

6.0 COORDINATION WITH OTHER PROGRAMS, PLANS and REGULATORY AUTHORITIES

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6.1 Overview

Two major Federal laws guiding the restoration of the injured resources and services in Alaska are OPA and NEPA. OPA and its regulations provide the basic framework for natural resource damage assessment and restoration. NEPA sets forth a specific process of impact analysis and public review. In addition, the Trustees must comply with other applicable laws, regulations and policies at the Federal, state and local levels. The potentially relevant laws, regulations and policies are set forth below.

In addition to laws and regulations, the Trustees must consider relevant environment or economic programs or plans that are ongoing or planned in or near the affected environment. The Trustees must attempt to ensure that their proposed restoration activities neither impede nor duplicate such programs or plans. By coordinating restoration with other relevant programs and plans, the Trustees can enhance the overall effort to improve the environment affected by the *M/V Kuroshima* incident.

In initiating the Final RP/EA, the Trustees propose to combine the Restoration Plan required under OPA with the environmental review processes required under NEPA. This is expected to enable the Trustees to implement restoration more rapidly than had these processes been undertaken sequentially.

6.2 Key Statutes, Regulations and Policies

Oil Pollution Act of 1990 (OPA), 33 USC §§ 2701, et seq.; 15 CFR Part 990

OPA establishes a liability regime for oil spills that injure or are likely to injure natural resources and/or the services that those resources provide to the ecosystem or humans. Federal and State agencies act as Trustees on behalf of the public and Indian Tribal Trustees act on behalf of their members to assess the injuries, scale restoration to compensate for those injuries and implement restoration. Section 1006(e)(1) of OPA (33 USC § 2706(e)(1)) requires the President, acting through the Under Secretary of Commerce for Oceans and Atmosphere (NOAA), to promulgate regulations for the assessment of natural resource damages resulting from a discharge or substantial threat of a discharge of oil. Assessments are intended to provide the basis for restoring, replacing, rehabilitating and acquiring the equivalent of injured natural resources and services.

The OPA damage assessment regulations (15 CFR Part 990) provide a framework for conducting sound natural resource damage assessments that achieve restoration. The process emphasizes both public involvement and participation by the Responsible Party(ies). The Trustees have used these regulations in this assessment.

Alaska Oil Pollution Laws

Alaska has several statutes relating to the discharge of oil or petroleum products. Pollution of air, land, subsurface land, or water of the State is prohibited by AS 46.03.710. The discharge of

oil or petroleum products into or upon the land or waters of the State is prohibited by AS 46.03.740. Civil penalties are assessed for the discharge of petroleum products into the environment of the State pursuant to AS 46.03.758 and, for the discharge of crude oil, pursuant to AS 46.03.759. Under AS 46.03.760 the State may collect civil damages for various forms of pollution including the discharge of petroleum products. Under AS 46.03.760 and AS 46.03.780 the State may collect damages for injuries to the environment and the cost of restoring the environment to its prespill condition. Strict liability for the discharge of hazardous materials, including petroleum products, is imposed pursuant to AS 46.03.822. Additional State statutes governing the discharge of oil and recovery of damages resulting therefrom are located at AS 46.04. Spending accounts for oil spill response and clean up have been established under AS 46.08. The discharge of oil into state waters also violates Alaska's water pollution statutes, AS 46.03.050 et seq., and regulations, 18 AAC 70.

National Environmental Policy Act (NEPA), as amended, 42 USC §§ 4321, et seq. 40 CFR Parts 1500-1508

Congress enacted NEPA in 1969 to establish a national policy for the protection of the environment. NEPA applies to Federal agency actions that affect the human environment. NEPA established the Council on Environmental Quality (CEQ) to advise the President and to carry out certain other responsibilities relating to implementation of NEPA by Federal agencies. Pursuant to Presidential Executive Order, Federal agencies are obligated to comply with the NEPA regulations adopted by the CEQ. These regulations outline the responsibilities of Federal agencies under NEPA and provide specific procedures for preparing environmental documentation to comply with NEPA. NEPA requires that an Environmental Assessment (EA) be prepared in order to determine whether the proposed restoration actions will have a significant effect on the quality of the human environment.

Generally, when it is uncertain whether an action will have a significant effect, Federal agencies will begin the NEPA planning process by preparing an EA. The EA may undergo a public review and comment period. Federal agencies may then review the comments and make a determination. Depending on whether an impact is considered significant, an environmental impact statement (EIS) or a Finding of No Significant Impact (FONSI) will be issued.

The Trustees have integrated this Restoration Plan with the NEPA process to comply, in part, with those requirements. This integrated process allows the Trustees to meet the public involvement requirements of OPA and NEPA concurrently. The RP/EA is intended to accomplish NEPA compliance by: (1) summarizing the current environmental setting, (2) describing the purpose and need for restoration action, (3) identifying alternative actions, (4) assessing the preferred actions' environmental consequences, and (5) summarizing opportunities for public participation in the decision process. Project-specific NEPA documents may be needed for some of the proposed restoration projects.

Clean Water Act (CWA) (Federal Water Pollution Control Act), 33 USC §§ 1251, et seq.

The CWA is the principal law governing pollution control and water quality of the nation's waterways. Section 404 of the law authorizes a permit program for the disposal of dredged or fill material into navigable waters. The U.S. Army Corps of Engineers (Corps) administers the program. In general, restoration projects that move significant amounts of material into or out of

waters or wetlands -- for example, hydrologic restoration of marshes -- require Section 404 permits.

Under Section 401 of the CWA, restoration projects that involve discharge or fill to wetlands or navigable waters must obtain certification of compliance with state water quality standards. The Alaska Department of Environmental Compliance implements the Section 401 certification program. Generally, restoration projects with minor wetlands impacts (*i.e.*, a project covered by a Corps general permit) do not require Section 401 certification, while projects with potentially large or cumulative impacts must undergo a certification review.

Coastal Zone Management Act (CZMA), 16 USC §§ 1451, *et seq.*, 15 CFR Part 923

The goal of the CZMA is to preserve, protect, develop and, where possible, restore and enhance the nation's coastal resources. The Federal government provides grants to states with federally-approved coastal management programs. The State of Alaska has a federally-approved program. Section 1456 of the CZMA requires that any Federal action inside or outside of the coastal zone that affects any land or water use or natural resources of the coastal zone shall be consistent, to the maximum extent practicable, with the enforceable policies of approved state management programs. It states that no Federal license or permit may be granted without giving the State the opportunity to concur that the project is consistent with the state's coastal policies. The regulations outline the consistency procedures.

The Trustees do not expect that any of the proposed projects will adversely affect the State's coastal zone. However, to comply with the CZMA, the Trustees intend to seek the concurrence of the State of Alaska that their preferred projects are consistent to the maximum extent practicable with the enforceable policies of the State coastal program.

Marine Mammal Protection Act (MMPA), 16 USC §§ 1361, *et seq.*

The Marine Mammal Protection Act is the principal Federal legislation that protects marine mammals. It also recognizes the important role that marine mammals play in the ecosystem as well as their recreational and aesthetic value. The MMPA places a moratorium, with few exceptions, on the taking or importing into the United States of marine mammals or their products. The MMPA defines "take" as "to harass, hunt, capture, or kill or attempt to harass, hunt, capture, or kill any marine mammal." The U.S. Fish and Wildlife Service and the Department of Commerce/NOAA share responsibility for the management and conservation for these species.

Endangered Species Act (ESA), 16 USC §§ 1531, *et seq.*, 50 CFR Parts 17, 222, 224

The ESA directs all Federal agencies to conserve endangered and threatened species and their habitats and encourages such agencies to utilize their authorities to further these purposes. Under the Act, the National Marine Fisheries Service (NMFS) and the USFWS publish lists of endangered and threatened species. Section 7 of the Act requires that Federal agencies consult with these two agencies to minimize the effects of Federal actions on endangered and threatened species. Prior to implementation of the proposed projects, the Trustees will conduct Section 7 consultations in conjunction with Essential Fish Habitat (EFH) consultation as noted below. Should it be determined that any of the proposed projects will adversely affect a threatened or endangered species, the Trustees will either redesign the project or substitute another project.

Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), 16 USC §§ 1801 et seq.

The Magnuson-Stevens Fishery Conservation and Management Act as amended and reauthorized by the Sustainable Fisheries Act (Public Law 104-297) establishes a program to promote the protection of EFH in the review of projects conducted under Federal permits, licenses, or other authorities that affect or have the potential to affect such habitat. After EFH has been described and identified in fishery management plans by the regional fishery management councils, Federal agencies are obligated to consult with the Secretary of Commerce with respect to any action authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken, by such agency that may adversely affect any EFH.

The Trustees anticipate that the proposed restoration projects will have no adverse effect on EFH and will promote the protection of fish resources and EFH. The Trustees will consult with NMFS prior to implementation of any restoration project.

Fish and Wildlife Coordination Act (FWCA), 16 USC §§ 661, et seq.

The FWCA requires that Federal agencies consult with the USFWS, NMFS and state wildlife agencies for activities that affect, control or modify waters of any stream or bodies of water, in order to minimize the adverse impacts of such actions on fish and wildlife resources and habitat. This consultation is generally incorporated into the process of complying with Section 404 of the Clean Water Act, NEPA or other Federal permit, license or review requirements.

In the case of NRDA restoration actions under this draft RP/EA, the fact that the three consulting agencies for the FWCA (*i.e.*, USFWS, NMFS and the State) are represented by the Trustees means that FWCA compliance will be inherent in the Trustee decisionmaking process.

Rivers and Harbors Act, 33 USC §§ 401, et seq.

The Rivers and Harbors Act regulates development and use of the nation's navigable waterways. Section 10 of the Act prohibits unauthorized obstruction or alteration of navigable waters and vests the Corps with authority to regulate discharges of fill and other materials into such waters. Restoration actions that require Section 404 Clean Water Act permits are likely also to require permits under Section 10 of the Rivers and Harbors Act. However, a single permit usually serves for both. Therefore, the Trustees can ensure compliance with the Rivers and Harbors Act through the same mechanism.

Executive Order (EO) 12898 - Environmental Justice

On February 11, 1994, President Clinton issued EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. This EO requires each Federal agency to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority and low income populations. EPA and the CEQ have emphasized the importance of incorporating environmental justice review in the analyses conducted by Federal agencies under NEPA and of developing mitigation measures that avoid disproportionate environmental effects on minority and low-income populations. The Trustees have concluded that there are no low-income or

ethnic minority communities that would be adversely affected by the proposed restoration activities.

Executive Order (EO) 11988 -- Construction in Flood Plains

This 1977 Executive Order directs Federal agencies to avoid to the extent possible the long- and short- term adverse impacts associated with the occupancy and modification of flood plains and to avoid direct or indirect support of development in flood plains wherever there is a practicable alternative. Each agency is responsible for evaluating the potential effects of any action it may take in a flood plain.

Before taking an action, the Federal agency must determine whether the proposed action will occur in a flood plain. For major Federal actions significantly affecting the quality of the human environment, the evaluation will be included in the agency's NEPA compliance document(s). The agency must consider alternatives to avoid adverse effects and incompatible development in flood plains. If the only practicable alternative requires siting in a flood plain, the agency must: (1) design or modify the action to minimize potential harm and (2) prepare and circulate a notice containing an explanation of why the action is proposed to be located in the flood plain. The Trustees have determined that none of the proposed projects is located in a flood plain.

6.3 Other Potentially Applicable Laws and Regulations

This section lists other laws that potentially affect the Trustees' restoration activities. The statutes or their implementing regulations may require permits from Federal or state permitting authorities. The permitting process also may require an evaluation of statutes other than those noted below.

- Archaeological Resources Protection Act, 16 USC §§ 470, *et seq.*
- Clean Air Act, 42 USC §§ 7401, *et seq.*
- Migratory Bird Treaty Act, 16 USC §§ 703, *et seq.*
- National Marine Sanctuaries Act, 16 USC §§ 14
- National Wildlife System Administration Act, 16 USC §§ 668dd, *et seq.*
- Executive Order 12996, National Wildlife System Administration

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8.0 REFERENCES

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9.0 BUDGET

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Final costs and allocation of available funds for restoration projects will depend on whether any changes in the proposed projects are necessary based on public comments on the restoration plan. Costs and cost allocations are preliminary and may change pending finalization and approval of associated design documents.

Table 5: Restoration Cost Summary		
Injury Category	Preferred Alternative	Estimated Cost
Birds	Predator removal on Avatanak	
Vegetation	Evaluate recovery of injured vegetation	
Vegetation	On-Site Planting	
Shellfish/Intertidal Biota	Additional testing for contaminants	
Shellfish/Intertidal Biota	Seafood Safety Education	
Salmonids/Lake resources	On-site Sediment Control	
Salmonids/Lake resources	Lakeshore planting and Contingency	
Salmonids/Lake resources	Salmon Enumeration and Limnology	
Subsistence and Recreation	Camp Structures	
Subsistence and Recreation	Education	
Subsistence and Recreation	Beach Cleanup	
Total		To be determined

10.0 Appendices

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10.1 Abbreviations and Acronyms

ADEC	Alaska Department of Environmental Conservation
ADF&G	Alaska Department of Fish and Game
ADOL	Alaska Department of Law
ADNR	Alaska Department of Natural Resources
°C	Centigrade (degrees)
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CORPS	U.S. Army Corps of Engineers
CZMA	Coastal Zone Management Act
CWA	Clean Water Act
DAC	NOAA's Damage Assessment Center
DOI	U.S. Department of the Interior
DOC	U.S. Department of Commerce
Draft RP/EA	Draft Restoration Plan and Environmental Assessment
EA	Environmental Assessment
EFH	Essential Fish Habitat (under MSFCMA)
EIS	Environmental Impact Statement
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FONSI	Finding of No Significant Impact
FWCA	Fish and Wildlife Coordination Act
HAZMAT	NOAA's Hazardous Materials Response and Assessment Division
HEA	Habitat Equivalency Analysis
KM	Kilometers
LAT	Lead Administrative Trustee
MMPA	Marine Mammal Protection Act
MSFCMA	Magnuson-Stevens Fishery Conservation and Management Act
M/V	Motor Vessel
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NRDA	Natural Resource Damage Assessment
NWR	National Wildlife Refuges (USFWS)
OPA	Oil Pollution Act of 1990
PAH	Polycyclic aromatic hydrocarbons
PPM	Parts per million
RP(s)	Responsible Party or Parties
RP/EA	Restoration Plan and Environmental Assessment
§	Section
SCAT	Shoreline Cleanup Assessment Team
USC	United States Code
USCG	U.S. Coast Guard

USFWS

U.S. Fish and Wildlife Service

**10.2 Trustee Determinations:
Determination of Jurisdiction (February, 1999)**

On November 26, 1997, the *M/V Kuroshima* ran aground in Summer Bay, Unalaska resulting in the discharge of oil to the Bay, Summer Bay Lake, Humpy Cove and surrounding areas. The natural resource Trustees for the resources affected by the spill are Alaska Department of Fish and Game, the State of Alaska Department of Law, and the State of Alaska Department of Natural Resources acting on behalf of the State of Alaska, the National Oceanic and Atmospheric Administration (NOAA) of the Department of Commerce, the United States Fish and Wildlife Service on behalf of the Department of the Interior (DOI), in consultation with the Qawalangin Tribe. Pursuant to the Oil Pollution Act of 1990, 33 U.S.C. Section 2706, these governmental entities are collectively referred to as the natural resource Trustees ("Trustees") in recognition of their common interests.

The Trustees make the following findings pursuant to the Oil Pollution Act of 1990 (OPA), 33 U.S.C. 2701 *et seq.*, and the implementing regulations under that Act, specifically 15 C.F.R. Section 990.41:

Section 990.41 Determination of Jurisdiction

1. An "incident" has occurred.

On November 26, 1997 the *M/V Kuroshima*, a privately owned vessel, as defined at 33 U.S.C. Section 2701 (37), ran aground in Summer Bay, Unalaska resulting in the discharge of approximately 40,000 gallons of Bunker fuel and marine diesel oil, as defined at 33 U.S.C. Section 2701 (23), into the navigable waters of Summer Bay and Summer Bay Lake which are part of the Exclusive Economic Zone, as defined at 33 U.S.C. Section 2701 (14) of OPA. See *Certificate of Financial Responsibility filed with U.S. Coast Guard (AR# 75)*, *Alaska Department of Environmental Conservation Situation Reports (AR #1)*, *Alaska Department of Environmental Conservation Final Incident Report, 1/6/98 Caleb Brett report (AR# 56)*.

2. The Trustees have determined that:

(A) This Incident was not permitted under federal, state or local law. See *Alaska Department of Environmental Conservation Situation Report, November 26, 1998 (AR# 18)*.

(B) The *M/V Kuroshima* is a privately owned vessel and is not a public vessel. See *Certificate of Financial Responsibility filed with the U.S. Coast Guard (AR# 75)*.

(C) The discharge of oil from this incident did not occur from an onshore facility subject to the Trans-Alaska pipeline Authority Act. See *Alaska Department of Environmental Conservation Situation Report, November 26, 1998 (AR# 18)*.

3. Based upon information gathered during the response, initiation and preassessment phases, the Trustees have determined, in consultation with the Qawalangin Tribe, that, due to the amount

and type of oil spilled, the known toxicity of the oil, the location of the spill and the living and non-living natural resources in the area at the time of the spill (including but not limited to birds, fish, marine biota, sediments and water) natural resources under the trusteeship of NOAA, DOI and the State of Alaska may have been injured, or may be injured as a result of the Incident. See *M/V Kuroshima Incident: Pre-Assessment Scoping Report, NOAA Damage Assessment Center (AR # 18)*.

Determination to Conduct Restoration Planning (February, 1999)

Section 990.42 - Determination to Conduct Restoration Planning

During the preassessment phase of the natural resource damage assessment the natural resource trustees engaged in a number of preassessment activities to secure information regarding the type and scope of potential natural resource injuries associated with the site, the need for additional damage assessment studies and potential for restoration. These activities included:

- (1) site visits and sample collection
- (2) evaluation of exposure to birds
- (3) evaluation of exposure to salmonids
- (4) collection of water and sediment samples in Summer Bay Lake
- (5) enumeration of salmon smolts from Summer Bay Lake
- (6) enumeration of adult fish to Summer Bay Lake

Additionally, the Trustees participated throughout the response efforts and evaluated information obtained during the response effort. *Kuroshima Shipping, S.A.* agreed to stipulate to the exposure of bald eagles and salmonids to oil. See *Stipulation Between Natural Resource Damage Trustees and Kuroshima Shipping, S.A. (AR# 95)*.

Based upon a review of the information obtained during these efforts, the Trustees have determined, pursuant to 15 C.F.R. Section 990.42 (a), that:

- (1) Data collected and analyzed during the preassessment phase pursuant to 15 C.F.R. Section 990.43 demonstrate that injuries to natural resources are likely to have resulted from the Incident, including but not limited to the following:
 - (A) losses associated with the direct oiling of invertebrate marine communities, including mortality and tainting of intertidal resources and the loss of use of these resources for subsistence;
 - (B) loss of wildlife, including direct bird mortality, resulting from oiling and predation of injured birds;
 - (C) losses associated with direct oiling of bird and marine habitats of the Unalaska Bay area including the shorelines of Summer Bay and Summer Bay Lake, including the loss of use of these areas for recreation;

(D) nearshore and Lake salmon and trout fisheries including the loss of use of these fisheries for subsistence, recreational and commercial fishing.

See NOAA's *Preassessment Report (AR# 18)*, 2/18/98 NOAA "Initiation Request" to the United States Coast Guard National Pollution Funds Center (NPFC) and approval (AR# 71) , 6/11/98 NOAA "Revised Initiation Request" and NPFC Approval (AR# 130) , Alaska Department of Environmental Conservation *Final Response Report (AR# 1)*.

(2) Response actions during cleanup have not adequately addressed the natural resource injuries resulting from the Incident. Response actions were primarily limited to containment and removal of oil that was spilled and were not intended to resolve all the natural resource losses associated with the Incident. See *Alaska Department of Environmental Conservation Final Response Report (AR# 1)*.

(3) Feasible primary and compensatory restoration actions exist to address injuries from the Incident. Restoration activities are expected to focus on addressing losses associated with the intertidal resources, Lake fisheries, waterfowl and shorebirds, habitat and other losses as identified. Feasible restoration actions relevant to the injuries may include, but are not necessarily limited to:

- (A) predator control
- (B) habitat improvements
- (C) shoreline maintenance
- (D) increasing public awareness and education on shellfish contamination.

Based upon the foregoing determinations the Trustees have decided to proceed with restoration planning for the Incident.

10.3 Index to Administrative Record

To facilitate review, the administrative record is presented three ways- by Record Number, Author, and Subject Area

Record Number	Author	Date	Title
1	Alaska Department of Environmental Conservation	1998	<i>M/V Kuroshima</i> Response. ADEC. Final Report.
2	Alaska Department of Fish and Game	1998	Juvenile and Adult Fish Production the Summer Following the <i>M/V Kuroshima</i> Oil Spill. Regional Information Report No. 4K99-62
3	Alaska Department of Fish and Game	1999	Juvenile and Adult Fish Production the Two Years Following the <i>M/V Kuroshima</i> Oil Spill.
4	Alaska Department of Health and Social Services,	1998	Health Consultation, <i>M/V Kuroshima</i> Oil Spill, Unalaska, Alaska
5	Bailey, E.	1993	Introduction of Foxes to Alaskan Islands- History, Effects on Avifauna, and Eradication.
6	Belt, G., Laughlin, J., and T. Merrill	1992	Design of Forest Riparian Buffer Strips for the Protection of Water Quality: Analysis of Scientific Literature.
7	Burger, A.E.	1993	Mortality of Seabirds Assessed from Beached-Bird Surveys in Southern British Columbia. Canadian Field
8	Byrd, G.V, Bailey, E., and W. Stahl.	1996	Introduced Predator Removal from Islands. Exxon Valdez Oil Spill Restoration Project Final Report
9	Byrd, G.V., Trapp, J.L., and C. F. Zeilemaker.	1994	Removal of Introduced Foxes: A Case Study in Restoration of Native Birds.
10	Everest, F., Beschta, R., Scrivener, J., Koski, K., Sedell, J. and C.J. Sederholm.	1987	Fine Sediment and Salmonid Production: A Paradox. pp 98-142 in Salo, E., and T. Cundy (Eds.) Streamside Management: Forestry and Fisheries Interactions.
11	Furniss, M., Roelofs, T., and C.S. Yee.	1991	Road Construction and Maintenance. pp 297-323 in Meehan (Ed.) Influences of Forest and Rangeland Management on Salmonid Fishes and Their Habitats.
12	Honnold, S., Edmundson, J., and S. Schrof.	1996	Limnological and Fishery Assessment of 23 Alaska Peninsula and Aleutian Area Lakes, 1993-1995: An Evaluation of Potential Sockeye and Coho Salmon Production.
13	Huyck, V., and E. Paulson (Eds.)	1997	Petroleum in the Freshwater Environment: An Annotated Bibliography.
14	Knecht, R., and R. Davis.	1999	Oil Spill Response and Restoration at the Summer Bay Archaeological Site (UNL-92)
15	Muhlberg, G., and N. Moore.	1998	Streambank Revegetation and Protection Manual - A Guide for Alaska.
16	NOAA	1999	Revised Draft Restoration Plan and Environmental Assessment for the January 19, 1996 North Cape Oil Spill.
17	NOAA	1998	<i>M/V Kuroshima</i> Incident Dutch Harbor, Alaska November 1997-July 1998: NOAA HAZMAT Scientific Support Team Information Management Report
18	NOAA	1998	<i>M/V Kuroshima</i> Incident: Preassessment Scoping Report NOAA Damage Assessment Center.
19	Polaris Consultants	1998	Summer Bay Lake Bottom Survey and Cleanup Report, <i>M/V Kuroshima</i> Oil Spill.
20	QUADRA Engineering, Inc.	1986	Unalaska Park and Recreation Master Plan for the City of Unalaska

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21	Tryck Nyman Hayes, Inc.	1996	Evaluation of Mitigation Opportunities in Unalaska
22	U.S. Coast Guard	1998	<i>M/V Kuroshima</i> , Panama. IMO No. 8710699; Multiple Loss of Life and Grounding with Pollution on 26 November 1997, Summers Bay, Unalaska Island, Alaska.
23	U.S. Fish and Wildlife Service	1991	Aleutian Canada Goose Recovery Plan.
24	Vanguard Environmental (Kane)	1998	Vegetation Restoration Project. <i>M/V Kuroshima</i> Oil Spill
25	Vanguard Environmental (Kane)	1999	Shoreline Cleanup Summer Bay Beach and Headland at Humpy Cove July, 1999. <i>M/V Kuroshima</i> Oil Spill.
26	Vanguard Environmental (Kane)	2000	Draft Proposed Sediment Control Project, Summer Bay Lake Road, <i>M/V Kuroshima</i> Oil Spill.
27	Waters, T.F	1995	Sediments in Streams: Sources, Biological Effects, and Control.
28	Wildlife Rapid Response Team	1998	<i>M/V Kuroshima</i> Oil Spill, November 26, 1997, Wildlife Report.
29	Whitney, J and R Yender	1997	References for Pribilof Islands Oil Spill Contingency Planning
30	Bonneville Power Administration	1990	Analysis of Salmon and Steelhead Supplementation
31	Rice, S.D, D Moles et al.	1984	Effects of Petroleum Hydrocarbons on Alaskan Aquatic Organisms
32	Stein, J.E, Krahn, M.M., Collier, T.K. and J.P. Meador	1998	Oil Spill Response: Assessing Exposure and Effects in Fishery Resources
33	U.S. Forest Service	1998	Cost Estimating Guide for Road Construction
34	Stockner, J.G and E.A MacIsaac	1996	British Columbia Lake Enrichment Programme: Two Decades of Habitat Enhancement for Sockeye Salmon
35	Linkins A.E, Johnson, L.A, Everett, K.R. and R.M. Atlas	1984	Oil Spills: Damage and Recovery in Tundra and Taiga
36	NOAA	1994	Assessment of Risks Associated with the Shipment and Transfer of Group V Oils
37	NOAA	1997	Oil beneath the Water Surface and Review of Currently Available Literature on Group V Oils.
38	NOAA	1989	Environmental Impacts of Oil Spills in Polar Waters.
39	NOAA	1997	Literature Review of the Effects of Oil and Oil Spills on Arctic and North Temperate Intertidal and Subtidal Ecosystems
40	Stockner, J.D	1977	Lake Fertilization as a Means of Enhancing Sockeye Salmon Populations
41	National Technical Information Service	1998	Sockeye Salmon: Citations for the NTIS Bibliographic Database
42	U.S. Fish and Wildlife Service	1998	Carcass Collection: <i>M/V Kuroshima</i> Oil Spill, Dutch Harbor, Alaska.
43	Fairchild, L.A., and M.R. North	1993	Unalaska Winter Waterbird Surveys, March 1993
44	Bue, B.G, Sharr, S., and J.E Seeb	1998	Evidence of Damage to Pink Salmon Populations Inhabiting Prince William Sound, Alaska, Two Generations after the Exxon Valdez Spill.
45	International Maritime Organization	1996	Final Draft Guidelines for Sampling and Identification of Oil Spill
46	Koenings, J.P., and R.D. Burkett	1987	Population Characteristics of Sockeye Salmon Smolts Relative to Temperature Regimes, Euphotic Volume, Fry Density, and Forage Base within Alaskan Lakes
47	Heintz, R.A, Rice, S.D., and B. Bue	1996	Field and Laboratory Evidence for Reduced Fitness in Pink Salmon that Incubate in Oiled Gravel.
48	Humphrey, B.	1993	Persistence of Oil in Subtidal Sediments

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49	Marty, G.D., Heintz, R.A. and D.E. Hinton	1997	Histology and Teratology of Pink Salmon Larvae near the Time of Emergence from Gravel Substrate in the Laboratory
50	Short, J.W., and R.A. Heintz	1997	Identification of Exxon Valdez Oil in Sediments and Tissues from Prince William Sound and the Northwestern Gulf of Alaska based on a PAH Weathering Model
51	Miller, M., Alexander, V., and R.J. Barsgate	1978	Effects of Oil Spills on Phytoplankton in an Arctic Lake and Ponds
52	CH2M Hill	1994	Circulation Study of Unalaska Bay and Contiguous Inshore Marine Waters
53	Wolfley, J.	1998	Ecological Risk Assessment and Management: Their Failure to Value Indigenous Traditional Ecological Knowledge and Protects Tribal Homelands
54	NOAA	1995	Physical Process Affecting the Movement and Spreading of Oils in Inland Waters.
55	U.S. Fish and Wildlife Service	1988	Alaska Maritime National Wildlife Refuge Comprehensive Conservation Plan
56	Intertek Testing Services	1998	<i>M/V Kuroshima</i> Report of Survey (Spill Size Calculation)
57	Wooley, C.	1998	Cultural Resource Report <i>M/V Kuroshima</i> Oil Spill Unalaska Island, Alaska
58	Gieger, H.J., Bue, B.G., Sharr, S., Wertheimer, A.C., and T.M. Willette	1996	A Life History Approach to Estimating Damage to Prince William Sound Pink Salmon Caused by the Exxon Valdez Oil Spill
59	NOAA	1994	Fish and Shellfish Tainting: Questions and Answers
60	NOAA	1999	Pavement in Patagonia, Asphalt in Alaska: Case Studies in Oil Pavement Formation, Fate, and Effects
61	NOAA	1994	Alaska Shoreline Countermeasures Manual
62	NOAA	1996	Kodiak Island and Alaska Peninsula Oceanographic Conditions and NOAA's Eleven-Year Oil Spill History
63	NOAA	1997	Damage Assessment Center Emergency Guidance Manual
64	Sauer, T. and P. Boehm	1991	The Use of Defensible Analytical Chemical Measurements for Oil Spill Natural Resource Damage Assessments
65	Roberts, P., Henry, C.B., Fukuyama, A., and G. Shigenaka	1999	Weathered Petroleum Bioavailability to Intertidal Bivalves after the T/V Exxon Valdez Incident.
66	Spies, R.B., Rice, S.D., Wolfe, D.A., and B.A. Wright	1996	The Effects of the Exxon Valdez Oil Spill on the Alaskan Coastal Environment.
67	Short, J.W., and M.M. Babcock	1996	Prespill and Postspill Concentrations of Hydrocarbons in Mussels and Sediments in Prince William Sound
68	Sharr, S., Moffitt, S.D., and A.K. Craig	1996	Effects of the Exxon Valdez on Pink Salmon Embryos and Preemergent Fry
69	Carls, M.G. Heintz, R., Moles, A., Rice, S.D., and J.W. Short	2001	Long-Term Biological Damage: What is Known, and How Should That Influence Decisions on Response, Assessment, and Restoration
70	Ford, R.G., Bonnell, M.L., Varoujean, D.H., Page, G.W., Carter, H.R., Sharp, B.E., Heinemann, D.E., and J.L. Casey	1996	Total Direct Mortality of Seabirds from the Exxon Valdez Oil Spill
71	NOAA	1998	Initiation Request to the National Pollution Funds Center
72	Nighswander, T.S., and N. Peacock	1999	The Communication of Health Risk from Subsistence Food in a Cross-Cultural Setting: Lessons Learned from the Exxon Valdez Oil Spill
73	Fall, J.A., Field, L.J., Nighswander, T., Stein, J.E., and M. Bolger	1999	Overview of Lessons Learned from the Exxon Valdez: A Ten Year Retrospective
74	Alaska Department of	1998	Synthesis of Shoreline Oiling Data and Map (Fax)

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75	USCG National Pollution Funds Center	1998	Case Management Division Vessel Identification Profile Request
76	Stoker, S.	1998	Proposal for Continued Monitoring and Cleanup
77	Dutch Harbor Fisherman	1998	Thaw Reveals vast amount of oil residue on Summer Bay Beach
78	Reuters News Service	1997	New Fuel Leak Spotted From Grounded Freighter
79	Associated Press	1997	Grounded Freighter Stirs Worry
80	Associated Press	1998	Oil From Freighter Taints Beach
81	Associated Press	1997	Salvage on Freighter in Alaska
82	Reuters News Service	1997	Dutch Harbor Grounding
83	Anchorage Daily News	1997	Working together improves oil spill response
84	Anchorage Daily News	1997	Freighter Owners get Deadline
85	Anchorage Daily News	1997	State Wants Grounded Ship Moved
86	Anchorage Daily News	1997	Summer Bay Cleanup goes on in Freezing Weather
87	Seattle Times	1997	Ship Stays Upright in Wind
88	Anchorage Daily News	1997	Spill crews clean lake, shoreline
89	Anchorage Daily News	1997	Spilled Oil taking toll on Birds
90	Associated Press	1997	Fuel Spill Higher than Thought
91	Associated Press	1997	Oil Spill Total may hit 100,000 gallons
92	Anchorage Daily News	1997	Storm Wallops Unalaska
93	Associated Press	1997	Estimate of Dutch Harbor Fuel Spill increases to 41,000 Gallons
94	Louisiana State University	1997	Characterization of Summer Bay Beach Stranded Oil
95	Co-trustees and RPs	1998	Stipulation between Natural Resource Damage Trustees and <i>Kuroshima</i> Shipping, S.A.
96	U.S. Coast Guard	1998	USCG Marine Violation Report, <i>M/V Kuroshima</i>
97	NOAA	2000	<i>M/V Kuroshima</i> Lost Human Use Pre-assessment Report
98	Hecker, M	1997	Memo from the City of Unalaska with Proposed Summer Bay Park Improvements
99	Industrial Economics Inc.	1998	<i>Kuroshima</i> Analytical Data Quality Assurance Review
100	US Department of the Interior	1997	Letter designating NOAA as Lead Administrative Trustee
101	Hahn, B.L., and E.P. Thompson	1998	Letter Certifying Completion of Cleanup Operations
102	EcoChem	1997	PAH Analyte List
103	Woods Hole Group	1997	Case Narrative: <i>M/V Kuroshima</i> Oil Spill, Summer Bay, Alaska (Sample Results)
104	Kane, D	1998	<i>M/V Kuroshima</i> Oil Spill: Final Shellfish Analytical Data and Double Ratio Plots
105	Stoker, S.	1998	Letter to ADEC with Shellfish Sampling Recommendations
106	Fairchild, L.A., and M.L. Heer	1997	Unalaska Winter Waterbird Surveys, March 1995
107	Anchorage Daily News	1998	Salvager Frees <i>Kuroshima</i> After 3 Months Aground
108	NOAA	1999	Preliminary <i>Kuroshima</i> Literature Review
109	Beak Consultants (Don Kane)	1997	<i>M/V Kuroshima</i> Oil Spill: Natural Resource Conceptual Restoration Proposal
110	Helton, D.	1998	Comments on (RPs) Conceptual Natural Resource Restoration Plan
111	Hoff, R.Z., and G. Shigenaka	1999	Lessons from Ten Years of Post-Exxon Valdez Monitoring on Intertidal Shorelines

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112	Helton, D.	2000	Summary of Site Visit
113	Blue, K.	1998	Memo from City of Unalaska with Proposed Restoration Projects
114	Ounalashka Corporation	1998	Proposed Restoration Plans for Humpy Cove and Morris Cove
115	Ford, R.G., Page, G., and H. Carter	1987	Estimating Mortality of Seabirds from Oil Spills
116	Burger, A.	1991	The Effects of Oil Pollution on Seabirds off the West Coast of Vancouver Island
117	Rice, S.	1999	Memo on interpretation of benthic sediment sampling from Summer Bay Lake. Sampled in April 1998.
118	USFWS	1999	A Conservation Success Story: Aleutian Canada Goose Wings its Way back from the Brink of Extinction
119	Federal Register	2001	Final rule to remove the Aleutian Canada Goose from the Federal List of Endangered and Threatened Wildlife.
120	Mearns, A., O'Connor, T., and G. Lauenstein	1999	Relevance of the National "mussel watch" Program to Seafood Fisheries Management Issues during Oil Spill Response.
121	Holmes, P.B.	1997	Aleutian Islands and Atka-Amliia Islands Management Areas: Salmon Management Report to the Alaska Board of Fisheries, 1998
122	Peterson, C.H.	2001	The "Exxon Valdez" Oil Spill in Alaska: Acute, Indirect, and Chronic Effects on the Ecosystem.
123	NOAA	1999	Preliminary Analysis of Summer Bay Recreation Counts
124	Wright, S.	1999	Email regarding beach wildrye survival
125	Helton, D.	1999	Response to Vanguard Environmental re: Vegetation Restoration Project Report
126	Alaska Department of Fish and Game	2000	Summer Bay Lake 2000 Season Summary
127	Alaska Department of Fish and Game	2001	Summer Bay Lake 2001 Season Summary
128	Vanguard Environmental (Kane)	1999	Vegetation Restoration Project Addendum
129	Vanguard Environmental (Kane)	1999	Response to Trustee Comments and HEA Calculations
130	NOAA	1998	Supplemental Initiation Request to the National Pollution Funds Center
131	Pletnikoff, G.	2001	Email and attached pictures of residual oil
132	Akutan Corporation	1999	Consent to fox eradication project

Organized by Author

Author	Record Number	Date	Title
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Alaska Department of Environmental Conservation	1	1998	<i>M/V Kuroshima</i> Response, ADEC, Final Report.
Alaska Department of Environmental Conservation	74	1998	Synthesis of Shoreline Oiling Data and Map (Fax)
Alaska Department of Fish and Game	2	1998	Juvenile and Adult Fish Production the Summer Following the <i>M/V Kuroshima</i> Oil Spill. Regional Information Report No. 4K99-62
Alaska Department of Fish and Game	3	1999	Juvenile and Adult Fish Production the Two Years Following the <i>M/V Kuroshima</i> Oil Spill.
Alaska Department of Fish and Game	126	2000	Summer Bay Lake 2000 Season Summary
Alaska Department of Fish and Game	127	2001	Summer Bay Lake 2001 Season Summary
Alaska Department of Health and Social Services,	4	1998	Health Consultation, <i>M/V Kuroshima</i> Oil Spill, Unalaska, Alaska
Anchorage Daily News	83	1997	Working together improves oil spill response
Anchorage Daily News	84	1997	Freighter Owners get Deadline
Anchorage Daily News	85	1997	State Wants Grounded Ship Moved
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Anchorage Daily News	107	1998	Salvager Frees <i>Kuroshima</i> After 3 Months Aground
Associated Press	79	1997	Grounded Freighter Stirs Worry
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Associated Press	91	1997	Oil Spill Total may hit 100,000 gallons
Associated Press	93	1997	Estimate of Dutch Harbor Fuel Spill increases to 41,000 Gallons
Associated Press	80	1998	Oil From Freighter Taints Beach
Bailey, E.	5	1993	Introduction of Foxes to Alaskan Islands- History, Effects on Avifauna, and Eradication.
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Bonneville Power Administration	30	1990	Analysis of Salmon and Steelhead Supplementation
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Byrd, G.V., Bailey, E., and W. Stahl.	8	1996	Introduced Predator Removal from Islands, Exxon Valdez Oil Spill Restoration Project Final Report
Byrd, G.V., Trapp, J.L., and C. F. Zeillenmaker.	9	1994	Removal of Introduced Foxes: A Case Study in Restoration of Native Birds.
Carls, M.G. Heintz, R., Moles, A., Rice, S.D., and J.W. Short	69	2001	Long-Term Biological Damage: What is Known, and How Should That Influence Decisions on Response, Assessment, and Restoration
CH2M Hill	52	1994	Circulation Study of Unalaska Bay and Contiguous Inshore Marine Waters
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Dutch Harbor Fisherman	77	1998	Thaw Reveals vast amount of oil residue on Summer Bay Beach
EcoChem	102	1997	PAH Analyte List
Everest, F., Beschta, R., Scrivener, J., Koski, K., Sedell, J. and C.J. Sederholm.	10	1987	Fine Sediment and Salmonid Production: A Paradox. pp 98-142 in Salo, E., and T. Cundy (Eds.) Streamside Management: Forestry and Fisheries Interactions.
Fairchild, L.A., and M.L. Heer	106	1997	Unalaska Winter Waterbird Surveys, March 1995
Fairchild, L.A., and M.R. North	43	1993	Unalaska Winter Waterbird Surveys, March 1993
Fall, J.A., Field, L.J., Nighswander, T., Stein, J.E., and M. Bolger	73	1999	Overview of Lessons Learned from the Exxon Valdez: A Ten Year Retrospective
Federal Register	119	2001	Final rule to remove the Aleutian Canada Goose from the Federal List of Endangered and Threatened Wildlife.
Ford, R.G., Bonnell, M.L., Varoujean, D.H., Page, G.W., Carter, H.R., Sharp, B.E., Heinemann, D.E., and J.L. Casey	70	1996	Total Direct Mortality of Seabirds from the Exxon Valdez Oil Spill
Ford, R.G., Page, G., and H. Carter	115	1987	Estimating Mortality of Seabirds from Oil Spills
Furniss, M., Roelofs, T., and C.S. Yee.	11	1991	Road Construction and Maintenance. pp 297-323 in Meehan (Ed.) Influences of Forest and Rangeland Management on Salmonid Fishes and Their Habitats.
Gieger, H.J., Bue, B.G., Sharr, S., Wertheimer, A.C., and T.M. Willette	58	1996	A Life History Approach to Estimating Damage to Prince William Sound Pink Salmon Caused by the Exxon Valdez Oil Spill
Hahn, B.L., and E.P. Thompson	101	1998	Letter Certifying Completion of Cleanup Operations
Hecker, M	98	1997	Memo from the City of Unalaska with Proposed Summer Bay Park Improvements
Heintz, R.A, Rice, S.D., and B. Bue	47	1996	Field and Laboratory Evidence for Reduced Fitness in Pink Salmon that Incubate in Oiled Gravel.
Helton, D.	110	1998	Comments on (RPs) Conceptual Natural Resource Restoration Plan
Helton, D.	125	1999	Response to Vanguard Environmental re: Vegetation Restoration Project Report
Helton, D.	112	2000	Summary of Site Visit
Hoff, R.Z., and G. Shigenaka	111	1999	Lessons from Ten Years of Post-Exxon Valdez Monitoring on Intertidal Shorelines
Holmes, P.B.	121	1997	Aleutian Islands and Atka-Amlia Islands Management Areas: Salmon Management Report to the Alaska Board of Fisheries, 1998
Honnold, S., Edmundson, J., and S. Schrof.	12	1996	Limnological and Fishery Assessment of 23 Alaska Peninsula and Aleutian Area Lakes, 1993-1995: An

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			Evaluation of Potential Sockeye and Coho Salmon Production.
Humphrey, B.	48	1993	Persistence of Oil in Subtidal Sediments
Huyck, V., and E. Paulson (Eds.)	13	1997	Petroleum in the Freshwater Environment: An Annotated Bibliography.
Industrial Economics Inc.	99	1998	Kuroshima Analytical Data Quality Assurance Review
International Maritime Organization	45	1996	Final Draft Guidelines for Sampling and Identification of Oil Spill
Intertek Testing Services	56	1998	<i>M/V Kuroshima</i> Report of Survey (Spill Size Calculation)
Kane, D.	104	1998	<i>M/V Kuroshima</i> Oil Spill: Final Shellfish Analytical Data and Double Ratio Plots
Knecht, R., and R. Davis.	14	1999	Oil Spill Response and Restoration at the Summer Bay Archaeological Site (UNL-92)
Koenings, J.P., and R.D. Burkett	46	1987	Population Characteristics of Sockeye Salmon Smolts Relative to Temperature Regimes, Euphotic Volume, Fry Density, and Forage Base within Alaskan Lakes
	100		
Linkins A.E. Johnson, L.A. Everett, K.R. and R.M. Atlas	35	1984	Oil Spills: Damage and Recovery in Tundra and Taiga
Louisiana State University	94	1997	Characterization of Summer Bay Beach Stranded Oil
Marty, G.D., Heintz, R.A. and D.E. Hinton	49	1997	Histology and Teratology of Pink Salmon Larvae near the Time of Emergence from Gravel Substrate in the Laboratory
Mearns, A., O'Connor, T., and G. Lauenstein	120	1999	Relevance of the National "mussel watch" Program to Seafood Fisheries Management Issues during Oil Spill Response.
Miller, M., Alexander, V., and R.J. Barsgate	51	1978	Effects of Oil Spills on Phytoplankton in an Arctic Lake and Ponds
Muhlberg, G., and N. Moore.	15	1998	Streambank Revegetation and Protection Manual - A Guide for Alaska.
National Technical Information Service	41	1998	Sockeye Salmon: Citations for the NTIS Bibliographic Database
Nighswander, T.S., and N. Peacock	72	1999	The Communication of Health Risk from Subsistence Food in a Cross-Cultural Setting: Lessons Learned from the Exxon Valdez Oil Spill
NOAA	38	1989	Environmental Impacts of Oil Spills in Polar Waters.
NOAA	36	1994	Assessment of Risks Associated with the Shipment and Transfer of Group V Oils
NOAA	59	1994	Fish and Shellfish Tainting: Questions and Answers
NOAA	61	1994	Alaska Shoreline Countermeasures Manual
NOAA	54	1995	Physical Process Affecting the Movement and Spreading of Oils in Inland Waters.
NOAA	62	1996	Kodiak Island and Alaska Peninsula Oceanographic Conditions and NOAA's Eleven-Year Oil Spill History
NOAA	37	1997	Oil beneath the Water Surface and Review of Currently Available Literature on Group V Oils.
NOAA	39	1997	Literature Review of the Effects of Oil and Oil Spills on Arctic and North Temperate Intertidal and Subtidal Ecosystems
NOAA	63	1997	Damage Assessment Center Emergency Guidance Manual
NOAA	16	1999	Revised Draft Restoration Plan and Environmental Assessment for the January 19, 1996 North Cape Oil Spill.
NOAA	17	1998	<i>M/V Kuroshima</i> Incident Dutch Harbor, Alaska November

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			1997-July 1998: NOAA HAZMAT Scientific Support Team Information Management Report
NOAA	18	1998	<i>M/V Kuroshima</i> Incident: Preassessment Scoping Report NOAA Damage Assessment Center.
NOAA	71	1998	Initiation Request to the National Pollution Funds Center
NOAA	60	1999	Pavement in Patagonia. Asphalt in Alaska: Case Studies in Oil Pavement Formation, Fate, and Effects
NOAA	108	1999	Preliminary Kuroshima Literature Review
NOAA	123	1999	Preliminary Analysis of Summer Bay Recreation Counts
NOAA	130	1999	Supplemental Initiation Request to the National Pollution Funds Center
NOAA	97	2000	<i>M/V Kuroshima</i> Lost Human Use Pre-assessment Report
Ounalashka Corporation	114	1998	Proposed Restoration Plans for Humpy Cove and Morris Cove
Peterson, C.H.	122	2001	The "Exxon Valdez" Oil Spill in Alaska: Acute, Indirect, and Chronic Effects on the Ecosystem.
Pletnikoff, G.	131	2000	Email and attached pictures of residual oil
Polaris Consultants	19	1998	Summer Bay Lake Bottom Survey and Cleanup Report. <i>M/V Kuroshima</i> Oil Spill.
QUADRA Engineering, Inc.	20	1986	Unalaska Park and Recreation Master Plan for the City of Unalaska
Reuters News Service	78	1997	New Fuel Leak Spotted From Grounded Freighter
Reuters News Service	82	1997	Dutch Harbor Grounding
Rice, S.	117	1999	Memo on interpretation of benthic sediment sampling from Summer Bay Lake. Sampled in April 1998.
Rice, S.D, D Moles et al.	31	1984	Effects of Petroleum Hydrocarbons on Alaskan Aquatic Organisms
Roberts, P., Henry, C.B., Fukuyama, A., and G. Shigenaka	65	1999	Weathered Petroleum Bioavailability to Intertidal Bivalves after the T/V Exxon Valdez Incident.
Sauer, T. and P. Boehm	64	1991	The Use of Defensible Analytical Chemical Measurements for Oil Spill Natural Resource Damage Assessments
Seattle Times	87	1997	Ship Stays Upright in Wind
Sharr, S., Moffitt, S.D., and A.K Craig	68	1996	Effects of the Exxon Valdez on Pink Salmon Embryos and Preemergent Fry
Short, J.W., and M.M. Babcock	67	1996	Prespill and Postspill Concentrations of Hydrocarbons in Mussels and Sediments in Prince William Sound
Short, J.W., and R.A. Heintz	50	1997	Identification of Exxon Valdez Oil in Sediments and Tissues from Prince William Sound and the Northwestern Gulf of Alaska based on a PAH Weathering Model
Spies, R.B., Rice, S.D., Wolfe, D.A., and B.A. Wright	66	1996	The Effects of the Exxon Valdez Oil Spill on the Alaskan Coastal Environment.
Stein, J.E, Krahn, M.M., Collier, T.K. and J.P. Meador	32	1998	Oil Spill Response: Assessing Exposure and Effects in Fishery Resources
Stockner, J.D	40	1977	Lake Fertilization as a Means of Enhancing Sockeye Salmon Populations
Stockner, J.G and E.A MacIsaac	34	1996	British Columbia Lake Enrichment Programme: Two Decades of Habitat Enhancement for Sockeye Salmon
Stoker, S.	76	1998	Proposal for Continued Monitoring and Cleanup
Stoker, S.	105	1998	Letter to ADEC with Shellfish Sampling Recommendations
Tryck Nyman Hayes, Inc.	21	1996	Evaluation of Mitigation Opportunities in Unalaska
U.S. Coast Guard	22	1998	<i>M/V Kuroshima</i> , Panama, IMO No. 8710699; Multiple Loss of Life and Grounding with Pollution on 26 November

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			1997, Summers Bay, Unalaska Island, Alaska.
U.S. Coast Guard	96	1998	USCG Marine Violation Report, <i>M/V Kuroshima</i>
U.S. Coast Guard	75	1998	Case Management Division Vessel Identification Profile Request
National Pollution Funds Center			
U.S. Department of the Interior	100	1997	Letter designating NOAA as Lead Administrative Trustee
U.S. Fish and Wildlife Service	55	1988	Alaska Maritime National Wildlife Refuge Comprehensive Conservation Plan
U.S. Fish and Wildlife Service	23	1991	Aleutian Canada Goose Recovery Plan.
U.S. Fish and Wildlife Service	42	1998	Carcass Collection: <i>M/V Kuroshima</i> Oil Spill, Dutch Harbor, Alaska.
U.S. Fish and Wildlife Service	118	1999	A Conservation Success Story: Aleutian Canada Goose Wings its Way back from the Brink of Extinction
U.S. Forest Service	33	1998	Cost Estimating Guide for Road Construction
Vanguard Environmental (Kane)	24	1998	Vegetation Restoration Project, <i>M/V Kuroshima</i> Oil Spill
Vanguard Environmental (Kane)	25	1999	Shoreline Cleanup Summer Bay Beach and Headland at Humpy Cove July, 1999. <i>M/V Kuroshima</i> Oil Spill.
Vanguard Environmental (Kane)	128	1999	Vegetation Restoration Project Addendum
Vanguard Environmental (Kane)	129	1999	Response to Trustee Comments and HEA Calculations
Vanguard Environmental (Kane)	26	2000	Draft Proposed Sediment Control Project, Summer Bay Lake Road, <i>M/V Kuroshima</i> Oil Spill.
Waters, T.F	27	1995	Sediments in Streams: Sources, Biological Effects, and Control.
Whitney, J and R Yender	29	1997	References for Pribilof Islands Oil Spill Contingency Planning
Wildlife Rapid Response Team	28	1998	<i>M/V Kuroshima</i> Oil Spill, November 26, 1997, Wildlife Report.
Wolfley, J.	53	1998	Ecological Risk Assessment and Management: Their Failure to Value Indigenous Traditional Ecological Knowledge and Protects Tribal Homelands
Woods Hole Group	103	1997	Case Narrative: <i>M/V Kuroshima</i> Oil Spill, Summer Bay, Alaska (Sample Results)
Wooley, C.	57	1998	Cultural Resource Report <i>M/V Kuroshima</i> Oil Spill Unalaska Island, Alaska
Wright, S.	124	1999	Email regarding beach wildrye survival

Administrative Record Organized by Subject Area

Archaeology			
Record Number	Author	Date	Title
14	Knecht, R., and R. Davis.	1999	Oil Spill Response and Restoration at the Summer Bay Archaeological Site (UNL-92)
57	Wooley, C.	1998	Cultural Resource Report <i>MV Kuroshima</i> Oil Spill Unalaska Island, Alaska

Birds			
Record Number	Author	Date	Title
5	Bailey, E.	1993	Introduction of Foxes to Alaskan Islands- History, Effects on Avifauna, and Eradication.
7	Burger, A.E.	1993	Mortality of Seabirds Assessed from Beached-Bird Surveys in Southern British Columbia. Canadian Field
8	Byrd, G.V., Bailey, E., and W. Stahl.	1996	Introduced Predator Removal from Islands, Exxon Valdez Oil Spill Restoration Project Final Report
9	Byrd, G.V., Trapp, J.L., and C. F. Zeillemaker.	1994	Removal of Introduced Foxes: A Case Study in Restoration of Native Birds.
16	NOAA	1999	Revised Draft Restoration Plan and Environmental Assessment for the January 19, 1996 North Cape Oil Spill.
23	U.S. Fish and Wildlife Service	1991	Aleutian Canada Goose Recovery Plan.
28	Wildlife Rapid Response Team	1998	<i>MV Kuroshima</i> Oil Spill, November 26, 1997. Wildlife Report.
42	U.S. Fish and Wildlife Service	1998	Carcass Collection: <i>MV Kuroshima</i> Oil Spill, Dutch Harbor, Alaska.
43	Fairchild, L.A., and M.R. North	1993	Unalaska Winter Waterbird Surveys, March 1993
55	U.S. Fish and Wildlife Service	1988	Alaska Maritime National Wildlife Refuge Comprehensive Conservation Plan
70	Ford, R.G., Bonnell, M.L., Varoujean, D.H., Page, G.W., Carter, H.R., Sharp, B.E., Heinemann, D.E., and J.L. Casey	1996	Total Direct Mortality of Seabirds from the Exxon Valdez Oil Spill
106	Fairchild, L.A., and M.L. Heer	1997	Unalaska Winter Waterbird Surveys, March 1995
115	Ford, R.G., Page, G., and H. Carter	1987	Estimating Mortality of Seabirds from Oil Spills
116	Burger, A.	1991	The Effects of Oil Pollution on Seabirds off the West Coast of Vancouver Island
118	USFWS	1999	A Conservation Success Story: Aleutian Canada Goose Wings its Way back from the Brink of Extinction
119	Federal Register	2001	Final rule to remove the Aleutian Canada Goose from the Federal List of Endangered and Threatened Wildlife.
132	Akutan Corporation	1999	Consent to fox eradication project

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Chemistry Results			
Record Number	Author	Date	Title
94	Louisiana State University	1997	Characterization of Summer Bay Beach Stranded Oil
99	Industrial Economics Inc.	1998	Kuroshima Analytical Data Quality Assurance Review
102	EcoChem	1997	PAH Analyte List
103	Woods Hole Group	1997	Case Narrative: <i>M/V Kuroshima</i> Oil Spill, Summer Bay, Alaska (Sample Results)

Coordination with RPs			
Record Number	Author	Date	Title
95	Co-trustees and RPs	1998	Stipulation between Natural Resource Damage Trustees and Kuroshima Shipping, S.A.
109	Beak Consultants (Don Kane)	1997	<i>M/V Kuroshima</i> Oil Spill; Natural Resource Conceptual Restoration Proposal
110	Helton, D.	1998	Comments on (RPs) Conceptual Natural Resource Restoration Plan

General Information			
Record Number	Author	Date	Title
13	Huyck, V., and E. Paulson (Eds.)	1997	Petroleum in the Freshwater Environment: An Annotated Bibliography.
16	NOAA	1999	Revised Draft Restoration Plan and Environmental Assessment for the January 19, 1996 North Cape Oil Spill.
18	NOAA	1998	<i>M/V Kuroshima</i> Incident: Preassessment Scoping Report NOAA Damage Assessment Center.
21	Tryck Nyman Hayes, Inc.	1996	Evaluation of Mitigation Opportunities in Unalaska
29	Whitney, J and R Yender	1997	References for Pribilof Islands Oil Spill Contingency Planning
31	Rice, S.D. D Moles et al.	1984	Effects of Petroleum Hydrocarbons on Alaskan Aquatic Organisms
51	Miller, M., Alexander, V., and R.J. Barsgate	1978	Effects of Oil Spills on Phytoplankton in an Arctic Lake and Ponds
59	NOAA	1994	Fish and Shellfish Tainting: Questions and Answers
62	NOAA	1996	Kodiak Island and Alaska Peninsula Oceanographic Conditions and NOAA's Eleven-Year Oil Spill History
63	NOAA	1997	Damage Assessment Center Emergency Guidance Manual
66	Spies, R.B., Rice, S.D., Wolfe, D.A., and B.A. Wright	1996	The Effects of the Exxon Valdez Oil Spill on the Alaskan Coastal Environment.
71	NOAA	1998	Initiation Request to the National Pollution Funds Center
100	US Department of the Interior	1997	Letter designating NOAA as Lead Administrative Trustee
108	NOAA	1999	Preliminary Kuroshima Literature Review
122	Peterson, C.H.	2001	The "Exxon Valdez" Oil Spill in Alaska: Acute, Indirect, and Chronic Effects on the Ecosystem.
130	NOAA	1998	Supplemental Initiation Request to the National Pollution Funds Center

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Newspaper Articles			
Record Number	Author	Date	Title
77	Dutch Harbor Fisherman	1998	Thaw Reveals vast amount of oil residue on Summer Bay Beach
78	Reuters News Service	1997	New Fuel Leak Spotted From Grounded Freighter
79	Associated Press	1997	Grounded Freighter Stirs Worry
80	Associated Press	1998	Oil From Freighter Taints Beach
81	Associated Press	1997	Salvage on Freighter in Alaska
82	Reuters News Service	1997	Dutch Harbor Grounding
83	Anchorage Daily News	1997	Working together improves oil spill response
84	Anchorage Daily News	1997	Freighter Owners get Deadline
85	Anchorage Daily News	1997	State Wants Grounded Ship Moved
86	Anchorage Daily News	1997	Summer Bay Cleanup goes on in Freezing Weather
87	Seattle Times	1997	Ship Stays Upright in Wind
88	Anchorage Daily News	1997	Spill crews clean lake, shoreline
89	Anchorage Daily News	1997	Spilled Oil taking toll on Birds
90	Associated Press	1997	Fuel Spill Higher than Thought
91	Associated Press	1997	Oil Spill Total may hit 100,000 gallons
92	Anchorage Daily News	1997	Storm Wallops Unalaska
93	Associated Press	1997	Estimate of Dutch Harbor Fuel Spill increases to 41,000 Gallons
107	Anchorage Daily News	1998	Salvager Frees Kuroshima After 3 Months Aground

Oil Fates			
Record Number	Author	Date	Title
36	NOAA	1994	Assessment of Risks Associated with the Shipment and Transfer of Group V Oils
37	NOAA	1997	Oil beneath the Water Surface and Review of Currently Available Literature on Group V Oils.
38	NOAA	1989	Environmental Impacts of Oil Spills in Polar Waters.
39	NOAA	1997	Literature Review of the Effects of Oil and Oil Spills on Arctic and North Temperate Intertidal and Subtidal Ecosystems
45	International Maritime Organization	1996	Final Draft Guidelines for Sampling and Identification of Oil Spill
48	Humphrey, B.	1993	Persistence of Oil in Subtidal Sediments
52	CH2M Hill	1994	Circulation Study of Unalaska Bay and Contiguous Inshore Marine Waters
54	NOAA	1995	Physical Process Affecting the Movement and Spreading of Oils in Inland Waters.
60	NOAA	1999	Pavement in Patagonia. Asphalt in Alaska: Case Studies in Oil Pavement Formation, Fate, and Effects
64	Sauer, T. and P. Boehm	1991	The Use of Defensible Analytical Chemical Measurements for Oil Spill Natural Resource Damage Assessments

Recreation			
Record Number	Author	Date	Title

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18	NOAA	1998	<i>M/V Kuroshima</i> Incident: Preassessment Scoping Report NOAA Damage Assessment Center.
20	QUADRA Engineering, Inc.	1986	Unalaska Park and Recreation Master Plan for the City of Unalaska
76	Stoker, S.	1998	Proposal for Continued Monitoring and Cleanup
97	NOAA	2000	<i>M/V Kuroshima</i> Lost Human Use Pre-assessment Report
98	Hecker, M	1997	Memo from the City of Unalaska with Proposed Summer Bay Park Improvements
113	Blue, K.	1998	Memo from City of Unalaska with Proposed Restoration Projects
114	Ounalashka Corporation	1998	Proposed Restoration Plans for Humpy Cove and Morris Cove
123	NOAA	1999	Preliminary Analysis of Summer Bay Recreation Counts

Response Documents			
Record Number	Author	Date	Title
1	Alaska Department of Environmental Conservation	1998	<i>M/V Kuroshima</i> Response, ADEC, Final Report.
17	NOAA	1998	<i>M/V Kuroshima</i> Incident Dutch Harbor, Alaska November 1997-July 1998: NOAA HAZMAT Scientific Support Team Information Management Report
19	Polaris Consultants	1998	Summer Bay Lake Bottom Survey and Cleanup Report. <i>M/V Kuroshima</i> Oil Spill.
22	U.S. Coast Guard	1998	<i>M/V Kuroshima</i> , Panama, IMO No. 8710699; Multiple Loss of Life and Grounding with Pollution on 26 November 1997, Summers Bay, Unalaska Island, Alaska.
25	Vanguard Environmental (Kane)	1999	Shoreline Cleanup Summer Bay Beach and Headland at Humpy Cove July, 1999. <i>M/V Kuroshima</i> Oil Spill.
56	Intertek Testing Services	1998	<i>M/V Kuroshima</i> Report of Survey (Spill Size Calculation)
61	NOAA	1994	Alaska Shoreline Countermeasures Manual
74	Alaska Department of Environmental Conservation	1998	Synthesis of Shoreline Oiling Data and Map (Fax)
75	USCG National Pollution Funds Center	1998	Case Management Division Vessel Identification Profile Request
96	U.S. Coast Guard	1998	USCG Marine Violation Report, <i>M/V Kuroshima</i>
101	Hahn, B.L., and E.P. Thompson	1998	Letter Certifying Completion of Cleanup Operations.

Salmon			
Record Number	Author	Date	Title
2	Alaska Department of Fish and Game	1998	Juvenile and Adult Fish Production the Summer Following the <i>M/V Kuroshima</i> Oil Spill. Regional Information Report No. 4K99-62
3	Alaska Department of Fish and Game	1999	Juvenile and Adult Fish Production the Two Years Following the <i>M/V Kuroshima</i> Oil Spill.
10	Everest, F., Beschta, R., Scrivener, J., Koski, K., Sedell, J. and C.J. Sederholm.	1987	Fine Sediment and Salmonid Production: A Paradox. Pp 98-142 in Salo, E., and T. Cundy (Eds.) Streamside Management: Forestry and Fisheries Interactions.

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11	Furniss, M., Roelofs, T., and C.S. Yee.	1991	Road Construction and Maintenance. pp 297-323 in Meehan (Ed.) Influences of Forest and Rangeland Management on Salmonid Fishes and Their Habitats.
12	Honnold, S., Edmundson, J., and S. Schrof,	1996	Limnological and Fishery Assessment of 23 Alaska Peninsula and Aleutian Area Lakes, 1993-1995: An Evaluation of Potential Sockeye and Coho Salmon Production.
26	Vanguard Environmental (Kane)	2000	Draft Proposed Sediment Control Project, Summer Bay Lake Road, <i>M/V Kuroshima</i> Oil Spill.
27	Waters, T.F	1995	Sediments in Streams: Sources, Biological Effects, and Control.
30	Bonneville Power Administration	1990	Analysis of Salmon and Steelhead Supplementation
32	Stein, J.E. Krahn, M.M., Collier, T.K. and J.P. Meador	1998	Oil Spill Response: Assessing Exposure and Effects in Fishery Resources
33	U.S. Forest Service	1998	Cost Estimating Guide for Road Construction
34	Stockner, J.G and E.A MacIsaac	1996	British Columbia Lake Enrichment Programme: Two Decades of Habitat Enhancement for Sockeye Salmon
40	Stockner, J.D	1977	Lake Fertilization as a Means of Enhancing Sockeye Salmon Populations
41	National Technical Information Service	1998	Sockeye Salmon: Citations for the NTIS Bibliographic Database
44	Bue, B.G, Sharr, S., and J.E Seeb	1998	Evidence of Damage to Pink Salmon Populations Inhabiting Prince William Sound, Alaska, Two Generations after the Exxon Valdez Spill.
46	Koenings, J.P., and R.D. Burkett	1987	Population Characteristics of Sockeye Salmon Smolts Relative to Temperature Regimes, Euphotic Volume, Fry Density, and Forage Base within Alaskan Lakes
47	Heintz, R.A. Rice, S.D., and B. Bue	1996	Field and Laboratory Evidence for Reduced Fitness in Pink Salmon that Incubate in Oiled Gravel.
49	Marty, G.D., Heintz, R.A. and D.E. Hinton	1997	Histology and Teratology of Pink Salmon Larvae near the Time of Emergence from Gravel Substrate in the Laboratory
58	Gieger, H.J., Bue, B.G., Sharr, S., Wertheimer, A.C., and T.M. Willette	1996	A Life History Approach to Estimating Damage to Prince William Sound Pink Salmon Caused by the Exxon Valdez Oil Spill
68	Sharr, S., Moffitt, S.D., and A.K Craig	1996	Effects of the Exxon Valdez on Pink Salmon Embryos and Preemergent Fry
69	Carls, M.G, Heintz, R., Moles, A., Rice, S.D., and J.W. Short	2001	Long Term Biological Damage: What is Known, and How Should That Influence Decisions on Response, Assessment, and Restoration
117	Rice, S.	1999	Memo on interpretation of benthic sediment sampling from Summer Bay Lake. Sampled in April 1998.
121	Holmes, P.B.	1997	Aleutian Islands and Atka-Amlia Islands Management Areas: Salmon Management Report to the Alaska Board of Fisheries, 1998
126	Alaska Department of Fish and Game	2000	Summer Bay Lake 2000 Season Summary
127	Alaska Department of Fish and Game	2001	Summer Bay Lake 2001 Season Summary

Shellfish and Intertidal

Record Number	Author	Date	Title
4	Alaska Department of	1998	Health Consultation, <i>M/V Kuroshima</i> Oil Spill. Unalaska, Alaska

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Health and Social Services.

50	Short, J.W., and R.A. Heintz	1997	Identification of Exxon Valdez Oil in Sediments and Tissues from Prince William Sound and the Northwestern Gulf of Alaska based on a PAH Weathering Model
53	Wolfley, J.	1998	Ecological Risk Assessment and Management: Their Failure to Value Indigenous Traditional Ecological Knowledge and Protects Tribal Homelands
65	Roberts, P., Henry, C.B., Fukuyama, A., and G. Shigenaka	1999	Weathered Petroleum Bioavailability to Intertidal Bivalves after the T/V Exxon Valdez Incident.
67	Short, J.W., and M.M. Babcock	1996	Prespill and Postspill Concentrations of Hydrocarbons in Mussels and Sediments in Prince William Sound
72	Nighswander, T.S., and N. Peacock	1999	The Communication of Health Risk from Subsistence Food in a Cross-Cultural Setting: Lessons Learned from the Exxon Valdez Oil Spill
73	Fall, J.A., Field, L.J., Nighswander, T., Stein, J.E., and M. Bolger	1999	Overview of Lessons Learned from the Exxon Valdez: A Ten Year Retrospective
104	Kane, D	1998	<i>M/V Kuroshima</i> Oil Spill: Final Shellfish Analytical Data and Double Ratio Plots
105	Stoker, S.	1998	Letter to ADEC with Shellfish Sampling Recommendations
111	Hoff, R.Z., and G. Shigenaka	1999	Lessons from Ten Years of Post-Exxon Valdez Monitoring on Intertidal Shorelines
120	Mearns, A., O'Connor, T., and G. Lauenstein	1999	Relevance of the National "mussel watch" Program to Seafood Fisheries Management Issues during Oil Spill Response.
131	Pletnikoff, G.	2001	Email and attached pictures of residual oil

Vegetation			
Record Number	Author	Date	Title
6	Belt, G., Laughlin, J., and T. Merrill	1992	Design of Forest Riparian Buffer Strips for the Protection of Water Quality: Analysis of Scientific Literature.
15	Muhlberg, G., and N. Moore.	1998	Streambank Revegetation and Protection Manual - A Guide for Alaska.
24	Vanguard Environmental (Kane)	1998	Vegetation Restoration Project, <i>M/V Kuroshima</i> Oil Spill
35	Linkins A.E, Johnson, L.A, Everett, K.R. and R.M. Atlas	1984	Oil Spills: Damage and Recovery in Tundra and Taiga
112	Helton, D.	2000	Summary of Site Visit
124	Wright, S.	1999	Email regarding beach wildrye survival
125	Helton, D.	1999	Response to Vanguard Environmental re: Vegetation Restoration Project Report
128	Vanguard Environmental (Kane)	1999	Vegetation Restoration Project Addendum
129	Vanguard Environmental (Kane)	1999	Response to Trustee Comments and HEA Calculations

10.4 Finding of No Significant Impact (FONSI)

(To be completed after consideration of public comments)