columbia, Vancouver, Canada. (NTIS No. PB2002-101747)

99339

Murphy, K.S., L.H. Suring, and A. Iliff. 2004. Western Prince William Sound human use and wildlife disturbance model, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 99339), USDA Forest Service, Chugach National Forest, Anchorage, Alaska. (NTIS No. PB2005-101217)

99346

Robards, M.D., M.F. Wilson, R.H. Armstrong, and J.F. Piatt, (eds.). 1999. Sand lance: a review of biology and predator relations and annotated bibliography, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 99346), Research Paper PNW-RP-521, U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station, Portland, Oregon. (NTIS No. PB2000-100605)

Ben-David, M., R.T. Bowyer, and L.K. Duffy. 1999. Responses of river otters to oil contamination: a controlled study of biological stress markers, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 99348), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska. (NTIS No. PB2002-101226)

99368 (*Three products were produced in lieu of a written final report.*)

National Oceanic and Atmospheric Administration. 2000. Sensitivity of coastal environments and wildlife to spilled oil, Prince William Sound, produced with support from *Exxon Valdez* Oil Spill Restoration Project 99368, National Oceanic and Atmospheric Administration, National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division; U.S. Coast Guard; Prince William Sound Regional Citizens' Advisory Council; Oil Spill Recovery Institute, Cordova, Alaska. (This atlas is not available through NTIS.)

99368 (*Three products were produced in lieu of a written final report.*)

National Oceanic and Atmospheric Administration, National Ocean Service, Office of Response and Restoration. 2001. Environmental Sensitivity Index Atlas, from *Exxon Valdez* Oil Spill Restoration Project 99368, National Oceanic and Atmospheric Administration, National Ocean Service, Office of Response and Restoration, Seattle, Washington. (This 2 volume CD-ROM is not available through NTIS.)

99368 (*Three products were produced in lieu of a written final report.*)

National Oceanic and Atmospheric Administration, National Ocean Service, Office of Response and Restoration. 2001. Prince William Sound, Alaska: Environmentally sensitive areas: Spring, summer, fall and winter, from *Exxon Valdez* Oil Spill Restoration Project 99368, National Oceanic and Atmospheric Administration, National Ocean Service, Office of Response and Restoration, Seattle, Washington. (This set of 4 poster-sized maps not available through NTIS.)

99379

Jewett, S.C., T.A. Dean, B.R. Woodin, M.K. Hoberg, and J.J. Stegeman. 2000. Exposure to hydrocarbons ten years after the *Exxon Valdez* oil spill: evidence from cytochrome P4501A expression and biliary FACs in nearshore demersal fish, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 99379), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska. (NTIS No. PB2002-101224)

99381

Bishop, M.A. 1999. Status of seabird colonies in Northeast Prince William Sound, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 99381), Prince William Sound Science Center, Cordova, Alaska. (NTIS No. PB2002-100452)

99434

O'Meara, M.S. 2000. East Amatuli Island remote video link project, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 99434), Pratt Museum/Homer Society of Natural History, Homer, Alaska. (NTIS No. PB2002-106707)

99471

Fall, J.A., and C.J. Utermohle. 1999. Subsistence harvests and uses in eight communities ten years after the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 99471), Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska. (NTIS No. PB2002-101227)

00090

Carls, M.G. and P.M. Harris. 2004. Monitoring of oiled mussel beds in Prince William Sound and the Gulf of Alaska, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 00090), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska. (NTIS No. PB2006-104452)

00169

Friesen, V.L. and J.F. Piatt. 2003. A genetic study to aid in restoration of murres, guillemots and murrelets to the Gulf of Alaska, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 00169), Alaska Biological Sciences Center, U.S. Geological Survey, Anchorage, Alaska. (NTIS No. PB2006-104381)

Seaman, G.A. 2001. Kachemak Bay ecological characterization, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 00278), Alaska Department of Fish and Game, Kachemak Bay Research Reserve, Homer, Alaska. (This CD-ROM is not available through NTIS.)

00287

Day, R.H. and A.K. Prichard. 2004. Biology of wintering marine birds and mammals in the northern Gulf of Alaska, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 00287), ABR Inc., Environmental Research and Services, Fairbanks, Alaska. (NTIS No. PB2005-101898)

00341

Castellini, M.S., J.M. Castellini, and S.J. Trumble. 2002. Harbor seal recovery. Phase II: controlled studies of health and diet, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 00341), University of Alaska Fairbanks, School of Ocean Sciences, Fairbanks, Alaska. (NTIS No. PB2006-104371)

00347

Heintz, R.A. and M.L. Larsen. 2002. Fatty acid profile and lipid class analysis for estimating diet composition and quality at different trophic levels, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 00347). National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Juneau, Alaska. (NTIS No. PB2012-104692)

00366

Otis, E.O. and M. Dickson. 2002. Improved salmon escapement enumeration using remote video and time-lapse recording technology, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 00366), Alaska Department of Fish and Game, Division of Commercial Fisheries, Homer, Alaska. (NTIS No. PB2003-102845)

00374

Norcross, B.L. and M. Frandsen. 2001. Coordination and planning for herring research, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 00374), Institute of Marine Science, University of Alaska Fairbanks, Fairbanks, Alaska. (NTIS No. PB2012-104692)

00389

Wang, J. and M. Jin. 2002. 3-D Ocean state simulations for ecosystem applications from 1995-1998 in Prince William Sound, Alaska. *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 00389), Chugach Development Corporation, Anchorage, Alaska. (NTIS No. PB2003-100049)

00454

Carls, M.G., R.A. Heintz, and S.D. Rice. 2003. Have wild pink salmon and their habitat recovered from persistent *Exxon Valdez* oil contamination? *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 00454), National Ocean and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska. (NTIS No. PB2007-102218)

00459

Irvine, G.A., D.H. Mann, and J.W. Short. 2002. Residual oiling of armored beaches and mussel beds in the Gulf of Alaska, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 00459), USGS - Biological Science Office, Alaska Science Center, Anchorage, Alaska. (NTIS No. PB2004-102224)

00466

Esler, D. 2000. Recovery status of Barrow's goldeneyes, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 00466), U.S. Geological Survey, Alaska Biological Science Center, Anchorage, Alaska. (NTIS No. PB2002-104731)

Anderson, P.J., B.A. Johnson, and J.E. Blackburn. 2003. Statistically based sampling strategies for Gulf of Alaska ecosystem trawl survey monitoring, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 00493), U.S. National Marine Fisheries Service, Kodiak, Alaska. (NTIS No. PB2006-107735)

00509

Adkinson, M.D., T.J. Quinn II, and R.J. Small. 2001. Evaluation of Alaska harbor seal (*Phoca vitulina*) population surveys: a simulation study, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 00509), Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau, Alaska. (NTIS No. PB2006-104362)

00516

Day, R.H., A.K. Prichard, and D.A. Nigro. 2002. At-sea ecological segregation and overlap of Brachyramphus murrelets in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 00516), ABR, Inc., Fairbanks, Alaska. (NTIS No. PB2003-103642)

00530

See, M.G. 2001. Lessons learned: evaluating scientific sampling of effects from the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 00530), Alaska Department of Environmental Conservation, Anchorage, Alaska. (NTIS No. PB2007-100082)

00567

Hill, S., M.G. See, D.G. Burrows, J.L. Bolton, and M.M. Krahn. 2001. Monitoring environmental contaminants in the Northern Gulf of Alaska: workshop and literature compilation, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 00567), Institute of Marine Science, University of Alaska Fairbanks, Fairbanks, Alaska. (NTIS No. PB2006-104453)

01064

Frost, K.J., L.F. Lowry, J.M. Ver Hoef, S.J. Iverson, and M.A. Simpkins. 2005. Monitoring, habitat use, and trophic interactions of harbor seals in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 01064), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska. (not available at NTIS)

01144

Roseneau, D.G. and G.V. Byrd. 2002. Common murre population monitoring at the Chiswell Islands, Alaska, 1001. *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 01144), U.S. Fish and Wildlife Service, Alaska, Maritime National Wildlife Refuge, Homer, Alaska. (NTIS No. PB2005-100584)

01163M

Piatt, J.F., editor. 2002. Response of seabirds to fluctuations in forage fish density, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 01163M), and Minerals Management Service (Alaska OCS Study MMS 2002-068), Alaska Science Center, U.S. Geological Survey, Anchorage, Alaska. (NTIS No. PB2005-101216)

01327

Roby, D. D. and A.K. Hovey. 2002. Pigeon guillemot restoration research at the Alaska SeaLife Center, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 01327), USUS – Oregon Cooperative Fish and Wildlife Research Unit, Department of Fisheries and Wildlife, Oregon State University, Corvallis, Oregon. (NTIS No. PB2007-100081)

01391

Kunibe, R., C. Fries, K. Zeiner, J. Hock, G. Kellogg, L. Patrick, and W. Samuels. 2001. Cook Inlet Information Monitoring and Management System, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 01391), Alaska Department of Natural Resources, Office of the Commissioner, Anchorage, Alaska. (NTIS No. PB2002-103564)

Kline, T.C., Jr. and S. Baumann. 2002. Prince William Sound webs: structure and change, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 01393), Prince William Sound Science Center, Cordova, Alaska. (NTIS No. PB2006-104464)

01441

Davis, R.W., A.L. Fuson, L.K. Polasek, R.R. Watson, T.C. Adams, D.F. Cowan, S.B. Kanatous, and T.A. Miller. 2002. Harbor seal recovery. Phase III: effects of diet on lipid metabolism and health, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 01441), Department of Marine Biology, Texas A&M University, Galveston, Texas. (NTIS No. PB2006-104369)

01452

Thorne, R.E. and G.L. Thomas. 2002. Assessing prey and competitor/predators of pink salmon fry, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 01452), Prince William Sound Science Center, Cordova, Alaska. (NTIS No. PB2007-102208)

01468

Thomas, G.L., J. Kirsch, and R.E. Thorne. 2001. *Ex-situ* target strength measurements of Pacific herring, *Clupea pallasi*, and Pacific sand lance, *Ammodytes hexapterus*, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 01468), Prince William Sound Science Center, Cordova, Alaska. (NTIS No. PB2006-104449)

01478

Seitz, A., D. Wilson, and J.L. Nielsen. 2002. Testing pop-up satellite tags as a tool for identifying critical habitat for the Pacific halibut (*Hippoglossus stenolepis*), *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 01478), U.S. Geological Survey, Alaska Biological Science Center, Anchorage, Alaska. (NTIS No. PB2003-107071)

01481

Hartwell, K. 2002. Our Alutiiq journey. *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 01481), Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska. (Videotape. Not available at NTIS.)

01492

Thedinga, J.F., M.G. Carls, J.M. Maselko, R.A. Heintz, R.E. Thomas, and S.D. Rice. 2003. Shock resistance and observer classification of pink salmon eggs, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 01492), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska. (NTIS No. PB2006-104465)

01534

Ballachey, B.E., O.W. Snyder, and T. Kondratyuk. 2003. Comparison of cytochrome P450 1A induction in blood and liver cells of sea otters, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 01534), U.S. Geological Survey, Alaska Science Center, Anchorage, Alaska. (NTIS No. PB2006-101700)

01555

Lanctot, R.B., S.A. Hatch, V.A. Gill, and M. Eens. 2001. Are corticosterone levels a good indicator of food availability and reproductive performance in a kittiwake colony? *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 01555), U.S. Geological Survey, Anchorage, Alaska. (NTIS No. PB2006-104450)

01599

Short, J.W., J. Kolak, J.R. Payne, G.K. Van Kooten. 2004. Evaluation of Yakataga oil seeps as regional background hydrocarbon sources in benthic sediments in the *Exxon Valdez* spill area, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 01599), National Ocean and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska. (NTIS No. PB2007-100080)

Short, J.W. 2004. Pristane in the neritic ecosystem of the Northern Gulf of Alaska, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 02195), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Alaska Fisheries Science Center, Auke Bay Laboratory, Juneau, Alaska. (NTIS No. PB2006-107249)

02195

Short, J.W. and P. Harris. 2005. Pristane monitoring in mussels. *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 02195), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Alaska Fisheries Science Center, Auke Bay Laboratory, Juneau, Alaska. (NTIS No. PB2012-106915)

02247

Hutchinson-Scarbrough, L.B. and J.N. McCullough. 2003. Kametolook River coho salmon subsistence project, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 02247), Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska, and Division of Commercial Fisheries, Kodiak, Alaska. (NTIS No. PB2006-106915)

02360

National Research Council. 2002. A Century of Ecosystem Science: Planning Long-Term Research in the Gulf of Alaska, (Restoration Project 02360) National Academy Press, Washington, D.C. (NTIS No. PB2003-100719)

02396

Hulbert, L.B. and S.D. Rice. 2002. Salmon shark, *Lamna ditropis*, movements, diet, and abundance in Eastern North Pacific Ocean and Prince William Sound, Alaska, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 02396), NOAA Fisheries, Auke Bay Laboratory, Juneau, Alaska. (NTIS No. PB2004-100641)

02401

O'Clair, C.E., M. Lindeberg and C. Hughey. 2002. Assessment of spot shrimp abundance in Prince William Sound a decade after the Exxon Valdez oil spill, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 02401), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska and Valdez Native Tribe, Valdez, Alaska. (NTIS No. PB2012-104691)

02404

Nielsen, J.L., P. Richards, D. Wilson, C.E. Zimmerman, and T. Tingey. 2004. Testing electronic archival tags in Pacific salmon, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 02404), U.S. Geological Survey, Alaska Science Center, Anchorage, Alaska. (NTIS No. PB2006-107752)

02538

Otis, E.O. and R. Heintz. 2003. Evaluation of two methods to discriminate Pacific herring (*Clupea pallasi*) stocks along the Northern Gulf of Alaska, Exxon *Valdez* Oil Spill Restoration Project Final Report (Restoration Project 02538), Alaska Department of Fish and Game, Division of Commercial Fisheries, Homer, Alaska. (NTIS No. PB2006-101720)

02552

Vaughan, S.L. and S.M. Gay, III. Exchange between Prince William Sound and the Gulf of Alaska, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 02552), Prince William Sound Science Center, Cordova, Alaska. (NTIS No. PB2006-104365)

02593

Ben-David, M., G.M. Blundell, J.W. Kern, J.A. Maier, E.D. Brown, and S.C. Jewett. 2003. Communication in river otters: creation of variable resource sheds for terrestrial communities, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 02593), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska. (Not available at NTIS.)

Foster, N.R. and M.K. Hoberg. 2003. Permanent archiving of specimens collected in nearshore habitats, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 02608), University of Alaska, Fairbanks, Alaska. . (NTIS No. PB2003-107062)

02612

Johannes, M.R.S., A. Mazumder, J.A. Edmundson, and W.J. Hauser. 2002. Detecting and understanding marine-terrestrial linkages in a developing watershed: nutrient cycling in the Kenai River Watershed, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 02612), University of Victoria, Victoria, British Columbia, and Alaska Department of Fish and Game, Division of Commercial Fisheries, Soldotna and Anchorage, Alaska. (NTIS No. PB2006-101719)

02622

Whitney, J. 2003. Environmental sensitivity index atlas: Cook Inlet, Alaska.

(Restoration Project 02622), National Oceanic and Atmospheric Administration, Hazardous Materials Response Division, Office of Response and Restoration, National Ocean Service, Seattle, Washington. (This CD of ESI maps is the final product for Project 02622. It is not available through NTIS.)

02667

Mauger, S. 2003. Effectiveness of Citizens' Environmental Monitoring Program, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 02667), Cook Inlet Keeper, Homer, Alaska. (NTIS No. PB2004-102955)

02668

Cooper, J. 2003. Developing an interactive water quality and habitat database and making it accessible on the web, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project02668), Cook Inlet Keeper, Homer, Alaska. (NTIS No. PB2006-104367)

02671

Stram, D.L. and G.C. Schoch. 2002. Coordinating volunteer vessels of opportunity to collect oceanographic data in Kachemak Bay and Lower Cook Inlet, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 02671), Kachemak Bay Research Reserve, Homer, Alaska. (NTIS No. PB2006-108274)

03012

Matkin, C.O., G. Ellis, L. Barrett Lennard, H. Yurk, E. Saulitis, D. Scheel, P. Olesiuk, and G. Yltialo. 2003. Photographic and acoustic monitoring of killer whales in Prince William Sound and Kenai Fjords, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 03012), North Gulf Oceanic Society, Homer, Alaska. [Note: This project is a restoration project funded during the first year of GEM and the project number may also appear as 030012.] (NTIS No. PB2004-102222)

03423

Bodkin, J.L., B.E. Ballachey, D. Esler, and T. Dean. 2003. Patterns and processes of population change in selected nearshore vertebrate predators, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 03423), U.S. Geological Survey, Alaska Science Center, Anchorage, Alaska.

[Note: This project is a restoration project funded during the first year of GEM and the project number may also appear as 030423.] (Not available from NTIS.)

03558

Atkinson, S., A. Hoover-Miller, C. Oki, and D. O'Neil. 2004. Harbor seal recovery: application of new technologies for monitoring health, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 03558), Alaska Department of Fish and Game, Anchorage, Alaska. [Note: This project is a restoration project funded during the first year of GEM and the project number may also appear as 030558.] (NTIS No. PB2006-104364)

Allendorf, F.W., K.L. Knudsen, K.R. Linder, P. Spruell, and T.A. Tyburczy. 2006. Construction of a linkage map for the pink salmon genome, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 030190), University of Victoria, Victoria, British Columbia, and Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska. (NTIS No. PB2007-109655)

030423

Bodkin, J.L, B.E. Ballachey, D. Esler, and T. Dean. 2003. Patterns and processes of population change in selected nearshore vertebrate predators, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 030423), U.S. Geological Survey, Alaska Science Center, Anchorage, Alaska. (NTIS No. PB2007-100083)

030585 Part II

Ballachey, B.E., J.L. Bodkin, and P.W. Snyder. 2003. Lingering oil: bioavailability and effects of prey and predators, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 030585 Part II), U.S. Geological Survey, Alaska Science Center, Anchorage, Alaska. (NTIS No. PB2007-102209)

030684

Johannes, M.R.S., J.A. Edmundson and A. Mazumder. 2004. Towards

sustainable management in the Kenai River watershed: linking human and resource development with nutrient and energy pathways across terrestrial, aquatic and marine systems, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 030684), University of Victoria, Victoria, British Columbia, Canada; and Alaska Department of Fish and Game, Division of Commercial Fisheries, Anchorage, Alaska. (NTIS No. PB2006-105568)

040159 / 050751

McKnight, A., K.M. Sullivan, D.B. Irons, S.W. Stephensen, and S. Howlin. 2006. Marine bird and sea otter population abundance of Prince William Sound, Alaska: trends following the T/V Exxon Valdez oil spill, 1989-2005, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 040159 / 050751), U.S. Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB2008-102802)

040407

Rosenberg, D.H., M.J. Petrula, D.D. Hill, and A.M. Christ. 2005. Harlequin dusk population dynamics: measuring recovery from the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 040407), Alaska Department of Fish and Game, Division of Wildlife Conservation, Anchorage, Alaska. (NTIS No. PB2010-100127)

040471

Fall, J.A., editor. 2006. Update on the status of subsistence uses in *Exxon Valdez* oil spill area communities, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 040471), Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska. (NTIS No. PB2007-108165)

040574

Lees, D.C. and W.B. Driskell. 2007. Assessment of bi-valve recovery on treated mixed-soft beaches in Prince William Sound, Alaska. *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 040574), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Office of Oil Spill Damage and Restoration, Auke Bay, Alaska. (NTIS No. PB2010-100130)

040600

Spies, R. B., editor. 2007. Long-term ecological change in the northern Gulf of Alaska. Elsevier, Amsterdam. 589 pages. (not available at NTIS)

Irvine, G.V., D.H. Mann, and J.W. Short. 2007. Monitoring lingering oil from the *Exxon Valdez* Spill in Gulf of Alaska armored beaches and mussel beds sixteen years post-spill, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 040708), USGS – Biological Office, Alaska Science Center, Anchorage, Alaska. (NTIS No. PB2008-102803)

040721

Saupe, S.M. and J. Harper. 2005. Alaska coastal habitat web site, Exxon

Valdez Oil Spill Restoration Project Final Report (Restoration Project 040721), Cook Inlet Regional Citizens' Advisory Council, Kenai, Alaska, and Coastal and Ocean Sciences, Inc., Sidney, British Columbia, Canada. (NTIS No. PB2006-104361)

040724

Payne, J.R., W.B. Driskell, J.W. Short, and M.L. Larsen. 2006. 2004-2005 LTEMP oil monitoring report, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 040724), Prince William Sound Regional Citizen's Advisory Council, Anchorage, Alaska. (NTIS No. PB2012-104734)

040772

Day, B. 2006. Ecological effects to benthic infauna from lingering oil 15 years after the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 040772), Integral Consulting Inc., Mercer Island, Washington. (NTIS No. PB2007-100079)

040776

Integral Consulting Inc. 2006. 2005 Assessment of lingering oil and resource injuries from the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 040776), Integral Consulting Inc., Mercer Island, Washington. (NTIS No. PB2007-100084)

050763

Payne, J.R., W.B. Driskell, J.W. Short, and M.L. Larsen. 2008. Final 2005-2006 LTEMP oil monitoring report, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 050763), Prince William Sound Regional Citizen's Advisory Council, Anchorage, Alaska. (NTIS No. PB2012-104735)

050764

Saupe, S., J.N. Harney, J.R. Harper and M.C. Morris. 2007. *ShoreZone* coastal habitat mapping data summary report – Kodiak Archipelago. *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 050764), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Juneau, Alaska. (NTIS No. PB2012-104739)

050777

Esler, D. 2008. Quantifying temporal variation in Harlequin duck cytochrome P4501A induction. *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 050777), Centre for Wildlife Ecology, Simon Fraser University, Delta, British Columbia, Canada. (NTIS No. PB2010-100129)

050778

Michel, J., Z. Nixon, and L. Cotsapas. 2006. Evaluation of oil remediation technologies for lingering oil from the *Exxon Valdez* oil spill in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 050778), National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Juneau, Alaska. (NTIS No. PB2007-102219)

050794

Rice, S.D. and M.G. Carls. 2007. Prince William Sound herring: an updated synthesis of population declines and lack of recovery, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 050794), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratories, Juneau, Alaska. (NTIS No. PB2010-100128)

Bickford, N. and S. Kelly. 2007. Using otolith chemical analysis to determine larval drift of Prince William Sound herring (*Clupea pallasi*), *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 060782), Institute of Marine Science and School of Fisheries and Ocean Science, University of Alaska , Fairbanks, Alaska. (NTIS No. PB2012-104738)

060783

Integral Consulting Inc. 2006. Information synthesis and recovery recommendations for resources and services injured by the Exxon Valdez oil spill, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 060783), Integral Consulting Inc., Mercer Island, Washington. (NTIS No. PB2007-108166)

070624

Batten, S.D. and D.W. Welch. 2008. Acquisition of continuous plankton recorder data. *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 070624), Sir Alister Hardy Foundation for Ocean Science, United Kingdom and Kintama Research Corporation, Nanaimo British Columbia, Canada. (NTIS No. PB2010-100131)

070750

Bodkin, J. L., T. A. Dean, H. A. Coletti, and K. A. Kloecker. 2009. Nearshore data management and monitoring, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 070750), U.S. Geological Survey, Alaska Science Center, Anchorage, Alaska.

070769

Otis, E.O., R. Heintz, and J. Maselko. 2010. Investigation of Pacific herring (Clupea pallasii) stock structure in Alaska using otolith microchemistry and heart tissue fatty acid composition. *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 070769), Alaska Department of Fish and Game, Division of Commercial Fisheries, Homer, Alaska. (NTIS No. PB2012-104737)

070801

Michel, J., Z. Nixon, M.O. Hayes, J. Short, G. Irvine, D. Betenbaugh, C. Boring, and D. Mann. 2010. Modeling the distribution of subsurface oil from the *Exxon Valdez* oil spill. *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 070801), National Oceanic and Atmospheric Administration, Juneau, Alaska. (NTIS No. PB2012-104736)

070808 and 070808A

Ballachey, B.E., D.H. Monson, K.S. Kloecker, G.G. Esslinger, F.C. Mohr, T.P. Lipscomb, M.J. Murray, and S. Howlin. 2014. Synthesis of Nearshore recovery following the 1989 Exxon Valdez oil spill: sea otter liver pathology and survival in Western Prince William Sound, 2001-2008, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 070808 and 070808A), U.S. Geological Survey, Alaska Science Center, Anchorage, Alaska.

070808/070808A/090808

Bodkin, J.L., B.E. Ballachey, and G.G. Esslinger. 2011. Synthesis of nearshore recovery following the 1989 *Exxon Valdez* oil spill: trends in sea otter population abundance in Western Prince William Sound. *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 070808, 070808A, 090808), U.S. Geological Survey, Alaska Science Center, Anchorage, Alaska. (NTIS No. PB2012-107424)

070811

Kline, T.C. Jr., and R.W. Campbell. 2010. Prince William Sound herring forage contingency, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 070811), Prince William Sound Science Center, Cordova, Alaska. (NTIS No. PB2012-106700)

Esler, D. and S.A. Iverson. 2010. Evaluating harlequin duck population recovery: CYP1A monitoring and a demographic population model. *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 070816), Centre for Wildlife Ecology, Simon Fraser University, Delta, British Columbia, Canada. (NTIS No. PB2012-106699)

070819

Hershberger, P.K., Elliott, D., Emmenegger, E., Hansen, J., Kocan, R., Kurath, G., LaPatra, S., Winton, J. 2011. Prince William Sound Herring Disease Program, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration project 070819), U.S. Geological Survey, Western Fisheries Research Center, Marrowstone Marine Field Station. http://www.evostc.state.ak.us/index.cfm?FA=searchResults.projectInfo&Project_ID=1585

070821

Linley, T., M. Betka, and H. Ferren. 2008. Development of culture technology to support restoration of herring in Prince William Sound: use of in vitro studies to validate and optimize restoration actions, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 070821), MariCal, Inc., Portland, Maine and Alaska SeaLife Center, Seward, Alaska. (NTIS No. PB2010-100135)

070830

Thorne, R.E. 2010. Trends in adult and juvenile herring distribution and abundance in Prince William Sound. *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 070830), Prince William Sound Science Center, Cordova, Alaska. (NTIS No. PB2012-107421)

070853

Bixler, K.S., D.D. Roby, D.B. Irons, M.A. Fleming and J.A. Cook. 2010. Pigeon guillemot restoration research in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 070853), Oregon State University, Corvallis, Oregon. (NTIS No. PB2014-100561)

080751

McKnight, A., K.M. Sullivan, D.B. Irons, S.W. Stephensen, and S. Howlin. 2008. Prince William Sound marine bird surveys, synthesis and restoration. *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 080751), U.S. Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB2012-106697)

080834

Meuret-Woody, H. and N. Bickford. 2009. Identifying essential habitat (source vs. sink habitat) for Pacific Herring (Clupea pallasi) in Sitka Sound using otolith microchemistry, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 080834), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska. (NTIS No. PB2012-106698)

090822

Bochenek, R.J. 2010. PWS herring data portal, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 090822), Axiom Consulting & Design, Anchorage, Alaska. (NTIS No. PB2012-110676) **10100750**

Ballachey, B.E., J.L. Bodkin, K.A. Kloecker, T.A. Dean, and H.A. Coletti. 2015. Monitoring for evaluation of recovery and restoration of injured nearshore resources, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 10100750), U.S. Geological Survey, Alaska Science Center, Anchorage, Alaska.

10100750-Amendment

Bodkin, J.L., B.E. Ballachey, and G.G. Esslinger. 2012. Trends in sea otter population abundance in Western Prince William Sound: progress toward recovery following the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 10100750-Amendment), U.S. Geological Survey, Alaska Science Center, Anchorage, Alaska.

10100804 (100804)

Rice, S. D., J. R. Moran, J. M. Straley, K. M. Boswell, and R. A. Heintz. 2011. Significance of whale predation on natural mortality rate of Pacific herring in Prince William Sound, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project: 100804), National Marine Fisheries Service, Juneau, Alaska.

11100112

Irvine, G.V., D.H. Mann, M.G. Carls, L. Holland, C. Reddy, R.K. Nelson, and C. Aeppli. 2014. Lingering oil on boulderarmored beaches in the Gulf of Alaska 23 years after the Exxon Valdez oil spill, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 11100112), U.S. Geological Survey, Alaska Science Center, Anchorage, Alaska.

11100808

Esler, D. 2011. Nearshore synthesis: sea otters and sea ducks (amendment), *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 111008080), Centre for Wildlife Ecology, Simon Fraser University, Delta, British Columbia, Canada.

11100836

Boufadel, M.C. 2014. Pilot studies of bioremediation of the *Exxon Valdez* oil is Prince William Sound beaches, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 11100836), Center for Natural Resources Development and Protection, New Jersey Institute of Technology, New Jersey.

12120114-Q

Bowen, L., Miles, A.K., Ballachey, B.E., Bodkin, J.L., and Esler, D. 2015. Gulf Watch Alaska Long-term Monitoring Program - Evaluating Chronic Exposure of Harlequin Ducks and Sea Otters to Lingering *Exxon Valdez* Oil in Western Prince William Sound. *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 12120114-Q), Pacific Wildlife Foundation and Centre for Wildlife Ecology, Simon Fraser University, Delta, British Columbia, Canada. U.S. Geological Survey, Alaska Science Center, Anchorage, Alaska.

15120112-C*

Carpenter, Kristin. 2016. Legacy of the *Exxon Valdez* Oil Spill: Mitigating Stormwater Runoff's Chronic Toxicity Through Snow Management Analysis in Cordova (Restoration Project 15120112-C), Copper River Watershed Project, Cordova, Alaska.

15150121*

Boufadel, M.C., J. Michel, Z. Nixon, and X. Geng. 2015. Priorities, Methods, and Costs for Restoration of Lingering Subsurface Oil from the *Exxon Valdez* Oil Spill in Prince William Sound, Alaska. *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 15150121), Alaska Department of Fish and Game, Juneau, Alaska.

15150122*

Fall, J. A. and G. Zimpelman, editors. 2016. Update on the Status of Subsistence Uses in *Exxon Valdez* Oil Spill Area Communities, 2014. *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 15150122), Alaska Department of Fish and Game, Division of Subsistence, Technical Paper No. 412, Anchorage, Alaska.

Exxon Valdez Oil Spill Gulf Ecosystem Monitoring and Research Project Final Reports

Final reports in this series cover GEM transition projects funded in FY 2002 and GEM projects funded in FY 2003 to 2009.

02395

Schoch, G.C., G.L. Eckert, and T.A. Dean. 2002. Long-term monitoring in the nearshore ocean: designing studies to detect change and assess cause, *Exxon Valdez* Oil Spill Gulf Ecosystem Monitoring and Research Project Final Report (GEM Project 02395), Kachemak Bay Research Reserve, Homer, Alaska. (NTIS No. PB2003-106512)

02613

Harper, J. 2003. ShoreZone mapping of the outer Kenai coast, Alaska, *Exxon Valdez* Oil Spill Gulf Ecosystem Monitoring and Research Project Final Report (GEM Project 02613), Coastal & Ocean Resources, Inc., Sidney, British Columbia, Canada. (NTIS No. PB2006-104370)

020619

Foy, R.J. and J. Harper. 2003. Mapping marine habitat - Kodiak Island, *Exxon Valdez* Oil Spill Gulf Ecosystem Monitoring and Research Project Final Report (GEM Project 020619), University of Alaska Fairbanks, Kodiak, Alaska. [Note: This project is a GEM transition project and the project number may also appear as 02619.] (NTIS No. PB2004-104662)

030575

Sigman, M.J., M.E. Hogan, P. McCollum, P. Schwalenberg-Brown, N. Bird, H.P. Huntington, J.J. Spaeder, R.T. Cooney, and C. Celentano. 2004. A plan for community involvement and community-based monitoring in the Gulf Ecosystem Monitoring Program, *Exxon Valdez* Oil Spill Gulf Ecosystem Monitoring and Research Project Final Report (GEM Project 030575), Center for Alaska Coastal Studies, Homer, Alaska. (NTIS No. PB2006-104451)

030584

Brown, E.D., J.H. Churnside, S. Hills, R.L. Collins, and R. Foy. 2006. Evaluation of airborne remote sensing tools for GEM monitoring, *Exxon Valdez* Oil Spill Gulf Ecosystem Monitoring and Research Project Final Report (GEM Project 030584), University of Alaska, Fairbanks, Alaska. (NTIS No. PB2012-107426)

030607

Schlein, W. 2004. Graphical information system (GIS) map of water quality monitoring sites across the Gulf of Alaska, *Exxon Valdez* Oil Spill Gulf Ecosystem Monitoring and Research Project Final Report (GEM Project 030607), Cook Inlet Keeper, Homer, Alaska. (NTIS No. PB2007-102220)

030623

Payne, J.R., W.B. Driskell, and J.W. Short. 2003. PWSRCAC-EVOS Long-term environmental monitoring program: 2002 – 2003 LTEMP monitoring report, *Exxon Valdez* Oil Spill Gulf Ecosystem Monitoring and Research Project Final Report (GEM Project 030623), Prince William Sound Regional Citizens' Advisory Council, Anchorage, Alaska. (NTIS No. PB2006-101718)

030641

Harper, J. and M.C. Morris. 2003. ShoreZone mapping protocol for the Gulf of Alaska, Exxon *Valdez* Oil Spill R Gulf Ecosystem Monitoring and Research Project Final Report (GEM Project 030641), Coastal & Ocean Resources, Inc., Sidney, British Columbia, Canada. (NTIS No. PB2006-104366)

030642

Foster, N.R. 2004. Database on the marine invertebrate macrofauna of Prince William Sound: an addition to the University of Alaska Museum's ARCTOS network, *Exxon Valdez* Oil Spill Gulf Ecosystem Monitoring and Research Project Final Report (GEM Project 030642), University of Alaska, Fairbanks, Alaska. (NTIS No. PB2006-107734)

Salomon, A.K. 2006. Investigating the relative roles of natural factors and shoreline harvest in altering the community structure, dynamics and diversity of the Kenai Peninsula's rocky intertidal, *Exxon Valdez* Oil Spill Gulf Ecosystem Monitoring and Research Project Final Report (GEM Project 030647), University of Washington, Seattle, Washington. (Not available from NTIS)

030656/A

Irvine, G.V., S.J. Carpenter, D.H. Mann, and J.M Schaaf. 2003. A 6,300-year-old window into the past: retrospective analysis of nearshore marine communities based on analysis of archeological material and isotopic analysis, *Exxon Valdez* Oil Spill Gulf Ecosystem Monitoring and Research Project Final Report (GEM Project 030656/A), U.S. Geological Survey, Anchorage, Alaska. (NTIS No. PB2007-102213)

040687

Bodkin, J.L. and T. Dean. 2003. Alternative sampling designs for nearshore monitoring, *Exxon Valdez* Oil Spill Gulf Ecosystem Monitoring and Research Project Final Report (GEM Project 040687), U.S. Geological Survey, Alaska Science Center, Anchorage, Alaska. (NTIS No. PB2012-107423)

040712

Kline, T.C., Jr. 2007. Nutrient-based resource management, *Exxon Valdez* Oil Spill Gulf Ecosystem Monitoring and Research Project Final Report (GEM Project 040712), Prince William Sound Science Center, Cordova, Alaska. (NTIS No. PB2008-102804)

040725

Thorne, R.E., M.A. Bishop, R.E. Crawford, G.L. Thomas, S.M. Gay III and K. George. 2008. Impacts of seafood waste discharge in Orca Inlet, Prince William Sound, *Exxon Valdez* Oil Spill Gulf Ecosystem Monitoring and Research Project Final Report (GEM Project 040725), Prince William Sound Science Center, Cordova, Alaska.

050749

Hoover-Miller, A., C. Jezierski, and S. Atkinson. 2008. Harbor seal monitoring in Southern Kenai Peninsula fjords, *Exxon Valdez* Oil Spill Gulf Ecosystem Monitoring and Research Project Final Report (GEM Project 050749), Alaska SeaLife Center, Seward, Alaska. (NTIS No. PB2010-100136)

050758

Moffitt, S.D. 2006. Management applications: implementing the SEA pink salmon survival model – tagging technology. *Exxon Valdez* Oil Spill Gulf Ecosystem Monitoring and Research Project Final Report (GEM Project 050758), Alaska Department of Fish and Game, Division of Commercial Fisheries, Cordova, Alaska. (NTIS No. PB2012-107425)

050765

Willette, T.M. and R.D. DeCino. 2009. Improving preseason forecasts of Kenai River sockeye salmon runs through salmon smolt monitoring – technology development, *Exxon Valdez* Oil Spill Gulf Ecosystem Monitoring and Research Project Final Report (GEM Project 050765), Alaska Department of Fish and Game, Commercial Fisheries Division, Soldotna, Alaska. (NTIS No. PB2012-107422)

Exxon Valdez Oil Spill State/Federal Natural Resource Damage Assessment Final Reports

Final reports in this series cover natural resource damage assessment (NRDA) studies funded from 1989 (prior to settlement of litigation) through 1992.

Air/Water 3

Short, J.W. and P.M. Harris. 1996. Petroleum hydrocarbons in near-surface seawater of Prince William Sound, Alaska, following the *Exxon Valdez* oil spill I: Chemical sampling and analysis, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Air/Water Study Number 3), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay, Alaska. (NTIS No. PB96-196951)

Air/Water 3 (Subtidal 3A)

Short, J.W. and P.M. Harris. 1995. Petroleum hydrocarbons in near-surface seawater of Prince William Sound, Alaska, following the *Exxon Valdez* oil spill II: analysis of caged mussels, Exxon *Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Air/Water Study Number 3, Subtidal Study Number 3A), National Oceanic and Atmospheric Administration, Juneau, Alaska. (NTIS No. PB96-196969)

Archaeology 1

Reger, D.R., J.D. McMahan, and C.E. Holmes. 1992. Effect of crude oil contamination on some archaeological sites in the Gulf of Alaska, 1991 investigations, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Archaeology Study Number 1), Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation, Office of History and Archaeology, Anchorage, Alaska. (NTIS No. PB96-194659)

Bird 1

Ford, R.G., M.L. Bonnell, D.H. Veroujean, G.W. Page, H.R. Carter, B.E. Sharp, D. Heinemann, and J.L. Casey. 1996. Total direct mortality of seabirds from the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Bird Study Number 1), U.S. Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB2000-105785)

Bird 2

Klosiewski, S.P. and K.K. Laing. 1994. Marine bird populations of Prince William Sound, Alaska, before and after the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Bird Study Number 2), U.S. Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB97-112684)

Bird 3

Nyswander, D.R., C.H. Dippel, G.V. Byrd, and E.P. Knudtson. 1993. Effects of the *Exxon Valdez* oil spill on murres: a perspective from observations at breeding colonies, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Bird Study Number 3), U.S. Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB97-112700)

Bird 4

Bowman, T.D., P.F. Schempf, and J.A. Bernatowicz. 1993. Effects of the *Exxon Valdez* oil spill on bald eagles, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Bird Study Number 4), U.S. Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB96-204250)

Bird 5

Hughes, J.H. and G.A. Sanger. 1999. Observations of Peale's peregrine falcons, *Falco peregrinus pealei*, on the Northern Gulf of Alaska coast, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Bird Study Number 5), Alaska Department of Fish and Game, Division of Wildlife Conservation, Anchorage, Alaska. (This report is not available at NTIS. See the Natural Resource Damage Assessment Interim Report series at the libraries listed.)

Bird 6

Kuletz, K.J. 1994. Marbled murrelet abundance and breeding activity at Naked Island, Prince William Sound, and Kachemak Bay, Alaska, before and after the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Bird Study Number 6), U.S. Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB97-112692)

Bird 7

Nishimoto, G. and G.V. Byrd. 1993. Effects of the *Exxon Valdez* oil spill on fork-tailed storm petrels breeding in the Barren Islands, Alaska, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Bird Study Number 7), U.S. Fish and Wildlife Service, Homer, Alaska. (NTIS No. PB97-112676)

Bird 8

Oakley, K.L., T.L. Wade, and D.B. Irons. 1995. Aliphatic and polycyclic aromatic hydrocarbons in eggs, livers and stomach contents of black-legged kittiwakes in Prince William Sound, Alaska, after the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Bird Study Number 8), U.S. Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB99-112294)

Bird 9

Oakley, K.L. and K.J. Kuletz. 1994. Population, reproduction and foraging of pigeon guillemots at Naked Island, Alaska, before and after the *Exxon Valdez* oil spill. *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Bird Study Number 9), U.S. Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB96-204276)

Bird 11

Patten, S.M., Jr., T. Crowe, R. Gustin, R. Hunter, P. Twaite, and C. Hastings. 2000. Assessment of injury to sea ducks from hydrocarbon uptake in Prince William Sound and the Kodiak Archipelago, following the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Bird Study Number 11), Alaska Department of Fish and Game, Division of Wildlife Conservation, Anchorage, Alaska. (NTIS No. PB2001-100969 - volume 1; NTIS No. PB2001-100970 - volume 2)

Bird 12/Restoration Study 17

Andres, B.A. 1995. The effects of the *Exxon Valdez* oil spill on black oystercatchers breeding in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Bird Study Number 12, Restoration Study Number 17), U.S. Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB96-204292)

Bird 12-1

Martin, P.D. 1993. Effects of the *Exxon Valdez* oil spill on migrant shorebirds using rocky intertidal habitats of Prince William Sound, Alaska, during spring, 1989, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Bird Study Number 12-1), U.S. Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB97-155998)

Coastal Habitat 1A

Highsmith, R.C., M.S. Stekoll, W.E. Barber, L. McDonald, D. Strickland, and W.P. Erickson. 1994. Comprehensive assessment of coastal habitat, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Coastal Habitat Study Number 1A), School of Fisheries and Ocean Sciences, University of Alaska, Fairbanks, Alaska. (NTIS No. PB99-110447)

Coastal Habitat 1B

Babcock, M.B. and J.W. Short. 1996. Prespill and postspill concentrations of hydrocarbons in sediments and mussels in intertidal sites within Prince William sound and the Gulf of Alaska, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Coastal Habitat Study Number 1B), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska. (NTIS No. PB96-194824)

Economic Studies

[The following economic reports were not published by the Exxon Valdez Oil Spill Trustee Council, but are included so this list of damage assessment reports will be complete. Not available from NTIS.]

Brown, G. Jr. 1992. Replacement costs of birds and mammals. Distributed by the State of Alaska Attorney General's Office.

Carson, R.T. and W.M. Hanemann. 1992. A preliminary economic analysis of recreational fishing losses related to the *Exxon Valdez* oil spill: A report to the Attorney General of the State of Alaska.

Carson, R.T., R.C. Mitchell, W.M. Hanemann, R.J. Kopp, S. Presser, and P.A. Ruud. 1992. A contingent valuation study of lost passive use values resulting from the *Exxon Valdez* oil spill: A report to the Attorney General of the State of Alaska. (Economic Study 7)

McDowell Group. 1990. An assessment of the impact of the *Exxon Valdez* oil spill on the Alaska tourism industry, Preston, Thorgrimson, Shidler, Gates, and Ellis, Seattle, Washington.

Mills, M.J. 1992. Alaska sport fishing in the aftermath of the *Exxon Valdez* oil spill, Special Publication No. 92 - 5, Alaska Department of Fish and Game, Division of Sport Fish, Anchorage, Alaska.

Fish/Shellfish 1/Restoration 9/Restoration 60B

Fried, S.M., B.G. Bue, D. Sharp, and S. Sharr. 1998. Injury to spawning areas and an evaluation of spawning escapement enumeration of pink salmon in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Fish/Shellfish Study Number1, Restoration Study Number 9, Restoration Study Number 60B), Alaska Department of Fish and Game, Division of Commercial Fisheries, Anchorage, Alaska. (NTIS No. PB2000-102403)

Fish/Shellfish 2

Sharr, S., B.G. Bue, S.D. Moffitt, A. Craig, and D.G. Evans. 1994. Injury to salmon eggs and preemergent fry in Prince William Sound, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Fish/Shellfish Study Number 2), Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Cordova, Alaska. (NTIS No. PB96-194840)

Fish/Shellfish 3

Sharr, S., C.J. Peckham, D.G. Sharp, L. Peltz, J.L. Smith, M.T. Willette, D.G. Evans, and B.G. Bue. 1996. Coded wire tag studies on Prince William Sound salmon, 1989-1991, Exxon *Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Fish/Shellfish Study Number 3), Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Anchorage, Alaska. (NTIS No. PB96-196936)

Fish/Shellfish 4

Wertheimer, A.C., A.G. Celewycz, M.G. Carls, and M.V. Sturdevant. 1994. Impact of the oil spill on juvenile pink and chum salmon and their prey in critical nearshore habitats, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Fish/Shellfish Study Number 4, NMFS Component), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska.

Fish/Shellfish 4A

Willette, T.M., G. Carpenter, P. Shields, and S.R. Carlson. 1994. Early marine salmon injury assessment in Prince William Sound, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Fish/Shellfish Study Number 4A), Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Cordova, Alaska. (NTIS No. PB96-194758)

Fish/Shellfish 5 (Restoration 90)

Hepler, K.R., P.A. Hansen and D.R. Bernard. 1994. Impact of oil spilled from the *Exxon Valdez* on survival and growth of Dolly Varden and cutthroat trout in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Fish/Shellfish Study Number 5; Restoration Study Number 90), Alaska Department of Fish and Game, Division of Sport Fish, Anchorage, Alaska. (NTIS No. PB96-194725)

Fish/Shellfish 7B and 8B

Swanton, C.O., T.J. Dalton, B.M. Barrett, D. Pengilly, K.R. Brennan, and P.A. Nelson. 1993. Effects of pink salmon (Oncorhynchus gorbuscha) escapement level of egg retention, preemergent fry, and adult returns to the Kodiak and Chignik management areas caused by the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Fish/Shellfish Study Number 7B and 8B), Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Kodiak, Alaska. (NTIS No. PB95-966012)

Fish/Shellfish 11

Brown, E.D. and T.T. Baker. 1998. Injury to Prince William Sound herring following the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Fish/Shellfish Study Number 11), Alaska Department of Fish and Game, Division of Commercial Fisheries Management and Development, Cordova, Alaska. (NTIS No. PB99-151177)

Fish/Shellfish 13

Trowbridge, C., T.T. Baker, and J.D. Johnson. 2001. Effects of hydrocarbons on bivalves following the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Fish/Shellfish Study Number 13), Alaska Department of Fish and Game, Division of Commercial Fisheries, Anchorage, Alaska. (NTIS No. PB2003-102851)

Fish/Shellfish 16

Kaill, M. and M.M. Babcock. 1990. Prince William Sound oysters, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Preliminary Status Report (Fish/Shellfish Study Number 16), Alaska Department of Fish and Game Fisheries Rehabilitation, Enhancement and Development Division; and National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Juneau, Alaska. (This report is not available at NTIS. See the Natural Resource Damage Assessment Interim Report series at the libraries listed.)

Fish/Shellfish 18

Haynes, E., T. Rutecki, M. Murphy, and D. Urban. 1995. Impacts of the *Exxon Valdez* oil spill on bottomfish and shellfish in Prince William Sound, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Fish/Shellfish Study Number 18), U.S. National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska.

Fish/Shellfish 19

Norcross, B.L. and M. Frandsen. 1998. Injury to larval fish in Prince William Sound, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Fish/Shellfish Study Number 19), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska. (NTIS No. PB99-151144)

Fish/Shellfish 22

Freese, J.L. and C.E. O'Clair. 1995. Injury to crabs outside Prince William Sound, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Fish/Shellfish Study Number 22), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska. (NTIS No. PB96-194782)

Fish/Shellfish 25

Kaill, M. 1990. Injury to scallop resources in Kodiak waters, Exxon *Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Preliminary Status Report (Fish/Shellfish Study Number 25), Alaska Department of Fish and Game, Fisheries Rehabilitation, Enhancement and Development Division, Juneau, Alaska. (This report is not available at NTIS. See the Natural Resource Damage Assessment Interim Report series at the libraries listed.)

Fish/Shellfish 27

Schmidt, D.C., K.E. Tarbox, B.M. Barrett, L.K. Brannian, S.R. Carlson, J.A. Edmundson, J.M. Edmundson, S.G. Honnold, B.E. Kind, G.B. Kyle, P.A. Roche, P. Shields, and C.O. Swanton. 1993. Sockeye salmon overescapement, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Fish/Shellfish Study Number 27), Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Soldotna, Alaska.

Fish/Shellfish 28

Geiger, H.J., W.D. Templin, J.S. Collie, and T.J. Quinn II. 1995. Run reconstruction and life history model, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Fish/Shellfish Study Number 28), Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Juneau, Alaska. (NTIS No. PB96-208418)

Fish/Shellfish 30

DiCostanzo, C. and B.P. Simonson. 1993. Database management, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Fish/Shellfish Study Number 30), Alaska Department of Fish and Game, Division of Commercial Fisheries, Juneau, Alaska. (NTIS No. PB95-966014)

Marine Mammal 1

Dahlheim, M.E. and O. von Ziegesar. 1993. Effects of the *Exxon Valdez* oil spill on the abundance and distribution of humpback whales (*Megaptera novaeangliae*) in Prince William Sound, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Marine Mammal Study Number 1), U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Seattle, Washington. (NTIS No. PB96-194634)

Marine Mammal 2

Dahlheim, M.E. and C.O. Matkin. 1993. Assessment of injuries to killer whales in Prince William Sound, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Marine Mammal Study Number 2), U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Seattle, Washington. (NTIS No. PB96-194642)

Marine Mammal 4

Calkins, D.G., E.F. Becker, T.R. Spraker, and T.R. Loughlin. 1994. Assessment of injury to Steller sea lions in Prince William Sound and the Gulf of Alaska, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Marine Mammal Study Number 4), Alaska Department of Fish and Game, Division of Wildlife Conservation, Anchorage, Alaska. (Not available from NTIS)

Marine Mammal 5 (Restoration Study 73)

Frost, K.J. and L.F. Lowry. 1994. Assessment of injury to harbor seals in Prince William Sound, Alaska, and adjacent areas following the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Marine Mammal Study Number 5, Restoration Study Number 73), Alaska Department of Fish and Game, Wildlife Conservation Division, Fairbanks, Alaska. (NTIS No. PB96-197116)

Marine Mammal 6-1

Ballachey, B.E. 1995. Biomarkers of damage to sea otters in Prince William Sound, Alaska following potential exposure to oil spilled from the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Marine Mammal Study Number 6-1), U.S Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB96-196894)

Marine Mammal 6-2

Ballachey, B.E. and K.A. Kloecker. 1997. Hydrocarbon residues in tissues of sea otters (*Enhydra lutris*) collected from Southeast Alaska, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Marine Mammal Study Number 6-2), U.S Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB98-136872)

Marine Mammal 6-3

Ballachey, B.E. and K.A. Kloecker. 1997. Hydrocarbons in hair, livers and intestines of sea otters (*Enhydra lutris*) found dead along the path of the *Exxon Valdez* oil spill, Exxon *Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Marine Mammal Study Number 6-3), U.S. Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB97-205652)

Marine Mammal 6-4

Bodkin, J.K., D.M. Mulcahy, and C.J. Lensink. 1996. Age-specific reproduction in female sea otters (Enhydra lutris) from Southcentral Alaska: analysis of reproductive tracts, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Marine Mammal Study Number 6-4), U.S Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB96-198569)

Marine Mammal 6-5

Bodkin, J.L. and M.S. Udevitz. 1995. An intersection model for estimating sea otter mortality from the *Exxon Valdez* oil spill along the Kenai Peninsula, Alaska, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Marine Mammal Study Number 6-5), U.S Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB96-194980)

Marine Mammal 6-6

Burn, D.M. 1994. Boat-based population surveys of sea otters (*Enhydra lutris*) in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Marine Mammal Study Number 6-6), U.S Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB99-112245)

Marine Mammal 6-7

DeGange, A.R., D.C. Douglas, D.H. Monson, and C.M. Robbins. 1995. Surveys of sea otters in the Gulf of Alaska in response to the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Marine Mammal Study Number 6-7), U.S Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB96-195003)

Marine Mammal 6-8

Doroff, A.M. and J.L. Bodkin. 1996. Sea otter foraging behavior and hydrocarbon concentrations in prey following the *Exxon Valdez* oil spill in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Marine Mammal Study Number 6-8), U.S Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB98-136898)

Marine Mammal 6-9

Doroff, A.M., and A.R. DeGange. 1995. Experiments to determine drift patterns and rates of recovery of sea otter carcasses following the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Marine Mammal Study Number 6-9), U.S Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB96-194972)

Marine Mammal 6-10

Lipscomb, T.P., R.K. Harris, R.B. Moeler, J.M. Pletcher, R.J. Haebler, and B.E. Ballachey. 1996. Histopathologic lesions associated with crude oil exposure in sea otters, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Marine Mammal Study Number 6-10), U.S Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB96-198544)

Marine Mammal 6-11

Lipscomb, T.P., R.K. Harris, A.H. Rebar, B.E. Ballachey, and R.J. Haebler. 1996. Pathological studies of sea otters, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Marine Mammal Study Number 6-11), U.S Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB96-198577)

Marine Mammal 6-12

Monnett, C. and L.M. Rotterman. 1992. Movements of weanling and adult female sea otters in Prince William Sound, Alaska after the T/V *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Marine Mammal Study Number 6-12), U.S Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB96-194899)

Marine Mammal 6-13

Monnett, C. and L.M. Rotterman. 1995. Mortality and reproduction of female sea otters in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Marine Mammal Study Number 6-13), U.S Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB96-194964)

Marine Mammal 6-14

Monnett, C. and L.M. Rotterman. 1992. Mortality and reproduction of sea otters oiled and treated as a result of the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Marine Mammal Study Number 6-14), U.S. Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB96-196902)

Marine Mammal 6-15

Monson, D.H. and B. Ballachey. 1995. Age distributions of sea otters found dead in Prince William Sound, Alaska following the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Marine Mammal Study Number 6-15), U.S. Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB96-194675)

Marine Mammal 6-16

Ballachey, B.E. and K.A. Kloecker. 1997. Hydrocarbon residues in tissues of sea otters (*Enhydra lutris*) collected following the *Exxon Valdez* oil spill, Exxon *Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Marine Mammal Study Number 6-16), U.S. Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB97-205645)

Marine Mammal 6-17

Rebar, A.H., B.E. Ballachey, D.K. Bruden, and K.A. Kloecker. 1996. Hematology and clinical chemistry of sea otters captured in Prince William Sound, Alaska following the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Marine Mammal Study Number 6-17), U.S Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB96-198536)

Marine Mammal 6-18

Rotterman, L.M. and C. Monnett. 1991. Mortality of sea otter weanlings in eastern and western Prince William Sound, Alaska, during the winter of 1990-91, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Marine Mammal Study Number 6-18), U.S Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB96-194998)

Marine Mammal 6-19

Udevitz, M.S., J.L. Bodkin, and D.P. Costa. 1995. Detection of sea otters in boat-based surveys of Prince William Sound, Alaska, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Marine Mammal Study Number 6-19), U.S Fish and Wildlife Service, Anchorage, Alaska. (NTIS No. PB96-194956)

Restoration Study 11

Dragoo, D.E., G.V. Byrd, D.G. Roseneau, D.A. Dewhurst, J.A. Cooper, and J.H. McCarthy. 1995. Population levels and reproductive performance of murres based on observations at breeding colonies four years after the *Exxon Valdez* oil spill, Exxon *Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Restoration Study Number 11), U.S Fish and Wildlife Service, Alaska Maritime National Wildlife Refuge, Homer, Alaska. (NTIS No. PB96-204268)

Restoration Study 15-1

Kuletz, K.J., D.K. Marks, and N.L. Naslund. 1994. At-sea abundance and distribution of marbled murrelets in the Naked Island area, Prince William Sound, Alaska, in summer, 1991 and 1992, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Restoration Study Number 15-1), U.S Fish and Wildlife Service, Alaska Maritime National Wildlife Refuge, Anchorage, Alaska. (NTIS No. PB97-112734)

Restoration Study 15-2

Kuletz, K.J., N.L. Naslund, and D.K. Marks. 1994. Identification of marbled murrelet nesting habitat in the *Exxon Valdez* oil spill zone, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Restoration Study Number 15-2), U.S Fish and Wildlife Service, Alaska Maritime National Wildlife Refuge, Anchorage, Alaska. (NTIS No. PB97-112718)

Restoration Study 47

Kuwada, M.N., and K. Sundet. 1993. Stream Habitat assessment project: Afognak Island, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Restoration Study 47), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska. (NTIS No. PB96-194915)

Restoration Study 60A

Sharr, S., C.J. Peckham, D.G. Sharp, J.L. Smith, D.G. Evans, and B.G. Bue. 1995. Coded wire tag studies on Prince William Sound salmon, 1992, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Restoration Study 60A), Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Anchorage, Alaska. (NTIS No. PB96-196878)

Restoration Study 60C

Sharr, S., J.E. Seeb, B.G. Bue, A. Craig, and G.D. Miller. 1994. Injury to salmon eggs and preemergent fry in Prince William Sound, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Restoration Study 60C), Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Anchorage, Alaska. (NTIS No. PB96-194840)

Restoration Study 71

Crowley, D.W. and S.M. Patten. 1996. Breeding ecology of harlequin ducks in Prince William Sound, Alaska. *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Study Number 71), Alaska Department of Fish and Game, Division of Wildlife Conservation, Anchorage, Alaska. (NTIS No. PB98-115439)

Restoration Study 102

Highsmith, R.C., M.S. Stekoll, P.G. van Tamelen, A.J. Hooten, L. Deysher, L. McDonald, D. Strickland, and W.P. Erickson. 1993. Herring Bay experimental and monitoring studies, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Restoration Study 102), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska. (NTIS No. PB96-194949)

Restoration Study 103-3

Farro, J.B., R.T. Bowyer, J.W. Testa, and L.K. Duffy. 1994. River otter component of the oiled mussel-bed study, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Restoration Study Number 103-3), Alaska Department of Fish and Game, Wildlife Conservation Division, Soldotna, Alaska. (NTIS No. PB96-194709)

Restoration Study 104A

Corbett, D.G. and D. Reger. 1994. Development of Alaska heritage stewardship program for protection of cultural resources at increased risk due to the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Restoration Study Number 104A), U.S. Fish and Wildlife Service, Alaska Maritime National Wildlife Refuge, Homer, Alaska. (NTIS No. PB96-204284)

Restoration Study 105-1/93063

Willette, T.M., N.C. Dudiak, G. Honnald, G. Carpenter, and M. Dickson. 1995. Survey and evaluation of instream habitat and stock restoration techniques for wild pink and chum salmon, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Restoration Study Number 105-1, Restoration Project 93063), Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Cordova, Alaska. (NTIS No. PB96-194733)

Restoration Study 105-2

Wedemeyer, K. 1993. Survey and evaluation of instream habitat and stock restoration techniques for anadromous fish, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Study Number 105-2), USDA Forest Service, Chugach National Forest, Glacier Ranger District, Girdwood, Alaska. (NTIS No. PB2000-107450)

Restoration Study 106

McCarron, S. and A.G. Hoffman. 1993. Technical support study for the restoration of Dolly Varden and cutthroat trout populations in Prince William Sound, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Restoration Study 106), Alaska Department of Fish and Game, Division of Sport Fish, Anchorage, Alaska. (NTIS No. PB95-966009)

Subtidal 1A

O'Clair, C.E., J.W. Short, and S.D. Rice. 1996. Petroleum hydrocarbon-induced injury to subtidal marine sediment resources, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Subtidal Study Number 1A), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska. (NTIS No. PB96-196944)

Subtidal 1B

Braddock, J.F., B.T. Rasley, T.R. Yeager, J.E. Lindstrom, and E.J. Brown. 1992. Hydrocarbon mineralization potentials and microbial populations in marine sediments following the *Exxon Valdez* oil spill, Exxon *Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Subtidal Study Number 1B), University of Alaska Fairbanks, Fairbanks, Alaska. (NTIS No. PB96-194626)

Subtidal 2B/Air Water 2

Feder, H.M. 1995. Injury to deep benthos. *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Subtidal Study 2B/Air Water 2), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska. (NTIS No. PB96-194618)

Subtidal 3B

Sale, D.M., J.C. Gibeaut and J.W. Short. 1995. Nearshore transport of hydrocarbons and sediments following the *Exxon Valdez* oil spill, Exxon *Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Subtidal Study Number 3B), Alaska Department of Environmental Conservation, Juneau, Alaska. (NTIS No. PB96-194907)

Subtidal 4

Wolf, D.A. 1996. Fate and toxicity of spilled oil from the *Exxon Valdez*, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Subtidal Study Number 4), National Oceanic and Atmospheric Administration, Silver Spring, Maryland. (NTIS No. PB96-194857)

Subtidal 5

Trowbridge, Charles. 1992. Injury to Prince William Sound spot shrimp, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Subtidal Study Number 5), Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Anchorage, Alaska. (NTIS No. PB95-966010)

Subtidal 6 (Fish/Shellfish 17)

Hoffmann, A. and P. Hansen. 1994. Injury to demersal rockfish and shallow reef habitats in Prince William Sound, 1989-1991, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Subtidal Study Number 6, Fish/Shellfish 17), Alaska Department of Fish and Game, Division of Sport Fish, Anchorage, Alaska. (NTIS No. PB95-966005)

Subtidal 7

Varanasi, U., T.K. Collier, C.A. Krone, M.M. Krahn, L.L. Johnson, M.S. Myers, and S.-L. Chan. 1995. Assessment of oil spill impacts on fishery resources: measurement of hydrocarbons and their metabolites, and their effects, in important species, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Subtidal Study Number 7), National Marine Fisheries Service, NOAA, Seattle, Washington. (NTIS No. PB96-194741)

Subtidal 8

Short, J.W., B.D. Nelson, R.A. Heintz, J.M. Maselko, M. Kendziorek, M.G. Carls, and S. Korn. 1996. Mussel tissue and sediment hydrocarbon data synthesis, 1989 – 1995, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Subtidal Study Number 8), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska.

Terrestrial Mammal 3

Faro, J.B., R.T. Bowyer, J.W. Testa, and L.K. Duffy. 1994. Assessment of injury to river otters in Prince William Sound, Alaska, following the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Terrestrial Mammal Study Number 3), Alaska Department of Fish and Game, Wildlife Conservation Division, Soldotna, Alaska. (NTIS No. PB96-194717)

Terrestrial Mammal 4

Sellers, R.A. and S.D. Miller. 1998. Population dynamics of brown bears after the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Terrestrial Mammal Study Number 4), Alaska Department of Fish and Game, Division of Wildlife Conservation, King Salmon, Alaska. (NTIS No. PB2000-101760)

Technical Services 2

Marty, G.D., M.S. Okihiro, and D.E. Hinton. 2000. Fish histopathology damage assessment after the *Exxon Valdez* oil spill, Exxon *Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report (Technical Services Study Number 2), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska. (NTIS No. PB2001-100967)

Exxon Valdez Oil Spill Restoration Project Annual Reports

Annual reports in this series cover multi-year restoration projects funded prior to FY 2002. Annual reports funded after FY 2002 are available on the EVOSTC website: www.evostc.state.ak.us

93002

Schmidt, D.C., K.E. Tarbox, G.B. Kyle, and S.R. Carlson. 1995. Sockeye salmon overescapement, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 93002), Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Soldotna, Alaska.

93006

Bland, R., J. Cusick, P. McClenahan, S. Klingler, D. McMahan, D. Reger, C. Diters, D. Corbett, and B. Fahey. 1998. Archaeological site monitoring and restoration, 1993, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 93006), Cultural Resources Division, National Park Service, Anchorage, Alaska.

93015

Tarbox, K.E., R.Z. Davis, L.K. Brannian, B.E. King, J.R. Fox, and S.M. Fried. 1994. Kenai River sockeye salmon restoration, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 93015), Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Soldotna, Alaska.

93036

Babcock, M.M., S.D. Rice, and P.M. Harris. 1995. Recovery monitoring and restoration of oiled mussel beds in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 93036), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska.

93046

Frost, K.F., and L.F. Lowry. 1994. Habitat use, behavior, and monitoring of harbor seals in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 93046), Alaska Department of Fish and Game, Wildlife Conservation Division, Fairbanks, Alaska.

94007-2

Reger, D., L. Yarborough, J. Schaaf, P. McClenahan, and R. Bland. 1996. Archaeological site monitoring and restoration, 1994, Exxon *Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 94007-2), Alaska Department of Natural Resources, Anchorage, Alaska.

94041

Schmidt, K., E.P. Bailey, and G.V. Byrd. 1995. Introduced predator removal from islands, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 94041), U.S. Fish and Wildlife Service, Anchorage, Alaska.

94064/94320F

Frost, K.J., L.F. Lowry, and J. Ver Hoef. 1995. Habitat use, behavior, and monitoring of harbor seals in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 94064 and 94320F), Alaska Department of Fish and Game, Wildlife Conservation Division, Anchorage, Alaska.

94086

Highsmith, R.C., M.S. Stekoll, P.G. van Tamelen, S.M. Saupe, T.L. Rucker, and L. Deysher. 1995. Herring Bay monitoring and restoration studies, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 94086), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

Babcock, M.M., P.M. Harris, S.D. Rice, R.J. Bruyere, and D.R. Munson. 1995. Recovery monitoring and restoration of oiled mussel beds in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 94090), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska.

94139C-1

Schmid, D., K. Buckley, and K. Hodges. 1994. Montague Island chum salmon restoration, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 94139C-1), USDA Forest Service, Cordova, Alaska.

94163

Willette, T.M., M.V. Sturdevant, S.C. Jewett, and E. Debevec. 1995. Forage fish influence on recovery of injured species: forage fish diet overlap, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 94163), Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Anchorage, Alaska.

94163-1

1995. Forage fish study in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 94163-1), University of Alaska Fairbanks, School of Fisheries and Ocean Sciences, Fairbanks, Alaska.

94166

Carls, M.G., S.D. Rice, and R.E. Thomas. 1995. The impact of exposure of adult pre-spawn herring (*Clupea harangues pallasi*) on subsequent progeny, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 94166), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska.

94166-1

Wilcock, J.A., E.D. Brown, and E. Debevec. 1995. Herring spawn deposition and reproductive impairment, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 94166-1), Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Cordova, Alaska.

94191-1

Seeb, J.E., B.G. Bue, A.K. Craig, C. Habicht, G.D. Miller, and S. Sharr. 1995. Injury to salmon embryos and preemergent fry in Prince William Sound, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 94191-1), Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Anchorage, Alaska.

94191-2

Heintz, R.A., S.D. Rice, and J.W. Short. 1995. Injury to pink salmon eggs and preemergent fry incubated in oiled gravel (laboratory study), *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 94191-2), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska.

94244/95244

Fall, J.D. 1995. Harbor seal and sea otter cooperative subsistence harvest assistance, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Projects 94244 and 95244), Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska.

94255

Tarbox, K.E., R.Z. Davis, L.K. Brannian, and S.M. Fried. 1995. Kenai River sockeye salmon restoration, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 94255), Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Soldotna, Alaska.

Schmidt, D.C., K.E. Tarbox, B.M. Barrett, G.B. Kyle, J.A. Edmundson, B.E. King, S.G. Honnald, L.K. Brannian, C.O. Swanton, P. Shields, J.M. Edmundson, P.A. Roche, and S.R. Carlson. 1995. Sockeye salmon overescapement, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 94258), Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Soldotna, Alaska.

94259

Edmundson, J.A., G.B. Kyle, and S.R. Carlson. 1995. Restoration of Coghill Lakes sockeye salmon: 1994 annual report on nutrient enrichment restoration, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 94259), Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Soldotna, Alaska.

94272

Olsen, J., H. Ferren, and C. Kerns. 1994. Chenega chinook release program, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 94272), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

94285

O'Clair, C.E., J.W. Short, and S.D. Rice. 1995. Subtidal monitoring: recovery of sediments in the Northwestern Gulf of Alaska, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 94285), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska.

94320

Cooney, R.T. 1995. SEA90: Sound ecosystem assessment (SEA) - and integrated science plan for the restoration of injured species in Prince William Sound, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 94320), Alaska Department of Fish and Game, Habitat and Restoration Section, Anchorage, Alaska.

94320B

Sharr, S., R. Riffe, S. Gehlbach, D.G. Evans, and B.G. Bue. 1995. Coded wire tag recoveries from pink salmon in Prince William Sound salmon fisheries, 1994, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 94320B), Alaska Department of Fish and Game, Cordova, Alaska.

94320C

Craig, A.K., B.G. Bue, and S. Sharr. 1995. Feasibility of wildstock tetracycline otolith marking in Prince William Sound, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 94320C), Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Cordova, Alaska.

94320D/95320D

Seeb, J.E., C. Habicht, W.B. Templin, and L.W. Seeb. 1997. Genetics of populations of pink salmon inhabiting Prince William Sound, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 94320D and 95320D), Alaska Department of Fish and Game, Genetics Program, Anchorage, Alaska.

94320S

Marty, C.D., E.F. Frieberg, T.R. Meyers, J.A. Wilcock, C.R. Davis, T.B. Farver, and D.E. Hinton. 1995. *Ichthyophonus hoferi*, viral hemorrhagic septicemia virus, and other causes of morbidity in Pacific herring spawning in Prince William Sound in 1994, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 94320S), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

94427

Rosenberg, D.H. 1995. Experimental harlequin duck breeding survey in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 94427), Alaska Department of Fish and Game, Wildlife Conservation Division, Anchorage, Alaska.

Fadely, B.S. and M.A. Castellini. 1996. Recovery of harbor seals from EVOS: condition and health status, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 95001), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

95007A

Reger, D., D. Corbett, M. Luttrell, and L. Yarborough. 1996. Archaeological site restoration, index site monitoring, 1995, Exxon *Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 95007A), Alaska Department of Natural Resources, Anchorage, Alaska.

95009D

Scheel, D., R. Dodge, and T.L.S. Vincent. 1996. Survey of octopus in the intertidal in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 95009D), Prince William Sound Science Center, Cordova, Alaska.

95012

Matkin, C.O., D. Scheel, G. Ellis, L. Barrett-Lennard, and E. Saulitis. 1996. Comprehensive killer whale investigation, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 95012), North Gulf Oceanic Society, Homer, Alaska.

95025

Holland-Bartels, L. 1996. Mechanisms of impact and potential recovery of nearshore vertebrate predators, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 95025), National Biological Service, Anchorage, Alaska.

95043B

Gillikin, D. 1996. Cutthroat trout and Dolly Varden rehabilitation in Western Prince William Sound, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 95043B1), U.S. Forest Service, Glacier Ranger District, Girdwood, Alaska.

95052

Miraglia, R.A. 1996. Community interaction and use of traditional knowledge, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 95052), Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska.

95064

Frost, K.J., L.F. Lowry, J. Small, and S.J. Iverson. 1996. Monitoring, habitat use, and trophic interactions of harbor seals in Prince William Sound, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 95064), Alaska Department of Fish and Game, Division of Wildlife Conservation, Fairbanks, Alaska.

95076/95191B

Wertheimer, A.C., S.D. Rice, A.G. Celewycz, J.F. Thedinga, R.A. Heintz, R.F. Bradshaw, and J.M. Maselko. 1996. Effects of oiled incubation substrate on straying and survival of wild pink salmon, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 95076 and 95191B), Auke Bay Fisheries Laboratory, National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Juneau, Alaska.

95117-BAA

Fadely, B.S., M.A. Castellini, and J.M. Castellini. 1996. Harbor seals and EVOS: blubber and lipids as indices of food limitation, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 95117-BAA), University of Alaska, Fairbanks, Alaska.

95131

Brown-Schwalenberg, P., J. Hetrick, and D. Daisy. 1996. Nanwalek/Port Graham/Tatitlek subsistence clam restoration, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 95131), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

Stephan R. Braund & Associates and Jon Isaacs & Associates. 1995. Community conference on subsistence and the oil spill: summary report, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 95138), Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska.

95139A1

Honnold, S.G. 1996. Little Waterfall Creek barrier bypass improvement: Pink (*Oncorhynchus gorbuscha*) and coho salmon (*Oncorhynchus kisutch*) habitat enhancement, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 95139A1), Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Kodiak, Alaska.

95139C1

Hodges, K. 1995. Montague Island riparian rehabilitation, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 95139C1), U.S. Department of Agriculture, Forest Service, Cordova, Alaska.

95163

Duffy, D.C. 1996. APEX: Alaska predator ecosystem experiment, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 95163), Alaska Natural Heritage Program, University of Alaska, Anchorage, Alaska.

95165

Seeb, J.E., S.E. Merkouris, L.W. Seeb, P. Bentzen, and J.M. Wright. 1995. Genetic discrimination of Prince William Sound herring populations, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 95165), Alaska Department of Fish and Game, Genetics Laboratory, Anchorage, Alaska.

95166

Willette, T.M., G.S. Carpenter, and E. Debevec. 1997. Herring spawn deposition and reproductive impairment, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 95166), Alaska Department of Fish and Game, Division of Commercial Fisheries Management and Development, Cordova, Alaska.

95191A-1

Craig, A.K., B.G. Bue, and T.M. Willette. 1996. Injury to pink salmon embryos in Prince William Sound - field monitoring, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 95191A-1), Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Cordova, Alaska.

95191A-2

Seeb, J.E., C. Habicht, B.A. Greene, E.J. Kretschmer, J.B. Olsen, and D.G. Evans. 1997. Laboratory examination of oilrelated embryo mortalities that persist in pink salmon populations in Prince William Sound, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 95191A-2), Alaska Department of Fish and Game, Genetics Laboratory, Anchorage, Alaska.

95255

Seeb, L.W., C. Habicht, W.D. Templin, K.E. Tarbox, R.Z. Davis, L.K Brannian, and J.E. Seeb. 1996. Kenai river sockeye salmon restoration, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 95255), Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Anchorage, Alaska.

95258

Schmidt, D.C., K.E. Tarbox, S.R. Carlson, G.B. Kyle, J.A. Edmundson, B.E. King, L.K. Brannian, C.O. Swanton, P.A. Nelson, L.G. Coggins, and S.G. Honnold. 1997. Sockeye salmon overescapement, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 95258), Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Soldotna, Alaska.

Kyle, G.B., J.A. Edmundson, S.R. Carlson, and P.A. Shields. 1996. Restoration of Coghill Lake sockeye salmon: 1995 annual report on nutrient enrichment, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 95259), Alaska Department of Fish and Game, Division of Commercial Fisheries Management and Development, Soldotna, Alaska.

95272

Ferren, H. and J. Milton. 1995. Chenega chinook release program, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 95272), Prince William Sound Aquaculture Corporation, Cordova, Alaska.

95320

Cooney, R.T. 1996. Sound Ecosystem Assessment (SEA): An integrated science plan for the restoration of injured species in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 95320), Alaska Department of Fish and Game, Anchorage, Alaska.

95320B

Riffe, R.R., S. Gehlbach, D.G. Evans, and B.G. Bue. 1996. Coded wire tag recoveries from pink salmon in Prince William Sound fisheries, 1995, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 95320B), Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Cordova, Alaska.

95320C

Joyce, T.L., D.G. Evans, and R. Riffe. 1996. Otolith marking of pink salmon in Prince William Sound hatcheries, 1995, Exxon *Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 95320C), Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Cordova, Alaska.

95320I

Schell, D.M. and A. Hirons. 1996. Isotope ratio studies of marine mammals in Prince William Sound, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 95320I), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

95320K

Ferren, H. and J. Milton. 1995. PWSAC-PWS system investigation: experimental fry release, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 95320K), Prince William Sound Aquaculture Corporation, Cordova, Alaska.

95320S

Marty, G.D., D.E. Hinton, R.M. Kocan, M.L. Landolt, J.R. Winton, C.J. Kennedy, and A.P. Farrell. 1996. Investigations of disease factors affecting declines of Pacific herring populations in Prince William Sound, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 95320S), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

95427

Rosenberg, D.H., M.J. Petrula, and D.W. Crowley. 1996. Distribution, abundance, and composition of harlequin duck populations in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 95427), Alaska Department of Fish and Game, Division of Wildlife Conservation, Anchorage, Alaska.

96001

Fadely, B.S., J.M. Castellini, and M.S. Castellini. 1997. Recovery of harbor seals from EVOS: condition and health status, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96001), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

96007A

Reger, D., D. Corbett, C. Diters, and L. Yarborough. 1997. Archaeological site restoration, index monitoring, 1996, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96007A), Alaska Department of Natural Resources, Anchorage, Alaska.

96012A-1

Matkin, C.O., D. Scheel, G. Ellis, L. Barrett-Lennard, and E. Saulitis. 1997. Comprehensive killer whale investigation, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96012A-1), North Gulf Oceanic Society, Homer, Alaska.

96025

Holland-Bartels, L. 1997. Mechanisms of impact and potential recovery of nearshore vertebrate predators, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96025), U.S. Geological Survey, Biological Resources Division, Anchorage, Alaska.

96043B

Gillikin, D. 1996. Monitoring cutthroat trout and Dolly Varden habitat improvement structures, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96043B1), U.S. Forest Service, Glacier Ranger District, Girdwood, Alaska.

96052-1

Miraglia, R.A. 1997. Community involvement/traditional ecological knowledge part 1: resource abnormalities study, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96052-1), Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska.

96052-2

Brown-Schwalenberg, P.K. and M. Vlasoff. 1997. Community involvement/traditional ecological knowledge, Part 2, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96052-2), Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska.

96064

Frost, K.J., L.F. Lowry, J.M. Ver Hoef, and S.J. Iverson. 1997. Monitoring, habitat use, and trophic interactions of harbor seals in Prince William Sound, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96064), Alaska Department of Fish and Game, Division of Wildlife Conservation, Fairbanks, Alaska.

96076

Wertheimer, A.C., S.D. Rice, J.F. Thedinga, R.A. Heintz, R.F. Bradshaw, J.M. Maselko, and A.G. Celewycz. 1997. Effects of oiled incubation substrate on straying and survival of wild pink salmon, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96076), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska.

96127

Winchester, J. 1997. Tatitlek coho salmon release, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96127), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

96131

Daisy, D., J. Hetrick, K.M. Brooks, and J. Agosti. 1997. Clam restoration project, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96131), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

96139A1

Honnold, S.G. 1997. Little Waterfall Creek barrier bypass improvement: Pink (*Oncorhynchus gorbuscha*) and coho salmon (*Oncorhynchus kisutch*) habitat enhancement, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96139A1), Alaska Department of Fish and Game, Division of Commercial Fisheries and Management, Kodiak, Alaska.

96139A2

Dickson, M., G. Coble, and N.C. Dudiak. 1997. Tributary restoration and development project: Port Dick Creek, Lower Cook Inlet, Alaska, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96064), Alaska Department of Fish and Game, Homer, Alaska.

96139C1

Hodges, K. 1996. Montague Island riparian rehabilitation, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96139C1), U.S. Department of Agriculture, Forest Service, Cordova, Alaska.

96142

Day, R.H. and D.A. Nigro. 1996. Status and ecology of Kittlitz's murrelet in Prince William Sound, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96142), ABR, Inc., Fairbanks, Alaska.

96144

Roseneau, D.G., A.B. Kettle, and G.V. Byrd. 1997. Common murre population monitoring at the Barren Islands, Alaska, 1996. *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96144), U.S. Fish and Wildlife Service, Alaska Maritime National Wildlife Refuge, Homer, Alaska.

96145

Reeves, G.H., K. Griswold, and K.P. Currens. 1997. Cutthroat trout and dolly varden in Prince William Sound, Alaska: the relation among and within populations of anadromous and resident forms, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96145), U.S. Department of Agriculture, Pacific North West Research Laboratory, Corvallis, Oregon.

96149

Reger, D. and D. Corbett. 1997. Archaeological site stewardship in the *Exxon Valdez* oil spill area: 1996 annual report, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96149), Alaska Department of Natural Resources, Anchorage, Alaska.

96162

Marty, G.D., D.E. Hinton, R.M. Kocan, J.R. Winton, C.J. Kennedy, and A.P. Farrell. 1997. Investigations of disease factors affecting Pacific herring populations in Prince William Sound, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96162), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

96163A-P

Duffy, D.C. 1997. APEX Project: Alaska Predator Ecosystem Experiment in Prince William Sound and the Gulf of Alaska, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96163A-P), Alaska Natural Heritage Program and Department of Biology, University of Alaska Anchorage, Anchorage, Alaska.

96166

Willette, T.M., G.S. Carpenter, and K. Hyer. 1997. Herring spawn deposition and reproductive impairment, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96166), Alaska Department of Fish and Game, Division of Commercial Fisheries Management and Development, Cordova, Alaska.

Schell, D.M. and A.C. Hirons. 1997. Isotope ratio studies of marine mammals in Prince William Sound, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96170), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

96180

Weiner, A. and M. Kuwada. 1997. Kenai River habitat restoration and recreation enhancement project, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96180), Alaska Department of Natural Resources and Alaska Department of Fish and Game, Anchorage, Alaska.

96186

Riffe, R.R. and D.G. Evans. 1997. Coded wire tag recoveries from pink salmon in Prince William Sound salmon fisheries, 1996, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96186), Alaska Department of Fish and Game, Division of Commercial Fisheries Management and Development, Cordova, Alaska.

96188

Joyce, T.L., D.G. Evans, and K.M. Munk. 1997. Otolith marking of pink salmon in Prince William Sound hatcheries, 1996, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96188), Alaska Department of Fish and Game, Division of Commercial Fisheries Management and Development, Cordova, Alaska.

96190

Allendorf, F.W., P. Spruell, K.L. Knudsen, K.R. Lindner, and K.L. Pilgrim. 1997. Construction of a linkage map for the pink salmon genome, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96190), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

96191A-1

Craig, A.K., B.G. Bue, and T.M. Willette. 1997. Injury to salmon embryos and preemergent fry in Prince William Sound, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96191A-1), Alaska Department of Fish and Game, Division of Commercial Fisheries Management and Development, Anchorage, Alaska.

96195

Short, J. and P. Harris. 1997. Pristane monitoring in mussels and predators of juvenile pink salmon and herring, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96195), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska.

96196

Habicht, C., W.B. Templin, L.W. Seeb, and J.E. Seeb. 1998. Genetics of populations of pink salmon inhabiting Prince William Sound, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96196), Alaska Department of Fish and Game, Genetics Laboratory, Anchorage, Alaska.

96210

Hemming, M. 1996. Youth Area Watch Program, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96210), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

96220

Hodges, K. and D.E. Schmidt. 1997. Eastern Prince William Sound wildstock salmon habitat restoration, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96220), U.S. Department of Agriculture, Forest Service, Cordova, Alaska.

96225

Anahonak, E.P., Jr., P. McCollum, and D. Daisy. 1997. Port Graham pink salmon project, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96225), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

Fall, J.A., M. Reidel, and K. Wynne. 1997. Community-based harbor seal management and biological sampling, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96244), Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska.

96256B

Gillikin, D. 1996. Sockeye salmon stocking Solf Lake, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96256B), U.S. Forest Service, Glacier Ranger District, Girdwood, Alaska.

96272

Ferren, H. and J. Milton. 1996. Chenega chinook release program, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96272), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

96291-2

Brodersen, C. 1998. Chenega shoreline restoration – monitoring, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96291-2), U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska

96320

Cooney, R.T. 1997. Sound Ecosystem Assessment (SEA): an integrated science plan for the restoration of injured species in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96320), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

96427

Rosenberg, D.H, and M.J. Petrula. 1997. Distribution, abundance, and composition of harlequin ducks in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96427), Alaska Department of Fish and Game, Division of Wildlife Conservation, Anchorage, Alaska.

97007A

Reger, D., D. Corbett, M. Luttrell, and L.F. Yarborough. 1998. Archaeological site restoration: index site monitoring, 1997, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97007A), Alaska Department of Natural Resources, Anchorage, Alaska.

97012

Matkin, C.O., D. Scheel, G. Ellis, L. Barrett-Lennard, H. Jurk, and E. Saulitis. 1998. Comprehensive killer whale investigation, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97012), North Gulf Oceanic Society, Homer, Alaska.

97025

Holland-Bartels, L., et.al. 1998. Mechanisms of impact and potential recovery of nearshore vertebrate predators, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97025), U.S. Geological Survey - Biological Resources Division, Anchorage, Alaska.

97043B

Gillikin, D. 1997. Monitoring cutthroat trout and Dolly Varden habitat improvement structures, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97043B), U.S. Forest Service, Glacier Ranger District, Girdwood, Alaska.

97052A

Brown-Schwalenberg, P.K. 1998. Community involvement project, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97052A), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

97052B1

Miraglia, R.A. 1998. Traditional ecological knowledge handbook: a training manual and reference guide for designing, conducting, and participating in research projects using traditional ecological knowledge, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97052B1), Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska.

97052B2/97052B3

Brown-Schwalenberg, P.K., H.P. Huntington, H.S. Short, and R.A. Miraglia. 1998. Traditional ecological knowledge, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97052B2 and 97052B3), Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska.

97064

Frost, K.J., L.F. Lowry, J.M. Ver Hoef, S.J. Iverson, and T. Gotthardt. 1998. Monitoring, habitat use, and trophic interactions of harbor seals in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97064), Alaska Department of Fish and Game, Division of Wildlife Conservation, Fairbanks, Alaska.

97127

Merrell, K. 1998. Tatitlek coho salmon release, Exxon *Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97127), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

97131

Daisy, D., J. Hetrick, K.M. Brooks, and J. Agosti. 1998. Clam restoration project, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97131), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

97139A2

Dickson, M., W. Bucher, and G. Coble. 1998. Tributary restoration and development project: Port Dick Creek, Lower Cook Inlet, Alaska, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97139A2), Alaska Department of Fish and Game, Division of Commercial Fisheries, Homer, Alaska.

97142

Day, R.H. and D.A. Nigro. 1998. Status and ecology of Kittlitz's murrelet in Prince William Sound: results of 1996 and 1997 studies, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97142), ABR, Inc., Fairbanks, Alaska.

97144

Roseneau, D.G., A.B. Kettle, and G.V. Byrd. 1998. Common murre population monitoring at the Barren Islands, Alaska, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97144), U.S. Fish and Wildlife Service, Alaska Maritime National Wildlife Refuge, Homer, Alaska.

97145

Reeves, G.H., K. Griswold, and K.P. Currens. 1997. Cutthroat trout and Dolly Varden in Prince William Sound, Alaska: the relation among and within populations of anadromous and resident forms, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97145), U.S. Department of Agriculture, Pacific Northwest Research Laboratory, Corvallis, Oregon.

97149

Reger, D. and D. Corbett. 1998. Archaeological site stewardship, 1997. *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97149), Alaska Department of Natural Resources, Anchorage, Alaska.

Marty, G.D., D.E. Hinton, R.M. Kocan, P. Hershberger, J.R. Winton, C.J. Kennedy, and A.P. Farrell. 1998. Investigations of disease factors affecting declines of Pacific herring populations in Prince William Sound, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97162), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

97163A-Q

Duffy, D.C. 1998. APEX project: Alaska predator ecosystem experiment in Prince William Sound and the Gulf of Alaska, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97163A-Q), Alaska Natural Heritage Program and Department of Biology, University of Alaska Anchorage, Anchorage, Alaska.

97169

Friesen, V.L. and J.F. Piatt. 1998. A genetic study to aid in restoration of murres, guillemots, and murrelets to the Gulf of Alaska, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97169), Alaska Biological Sciences Center, U.S. Geological Survey, Anchorage, Alaska.

97170

Schell, D.M. and A.C. Hirons. 1998. Isotope ratio studies of marine mammals in Prince William Sound, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97170), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

97180

Kuwada, M.N. and A.H. Weiner. 1998. Kenai River habitat restoration and recreation enhancement project, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97180), Alaska Department of Fish and Game, Alaska Department of Natural Resources, Anchorage, Alaska.

97188

Joyce, T.L. and D.G. Evans. 1998. Otolith marking of pink salmon in Prince William Sound salmon hatcheries, 1997, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97188), Alaska Department of Fish and Game, Division of Commercial Fisheries, Cordova, Alaska.

97190

Allendorf, F.W., P. Spruell, K.R. Lindner, K.L. Knudsen, D.J. Reedy, and K.L. Pilgrim. 1998. Construction of a linkage map for the pink salmon genome, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97190), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

97191A-1

Craig, A.K., B.G. Bue, and T.M. Willette. 1998. Injury to pink salmon embryos in Prince William Sound - field monitoring, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97191A-1), Alaska Department of Fish and Game, Division of Commercial Fisheries, Cordova, Alaska.

97195

Short, J. and P. Harris. 1998. Pristane monitoring in mussels and predators of juvenile pink salmon and herring, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97195), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska.

97196

Habicht, C., J.E. Seeb, and L.W. Seeb. 1998. Genetics of populations of pink salmon inhabiting Prince William Sound, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97196), Alaska Department of Fish and Game, Genetics Program, Anchorage, Alaska.

Manning, M. 1997. Youth area watch, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97210), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

97220

Hodges, K. and D.E. Schmid. 1998. Eastern Prince William Sound wildstock salmon habitat restoration, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97220), USDA Forest Service, Cordova, Alaska.

97225

Anahonak, E., P. McCollum, and D. Daisy. 1998. Port Graham pink salmon project, Exxon *Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97225), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

97231

Kuletz, K.J., and S.J. Kendall. 1998. Marbled murrelet productivity relative to forage fish abundance and chick diet, Exxon *Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97231), U.S. Fish and Wildlife Service, Anchorage, Alaska.

97247

Hutchinson-Scarbrough, L. and J. McCullough. 1998. Kametolook River coho salmon subsistence project, Exxon *Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97247), Alaska Department of Fish and Game, Division of Commercial Fisheries, Kodiak, Alaska.

97256B

Gillikin, D. 1997. Monitoring cutthroat trout and Dolly Varden habitat improvement structures, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97256B), U.S. Forest Service, Glacier Ranger District, Girdwood, Alaska.

97263

Meganack, W., D. Martin, J.L. Hall, and A.J. Hall. 1997. Assessment, protection and enhancement of wildstock salmon streams in the Lower Cook Inlet, Exxon *Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97263), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

97290

Short, J.W. and B.D. Nelson. 1998. Hydrocarbon data analysis, interpretation and database maintenance for restoration and NRDA environmental samples associated with the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97290), U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska.

97306

Robards, M.D. and J.F. Piatt. 1998. Ecology and demographics of Pacific Sand Lance, *Ammodytes hexapterus* Pallas, in Lower Cook Inlet, Alaska, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97306), U.S. Geological Survey, Biological Resources Division, Anchorage, Alaska.

97320

Cooney, R.T. 1998. SEA97: Sound Ecosystem Assessment (SEA) - An integrated science plan for the restoration of injured species in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 97320), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

98007A

Reger, D., D. Corbett, E. Pontti, P. Saltonstall, S. Ludwig, and M. Gilliam. 1999. Archaeological restoration, index site monitoring, 1998, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 98007A), Alaska Department of Natural Resources, Anchorage, Alaska.

Matkin, C.O., D. Scheel, G. Ellis, L. Barrett-Lennard, H. Jurk, and E. Saulitis. 1999. Comprehensive killer whale investigation, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 98012), North Gulf Oceanic Society, Homer, Alaska.

98052A

Brown-Schwalenberg, P.K., H.S. Short, and R.A. Miraglia. 1999. Community involvement project, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 98052A), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

98052B

Brown-Schwalenberg, P.K., H.P. Huntington, H.S. Short, and R.A. Miraglia. 1999. Traditional ecological knowledge, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 98052B), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

98064

Frost, K.J., L.F. Lowry, J.M. Ver Hoef, S.J. Iverson, and M.A. Simpkins. 1999. Monitoring, habitat use, and trophic interactions of harbor seals in Prince William Sound, Alaska, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 98064), Alaska Department of Fish and Game, Division of Wildlife Conservation, Fairbanks, Alaska.

98127

Coggswell, S. 2000. Tatitlek coho salmon release, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 98127), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

98131

Daisy, D., K.M. Brooks, J. Agosti, and J. Hetrick. 1999. Clam restoration project, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 98131), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

98139A2

Dickson, M., G. Coble, and W. Bucher. 1999. Tributary restoration and development project: Port Dick Creek, Lower Cook Inlet, Alaska, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 98139A2), Alaska Department of Fish and Game, Division of Commercial Fisheries, Homer, Alaska.

98144

Roseneau, D.G., A.B. Kettle, and G.V. Byrd. 1999. Common murre population monitoring at the Chiswell Islands, Alaska, 1998, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 98144), U.S. Fish and Wildlife Service, Alaska Maritime National Wildlife Refuge, Homer, Alaska.

98159

Lance, B.K., D.B. Irons, S.J. Kendall, and L.L. McDonald. 1999. Marine bird and sea otters population abundance in Prince William Sound, Alaska: trends following the *T/V Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 98159), U.S. Fish and Wildlife Service, Anchorage, Alaska.

98163

Duffy, D.C. 1999. APEX project: Alaska predator ecosystem experiment in Prince William Sound and the Gulf of Alaska, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 98163), Paumanok Solutions, Kailua, Hawaii.

98169

Friesen, V.L. and J.F. Piatt. 1998. A genetic study to aid in restoration of murres, guillemots, and murrelets to the Gulf of Alaska, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 98169), Alaska Biological Sciences Center, U.S. Geological Survey, Anchorage, Alaska.

Lindner, K.R., P. Spruell, K.L. Knudsen, B. Sneed, and F.W. Allendorf. 1999. Construction of a linkage map for the pink salmon genome, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 98190), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

98195

Short, J. and P. Harris. 1999. Pristane monitoring in mussels and predators of juvenile pink salmon and herring, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 98195), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska.

98210

Childress, J. and J. Hall. 1998. Youth area watch program, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 98210), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

98225

McCollum, P. and D. Daisy. 1999. Port Graham pink salmon project, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 98225), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

98247

Hutchinson-Scarbrough, L.B. and J.N. McCullough. 1999. Kametolook River coho salmon subsistence project, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 98247), Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska, and Division of Commercial Fisheries, Kodiak, Alaska.

98256B

Gillikin, D. 1998. Sockeye salmon stocking Solf Lake, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 98256B), U.S. Forest Service, Glacier Ranger District, Girdwood, Alaska.

98263

Hall, A.J., J.L. Hall, and W. Meganack, Jr. 1998. Assessment, protection and enhancement of wildstock salmon streams in the lower Cook Inlet, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 98263), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

98273

Rosenberg, D.H. and M.J. Petrula. 1999. Scoter life history and ecology: Linking satellite technology with traditional knowledge, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 98273), Alaska Department of Fish and Game, Division of Wildlife Conservation, Anchorage, Alaska.

98290

Nelson, B.D., J.W. Short, and S.D. Rice. 1999. Hydrocarbon data analysis, interpretation and database maintenance for restoration and NRDA environmental samples associated with the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 98290), U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska.

98297

Vaughan, S.L., S.M. Gay, and L.B. Tuttle. 1998. Oceanography of Prince William Sound bays and fjords, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 98297), Prince William Sound Science Center, Cordova, Alaska.

98306

Robards, M.D. and J.F. Piatt. 1998. Ecology and demographics of Pacific Sand Lance, *Ammodytes hexapterus* Pallas, in Lower Cook Inlet, Alaska, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 98306), U.S. Geological Survey, Biological Resources Division, Anchorage, Alaska.

Hovey, A.K., G.J. Divoky, and D.D. Roby. 1999. Pigeon guillemot restoration research at the Alaska SeaLife Center, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 98327), Oregon Cooperative Fish and Wildlife Research Unit, Biological Resources Division - USGS, and Department of Fisheries and Wildlife, Oregon State University, Corvallis, Oregon.

98330-1

Okey, T.S. and D. Pauly, (eds.). 1999. A trophic mass-balance model of Alaska's Prince William Sound ecosystem for the post-spill period of 1994-1996, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 98330-1), Fisheries Centre, University of British Columbia, Vancouver, Canada.

98330-2

Powell, R.D. and S.L. Pimm. 1999. Toward a mass-balance-based dynamic model of Alaska's Prince William Sound ecosystem for the post-spill period 1994-1996, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 98330-2), University of Tennessee, Knoxville, Tennessee.

98338

Piatt, J.F. and T.I. Van Pelt. 1998. Survival of adult murres and kittiwakes in relation to forage fish abundance, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 98338), U.S. Geological Survey, Anchorage, Alaska.

98340

Weingartner, T. 1999. Toward long-term oceanographic monitoring of the Gulf of Alaska ecosystem, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 98340), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

98341

Castellini, M.A., J.M. Castellini, and S.J. Trumble. 1998. Recovery of harbor seals. Phase II: controlled studies of health and diet, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 98341), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

98347

Heintz, R.A., M. Larsen, and L. Holland. 1999. Fatty acid profile and lipid class analysis for estimating diet composition and quality at different trophic levels, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 98347), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska.

99012

Matkin, C.O., D. Scheel, G. Ellis, L. Barrett-Lennard, H. Jurk, and E. Saulitis. 2000. Photographic and acoustic monitoring of killer whales in Prince William Sound and Kenai Fjords, Alaska, Exxon *Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 99012), North Gulf Oceanic Society, Homer, Alaska.

99052A

Brown-Schwalenberg, P.K. and H.S. Short. 2000. Community involvement project, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 99052A), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

99052B

Brown-Schwalenberg, P.K. and H.S. Short. 2000. Traditional ecological knowledge, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 99052B), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

Friesen, V.L. and J.F. Piatt. 2000. A genetic study to aid in restoration of murres, guillemots and murrelets to the Gulf of Alaska, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 99169), U.S. Geological Survey, Alaska Biological Science Center, Anchorage, Alaska.

99190

Lindner, K.R., E.K. Steinberg, P. Spruell, K.L. Knudsen, A.N. Maxwell, and F.W. Allendorf. 2000. Construction of a linkage map for the pink salmon genome, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 99190), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

99195

Short, J. and P. Harris. 2000. Pristane monitoring in mussels, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 99195), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska.

99210

Childress, J. and J. Hall. 1999. Youth area watch program, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 99210), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

99245

Vanek, V. and M. Reidel. 2000. Community-based harbor seal management and biological sampling, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 99245), Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska.

99247

Hutchinson-Scarborough, L., and J. McCullough. 2000. Kametolook River coho salmon subsistence project, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 99247), Alaska Department of Fish and Game, Division of Commercial Fisheries, Kodiak, Alaska.

99256B

Gillikin, D. 2000. Sockeye salmon stocking Solf Lake, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 99256B), U.S. Forest Service, Glacier Ranger District, Girdwood, Alaska.

99273

Rosenberg, D.H. and M.J. Petrula. 2000. Scoter life history and ecology: linking satellite technology and traditional knowledge, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 99273), Alaska Department of Fish and Game, Division of Wildlife Conservation, Anchorage, Alaska.

99290

Nelson, B.D., J.W. Short, and S.D. Rice. 2000. Hydrocarbon data analysis, interpretation and database maintenance for restoration and NRDA environmental samples associated with the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 99290), U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska.

99327

Hovey, A.K., G.J. Divoky, and D.D. Roby. 2000. Pigeon guillemot restoration research at the Alaska SeaLife Center, *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 99327), Oregon Cooperative Fish and Wildlife Research Unit, USGS - Biological Resources Division, and Department of Fisheries and Wildlife, Oregon State University, Corvallis, Oregon.

99338

Piatt, J.F. 2000. Survival of adult murres and kittiwakes in relation to forage fish abundance, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 99338), U.S. Geological Survey, Alaska Biological Science Center, Anchorage, Alaska.

Weingartner, T. 2000. Toward long-term oceanographic monitoring of the Gulf of Alaska ecosystem, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 99340), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

99341

Castellini, M.A., J.M. Castellini, and S.J. Trumble. 2000. Recovery of harbor seals. Phase II: controlled studies of health and diet, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 99341), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

99366

Otis, E.O. and M. Dickson. 2000. Improved salmon escapement enumeration using remote video and time-lapse technology, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 99366), Alaska Department of Fish and Game, Division of Commercial Fisheries, Anchorage, Alaska.

99371

Scheel, D.M. 2000. Effects of harbor seal metabolism on stable isotope ratio tracers, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 99371), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

99391

Zeiner, K., R. Kunibe, C. Fries, J. Hock, G. Kellogg, L. Patrick, L. Suring, D. Sklarew, C. Gaunt, M. Fene, and W. Samuels. 2000. Cook Inlet Information Management and Monitoring System, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 99391), Alaska Department of Natural Resources, Office of the Commissioner, Anchorage, Alaska.

99393

Kline, T.C., Jr. 2000. Prince William Sound food webs: structure and change, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 99393), Prince William Sound Science Center, Cordova, Alaska

99401

O'Clair, C.E., M. Lindeberg, and C. Hughey. 2000. Assessment of spot shrimp abundance in Prince William Sound a decade after the *Exxon Valdez oil spill, Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 99401), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska and Valdez Native Tribe, Valdez, Alaska.

99423

Bodkin, J.L. and T.A. Dean. 2000. Patterns and processes of population change in sea otters, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 99423), U.S. Geological Survey, Alaska Biological Science Center, Anchorage, Alaska.

99441

Davis, R.W. 2000. Harbor seal recovery. Phase III: effects of diet on lipid metabolism and health, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 99441), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

99462

Marty, G.D., T.R. Meyers, and G. Carpenter. 2000. Effect of disease on recovery of Pacific herring in Prince William Sound, Alaska, Spring 1999, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 99462), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

Heintz, R.A. 2000. Effects of oiled incubation substrate on pink salmon reproduction, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 99476), U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska.

99479

Kitaysky, A.S. and J.F. Piatt. 2000. Effects of food stress on survival and reproductive performance of seabirds, *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 99479), University of Washington, Seattle, Washington and U.S. Geological Survey, Anchorage, Alaska.

00052

Ward, S.L. and P.K. Brown-Schwalenberg. 2001. Community involvement project, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 00052), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

00159

Stephensen, S.W., D.B. Irons, S.J. Kendall, B.K. Lance, and L.L. McDonald. 2001. Marine bird and sea otter population abundance of Prince William Sound, Alaska: trends following the *T/V Exxon Valdez* oil spill, 1989 - 2000. *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 00159), U.S. Fish and Wildlife Service, Anchorage, Alaska.

00190

Lindner, K.R., E.K. Steinberg, M. Skinner, K.L. Knudsen, P. Spruell, and F.W. Allendorf. 2001. Construction of a linkage map for the pink salmon genome, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 00190), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

00210

Childress, J. and J. Hall. 2000. Youth area watch program, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 00210), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

00247

Hutchinson-Scarbrough, L.B. and J.N. McCullough. 2001. Kametolook River coho salmon subsistence project, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 00247), Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska, and Division of Commercial Fisheries, Kodiak, Alaska.

00256B

Gillikin, D. 2001. Sockeye salmon stocking Solf Lake, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 00256B), U.S. Forest Service, Glacier Ranger District, Girdwood, Alaska.

00338

Piatt, J.F. 2001. Survival of adult murres and kittiwakes in relation to forage fish abundance, *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 00338), U.S Geological Survey, Alaska Biological Science Center, Anchorage, Alaska.

00340

Weingartner, T. 2001. Toward long-term oceanographic monitoring of the Gulf of Alaska ecosystem, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 00340), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

00401

O'Clair, C.E., M. Lindeberg, and C. Hughey. 2001. Assessment of spot shrimp abundance in Prince William Sound a decade after the *Exxon Valdez* oil spill, Exxon *Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 00401), National Ocean and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska, and Valdez Native Tribe, Valdez, Alaska.

Rosenberg, D. and M.J. Petrula. 2001. Harlequin duck population dynamics, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 00407), Alaska Department of Fish and Game, Division of Wildlife Conservation, Anchorage, Alaska.

00423

Bodkin, J.L., T.A. Dean, and D. Esler. 2001. Patterns and processes of population change in selected nearshore vertebrate predators, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 00423), U.S. Geological Survey, Alaska Biological Science Center, Anchorage, Alaska.

00455

Falkenberg, C. 2001. Evaluation of the data system for the EVOS long-term monitoring program, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 00455), ECOlogic Corp., Washington, D.C.

00462

Marty, C.D., T.R. Meyers, and G. Carpenter. 2000. Effect of disease on recovery of Pacific herring in Prince William Sound, Alaska, Fall 1999 and Spring 2000, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 004621), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

00476

Heintz, R.A. 2001. Effects of oiled incubation substrate on pink salmon reproduction, *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 00476), National Ocean and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Fisheries Laboratory, Juneau, Alaska.

00479

Kitaysky, A.S. and J.F. Piatt. 2001. Effects of food stress on survival and reproductive performance of seabirds, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 00479), University of Washington, Seattle, Washington, and U.S. Geological Survey, Anchorage, Alaska.

00610

Ward, S.L. and T. Schneider. 2001. Kodiak Archipelago youth area watch, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 00610), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

01012

Matkin, C.O., G. Ellis, H. Yurk, and E. Saulitis. 2002. Photographic and acoustic monitoring of killer whales in Prince William Sound and Kenai Fjords, Alaska, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 01012), North Gulf Oceanic Society, Homer, Alaska.

01052

P.K. Brown-Schwalenberg and Ward, S.L. 2002. Community involvement project, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 01052), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

01190

Tyburczy, J., K.R. Lindner, K.L. Knudsen, P. Spruell, and F.W. Allendorf. 2002. Construction of a linkage map for the pink salmon genome, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 01190), University of Montana, Missoula, Montana.

01195

Short, J. and P. Harris. 2002. Pristane monitoring in mussels and predators of juvenile pink salmon and herring, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 01195) U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service Auke Bay Laboratory, Juneau, Alaska.

01256B

Gillikin, D. 2002. Sockeye salmon stocking at Solf Lake, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 01256B), U.S. Forest Service, Glacier Bay Ranger District, Girdwood, Alaska.

01290

Nelson, B.D., J.W. Short, and S.D. Rice. 2002. Hydrocarbon data analysis, interpretation and database maintenance for restoration and NRDA environmental samples associated with the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 01290), U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service Auke Bay Laboratory, Juneau, Alaska.

01340

Weingartner, T.J. and S.L. Danielson. 2002. Toward long-term oceanographic monitoring of the Gulf of Alaska ecosystem, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 01340), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

01423

Bodkin, J.L., B.E. Ballachey, and D. Esler. 2002. Patterns and processes of population change in selected nearshore vertebrate predators, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 01423), U.S Geological Survey, Alaska Biological Science Center, Anchorage, Alaska.

01462

Marty, G.D., T.R. Meyers, and S.D. Moffitt. 2002. Effect of disease on recovery of Pacific herring in Prince William Sound, Alaska, Fall 2000 and Spring 2001, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 01462), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

01558

Atkinson, S. 2002. Harbor seal recovery: Application of new technologies for monitoring health, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 01558), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska.

01610

T. Schneider and S.L. Ward. 2001. Kodiak Archipelago youth area watch, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 01610), Alaska Department of Fish and Game, Habitat and Restoration Division, Anchorage, Alaska

Exxon Valdez Oil Spill State/Federal Natural Resource Damage Assessment Annual Reports

Annual reports in this series cover multi-year natural resource damage assessment (NRDA) studies funded between 1989 (prior to settlement of litigation) and 1992.

Bird 10

Patten, S.M. 1991. Assessment of injury to glaucous-winged gulls using Prince William Sound, Exxon *Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Annual Report (Bird Study Number 10), Alaska Department of Fish and Game, Division of Wildlife Conservation, Anchorage, Alaska.

Bird 13

Alaska Department of Fish and Game. 1991. Reconnaissance survey of passerine birds in Prince William Sound, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Annual Report (Bird Study Number 13), Alaska Department of Fish and Game, Division of Wildlife Conservation, Anchorage, Alaska.

Fish/Shellfish 6

Roth, K., C. Whitmore, and P. Hansen. 1990. Prince William Sound and Gulf of Alaska sport fishery harvest and effort, 1989, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Annual Report (Fish/Shellfish Study Number 6), Alaska Department of Fish and Game, Division of Sport Fish, Anchorage, Alaska.

Fish/Shellfish 12

Brennan, K. 1998. Hydrocarbon injury assessment - Kodiak and Alaska Peninsula herring, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Annual Report (Fish/Shellfish Study Number 12), Alaska Department of Fish and Game, Division of Commercial Fisheries, Kodiak, Alaska.

Fish/Shellfish 14

O'Clair, C.E., C. Trowbridge, and D. Ackley. 1990. Injury to Prince William Sound crabs, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Annual Report (Fish/Shellfish Study Number 14), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska.

Fish/Shellfish 20

Huttunen, D.C. and P.A. Skvorc. 1989. Undersea observations of submerged oil, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Annual Report (Fish/Shellfish Study Number 20), Alaska Department of Fish and Game, Oil Spill Impact and Restoration Division, Anchorage, Alaska.

Fish/Shellfish 26

Donaldson, W. and S. Byersdorfer. 1990. Sea urchin injury: assessment of impacts of oil on green sea urchins, Exxon *Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Annual Report (Fish/Shellfish Study Number 26), Alaska Department of Fish and Game, Division of Commercial Fisheries, Kodiak, Alaska.

Marine Mammal 3

Loughlin, T.R. 1994. Cetacean necropsies to determine injury from the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Annual Report (Marine Mammal Study Number 3), U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Alaska Fisheries Science Center, National Marine Mammal Laboratory, Seattle, Washington.

Restoration Study 53

Tarbox, K.E., D.L. Waltemyer, L.K. Brannian, R.Z. Davis, B.E. King, J.R. Fox, and S.M. Fried. 1994. Kenai River sockeye salmon restoration, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Annual Report (Restoration Study Number 53), Alaska Department of Fish and Game, Commercial Fisheries Division, Soldotna, Alaska.

Restoration Study 59

Seeb, L., J. Seeb, R. Gates, and C. Habicht. 1993. Assessment of genetic stock structure of salmonids, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Annual Report (Restoration Study Number 59), Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Anchorage, Alaska.

Restoration Study 103-1

Babcock, M.M., S.D. Rice, P.M. Harris, and C.C. Brodersen. 1996. Recovery monitoring and restoration of intertidal oiled mussel beds in Prince William Sound impacted by the *Exxon Valdez* oil spill: 1991 and 1992, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Annual Report (Restoration Study Number 103-1), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska.

Restoration Study 103-4

Cusick, J.A. and G.V. Irvine. 1993. Geographical extent and recovery monitoring of intertidal oiled mussel beds in the Gulf of Alaska affected by the *Exxon Valdez* oil spill, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Annual Report (Restoration Study Number 103-4), National Park Service, Anchorage, Alaska.

Terrestrial Mammal 1

Lewis, J.P. and D.G. Calkins. 1995. Assessment of the impact of the *Exxon Valdez* oil spill on Sitka black-tailed deer in Prince William Sound and the Kodiak Archipelago, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Annual Report (Terrestrial Mammal Study Number 1), Alaska Department of Fish and Game, Division of Wildlife Conservation, Anchorage, Alaska.