OCS Report
BOEM 2015-010

Supplement to the Oil-Spill Risk Analysis: Chukchi Sea Planning Area, OCS Lease Sale 193

Zhen Li
Walter R. Johnson
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US Department of the Interior
Bureau of Ocean Energy Management
Headquarters, Herndon, VA
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Report Availability

This report is available on the Department of the Interior Bureau of Ocean Energy Management website (at http://www.boem.gov/Environmental-Stewardship/Environmental-Assessment/Oil-Spill-Modeling/Oil-Spill-Risk-Analysis-Reports.aspx).

About the Cover

Study area in the Beaufort and Chukchi seas and boundary segments used in the oil-spill trajectory analysis.

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Acronyms

bbl	barrel= 42 U.S. gallons
Bbbl	Billion barrels = 10^9 barrels
BOEM	Bureau of Ocean Energy Management
BS	Boundary Segment
ERA	Environmental Resource Area
GLS	Grouped Land Segment
GOM	Gulf of Mexico
ID	Identification
LA	Launch Area
LOWC	Loss of Well Control
LS	Land Segment
OCS	Outer Continental Shelf
OSRA	Oil-Spill Risk Analysis
PL	Pipelines
ROMS	Regional Ocean Modeling System
SEIS	Supplemental Environmental Impact Statement
USDOI	United States Department of the Interior

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1.0 Introduction

The Bureau of Ocean Energy Management (BOEM) initiated the Chukchi Sea Oil and Gas Lease Sale 193 Second Supplemental Environmental Impact Statement (referred to as the Second SEIS) process to address the deficiency identified by the Court of Appeals in its remand to the United States District Court for the District of Alaska, and to support the Secretary of the Interior's forthcoming decision to affirm, modify, or vacate Lease Sale 193. Lease Sale 193 was held in February 2008, and no additional leases will be issued as a result of the Second SEIS process. The Lease Sale 193 leases originally included 487 leased blocks, 27 of which have been relinquished, leaving 460 existing active whole or partial leased blocks (which are referred to as the Leased Area) in the Chukchi Sea Program Area. Because oil spills may occur from activities associated with offshore oil exploration, production, and transportation resulting from the Leased Area, the U.S. Department of the Interior (USDOI), BOEM conducted a formal oil-spill risk analysis (OSRA) to support the Second SEIS. This report summarizes results of that analysis, the objective of which was to estimate the probability of contact, the probability of oil-spill occurrence, and the probability of oil-spill occurrence and contact to environmental resources from accidental large oil spills occurring from Outer Continental Shelf (OCS) oil and gas-related activities.

The occurrence of oil spills is fundamentally a matter of probability. There is no certainty regarding the amount of oil that would be produced, or the size or likelihood of a spill that could occur during the estimated life of a given scenario. Neither can the winds, ocean currents or ice that could transport oil spills be known for certain. A probabilistic event, such as an oil-spill occurrence or oil-spill contact to an environmental resource, cannot be predicted, but an estimate of its likelihood (its probability) can be quantified. An OSRA Report quantifies these probabilities.

This OSRA was conducted in three parts, corresponding to different aspects of the overall problem.

1. The probability of oil-spill occurrence, which is based on estimated volumes of oil produced and transported and on the oil spill occurrence rates derived from historic data and a fault-tree model.
2. Calculated trajectories of oil spills from hypothetical spill locations to locations of various environmental resources, which are simulated using the OSRA Model.
3. The combination of results of the first two parts to estimate the overall oil-spill risk if there is oil development in the analyzed areas.

This report is available from the BOEM website (http://www.boem.gov/Environmental-Stewardship/Environmental-Assessment/Oil-Spill-Modeling/Oil-Spill-Risk-Analysis-Reports.aspx).

2.0 Framework of the Analysis

Many factors are considered when producing an OSRA report. These include the proposed action and its alternatives, the estimated volume of oil resources in the Leased Area, the location of the proposed action, and the locations of environmental resources within the study area. Another important factor is the hindcast wind, current and ice data that are used to drive the oil spill

trajectory model.

2.1 Study Area

As shown in Figure A-1, the study area for this analysis, which extends from 174° E to 130° W and 66º N to 75º N, defines the geographic boundaries that encompass the environmental resources at risk from a hypothetical oil spill from OCS operations in and adjacent to the Lease Area. The study area is formed by 40 offshore boundary segments and the Beaufort (United States and Canada) and Chukchi seas (United States and Russia) coastline (Figure A-1). The OSRA model has a resolution of 0.6 km by 0.6 km and a total of 6 million grid cells in the study area.

The study area is chosen to be large enough to allow most hypothetical oil spill trajectories to develop without contacting the offshore boundary segments within 360 days (the maximum elapsed time considered). Although few trajectories might extend beyond the borders of the study area within 360 days, BOEM has tracked and tabulated the contact of these trajectories with the open-ocean boundaries.

As shown in Figure A-2, the Chukchi Sea Sale 193 Leased Area is divided into six hypothetical Launch Areas (LAs) and six hypothetical Pipelines (PL) segments. The LAs and PLs are comprised of 375 hypothetical launch points, which are spaced at one-seventh-degree intervals in the north-south direction (about 15.86 km) and one-third-degree intervals in the east-west direction (about 12.67 km). The PL segments are not meant to represent three proposed pipelines or any real or planned pipeline locations. They are spaced along the coast to allow BOEM to evaluate differences in oil-spill trajectories from different locations along the coast and to estimate the probability for oil spill contacts from oil and gas activities in the Leased Area. The details of the hypothetical launch point locations are discussed in Section 3.2.3.

The development scenario assumes that the oil produced in the Leased Area will be transported to shore via pipelines with potential landfall locations chosen based on existing information and professional judgment. These hypothetical PL segments (2, 3, 5, 6, 8 and 9) are used to determine spill risks from oil transportation. Pipelines 2, 5 and 8 are offshore PL segments and PLs 3, 6 and 9 are near-shore PL segments. The locations of the hypothetical pipelines are shown in Figure A-2.

2.2 Summary of the Proposed Action and Alternatives

The Proposed Action is to affirm Lease Sale 193 and all of the leases issued as a result of the sale (USDOI, BOEM, 2015). These leases currently include 460 active whole or partial blocks (termed the Leased Area) within the Chukchi Sea Program Area. No additional leases would be offered as a result of this Second SEIS process. Under these circumstances, Alternative I and Alternative IV (Corridor II Deferral) are effectively the same, because no leases were issued within the Corridor II Deferral. Under Alternative III (Corridor I Deferral), five leases would be vacated because they fall within the Corridor I Deferral. The Alternative II (No Action) is equivalent to not affirming the leases; as a result, the existing leases would be vacated.

2.3 Estimated Volume of Oil Resources

For this analysis, both benefits and risks are functions of the volume of oil produced and are

mutually dependent. For example, greater volumes of produced oil are associated with greater economic benefits, as well as greater risks. If the benefits are evaluated by assuming production of a specific amount of oil, then the corresponding risks should be stated conditionally, such as "the risks are…, given that the volume is…" Any statements about the likelihood of a particular volume of oil being developed also apply to the likelihood of the corresponding benefits and risks.

An estimate of amount of oil to be produced from a given area is estimated and presented in billion barrels (Bbbl). The projected oil production in Bbbl for a typical proposed lease sale is shown in Table 1 below. Note that 1 bbl= 1 barrel = 42 U.S. gallons, 1 Bbbl=1 billion barrels= 10^9 barrels. For the Chukchi Sea Sale 193 Leased Area, over the life of exploration and production the estimated crude oil and condensate production for the anchor and sub-anchor case is 4.3 Bbbl.

Table 1. Estimated Oil Production for the Proposed Action and the Alternatives

Alternative Number	Alternative Name	Estimated Production (Bbbl[1])	Analysis Period in Years
I or IV	Proposed Action or Corridor II Deferral	4.3	51
II	No Action	0	0
III	Corridor I Deferral	4.3	51

Source: USDOI, BOEM, Alaska OCS Region (2015)
Note: 1 Bbbl means one billion barrels

2.4 Environmental Resources Considered in the Analysis

Environmental resources consist of environmental resource areas (ERAs), land segments (LSs), grouped land segments (GLSs) and boundary segments (BSs). ERAs represent areas of social, economic, or biological resources. BOEM, Alaska OCS Region analysts designate these resources by working with scientists in other federal and state agencies, academia and various stakeholders who provide information about these resources. BOEM analysts also used information from its Environmental Studies Program results, literature reviews, and professional exchange with other scientists to define these resources.

The analysts used geographic information on biological, physical, and socioeconomic resources to map resource locations potentially vulnerable to oil-spill contact. There are 124 ERAs. These resource areas represent concentrations of wildlife, habitat, subsistence-hunting areas, or subsurface habitats and are shown in Figures A-3 through A-8. The names or abbreviations of the ERAs, the general resource they represent and their vulnerability (i.e., months of habitat or resource use) are shown in Table B-1. Discussions of the results of the OSRA model, as related to all considered resources, can be found in the Second SEIS (USDOI, BOEM, 2015).

All of the onshore, coastal environmental resource locations were represented by one or more partitions of the coastline (herein called land segments (LSs)). The study area coastline is partitioned into 132 equidistant land segments of approximately 15-mile (25-kilometer) length. The partitions are formed by creating straight lines between two points projected onto the coast; therefore, the actual miles of shoreline represented by each land segment may be greater than 15 miles, depending upon the complexity of the coastal area. The locations of these 132 land segments are shown in Figures A-9 through A-11. The names of geographic locations within each

land segment are shown in Table B-2. The land segments are further grouped into 46 larger geographic areas called Grouped Land Segments (GLSs) and are evaluated as unique environmental resources. Figures A-12 through A-14 show the location of these 46 GLSs. The GLSs, their names, the individual LSs that make them up, and the months they are vulnerable to spills are shown in Table B-3.

3.0 Oil-Spill Risk Analysis

Risk analyses may be characterized as "hazard-based" or "risk-based." A hazard-based analysis examines possible events regardless of their low (or high) likelihood. For example, a potential impact would not lose significance because the risk has been reduced due to an increase in the level of control, such as engineering standards. A risk-based analysis, on the other hand, does take into account the likelihood of the event occurring or the measures that can be taken to mitigate against its potential impacts.

This OSRA is designed for use as a risk-based assessment. Therefore, the likelihood of oil spills (≥ 1,000 bbl in size) occurring on the OCS plays an integral role in the analysis. In addition to the estimated probability of one or more large spills occurring, the analysis entails an oil-spill trajectory model. Results from the trajectory analysis estimate where hypothetical spills might travel on the ocean's surface and what resources might be contacted, and these results provide input to the final OSRA step of estimating the combined probability of one or more large spills both occurring and contacting environmental resources. Note that the analysis estimates spill contacts, not impacts. Further measures that are evaluated to determine impacts, such as the natural weathering of oil spills and cleanup activities, are not directly factored into the OSRA, but are discussed in the Second SEIS (USDOI, BOEM, 2015).

The OSRA was conducted in three parts, corresponding to different aspects of the overall problem:

1. The probability of oil-spill occurrence (discussed in Section 3.1),
2. The trajectories of oil spills from hypothetical launch points to various environmental resources (described in Section 3.2), and
3. A combination of the first two analyses to estimate the overall oil-spill risk of both spill occurrence and spill contact if there is oil development (presented in Section 3.3).

For this analysis, OSRA model uses the oil spill occurrence rate derived from the historical oil-spill data from the North Sea, Gulf of Mexico (GOM) and the Pacific OCS using a fault tree model.

The second part of OSRA model initiates oil-spill trajectories from hypothetical launch points and computes the conditional probability of spill contact to the environmental resources from these trajectories. The hypothetical launch points are in areas of prospective drilling and production and along hypothetical pipelines. Note that pipeline locations are entirely hypothetical. They are not meant to represent three proposed pipelines or any real or planned pipeline locations. They are spaced along the coast to evaluate differences in oil-spill trajectories from different locations along the coast. They are not meant to represent or suggest any particular development scenario. If and when any commercial hydrocarbons are discovered, detailed development scenarios would be

engineered, designed, reviewed, and evaluated by industry and BSEE, BOEM and other applicable regulatory agencies.

Spill volume is not factored into the oil-spill trajectory model because an oil spill's movement is controlled by the surface winds and currents, not by the spill's volume.

The trajectories of hypothetical spills can be launched from each hypothetical launch point on a daily basis over a time period of available hindcast (historical) wind and current data, typically exceeding 10 years. The percentage of the trajectory contacting the environmental resources from those millions of hypothetical trajectories launched is the conditional probability of contact from a spill from a given set of launch areas or pipelines to an environmental resource, including environmental resource area, land segment, grouped land segment or boundary segment.

The third part of OSRA computes the combined probability of spills both occurring and contacting offshore and coastal environmental resource locations.

3.1 Probability of One or More Large Oil Spills Occurring

The probability of one or more large oil spills occurring assumes that spills occur independently of each other as a Poisson process. The Poisson process is a statistical distribution that is commonly used to model random events. In this analysis, the probability of one or more large oil spills (defined as a spill of greater than or equal to 1,000 barrels) occurring is based on estimated oil production rates in the Leased Area from the Scenario and the oil spill occurrence rates derived from fault tree modelling.

The fault-tree method incorporated an analysis of oil-spill statistics from the North Sea, GOM and Pacific OCS to evaluate the estimated oil spill occurrence rates applicable to the Leased Area Scenario in the Chukchi Sea (Bercha Group, 2014b).

3.1.1 Oil-Spill Occurrence Rates

Estimates of oil spill occurrence rates are based on historic spill occurrences or fault tree modeling and the estimated volume of oil produced and transported. Oil spill occurrence rates are expressed as the mean number of spills of a given size range per billion barrels (spills/Bbbl, defined as 10^9 bbl) of oil produced or transported. Only spills greater than or equal to 1,000 bbl are addressed in the OSRA analysis because smaller spills may not persist long enough to be simulated by trajectory modeling. However, smaller spills are not ignored; they are addressed in the Second SEIS without the use of trajectory modeling.

3.1.2 Production Scenario for the Leased Area

The exploration and development Scenario in the Second SEIS was used to develop oil-spill occurrence rates (USDOI, BOEM, 2015, Section 2.3 and Appendix B). Many factors contribute to the Scenario. In developing the Second SEIS, BOEM estimated the level of exploration,

development and production activities that reasonably could occur from the 460 leases issued during Lease Sale 193. BOEM developed the Scenario by using the best available methodology and by applying best professional judgment to the best available information, which here includes knowledge of individual geologic prospects, data on prospect size and risk, the realities of infrastructure constraints, timing considerations such as finite primary lease terms and length of drilling seasons, and information on development costs. The unique circumstances surrounding this Second SEIS process also enabled BOEM to consider an additional type of valuable information – actual bidding data and results from Lease Sale 193 – not typically available in a lease sale Environmental Impact Statement. The availability of this data provided better information on the actual prospects of interest and also enabled BOEM to use a more refined model to estimate different development outcomes and their likelihood. In addition, the BOEM analysts estimate other exposure variables, such as the estimated number of platforms and wells and the length and size of pipelines, as a function of the volume of oil estimated to be produced or transported (USDOI, BOEM, 2015, Appendix B, Table B-7).

3.1.3 Using Fault Tree Analysis to Estimate Large Spill Rates

Based on historic oil-spill data in the North Sea, GOM, and Pacific OCS, BOEM uses a fault-tree analysis to estimate the oil spill occurrence rate relevant to the Arctic by factoring in the effects of the Arctic environment on oil and gas production.

Fault-tree analysis is a method for estimating the oil spill occurrence rate resulting from the interactions of other events. Fault trees are logical structures that describe the causal relationship between the basic system components and events resulting in system failure. Two general fault trees were constructed, one for large pipeline spills and one for large platform/well spills. Arctic effects were treated as a modification of existing spill causes as well as unique spill causes. Modification of existing spill causes included those that also occur in other OCS regions but at a different frequency, such as trawling accidents. Unique spill causes for pipeline spills included events that occur only in the Arctic, such as ice gouging, strudel scour, upheaval buckling, thaw settlement, and other causes. For platforms, unique Arctic spill causes included ice force, low temperature, and other causes. The measures of uncertainty calculated were expanded beyond Arctic effects in each fault-tree event to include the non-Arctic variability in spill size, spill frequency, and facility parameters, including wells drilled, number of platforms, number of subsea wells and subsea pipeline length. The inclusion of these types of variable Arctic effects, non-Arctic data, and facility parameters is intended to provide a realistic estimate of oil spill-occurrence indicators on the Arctic OCS and their resultant variability.

Using fault tree method, oil-spill data from the GOM and Pacific OCS were modified and incremented to represent expected Arctic performance and included both Arctic and non-Arctic variability (Bercha Group, Inc., 2014b). The Bercha Group Inc. (2014b) fault tree analysis includes updated oil-spill data from the GOM and the Pacific OCS (Bercha Group Inc., 2013). It also includes loss-of-well-control frequencies from a recently completed Loss of Well Control Study (LOWC; Bercha Group Inc., 2014a). The LOWC study updated offshore LOWC frequency data through 2011 for the GOM, the Pacific OCS, and the North Sea using information from both the SINTEF worldwide database and the U.S. GOM and Pacific OCS.

The resulting oil spill occurrence rates (for spills greater than or equal to 1,000 bbl) in theLeased Area were calculated by the Bercha Group. These were weighted by production estimates to develop oil spill occurrence rates for platforms and wells (0.11 spills/Bbbl), pipelines (0.21 spills/Bbbl) and all sources (0.32 spills/Bbbl). These and the 95% confidence intervals on the total oil spill occurrence rate per Bbbl are shown in Table 2 below. These rates served as input into the OSRA Model.

Table 2. Mean Oil Spill Occurrence Rate for Spills Greater than or Equal to 1,000 Barrels

Facility Type	Mean Spill Rate
Platforms/Wells	0.11 spills per Bbbl produced
Pipelines	0.21 spills per Bbbl produced
All Sources	0.32 spills per Bbbl produced
95% Confidence Interval	0.12-0.56 spills per Bbbl produced

3.1.4 Poisson Distribution

The Poisson distribution is used for estimating the probability of one or more large spills occurring in the Chukchi Sea 193 Lease Area. Using Bayesian techniques, Devanney and Stewart (1974) calculated the probability distributions on spill occurrence using past oil production volume and oil-spill occurrence data and future production estimates. The spill is assumed to occur as a Possion process, with estimated volume of oil produced or handled as the exposure variable. The probability distribution for spill occurrence is estimated within a fixed class of spills. A fixed class of spills consists of spills in a single size range (e.g., spills larger than a 1,000 bbl) originating from a single spill source (e.g., pipeline).

Smith et al. (1982), using Bayesian inference techniques, presented a derivation of this process, assuming the probability of ***n*** spills over some future exposure ***t*** is expected to occur at random with a frequency specified by equation (1):

$$\text{P (}\boldsymbol{n}\text{ spills over future exposure }\boldsymbol{t}\text{) } = \frac{(\lambda t)^n e^{-\lambda t}}{n!} \qquad (1)$$

where $\boldsymbol{\lambda}$ is the true rate of spill occurrence per unit exposure. The predicted probability takes the form of a negative binomial distribution specified by equation (2):

$$\text{P(n)} = \frac{(n+v-1)!\,t^n \tau^v}{n!\,(v-1)!\,(t+\tau)^{n+v}} \qquad (2)$$

where τ is past exposure and ***v*** is the number of spills observed in the past. The negative binomial is then shown to converge over time to the Poisson, with $\boldsymbol{\lambda}$ estimated using equation (3) (Smith et al., 1982):

$$\lambda = v/\tau \qquad (3)$$

Using the spill rate and the volume of oil assumed to be produced, the estimated mean number of spills is calculated. That number of spills is distributed as a Poisson distribution. The probability of one or more large spills is equal to one minus the probability of zero spills. The probability of one or more spills occurring is:

$$P\ (n \geq 1) = 1 - \left(\frac{1}{1 + t/\tau} \right)^{\nu} \qquad (4)$$

Thus, the equation (4) is the estimated probability distribution on spill occurrence for a fixed class of spills (a single spill-size range, a single spill-source category) that incorporates the predicted volume to be handled, t, the past oil spill occurrence rate, ν/τ, and the uncertainty which stems from the fact that $\nu t/\tau$ is not likely to equal the true oil spill occurrence rate, λ, exactly.

Two basic criteria were used in selecting the volume of oil handled as the risk exposure variable to calculate oil spill occurrence rates: (1) the exposure variable should be simple to define, and (2) it should be a quantity that can be estimated. The volume of oil produced or transported was the chosen exposure variable primarily for the following reasons: (1) historic volumes of oil produced and transported are well documented; (2) using this volume makes the calculation of the estimated oil spill occurrence rate simple—the ratio of the number of historic spills to the volume of oil produced or transported; and (3) future volumes of oil production and transportation are routinely estimated, so this approach can be used to project an estimate of future oil spill occurrence rates.

3.1.5 Oil-Spill Occurrence Probability Estimates

Oil-spill occurrence estimates for spills greater than or equal to 1,000 bbl were calculated for production and transportation of oil associated with the Chukchi Sea Sale 193 Leased Area proposed action or its alternatives. These probabilities are based on the volume of oil assumed to be found, produced, and transported over the production life of the leased area and on the oil spill occurence rates that have been calculated for oil spills from OCS platforms/wells and pipelines by the Bercha Group (2014b). The probabilities of one or more oil spills greater than or equal to 1,000 bbl occurring as a result of OCS production and transportation resulting from the proposed action or deferral area alternatives are found in Table 3.

Table 3. Oil-spill Occurrence Probability Estimates for One or More Spills Greater than or Equal to 1,000 Barrels Resulting over the Assumed Production Life of the Proposed Action and Alternative Actions, Chukchi Sea Sale 193 Leased Area

Alternative Name (Number)		Volume of Oil (Bbbl)	Probability of One or More Spills	Mean Number of Spills
Proposed Action or Corridor II Deferral (I orIV)	Platforms/Wells	4.3	39%	0.5
	Pipelines		59%	0.9
	All Sources		75%	1.4
No Action (II)		0	0	0
Corridor I Deferral (III)	Platforms/Wells	4.3	39%	0.5
	Pipelines		59%	0.9
	All Sources		75%	1.4

Source: USDOI, BOEM, Alaska OCS Region (2015)

3.2 The OSRA Model

The OSRA Model was designed to track the movements of hypothetical large oil spills and to calculate the potential contacts to the environmental resources that include environmental resource areas, land segments, grouped land segments, and boundary segments. The OSRA model, originally developed by Smith et al. (1982), has been enhanced by BOEM over the years (Price et al. 2003, 2004; Ji et al. 2004, 2011). The model performs four functions.

- OSRA uses model-simulated historical wind, ice, and current information (hindcasts) to estimate where a hypothetical spill from a particular point would move over a specific period of time. Model-simulated current, ice and wind data and hypothetical launch points are described in sections 3.2.1 and 3.2.2.
- OSRA geographically tracks each hypothetical spill trajectory versus the environmental resources. Trajectories and contacts are detailed in section 3.2.3 and 3.2.4.
- OSRA counts every time a hypothetical spill contacts one of these environmental resources that include environmental resource areas, land segments and boundary segments. Contact tracking is addressed in section 3.2.5
- OSRA estimates the probability of contact based on the total number of hypothetical spill launches from a given point and the number of contacts to each specific environmental resource that includes environmental resource areas, land segments and boundary segments. OSRA also estimates the combined probabilities of one or more large spills both occurring and contacting environmental resources. This is summarized in section 3.2.6.

Finally, Section 3.2.7 lists factors that are not included in OSRA modeling and discusses how the exclusion of those factors will affect the model's results.

3.2.1 Model-Simulated Ocean Currents, Ice and Winds as Inputs to OSRA

This model estimates oil-spill trajectories using model-simulated data fields of winds, ice, and ocean currents in the Beaufort and Chukchi seas.

An oil spill on the ocean surface moves around due to complex ocean surface currents exerting a shear force on the spilled oil from below. For cases where the ice concentration is 80 percent or higher, the model ice velocity is used to calculate the transport of the oil. In addition to the effects of surface currents and ice movements, the prevailing wind exerts an additional shear force on the spill from above, and the combination of the three forces causes the transportation of the oil spill away from its initial spill location.

BOEM uses the results from a coupled ice-ocean general circulation model to simulate oil-spill trajectories. The wind-driven and density-induced ocean-flow fields and the ice-motion fields are simulated using a three-dimensional, coupled, ice-ocean hydrodynamic model (Curchitser et al., 2013). The model is based on the Regional Ocean Modeling System (ROMS) (Shcheptkin and McWilliams, 2005). The ROMS has been coupled to a sea ice model (Budgell, 2005), which consists of elastic-viscous-plastic rheology (Hunke and Dukowics, 1997; Hunke, 2001) and the Mellor and Kantha (1989) thermodynamics. This model simulates flow properties and sea-ice evolution for the Arctic with enhanced resolution (5km) in the Chukchi and Beaufort seas during the years 1985-2005. The sea ice model was adapted to represent land-fast ice, mostly on the

Chukchi coast. The coupled ocean-ice model uses six-hourly CORE2 forcing files (Large and Yeager, 2009), including winds, air temperature, air pressure, humidity, plus daily solar radiation, to compute the momentum, heat and salt fluxes. Comparison of model results with observation shows significant skill in the model capability to reproduce observed circulation and sea ice patterns in the Beaufort and Chukchi Seas (Curchitser et al., 2013).

BOEM uses the reanalysis (1986-2004) wind fields provided by Curchitser et al. (2013). The wind data are from CORE2 (Large and Yeager, 2009) and was interpolated to the coupled ocean model grid at three-hourly intervals.

3.2.2 Hypothetical Launch Points

To determine locations where hypothetical oil spills could originate, the OSRA Model uses a grid structure. The model initiates hypothetical oil-spill trajectories uniformly in space and time from within each launch area. At one-seventh-degree intervals in the north-south direction (about 15.86 km) and one-third-degree intervals in the east-west direction (about 12.67 km), the model launched a trajectory every 2 days. At this resolution, there were 375 total hypothetical launch points in space, grouped into six hypothetical launch areas (LAs) (1, 4, 5, 6, 10, and 11), and six hypothetical pipelines (PLs) (2, 3, 5, 6, 8, and 9) representing the Chukchi Sea Sale 193 Leased Area. The hypothetical launch points are grouped to estimate the probability for spill contacts from oil and gas activities from the Leased Area. Locations of these launch areas and pipelines are shown in Figure A-2.

3.2.3 Hypothetical Spill Trajectories

A trajectory can be defined as the path followed by an object moving under the action of given forces. In this case, the forces of surface currents, ice and wind act on a hypothetical oil spill to produce a modeled trajectory.

The hypothetical oil-spill trajectories in OSRA outputs are produced by numerically integrating a temporally and spatially-varying ocean current field and superposing on that an empirical wind-induced drift of the hypothetical oil spills (Samuels et al., 1982). Collectively, the trajectories represent a statistical ensemble of simulated oil-spill displacements produced by a field of winds derived from observations and numerically derived ocean currents and ice motion.

For this analysis, a total of 3,240 trajectories were simulated from each of 375 launch points over the 18 years of wind, current and ice data, for a total of 1.215 million trajectories. The results of these trajectory simulations were combined to represent platform/well spills from 6 LAs (Figure A-2). Launch Area 1 is more than 150 miles offshore. Launch Areas 4-6 are approximately 90-150 miles offshore. Launch Areas 10-11 are approximately 25-90 miles offshore. Pipeline spills were represented by trajectories from each launch point along each PL (2, 3, 5, 6, 8, and 9, Figure A-2).

Trajectories are constructed from simulations of wind-driven and density-induced ocean flow fields, and the ice motion field. The basic approach is to simulate these time and spatially dependent currents separately, then to combine them through linear superposition to produce an oil-transport vector. This vector is then used to create a trajectory. Simulations are performed for

three seasons, annual (January 1 – December 31), winter (November 1-May 31) and summer (June 1-October 31). The choice of this seasonal division was based on meteorological, climatological, and biological cycles, as well as consultation with BOEM, Alaska OCS Region analysts. Curchitser et al. (2013) detail the modeling of each ice motion field and ocean current component. Brief summaries of the methods and assumptions follow.

For cases where the ice concentration is below 80 percent, each trajectory is constructed using vector addition of the ocean current field and 3.5 percent of the instantaneous wind field-a method based on work done by Huang and Monastero (1982), Smith et al. (1982), and Stolzenbach et al. (1977). For cases where the ice concentration is 80 percent or greater, the model ice velocity is used to transport the oil. Equations 1 and 2 show the components of motion that are simulated and used to describe the oil transport:

$$U_{oil} = U_{current} + 0.035\ U_{wind} \quad (1)$$

or

$$U_{oil} = U_{ice} \quad (2)$$

where: U_{oil} = oil drift vector
$U_{current}$ = current vector (when ice concentration <80%)
U_{wind} = wind speed at 10 m above the sea surface
U_{ice} = ice vector (when ice concentration ≥80%)

The wind drift factor was estimated to be 0.035, with a variable drift angle ranging from 0^o to 25^o clockwise. The drift angle was computed as a function of wind speed according to the formula in Samuels et al. (1982). (The drift angle is inversely related to wind speed.)

The trajectories age while they are in the water and/or on the ice. For each day that the hypothetical spill is in the water, the spill ages—up to a total of 360 days. While the spill is in the ice (≥80% concentration), the aging process is suspended. The maximum time allowed for the transport of oil in the ice is 360 days, after which the trajectory is terminated. After coming out of the ice, into open water, the trajectory ages to a maximum of 30 days.

For each trajectory simulation, the start time for the first trajectory was the first day of the season (winter or summer) of the first year of wind data (1986) at 6 a.m. Greenwich Mean Time (GMT). The summer season consists of June 1-October 31, and the winter season is November 1-May 31. Each subsequent trajectory was started every 2 days at 6 a.m. GMT. A total of 3,240 trajectories (1,890 in winter, 1,350 in summer) from each spatial launch point over the 18 years of wind, current and ice data (1986-2004), and results of these trajectory simulations were combined to represent platform spills. Transportation spills were represented by 3,240 trajectories (1,890 in winter, 1,350 in summer) launched from each launch point along each pipeline.

The winds, ice, and currents are assumed to be statistically similar to those that will occur in the Chukchi Sea during future offshore activities. In other words, the analysts assume that the frequency of strong wind events in the wind field during the time of data collection (18 years) is the same as what will occur during future offshore activities.

In this fashion, the OSRA Model generates time sequences of hypothetical launch points. These results are essentially oil-spill trajectories.

3.2.4 Contacts with Environmental Resources

Another portion of the OSRA Model tabulates "contacts" by the simulated oil spills. A contact occurs when a trajectory touches an environmental resource such as a land segment or an environmental resource area.

The model contains the geographical boundaries of a variety of identified environmental features. The shoreline segments (LS) proximate to their locations identify onshore resources. Offshore resources are identified by the area of surface waters overlying their locations.

At every integration time step, the OSRA Model monitors the locations of the simulated spills and counts the number of oil-spill contacts to land segments and the locations of onshore and offshore environmental resource areas. A contact to a land segement will stop the trajectory of an oil spill; no rewashing is assumed in this model. However, contacts to the transparent (nonland) offshore environmental resource areas will not stop the respective trajectories.

3.2.5 Estimating Probability of Contacts

Next, the model counts the occurrences of oil-spill contact to each land segment and environmental resource area. The frequencies of oil-spill contact are computed for designated oil-spill travel times (e.g., 3, 10, 30, 60, 180, or 360 days) by dividing the total number of oil-spill contacts by the total number of hypothetical spills initiated in the model from a given hypothetical launch point.

After specified periods of time, the OSRA Model will divide the total number of contacts to the environmental resources, such as LSs or ERAs, by the total number of simulated oil spills from a given geographic location. These ratios are the estimated probabilities of oil-spill contact from offshore activities at that geographic location, assuming spill occurrence.

The OSRA Model output provides the estimated probabilities of contact within the travel-times given above to all identified environmental resources, such as LSs and ERAs, from locations chosen to represent hypothetical oil spills due to oil production and transportation facilities. By inference, the frequencies of contact by the simulated oil spill trajectories are assumed to be the same as what could occur from actual oil spills during future offshore activities.

3.2.6 OSRA Model Output

The outputs of the OSRA Model are a series of conditional and combined probabilities of a contact, and occurrence and contact between a hypothetical spill in a specific area and an ERA, a specific LS or GLS or a boundary segment (BS). The detailed discussion of conditional and combined probabilities is in section 3.3. Those probabilities are presented in Tables B-4 through B-78 in Appendix B.

The tables in Appendix B are arranged to address conditional probabilities in this order:

- Annual
- Summer
- Winter

Within each season, the probability is reported by Environmental Resource Areas, Land Segments, Grouped Land Segments and Boundary Segments within 3-, 10-, 30-, 60-, 180-, and 360-day time periods. These tables are followed by the combined probabilities associated with ERAs, LSs, and GRSs. The analysts at BOEM used the probabilities in these tables to analyze the effects of large oil spills in the Second SEIS.

3.2.7 Factors Not Considered in the OSRA Model

It is important to note that the modelled and assessed scenarios in this report are unmitigated events to provide a conservative basis for environmental effects assessment. There are factors not explicitly considered by the OSRA Model that can affect the transport of spilled oil as well as the dimensions, volume, and nature of the oil spills contacting environmental resources. These include possible cleanup operations, physical or biological weathering of oil spills, or the spreading and splitting of oil spills. The OSRA analysts have chosen to take a more environmentally conservative approach by presuming persistence of spilled oil over the selected time duration of the trajectories. These assumptions make the OSRA model's calculated probabilities conservative as they do not take into account the prevention and response measures that will be in place to prevent and reduce the potential effects and consequences of an accidental event. These types of measures are further evaluated in the Second SEIS.

3.3 Conditional Probabilities of Contact

The probability that an oil spill will contact a specific environmental resource within a given time of travel from a certain location or spill point is termed a conditional probability, the condition being that a spill is assumed to have occurred. Each trajectory was allowed to continue for as long as 360 days. However, if the hypothetical spill contacted a land segment sooner than 360 days after the start of the spill, the spill trajectory was terminated, and the contact was recorded.

The trajectories simulated by the model represent only hypothetical pathways of oil spills; they do not involve any direct consideration of cleanup, dispersion, or weathering processes that could alter the quantity or properties of oil that might eventually contact the environmental resources. However, an implicit analysis of weathering and decay can be considered by noting the ages of the simulated oil spills when they contact environmental resources. Conditional probabilities of contact with environmental resources within 3, 10, 30, 60, 180 and 360 days of travel time were calculated for each of the hypothetical spill sites by the model to serve as input into the final calculation of the combined probabilities (Tables B-4 through B-75).

3.4 Combined Probabilities of Contact

A critical difference exists between the conditional probabilities and the combined probabilities calculated. Conditional probabilities depend only on the winds, currents and ice in the study area.

Combined probabilities, on the other hand, depend not only on the winds, currents and ice, but also on the probability of one or more large spills occurring, the estimated volume of oil to be produced or transported, and the oil transportation scenario. The combined probabilities for this analysis of the proposed action and its alternatives are presented in Appendix B, Tables B-76, B-77, and B-78. The combined probabilities reflect the probability of one or more large spills occurring and contacting resources over the Scenario life of the Leased Area. Because no leases or few (5) leases were contained within the alternatives, the combined probabilities varied by ±1% between alternatives. The variation was not substantive enough to warrant a separate analysis and is well within the uncertainty on the input ice, ocean and wind fields.

In calculating the combined probabilities of both oil-spill contact and oil-spill occurrence, the following steps are performed:

1. To address the probability of spill contact for a set of n_t environmental resources and n_l hypothetical launch points, the conditional probabilities can be represented in a matrix form. Let [**C**] be an $n_t \times n_l$ matrix, where each element $c_{i,j}$ is the probability that an oil spill will contact environmental resource ***i*,** given that a spill occurs at launch point ***j***. Note that hypothetical launch points can represent potential starting points of spills from production areas or from transportation routes.

2. Oil-spill occurrence can be represented by another matrix [**S**]. With n_l hypothetical launch points and n_s production sites, the dimensions of [**S**] are $n_l \times n_s$. Let each element $s_{j,k}$ be the estimated mean number of spills occurring at hypothetical launch point *j* owing to production of a unit volume (1 Bbbl) of oil at site ***k*.** These spills can result from either production or transportation. The $s_{j,k}$ can be determined as a function of the volume of oil (spills/Bbbl). Each column of [**S**] corresponds to one production site and one transportation route. If alternative and mutually exclusive transportation routes are considered for the same production site, they can be represented by additional columns of [**S**], thus increasing n_s**.**

3. The unit risk matrix [**U**] is defined as:

$$[U] = [C] \times [S]$$

   [**U**] has dimensions $n_t \times n_s$. Each element $u_{i,k}$ corresponds to the estimated mean number of spills occurring and contacting environmental resource ***i***, owing to the production of a unit volume (1 Bbbl) of oil at site ***k*.**

4. To convert this number into a number that reflects the expected oil production volume, a value for volume must be included. With [**U**], the mean contacts to each environmental resource are estimated, given a set of oil volumes at each site. Let [**V**] be a vector of dimension n_s where each element v_k corresponds to the volume of oil expected to be found at production site ***k*.** Then, if [L] is a vector of dimension n_t, where each element λ_i corresponds to the mean number of contacts to environmental resource ***i*,** the formula is:

$$[L] = [U] \times [V]$$

Thus, estimates of the mean number of oil spills that are likely to occur and contact environmental resources (or land segments) can be calculated. (Note that, as a statistical parameter, the mean number can assume a fractional value, even though fractions of oil spills have no physical meaning.)

4.0 Discussion

Conditional probabilities are expressed as a percent chance. This means that the probability (a fractional number between 0 and 1) is multiplied by 100 and expressed as a percentage.

Conditional probabilities assume a large spill has occurred and the transport of the spilled oil depends only on the winds, ice, and ocean currents in the study area. Conditional probabilities of contact were estimated for 3, 10, 30, 60, 180, or 360 days for annual and both summer and winter seasons (Appendix B.2). Summer spills are spills are defined as those that begin anytime from June through October. Therefore, if any contact to an environmental resource area or land segment is made by a trajectory that began before the end of summer season, it is considered a summer contact and is counted along with the rest of the contacts from spills launched in the summer. BOEM estimates the conditional probability of contact from spills that start in winter, freeze into the landfast ice, and melt out in the spring. Winter spills are defined as spills that begin any time from November 1 through May 31, melt out of the ice, and contact an environmental resource area or land segment during the open-water period. Therefore, if any contact to an environmental resource area or land segment is made by a trajectory that began before the end of the winter season, it is considered a winter contact and is counted along with the rest of the contacts from spills launched in the winter.

4.1 Comparisons between Spill Location and Season

The primary differences of contact between hypothetical launch points (LAs and PLs) are geographic, in the perspective of west to east or nearshore versus offshore, and temporal in terms of how long it takes to contact. Hypothetical launch points at offshore locations take longer to contact the coast and nearshore ERAs, if contact occurs at all. Winter spill contact to nearshore and coastal resources is less often and, to a lesser extent than summer spill contacts, due to the effect of landfast ice in place from November to May. Statistically, hypothetical spills have a westerly and southwesterly direction of drift through time.

4.2 Comparisons through Time

For launch areas and pipelines close to shore, spills have relatively high conditional and combined probabilities of contact to the adjacent coastline. The detailed discussions of the conditional and combined probabilities are in Sections 4.2.1 and 4.2.2

4.2.1 Comparisons of the Conditional Probabilities of Contact

The results in Table 4 below follow a sequential discussion of annual, summer and winter conditional contact probabilities by ERA and LS for each time period.

Table 4. Percent Chance of Contact from Launch Areas and Pipelines.

Season	Relevant Table in Appendix B	Launch Areas (LAs)	Pipelines (PLs)
With Environmental Resource Areas within 3 Days			
Annual	B-4	<0.5 to 39	<0.5 to57
Summer	B-28	<0.5 to 62	<0.5 to >99.5
Winter	B-52	<0.5 to 59	<0.5 to 65
With Land Segments within 3 Days			
Annual	B-10	<0.5	<0.5 to 2 [PLs 3, 6, or 9] Rest <0.5
Summer	B-34	<0.5 to 3] [LA 11 only] Rest <0.5	<0.5 to 3 [PLs 3, 6, and 9] Rest <0.5
Winter	B-58	<0.5	<0.5 to 2 [PLs 3, 6, and 9] Rest <0.5
With Environmental Resource Areas within 10 Days			
Annual	B-5	<0.5 to 45	<0.5 to 61
Summer	B-29	<0.5 to 71	<0.5 to 99.5
Winter	B-53	<0.5 to 67	<0.5 to 76
With Land Segments within 10 Days			
Annual	B-11	<0.5 to 2 [LA 5, 6, 10, and 11] Rest <0.5	<0.5 to 4 [PL 3, 5, 6, and 9] Rest <0.5
Summer	B-35	<0.5 to 4 [LAs 10 and 11] <0.5 to 1 [LAs 4, 5, and 6] <0.5 [LA 1 only]	<0.5 to 7
Winter	B-59	<0.5 to 1 [LAs 10 and 11] Rest <0.5	<0.5 to 3 [PLs 3, 6, 8, and 9] Rest <0.5
With Environmental Resource Areas with 30 Days			
Annual	B-6	<0.5 to 47	<0.5 to 64
Summer	B-30	<0.5 to 75	<0.5 to >99.5
Winter	B-54	<0.5 to 70	<0.5 to 78
With Land Segments within 30 Days			
Annual	B-12	<0.5 to 6	<0.5 to 6
Summer	B-36	<0.5 to 10	<0.5 to 10
Winter	B-60	<0.5 to 4	<0.5 to 4

As Table 4 indicates, ERAs in general are more likely to be contacted by a spill than individual LSs. The highest percent chance of contact to a LS was 10% from a spill within 30 days. The highest percent chance of contact to an environmental resource area was 99.5%, which could occur within 3, 10, or 30 days.

Other observations are: near-shore pipelines and launch areas have a higher percent chance of contact to ERAs all year than those farther from shore, and generally, the longer the time-frame under consideration, the higher the percent chance of contact.

4.2.2 Comparisons of the Combined Probabilities of Contact

The combined probability represents the probability of one or more large spills from operations in or adjacent to the Leased Area occurring and contacting environmental resources.

For the most part, the combined probabilities (expressed as percent chance) to LSs or ERAs is less than or equal to 37% within 30 days, or less than or equal to 40% within 360 days.

For ERAs, the combined probability ranges from less than 0.5% to 21%, less than 0.5% to 27 %, and less than 0.5% to 37 % within 3, 10, and 30 days, respectively (Table B-76).

The LSs with at least a 1% combined probability within 30 days include: LSs 7 and 8 (Wrangel Island) 22-37 (Chukotka coastline), 64-80 (Point Hope – Eluksingiak Point) and 84-85 (Barrow Area). The LSs 30 (Nutepynmin), 31 (Alyatki), 80 (Eluksingiak Point), and 84 (Will Rogers and Wiley Post Mem.) have a 2% combined probability and 79 (Wainwright) and 85 (Barrow) have a 3% combined probability (Table B-77).

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Appendix A. Oil-Spill Risk Analysis Figures

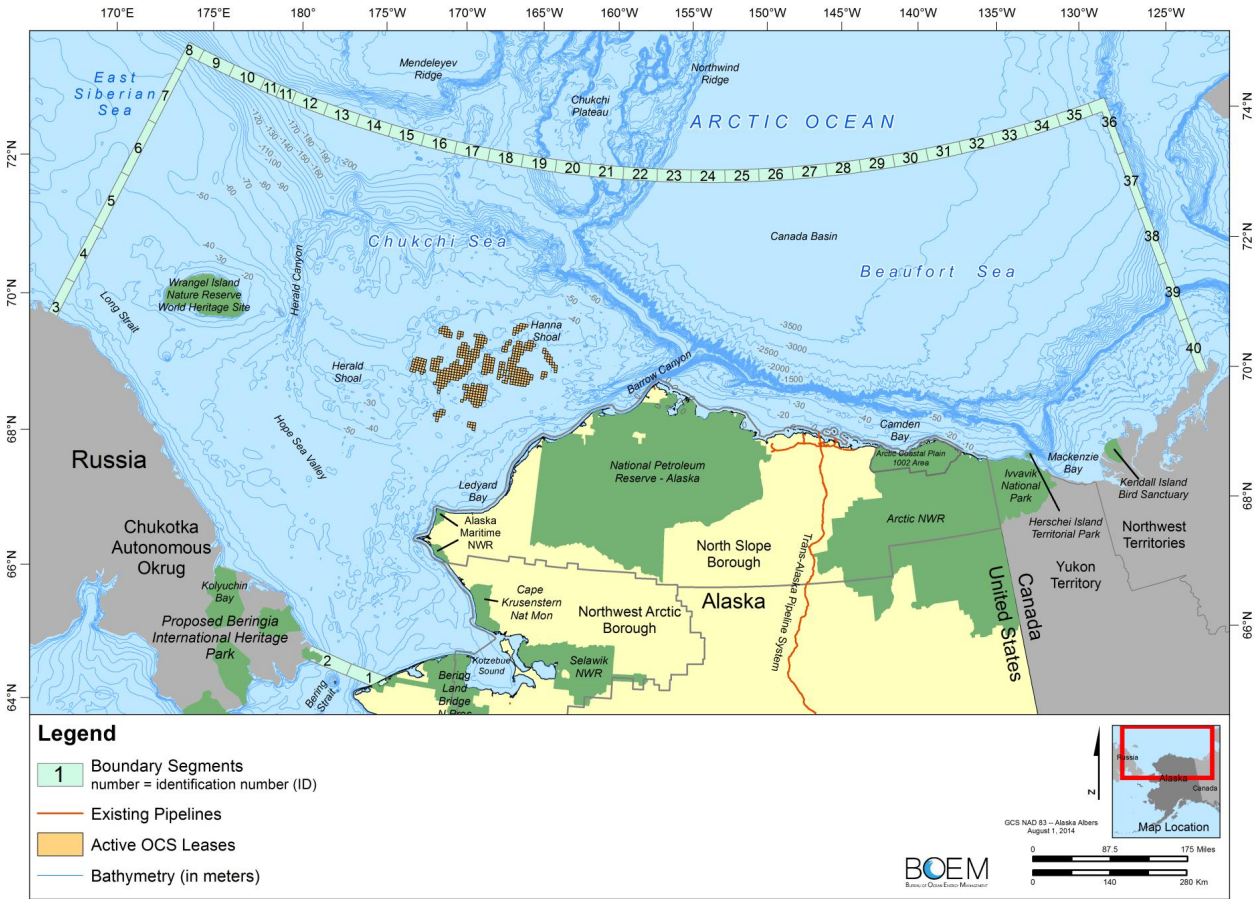

Figure A-1: Study Area and Boundary Segments Used in the Oil-Spill Trajectory Analysis.

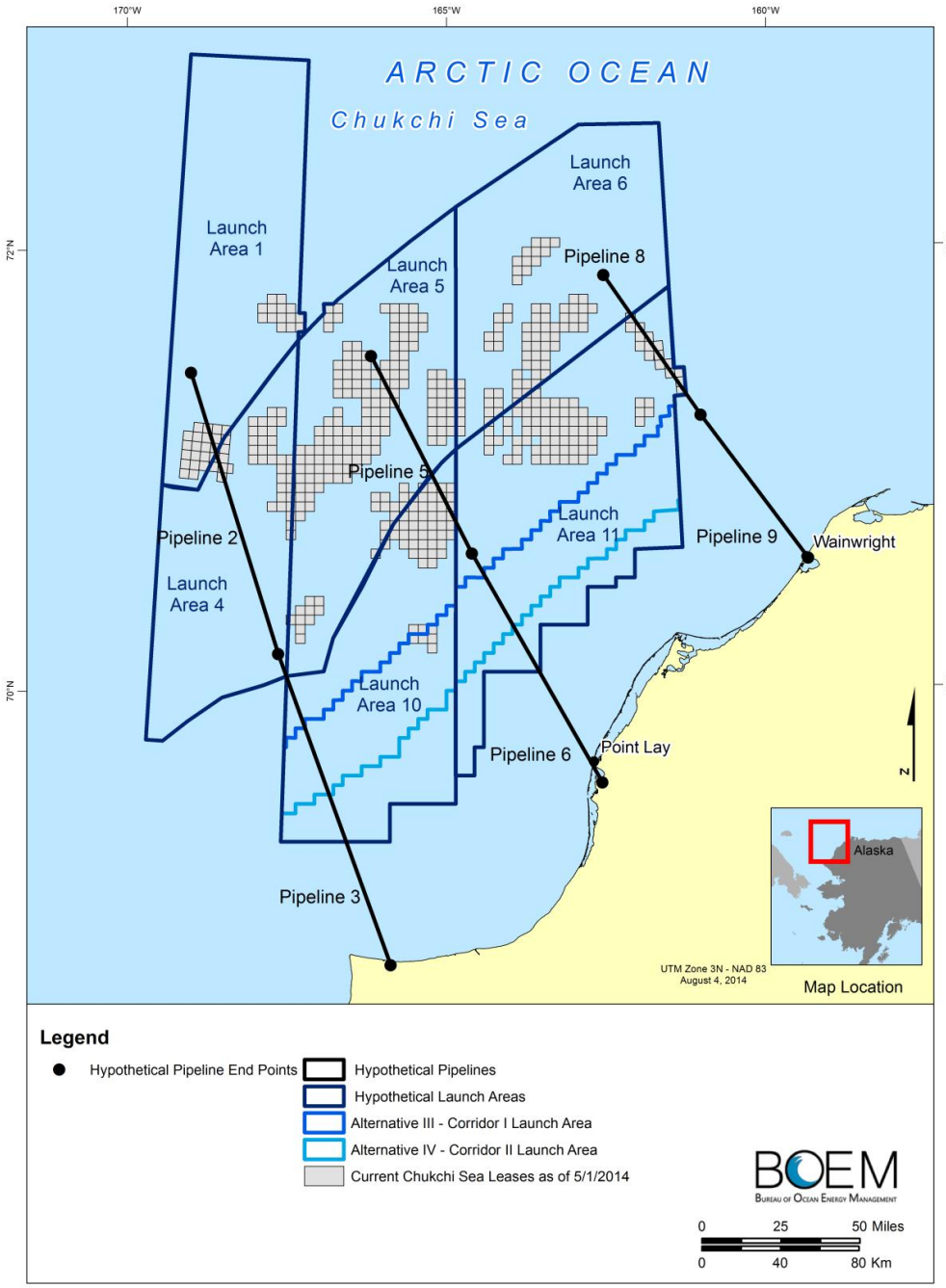

Figure A-2: Hypothetical Launch Areas and Hypothetical Pipelines Used in the Oil-Spill Trajectory Analysis.

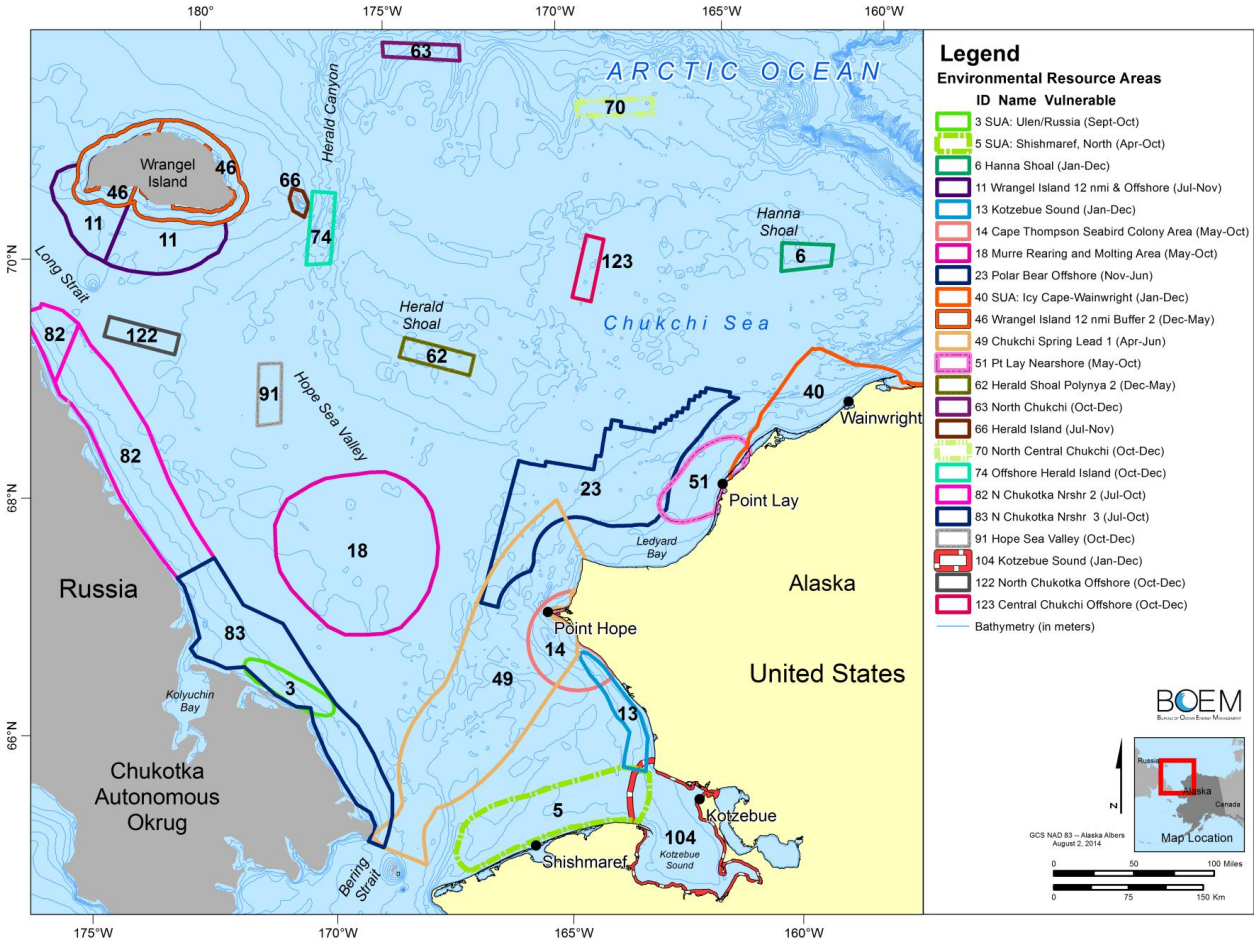

Figure A-3: Environmental Resource Areas Used in the Oil-Spill Trajectory Analysis (set 1)

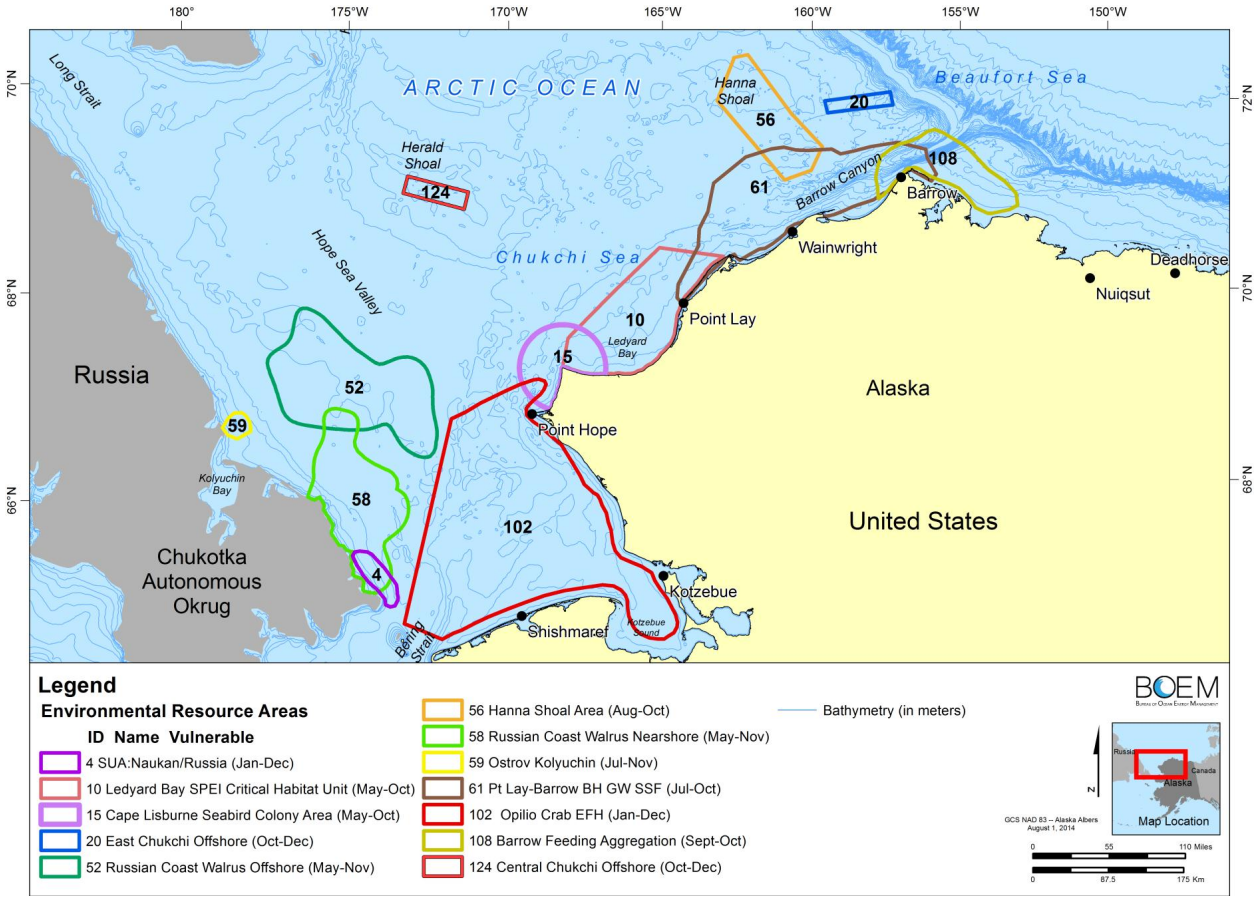

Figure A-4: Environmental Resource Areas Used in the Oil-Spill Trajectory Analysis (set 2).

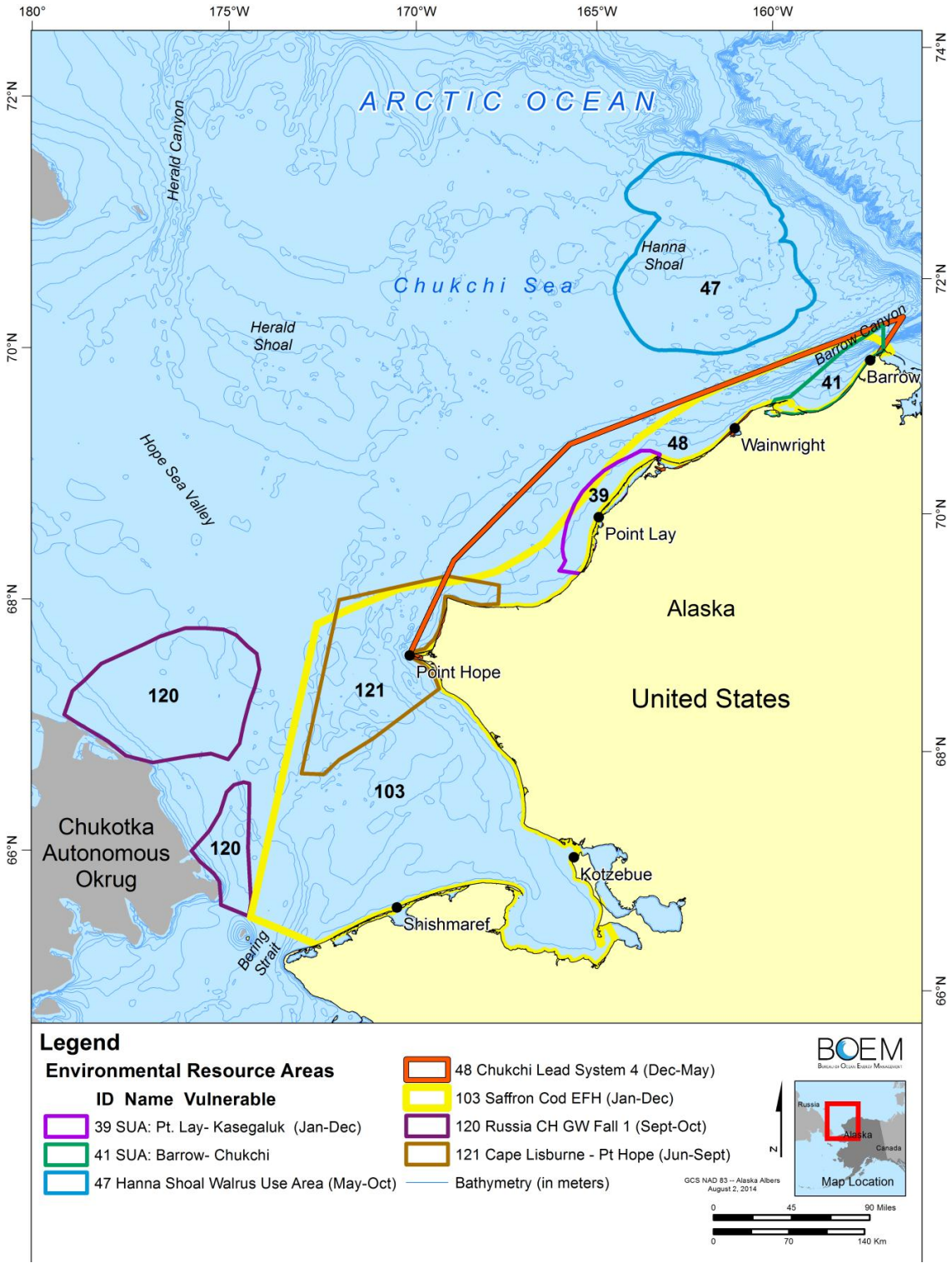

Figure A-5: Environmental Resource Areas Used in the Oil-Spill Trajectory Analysis (set 3).

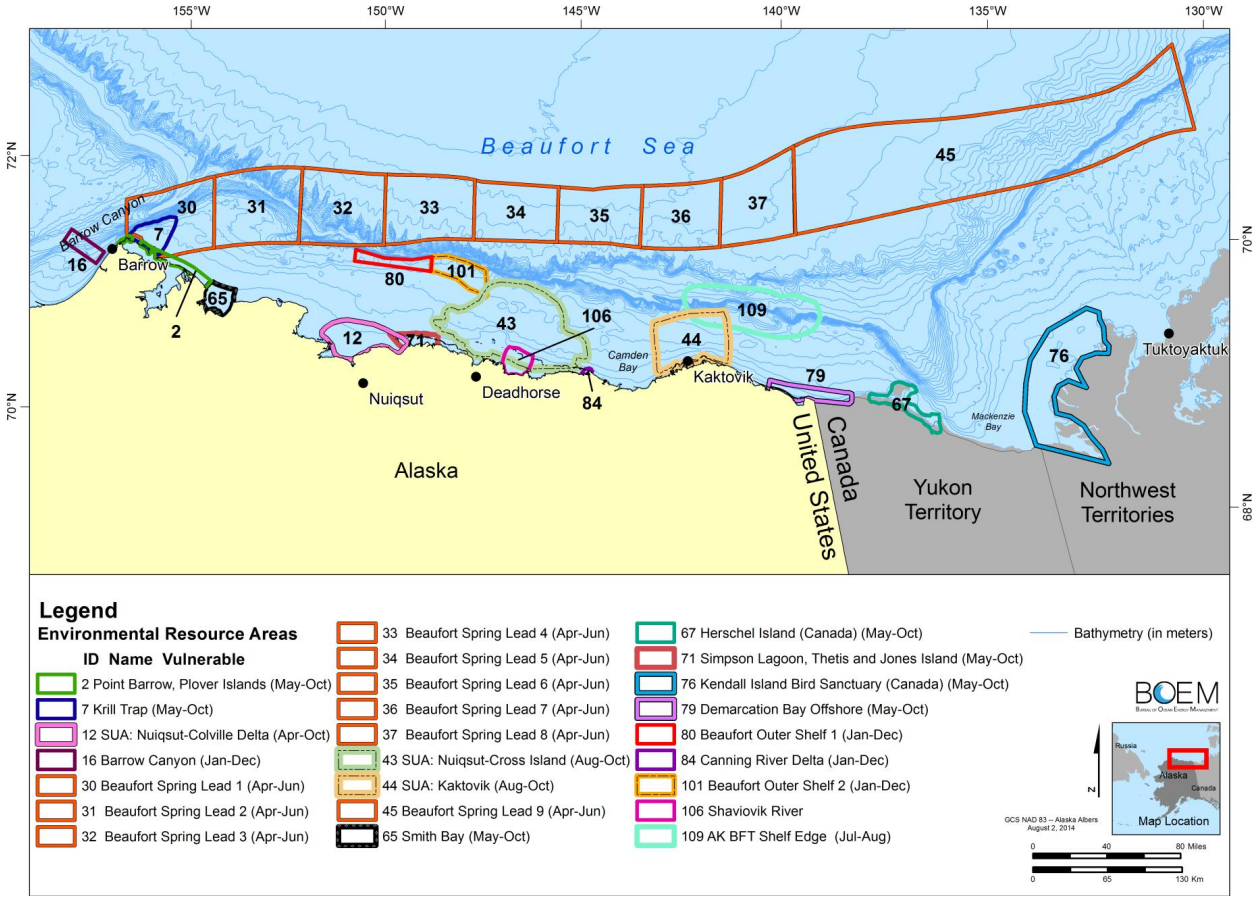

Figure A-6: Environmental Resource Areas Used in the Oil-Spill Trajectory Analysis (set 4).

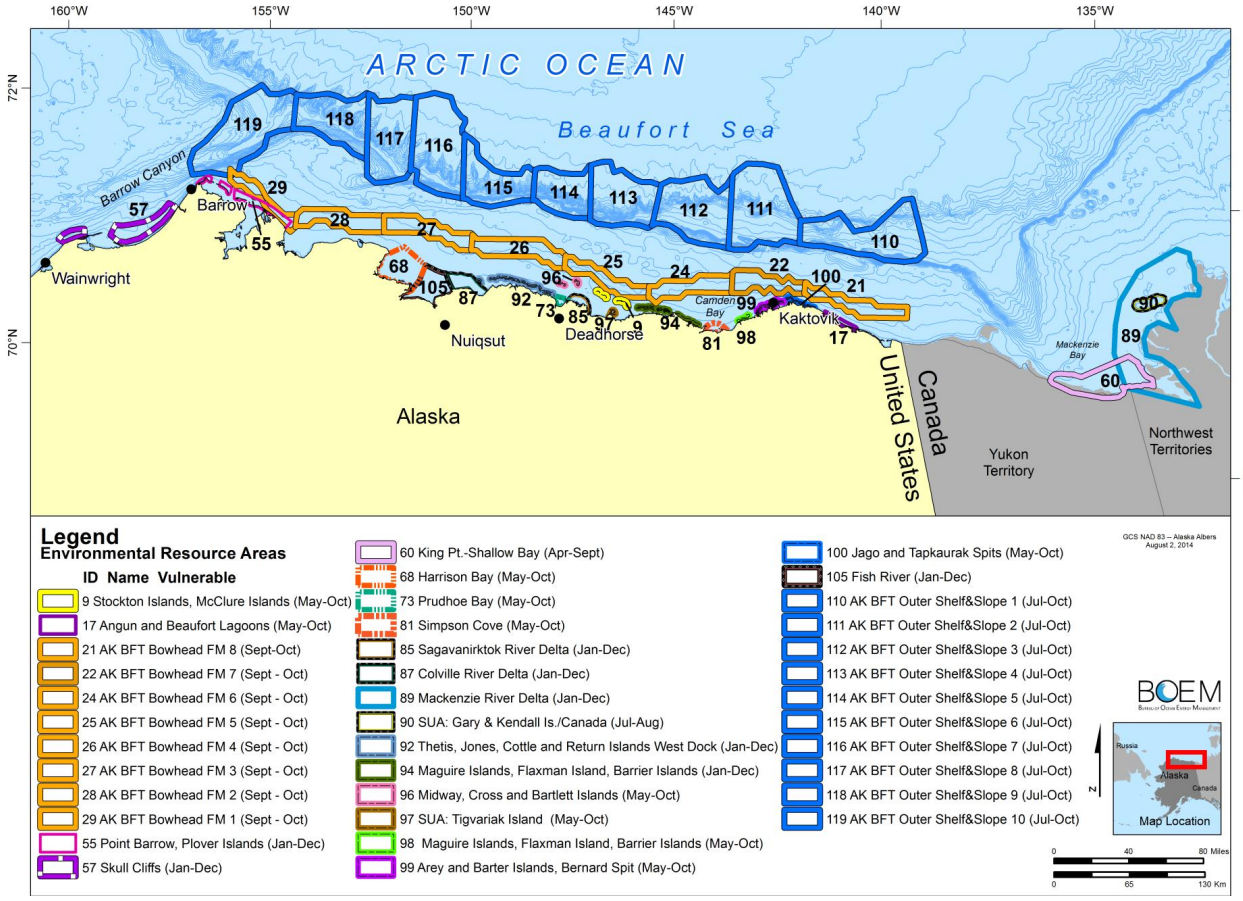

Figure A-7: Environmental Resource Areas Used in the Oil-Spill Trajectory Analysis (set 5).

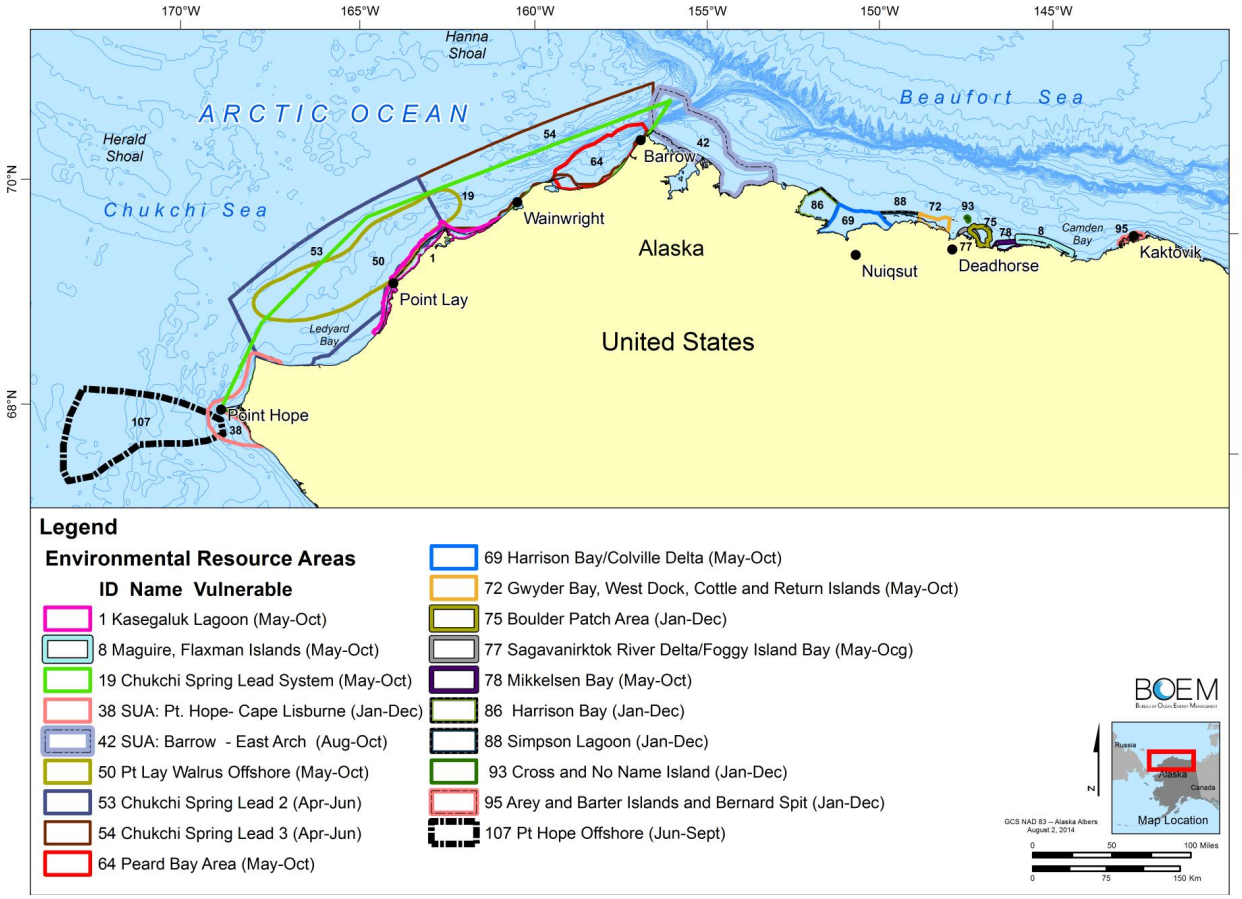

Figure A-8: Environmental Resource Areas Used in the Oil-Spill Trajectory Analysis (set 6).

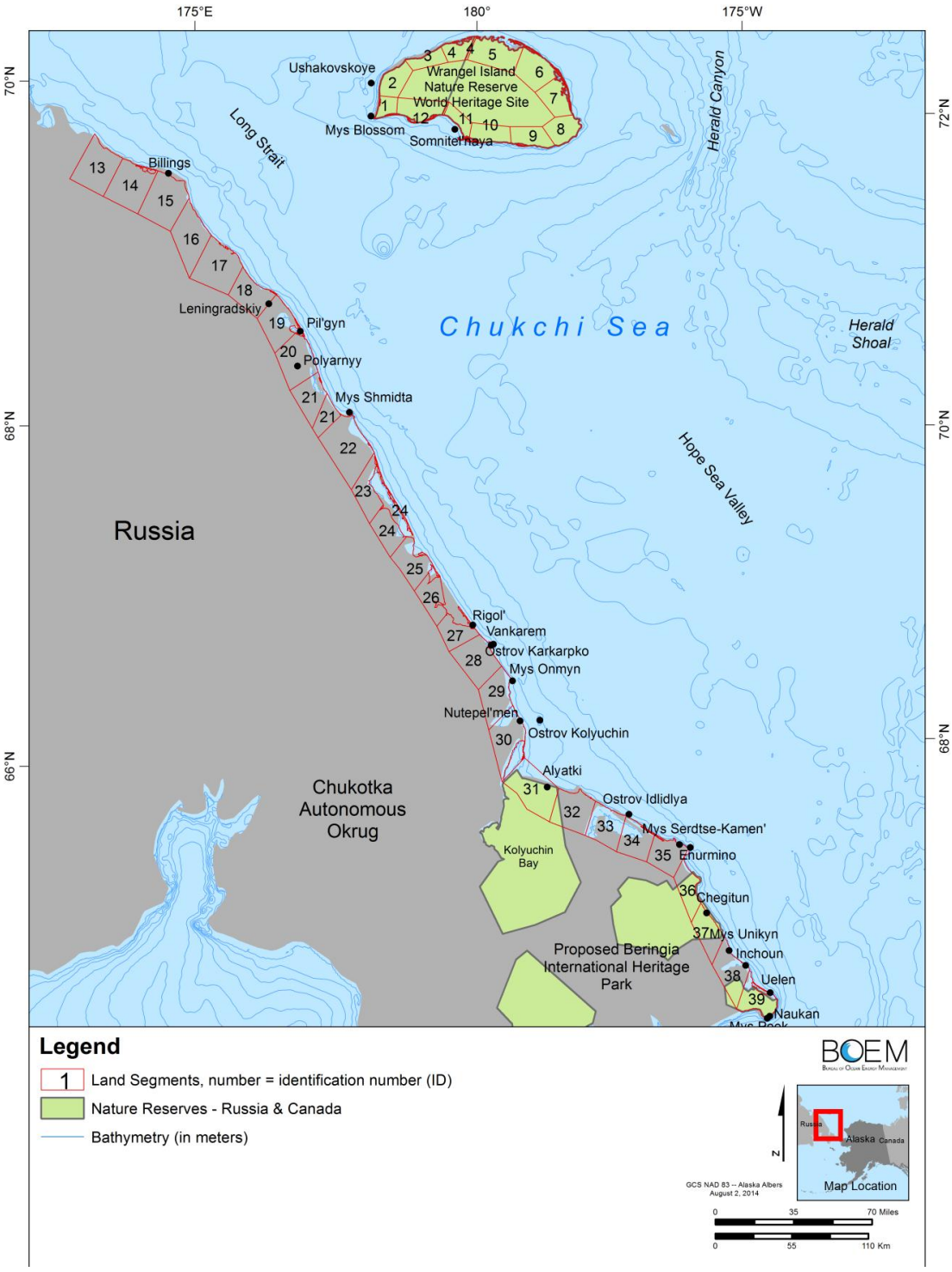

Figure A-9: Land Segments Used in the Oil-Spill Trajectory Analysis (set 1).

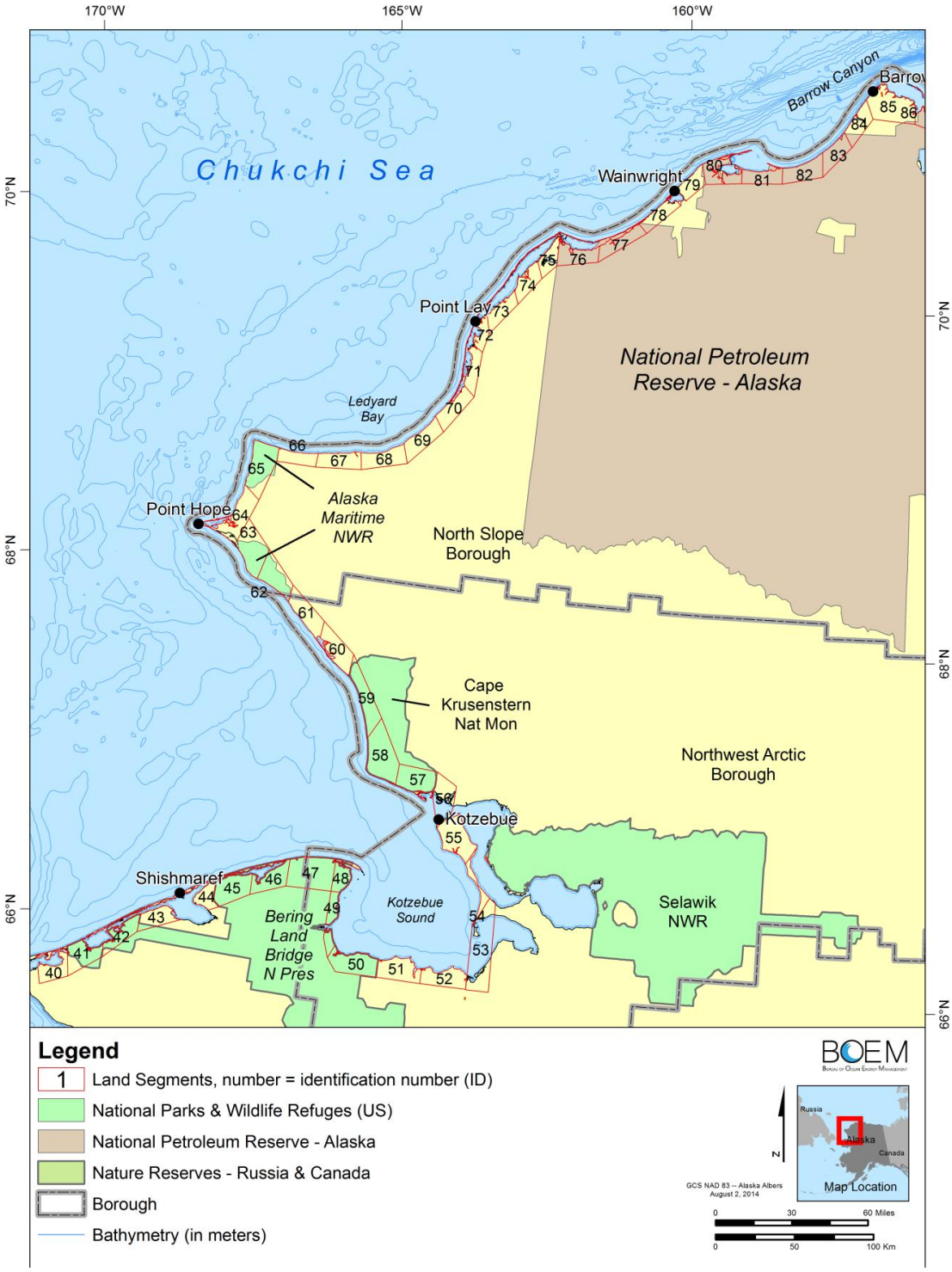

Figure A-10: Land Segments Used in the Oil-Spill Trajectory Analysis (set 2).

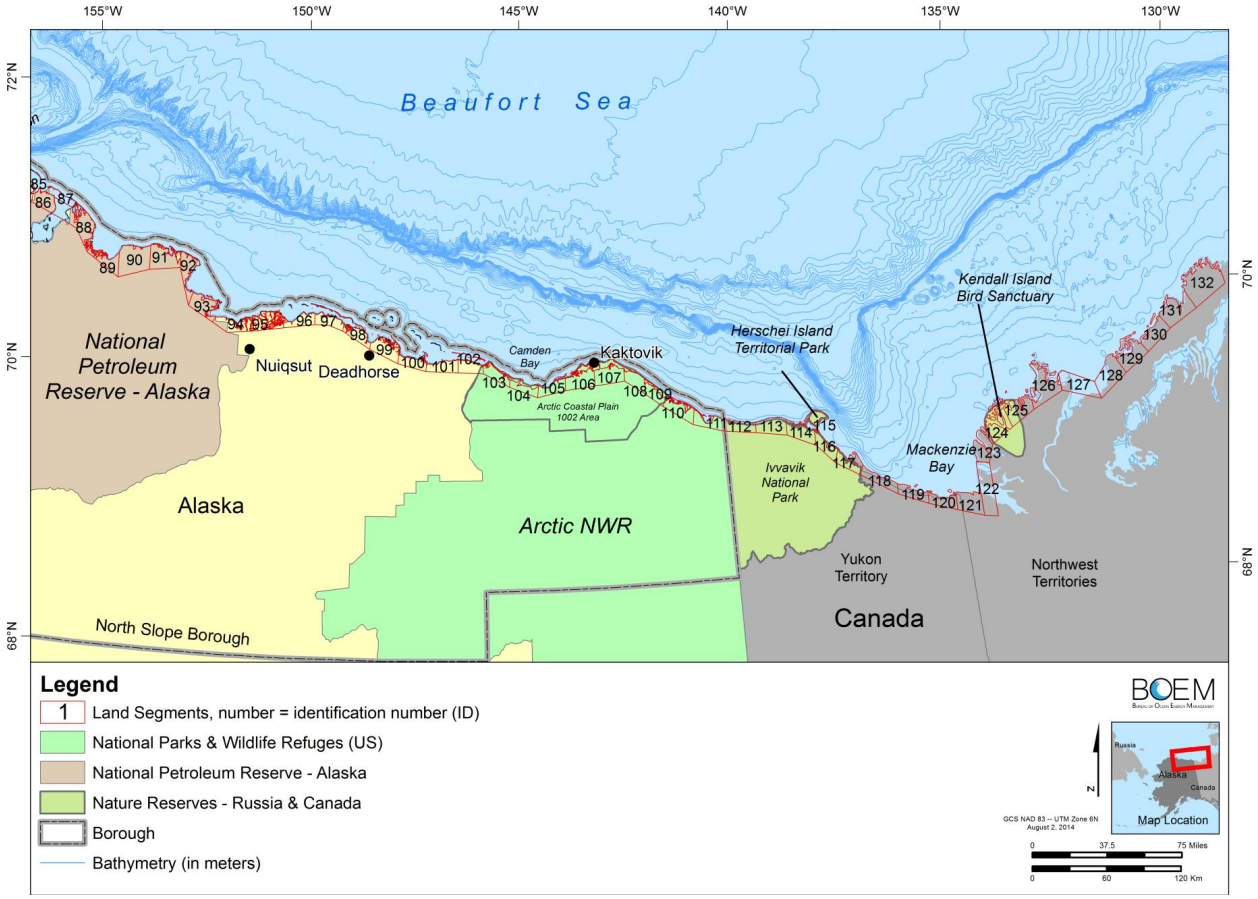

Figure A-11: Land Segments Used in the Oil-Spill Trajectory Analysis (set 3).

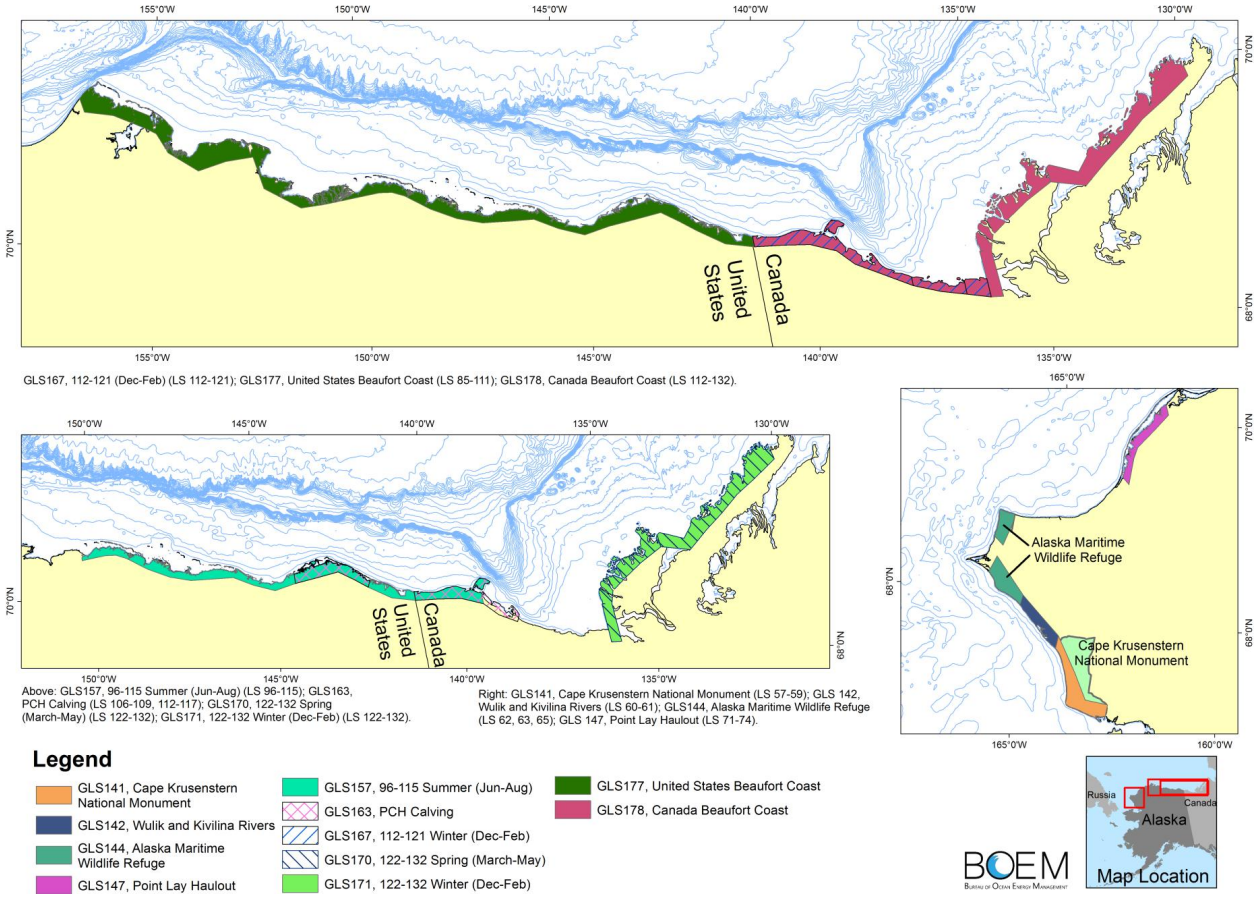

Figure A-12: Grouped Land Segments Used in the Oil-Spill Trajectory Analysis (set 1).

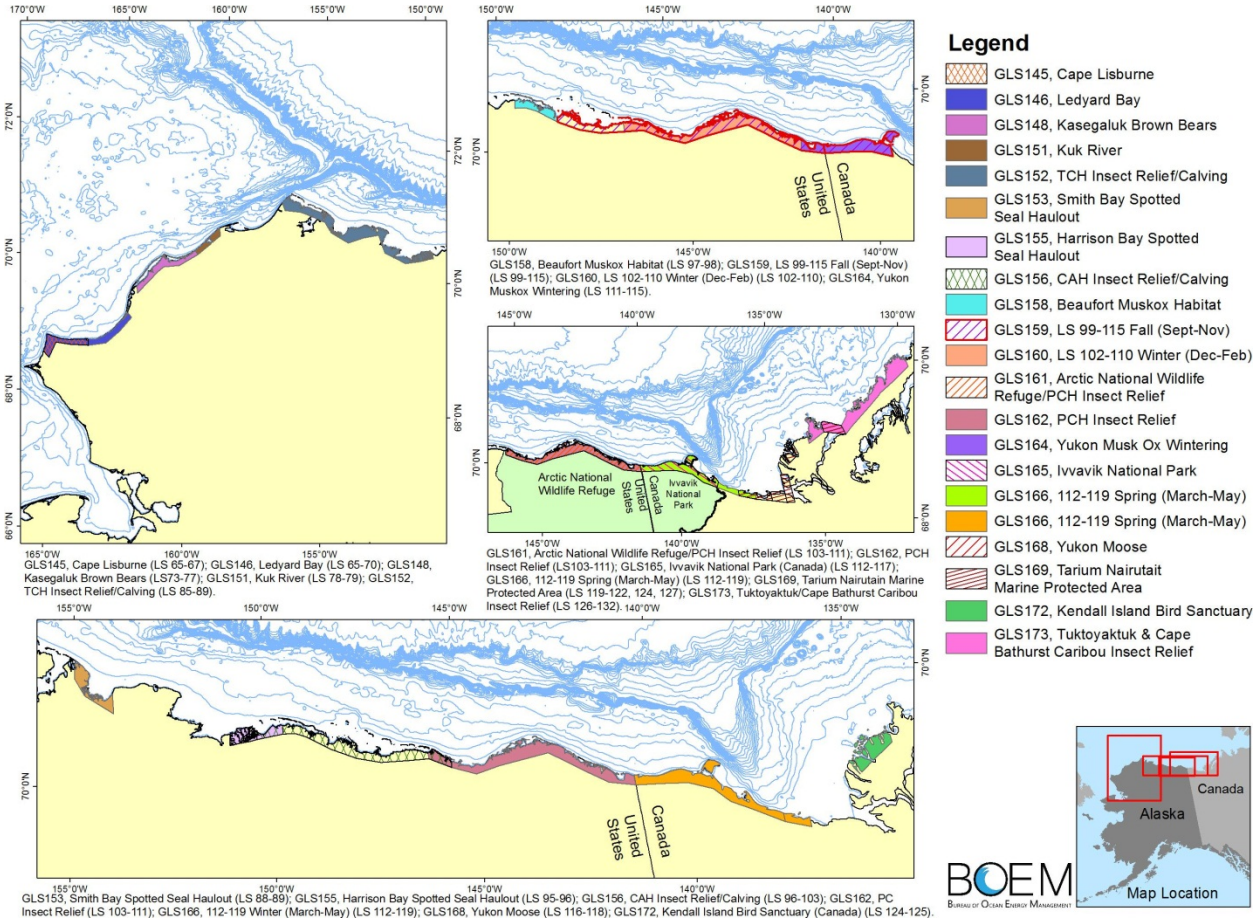

Figure A-13: Grouped Land Segments Used in the Oil-Spill Trajectory Analysis (set 2).

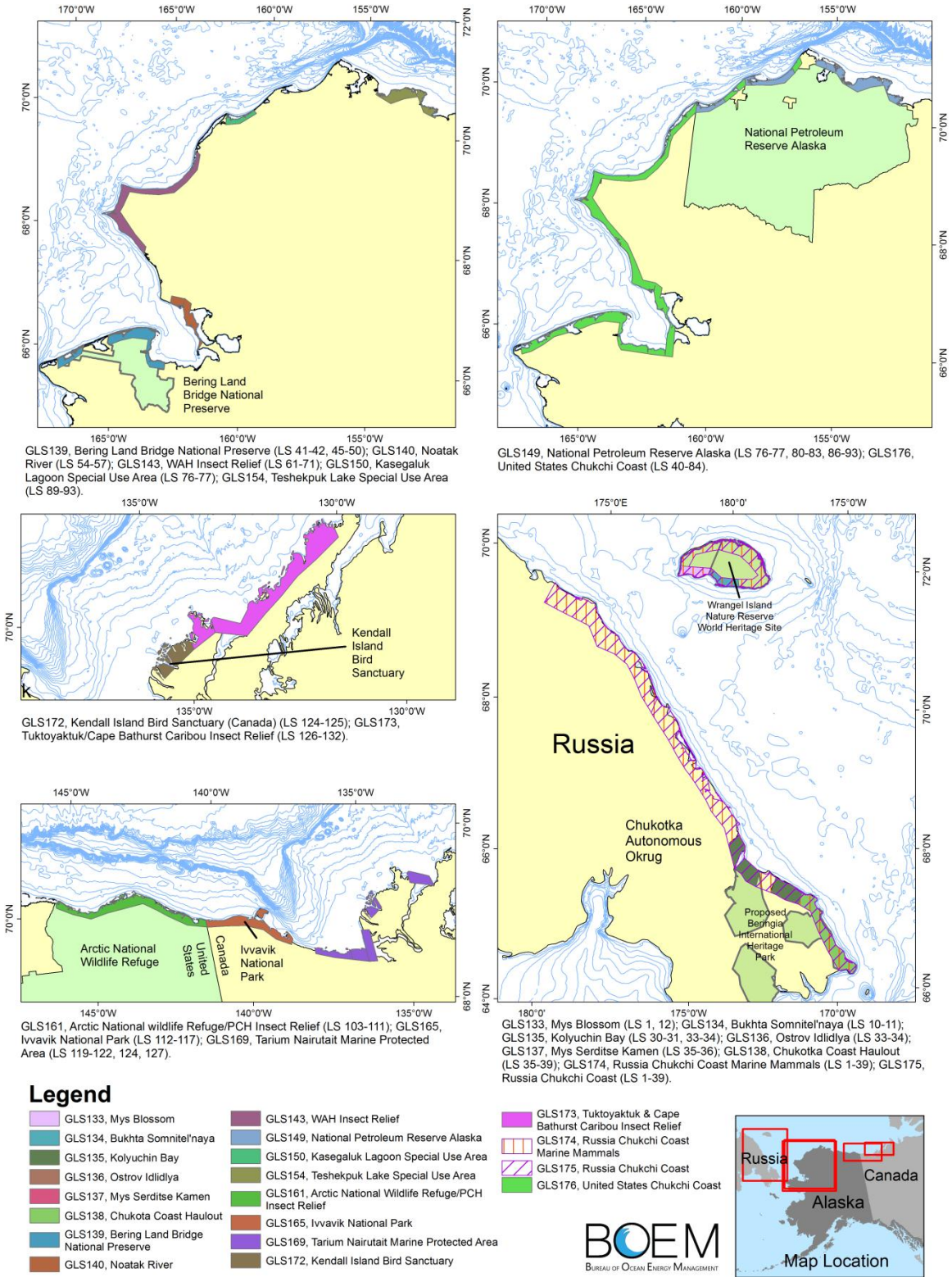

Figure A-14: Grouped Land Segments Used in the Oil-Spill Trajectory Analysis (set 3).

Appendix B. Oil-Spill Risk Analysis Tables

B.1 Environmental Resource Areas, Land Segments and Grouped Land Segments

Table B-1:Environmental Resource Area (ERA) Names, Identification Numbers (ID), Months of Vulnerability Represented in the Oil-Spill Trajectory Model, and Location on ERA Maps.

ID	Name	General Resource	Vulnerable Months	Fig A-
1	Kasegaluk Lagoon Area	Birds, Barrier Island, Seals, Whales	May-Oct	8
2	Point Barrow, Plover Islands	Birds, Barrier Island	May-Oct	6
3	SUA: Uelen/Russia	Subsistence	Sept-Oct	3
4	SUA:Naukan/Russia	Subsistence	Jan-Dec	4
5	SUA: Shishmaref, North	Subsistence, Marine Mammals	Apr-Oct	3
6	Hanna Shoal	Lower Trophics, Seals	Jan-Dec	3
7	Krill Trap	Lower Trophics	May-Oct	6
8	Maguire, Flaxman Islands	Birds, Barrier Island	May-Oct	8
9	Stockton Islands, McClure Islands	Birds, Barrier Island	May-Oct	7
10	Ledyard Bay SPEI Critical Habitat Area	Birds	May-Oct	4
11	Wrangel Island 12 nmi and Offshore	Marine Mammals	Jul-Nov	3
12	SUA: Nuiqsut - Colville Delta	Subsistence	Apr-Oct	6
13	Kotzebue Sound	Subsistence, Whales	Jan-Dec	3
14	Cape Thompson Seabird Colony Area	Birds	May-Oct	3
15	Cape Lisburne Seabird Colony Area	Birds, Marine Mammals	May-Oct	4
16	Barrow Canyon	Lower Trophics	Jan-Dec	6
17	Angun and Beaufort Lagoons	Birds, Barrier Island	May-Oct	7
18	Murre Rearing and Molting Area	Birds	May-Oct	3
19	Chukchi Spring Lead System	Birds	Apr-Jun	8
20	East Chukchi Offshore	Whales	Oct-Dec	4
21	AK BFT Bowhead FM 1	Whales	Sep-Oct	7
22	AK BFT Bowhead FM 2	Whales	Sep-Oct	7
23	Polar Bear Offshore	Marine Mammals	Nov-Jun	3
24	AK BFT Bowhead FM 3	Whales	Sep-Oct	7
25	AK BFT Bowhead FM 4	Whales	Sep-Oct	7
26	AK BFT Bowhead FM 5	Whales	Sep-Oct	7
27	AK BFT Bowhead FM 6	Whales	Sep-Oct	7
28	AK BFT Bowhead FM 7	Whales	Sep-Oct	7
29	AK BFT Bowhead FM 8	Whales	Sep-Oct	7
30	Beaufort Spring Lead 1	Whales	Apr-Jun	6
31	Beaufort Spring Lead 2	Whales	Apr-Jun	6
32	Beaufort Spring Lead 3	Whales	Apr-Jun	6
33	Beaufort Spring Lead 4	Whales	Apr-Jun	6
34	Beaufort Spring Lead 5	Whales	Apr-Jun	6
35	Beaufort Spring Lead 6	Whales	Apr-Jun	6
36	Beaufort Spring Lead 7	Whales	Apr-Jun	6
37	Beaufort Spring Lead 8	Whales	Apr-Jun	6
38	SUA: Pt. Hope - Cape Lisburne	Subsistence	Jan-Dec	8

ID	Name	General Resource	Vulnerable Months	Fig A-
39	SUA: Pt. Lay - Kasegaluk	Subsistence	Jan-Dec	5
40	SUA: Icy Cape - Wainwright	Subsistence	Jan-Dec	3
41	SUA: Barrow - Chukchi	Subsistence	Apr-May	5
42	SUA: Barrow - East Arch	Subsistence	Aug-Oct	8
43	SUA: Nuiqsut - Cross Island	Subsistence	Aug-Oct	6
44	SUA: Kaktovik	Subsistence	Aug-Oct	6
45	Beaufort Spring Lead 9	Whales	Apr-Jun	6
46	Wrangel Island 12 nmi Buffer 2	Marine Mammals	Dec-May	3
47	Hanna Shoal Walrus Use Area	Marine Mammals	May-Oct	5
48	Chukchi Lead System 4	Marine Mammals	Dec-May	5
49	Chukchi Spring Lead 1	Whales	Apr-June	3
50	Pt Lay Walrus Offshore	Marine Mammals	May-Oct	8
51	Pt Lay Walrus Nearshore	Marine Mammals	May-Oct	3
52	Russian Coast Walrus Offshore	Marine Mammals	May-Nov	4
53	Chukchi Spring Lead 2	Whales	Apr-Jun	8
54	Chukchi Spring Lead 3	Whales	Apr-Jun	8
55	Point Barrow, Plover Islands	Marine Mammals, Barrier Islands	Jan-Dec	7
56	Hanna Shoal Area	Whales	Aug-Oct	4
57	Skull Cliffs	Lower Trophics	Jan-Dec	7
58	Russian Coast Walrus Nearshore	Marine Mammals	May-Nov	4
59	Ostrov Kolyuchin	Marine Mammals	Jul-Nov	4
60	King Pt.-Shallow Bay	Subsistence, Whales	Apr-Sep	7
61	Pt Lay-Barrow BH GW SSF	Whales	Jul-Oct	4
62	Herald Shoal Polynya 2	Marine Mammals	Dec-May	3
63	North Chukchi	Whales	Oct-Dec	3
64	Peard Bay Area	Birds, Marine Mammals	May-Oct	8
65	Smith Bay	Birds, Marine Mammals, Whales	May-Oct	6
66	Herald Island	Marine Mammals	Jul-Nov	3
67	Herschel Island (Canada)	Birds	May-Oct	6
68	Harrison Bay	Birds, Fish, Marine Mammals	May-Oct	7
69	Harrison Bay/Colville Delta	Birds, Marine Mammals	May-Oct	8
70	North Central Chukchi	Whales	Oct-Dec	3
71	Simpson Lagoon, Thetis and Jones Island	Birds	May-Oct	6
72	Gwyder Bay, West Dock, Cottle and Return Islands	Birds	May-Oct	8
73	Prudhoe Bay	Birds	May-Oct	7
74	Offshore Herald Island	Whales	Oct-Dec	3
75	Boulder Patch Area	Lower Trophics	Jan-Dec	8
76	Kendall Island Bird Sanctuary (Canada)	Birds	May-Oct	6
77	Sagavanirktok River Delta/Foggy Island Bay	Birds	May-Oct	8
78	Mikkelsen Bay	Birds	May-Oct	8
79	Demarcation Bay Offshore	Birds	May-Oct	6
80	Beaufort Outer Shelf 1	Lower Trophics	Jan-Dec	6
81	Simpson Cove	Birds	May-Oct	7
82	N Chukotka Nrshr 2	Whales	Jul-Oct	3

ID	Name	General Resource	Vulnerable Months	Fig A-
83	N Chukotka Nrshr 3	Whales	Jul-Oct	3
84	Canning River Delta	Fish	Jan-Dec	6
85	Sagavanirktok River Delta	Fish	Jan-Dec	7
86	Harrison Bay	Fish	Jan-Dec	8
87	Colville River Delta	Fish	Jan-Dec	7
88	Simpson Lagoon	Fish	Jan-Dec	8
89	Mackenzie River Delta	Fish	Jan-Dec	7
90	SUA: Gary & Kendall Is./Canada	Subsistence	Jul-Aug	7
91	Hope Sea Valley	Whales	Oct-Dec	3
92	Thetis and Jones Islands, Cottle and Return Islands West Dock	Marine Mammals, Barrier Islands	Jan-Dec	7
93	Cross and No Name Island	Marine Mammals, Barrier Islands	Jan-Dec	8
94	Maguire Islands, Flaxman Island, Barrier Islands	Marine Mammals, Barrier Islands	Jan-Dec	7
95	Arey and Barter Islands and Bernard Spit	Marine Mammals, Barrier Islands	Jan-Dec	8
96	Midway, Cross and Bartlett Islands	Birds	May-Oct	7
97	SUA: Tigvariak Island	Subsistence	May-Oct	7
98	Anderson Point Barrier Islands	Birds, Barrier Island	May-Oct	7
99	Arey and Barter Islands, Bernard Spit	Birds, Barrier Island	May-Oct	7
100	Jago and Tapkaurak Spits	Birds, Barrier Island	May-Oct	7
101	Beaufort Outer Shelf 2	Lower Trophics	Jan-Dec	6
102	Opilio Crab EFH	Opilio Crab Habitat (EFH)	Jan-Dec	4
103	Saffron Cod EFH	Saffron Cod Habitat (EFH)	Jan-Dec	5
104	Kotzebue Sound	Fish, Marine Mammals	Jan-Dec	3
105	Fish Creek	Fish	Jan-Dec	7
106	Shaviovik River	Fish	Jan-Dec	6
107	Pt Hope Offshore	Whales	Jun-Sep	8
108	Barrow Feeding Aggregation	Whales	Sep-Oct	4
109	AK BFT Shelf Edge	Whales	Jul-Aug	6
110	AK BFT Outer Shelf and Slope 1	Whales	Jul-Oct	7
111	AK BFT Outer Shelf and Slope 2	Whales	Jul-Oct	7
112	AK BFT Outer Shelf and Slope 3	Whales	Jul-Oct	7
113	AK BFT Outer Shelf and Slope 4	Whales	Jul-Oct	7
114	AK BFT Outer Shelf and Slope 5	Whales	Jul-Oct	7
115	AK BFT Outer Shelf and Slope 6	Whales	Jul-Oct	7
116	AK BFT Outer Shelf and Slope 7	Whales	Jul-Oct	7
117	AK BFT Outer Shelf and Slope 8	Whales	Jul-Oct	7

ID	Name	General Resource	Vulnerable Months	Fig A-
118	AK BFT Outer Shelf and Slope 9	Whales	Jul-Oct	7
119	AK BFT Outer Shelf and Slope 10	Whales	Jul-Oct	7
120	Russia CH GW Fall 1 and 2	Whales	Sep-Oct	5
121	C Lisburne - Pt Hope	Whales	Jun-Sep	5
122	North Chukotka Offshore	Whales	Oct-Dec	3
123	AK Chukchi Offshore	Whales	Oct-Dec	3
124	Central Chukchi Offshore	Whales	Oct-Dec	4

Source: USDOI, BOEM, Alaska OCS Region (2015).

Table B-2: Land Segment IDs and the Geographic Place Names within the Land Segment.

ID	Geographic Place Name	ID	Geographic Place Name
1	Mys Blossom, Mys Fomy, Khishchnikov, Neozhidannaya, Laguna Vaygan	**36**	Mys Chechan, Mys Ikigur, Keniskhvik, Mys Serditse Kamen
2	Mys Gil'der, Ushakovskiy, Mys Zapadnyy	**37**	Chegitun, Utkan, Mys Volnistyy
3	Mys Florens, Gusinaya	**38**	Enmytagyn, Inchoun, Inchoun, Laguna Inchoun, Mitkulino, Uellen, Mys Unikyn
4	Mys Ushakova, Laguna Drem-Khed	**39**	Cape Dezhnev, Mys Inchoun, Naukan, Mys Peek, Uelen, Laguna Uelen, Mys Uelen
5	Mys Evans, Neizvestnaya, Bukhta Pestsonaya	**40**	Ah-Gude-Le-Rock, Dry Creek, Lopp Lagoon, Mint River
6	Ostrov Mushtakova	**41**	Ikpek, Ikpek Lagoon, Pinguk River, Yankee River
7	Kosa Bruch	**42**	Arctic Lagoon, Kugrupaga Inlet, Nuluk River
8	Klark, Mys Litke, Mys Pillar, Skeletov, Mys Uering	**43**	Sarichef Island, Shishmaref Airport
9	Nasha, Mys Proletarskiy, Bukhta Rodzhers	**44**	Cape Lowenstern, Egg Island, Shishmaref, Shishmaref Inlet
10	Reka Berri, Bukhta Davidova, , Khishchnika, Reka Khishchniki	**45**	
11	Bukhta Somnitel'naya	**46**	Cowpack Inlet, Cowpack River, Kalik River, Kividlo, Singeak, Singeakpuk River, White Fish Lake
12	Zaliv Krasika, Mamontovaya, Bukhta Predatel'skaya	**47**	Kitluk River, Northwest Corner Light, West Fork Espenberg River
13	Mys Kanayen, Mys Kekurnyy, Mys Shalaurova, Veyeman	**48**	Cape Espenberg, Espenberg, Espenberg River
14	Innukay, Laguna Innukay, Umkuveyem, Mys Veuman	**49**	Kungealoruk Creek, Kougachuk Creek, Pish River
15	Laguna Adtaynung, Mys Billingsa, Ettam, Gytkhelen, Laguna Uvargina	**50**	Clifford Point, Cripple River, Goodhope Bay, Goodhope River, Rex Point, Sullivan Bluffs
16	Mys Emmatagen, Mys Enmytagyn, Uvargin	**51**	Cape Deceit, Deering, Kugruk Lagoon, Kugruk River, Sullivan Lake, Toawlevic Point
17	Enmaat'khyr, Kenmankautir, Mys Olennyy, Mys Yakan, Yakanvaam, Yakan	**52**	Motherwood Point, Ninemile Point, Willow Bay
18	Mys Enmykay, Laguna Olennaya, Pil'khikay, Ren, Rovaam, Laguna Rypil'khin	**53**	Kiwalik, Kiwalik Lagoon, Middle Channel Kiwalk River, Minnehaha Creek, Mud Channel Creek, Mud Creek
19	Laguna Kuepil'khin, Leningradskiy	**54**	Baldwin Peninsula, Lewis Rich Channel

ID	Geographic Place Name	ID	Geographic Place Name
20	Polyarnyy, Kuekvun', Notakatryn, Pil'gyn, Tynupytku	**55**	Cape Blossom, Pipe Spit
21	Laguna Kinmanyakicha, Laguna Pil'khikay, Amen, Pil'khikay, Bukhta Severnaya, Val'korkey	**56**	Kinuk Island, Kotzebue, Noatak River
22	Ekiatan', Laguna Ekiatan, Kelyun'ya, Mys Shmidta, Rypkarpyy	**57**	Aukulak Lagoon, Igisukruk Mountain, Noak, Mount, Sheshalik, Sheshalik Spit
23	Emuem, Kemuem, Koyvel'khveyergin, Laguna Tengergin, Tenkergin	**58**	Cape Krusenstern, Eigaloruk, Evelukpalik River, Kasik Lagoon, Krusenstern Lagoon,
24		**59**	Imik Lagoon, Ipiavik Lagoon, Kotlik Lagoon, Omikviorok River
25	Laguna Amguema, Ostrov Leny, Yulinu	**60**	Imikruk Lagoon, Imnakuk Bluff, Kivalina, Kivalina Lagoon, Singigrak Spit, Kivalina River, Wulik River
26	Ekugvaam, Reka Ekugvam, Kepin, Pil'khin	**61**	Asikpak Lagoon,Cape Seppings,Kavrorak Lagoon,Pusaluk Lagoon,Seppings Lagoon
27	Laguna Nut, Rigol'	**62**	Atosik Lagoon,Chariot,Ikaknak Pond,Kisimilok Mountain,Kuropak Creek,Mad Hill
28	Kamynga, Ostrov Kardkarpko, Kovlyuneskin, Mys Vankarem, Vankarema, Laguna Vankarem	**63**	Akoviknak Lagoon, Cape Thompson, Crowbill Point, Igilerak Hill, Kemegrak Lagoon
29	Akanatkhyrgyn, Nutpel'men, Mys Onman, Vel'may	**64**	Aiautak Lagoon, Ipiutak Lagoon, Kowtuk Point, Kukpuk River, Pingu Bluff, Point Hope, Sinigrok Point, Sinuk
30	Laguna Kunergin, Nutepynmyn, Pyngopil'khin, Laguna Pyngopil'khin	**65**	Buckland, Cape Dyer, Cape Lewis, Cape Lisburne
31	Alyatki, Zaliv Tasytkhin, Kolyuchin Bay	**66**	Ayugatak Lagoon
32	Mys Dzhenretlen, Eynenekvyk, Lit'khekay-Polar Station	**67**	Cape Sabine, Pitmegea River
33	Neskan, Laguna Neskan, Mys Neskan	**68**	Agiak Lagoon, Punuk Lagoon
34	Emelin, Ostrov Idlidlya, I, Memino, Tepken,	**69**	Cape Beaufort, Omalik Lagoon
35	Enurmino, Mys Keylu, Netakeniskhvin, Mys Neten,	**70**	Kuchaurak Creek, Kuchiak Creek
71	Kukpowruk River, Naokok, Naokok Pass, Sitkok Point	**103**	Brownlow Point, Canning River, Tamayariak River
72	Epizetka River, Kokolik River, Point Lay, Siksrikpak Point	**104**	Camden Bay, Collinson Point, Katakturuk River, Konganevik Point, Simpson Cove
73	Akunik Pass, Tungaich Point, Tungak Creek	**105**	Anderson Point, Carter Creek, Itkilyariak Creek, Kajutakrok Creek, Marsh Creek, Sadlerochit River
74	Kasegaluk Lagoon, , Solivik Island, Utukok River	**106**	Arey Island, Arey Lagoon, Barter Island, Hulahula River, Okpilak River
75	Akeonik, Icy Cape, Icy Cape Pass	**107**	Bernard Harbor, Jago Lagoon, Kaktovik, Kaktovik Lagoon
76	Akoliakatat Pass, Avak Inlet, Tunalik River	**108**	Griffin Point, Oruktalik Lagoon, Pokok Lagoon
77	Mitliktavik, Nivat Point, Nokotlek Point, Ongorakvik River	**109**	Angun Lagoon, Beaufort Lagoon, Nuvagapak Lagoon,
78	Kilmantavi, Kuk River, Point Collie, Sigeakruk Point,	**110**	Aichilik River, Egaksrak Lagoon, Egaksrak River, Icy Reef, Kongakut River, Siku Lagoon
79	Point Belcher, Wainwright, Wainwright Inlet	**111**	Demarcation Bay, Demarcation Point, Gordon, Pingokraluk Lagoon

ID	Geographic Place Name	ID	Geographic Place Name
80	Eluksingiak Point, Igklo River, Kugrua Bay	**112**	Clarence Lagoon, Backhouse River
81	Peard Bay, Point Franklin, Seahorse Islands, Tachinisok Inlet	**113**	Komakuk Beach, Fish Creek
82	Skull Cliff	**114**	Nunaluk Spit
83	Nulavik, Loran Radio Station	**115**	Herschel Island
84	Walakpa River, Will Rogers and Wiley Post Memorial	**116**	Ptarmagin Bay
85	Barrow, Browerville, Elson Lagoon	**117**	Roland & Phillips Bay, Kay Point
86	Dease Inlet, Plover Islands, Sanigaruak Island	**118**	Sabine Point
87	Igalik Island, Kulgurak Island, Kurgorak Bay, Tangent Point	**119**	Shingle Point
88	Cape Simpson, Piasuk River, Sinclair River, Tulimanik Island	**120**	Trent and Shoalwater Bays
89	Ikpikpuk River, Point Poleakoon, Smith Bay	**121**	Shallow Bay, West Channel
90	Drew Point, Kolovik, McLeod Point,	**120**	Trent and Shoalwater Bays
91	Lonely AFS Airport, Pitt Point, Pogik Bay, Smith River	**121**	Shallow Bay, West Channel
92	Cape Halkett, Esook Trading Post, Garry Creek	**122**	
93	Atigaru Point, Eskimo Islands, Harrison Bay, Kalikpik River, Saktuina Point	**123**	Outer Shallow Bay, Olivier Islands
94	Fish Creek, Tingmeachsiovik River	**124**	Middle Channel, Gary Island
95	Anachlik Island, Colville River, Colville River Delta	**125**	Kendall Island
96	Kalubik Creek, Oliktok Point, Thetis Mound,	**126**	North Point, Pullen Island
97	Beechey Point, Bertoncini , Bodfish, Cottle and, Jones Islands, Milne Point, Simpson Lagoon	**127**	Hendrickson Island, Kugmallit Bay
98	Gwydyr Bay, Kuparuk River, Long Island	**128**	Tuktoyaktuk, Tuktoyaktuk Harbour
99	Duck Island, Foggy Island, Gull Island, Heald Point, Howe Island, Niakuk Islands, Point Brower	**129**	Warren Point
100	Foggy Island Bay, Kadleroshilik River, Lion Point, Shaviovik River, Tigvariak Island	**130**	Hutchison Bay
101	Bullen Point, Point Gordon, Reliance Point	**131**	McKinley Bay, Atkinson Point
102	Flaxman Island, Maguire Islands, North Star Island, Point Hopson, Point Sweeney, Point Thomson, Staines River	**132**	Kidney Lake, Nuvorak Point

Key: ID = identification (number).

Source: USDOI, BOEM, Alaska OCS Region (2015).

Table B-3: Grouped Land Segment (GLS) Geographic Names, IDs, Months of Vulnerability, and Land Segments ID's in each GLS.

GLS ID	Grouped Land Segment Name	Land Segment ID's	Vunerable Months
133	Mys Blossom	1, 12	Jul-Nov
134	Bukhta Somnitel'naya	10, 11	Jul-Nov

GLS ID	Grouped Land Segment Name	Land Segment ID's	Vunerable Months
135	Kolyuchin Bay	30, 31, 33, 34	Jun-Nov
136	Ostrov Idlidlya	33,34	Jul-Nov
137	Mys Serditse Kamen	35, 36	Jul-Nov
138	Chukotka Coast Haulout	35-39	Jul-Nov
139	Bering Land Bridge National Preserve	41, 42, 45-50	Jan-Dec
140	Noatak River	54-57	Jan-Dec
141	Cape Krusenstern National Monument	57-59	Jan-Dec
142	Wulik and Kivilina Rivers	60-61	Jan-Dec
143	WAH Insect Relief	61-71	Jul-Aug
144	Alaska Maritime National Wildlife Refuge	62, 63, 65	Jan-Dec
145	Cape Lisburne	65, 66, 67	Aug-Nov
146	Ledyard Brown Bears	65-70	Jun-Oct
147	Point Lay Haulout	71-74	Jan-Dec
148	Kasegaluk Brown Bears	73-77	Jun-Oct
149	National Petroleum Reserve Alaska	76, 77, 80-83, 86-93	Jan-Dec
150	Kasegaluk Lagoon Special Area (NPR-A)	76-77	Jan-Dec
151	Kuk River	78-79	Jan-Dec
152	TCH Insect Relief/Calving	85-95	May-Aug
153	Smith Bay Spotted Seal Haulout	88-89	May-Oct
154	Teshekpuk Lake Special Area (NPR-A)	89-93	Jan-Dec
155	Harrison Bay Spotted Seal Haulout	95, 96	Jun–Sep
156	CAH Insect Relief/ Calving	96-103	Jul - Aug
157	96-115 Summer	96-115	Jun- Aug
158	Beaufort Muskox Habitat	97-98	Nov-May
159	99-115 Fall	99-115	Sep-Nov
160	102-110 Winter	102-110	Dec-Feb
161	Arctic National Wildlife Refuge	103-111	Jan-Dec
162	PCH Insect Relief	103-111	Jul - Aug
163	PCH Calving	106-109, 112-117	May-Jun
164	Yukon Musk Ox Wintering	111-115	Nov-April
165	Ivvavik National Park (Canada)	112-117	Jan-Dec
166	112-119 Spring	112-119	Mar-May
167	112-121 Winter	112-121	Dec-Feb
168	Yukon Moose	116-118	Jan-Dec
169	Tarium Nirutait Marine Protected Area	119,120,121,122, 124,127	Jan-Dec
170	122-132 Spring	122-132	Mar-May
171	122-132 Winter	122-132	Dec-Feb

GLS ID	Grouped Land Segment Name	Land Segment ID's	Vunerable Months
172	Kendall Island Bird Sanctuary (Canada)	124-125	May-Oct
173	Tuktoyaktuk/Cape Bathurst Caribou Insect Relief	126-132	Jul - Aug
174	Russia Chukchi Coast Marine Mammals	1-39	Jul-Nov
175	Russia Chukchi Coast	1-39	Jan-Dec
176	United States Chukchi Coast	40-84	Jan-Dec
177	United States Beaufort Coast	85-111	Jan-Dec
178	Canada Beaufort Coast	112-132	Jan-Dec

Source: USDOI, BOEM, Alaska OCS Region (2015).

Notes: CAH– Central Arctic Herd; PCH–Porcupine Caribou Herd; TCH–Teshekpuk Caribou Herd; WAH–Western Arctic Herd

B.2. OSRA Conditional and Combined Probability Tables

Tables B-4 through B-78 represent conditional probabilities (expressed as percent chance) that a large oil spill starting at a particular location (launch area (LA) or pipeline (PL)) will contact a certain location (environmental resource area, land segment, boundary segment, or grouped land segment). The tables are further organized as annual or seasonal (winter, summer). Tables B-4 through B-27 represent annual conditional probabilities while Tables B-28 through B-75 represent seasonal conditional probabilities. Tables B-76 through B-78 represent combined probabilities (expressed as percent chance) of one or more large spills, and the estimated number of spills (mean), occurring and contacting a resource over the assumed life of the Leased Area, Alternatives I, III, or IV.

If the probability of contacting a given resource area is >99.5%, it is shown with a double asterisk (**). If the probability of oil contacting a resource area is <0.5%, it is shown with a dash (-). Resource areas with a <0.5% chance of contact from all LAs and PLs are not shown.

B.2.1 Annual Conditional Probabilities for Environmental Resource Area

Tables B-4 through B-9 represent annual conditional probabilities (expressed as percent chance) that a large oil spill starting at a particular location will contact a certain environmental resource area (ERA) within 3, 10, 30, 60, 180, and 360 days.

Table B-4: 3 Days-Annual-ERA: Annual Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Environmental Resource Area (ERA) within 3 Days.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
0	Land	-	-	-	-	-	1	-	2	-	7	-	7
1	Kasegaluk Lagoon Area	-	-	-	-	-	-	-	-	-	5	-	-
6	Hanna Shoal	-	-	-	10	-	2	-	-	-	-	20	-
7	Krill Trap	-	-	-	-	-	-	-	-	-	-	-	1
10	Ledyard Bay SPEI Critical Habitat Area	-	-	-	-	8	4	-	9	-	27	-	-
15	Cape Lisburne Seabird Colony Area	-	-	-	-	2	-	-	8	-	1	-	-
16	Barrow Canyon	-	-	-	-	-	1	-	-	-	-	1	6
18	Murre Rearing and Molting Area	-	-	-	-	-	-	-	1	-	-	-	-
19	Chukchi Spring Lead System	-	-	-	-	3	4	-	3	-	14	-	10
23	Polar Bear Offshore	-	1	-	-	39	16	-	38	1	43	-	3
38	SUA: Pt. Hope - Cape Lisburne	-	-	-	-	-	-	-	3	-	-	-	-
39	SUA: Pt. Lay - Kasegaluk	-	-	-	-	1	1	-	-	-	23	-	-
40	SUA: Icy Cape - Wainwright	-	-	-	-	1	10	-	-	1	12	1	57
41	SUA: Barrow - Chukchi	-	-	-	-	-	-	-	-	-	-	-	1
42	SUA: Barrow - East Arch	-	-	-	-	-	-	-	-	-	-	-	1
47	Hanna Shoal Walrus Use Area	-	-	2	31	-	13	-	-	2	-	51	19
48	Chukchi Lead System 4	-	-	-	-	6	9	-	7	-	29	-	22
49	Chukchi Spring Lead 1	-	-	-	-	1	-	-	3	-	-	-	-

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
50	Pt Lay Walrus Offshore	-	-	-	-	12	5	-	11	-	24	-	2
51	Pt Lay Walrus Nearshore	-	-	-	-	1	1	-	1	-	17	-	-
53	Chukchi Spring Lead 2	-	-	-	-	10	6	-	11	-	19	-	1
54	Chukchi Spring Lead 3	-	-	-	-	-	4	-	-	-	2	-	17
56	Hanna Shoal Area	-	-	-	9	-	3	-	-	-	-	19	5
57	Skull Cliffs	-	-	-	-	-	1	-	-	-	-	-	7
61	Pt Lay-Barrow BH GW SSF	-	-	1	2	2	13	-	-	3	15	7	34
62	Herald Shoal Polynya 2	-	3	-	-	-	-	2	-	-	-	-	-
64	Peard Bay Area	-	-	-	-	-	1	-	-	-	-	1	8
70	North Central Chukchi	2	-	-	-	-	-	-	-	-	-	-	-
102	Opilio Crab EFH	-	-	-	-	1	-	-	2	-	-	-	-
103	Saffron Cod EFH	-	-	-	-	4	8	-	13	1	29	2	44
108	Barrow Feeding Aggregation	-	-	-	-	-	-	-	-	-	-	-	1
119	AK BFT Outer Shelf and Slope 10	-	-	-	-	-	-	-	-	-	-	-	1
121	C Lisburne - Pt Hope	-	-	-	-	1	-	-	4	-	-	-	-
123	AK Chukchi Offshore	3	4	5	2	-	-	1	-	3	-	1	-
124	Central Chukchi Offshore	-	2	-	-	-	-	2	-	-	-	-	-

Table B-5: 10 Days-Annual-ERA: Annual Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Environmental Resource Area (ERA) within 10 Days.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
0	Land	2	4	3	1	9	10	3	11	4	22	3	18
1	Kasegaluk Lagoon Area	-	1	-	-	2	1	-	2	-	7	-	-
6	Hanna Shoal	1	-	3	16	1	5	-	-	3	1	26	4
7	Krill Trap	-	-	-	1	-	1	-	-	1	1	1	3
10	Ledyard Bay SPEI Critical Habitat Area	-	1	1	-	11	5	1	13	1	29	-	2
11	Wrangel Island 12 nm & Offshore	1	1	-	-	-	-	1	-	-	-	-	-
15	Cape Lisburne Seabird Colony Area	-	-	-	-	5	1	-	10	-	4	-	-
16	Barrow Canyon	-	1	2	2	2	7	1	1	3	4	5	16
18	Murre Rearing and Molting Area	-	3	1	-	5	1	2	7	1	2	-	-
19	Chukchi Spring Lead System	-	-	-	-	6	7	-	6	1	17	1	13
20	East Chukchi Offshore	-	-	-	-	-	-	-	-	-	-	1	1
23	Polar Bear Offshore	-	4	3	1	45	23	3	45	7	50	2	11
30	Beaufort Spring Lead 1	-	-	-	-	-	1	-	-	-	-	-	2
31	Beaufort Spring Lead 2	-	-	-	-	-	-	-	-	-	-	-	1
38	SUA: Pt. Hope - Cape Lisburne	-	-	-	-	2	-	-	5	-	3	-	-
39	SUA: Pt. Lay - Kasegaluk	-	1	-	-	4	3	1	4	1	27	-	2
40	SUA: Icy Cape - Wainwright	1	3	4	2	10	21	3	6	8	26	5	61
41	SUA: Barrow - Chukchi	-	-	-	-	-	1	-	-	-	-	-	2
42	SUA: Barrow - East Arch	-	-	1	1	-	2	-	-	1	1	2	3

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
43	SUA: Nuiqsut - Cross Island	-	-	-	-	-	-	-	-	-	-	1	1
46	Wrangel Island 12 nmi Buffer 2	1	-	-	-	-	-	-	-	-	-	-	-
47	Hanna Shoal Walrus Use Area	5	3	9	35	3	19	3	1	10	4	51	25
48	Chukchi Lead System 4	-	1	2	2	11	16	1	11	4	34	5	29
49	Chukchi Spring Lead 1	-	-	-	-	3	1	-	4	-	2	-	-
50	Pt Lay Walrus Offshore	-	2	2	-	17	8	2	16	2	28	-	4
51	Pt Lay Walrus Nearshore	-	1	-	-	4	1	-	4	-	19	-	-
52	Russian Coast Walrus Offshore	-	3	1	-	5	1	2	7	1	3	-	1
53	Chukchi Spring Lead 2	-	-	-	-	12	7	-	13	1	21	-	4
54	Chukchi Spring Lead 3	-	-	1	1	2	7	-	1	2	6	2	19
56	Hanna Shoal Area	2	1	3	12	1	5	1	-	3	1	20	8
57	Skull Cliffs	-	1	1	1	1	4	1	1	2	4	1	11
58	Russian Coast Walrus Nearshore	-	-	-	-	1	-	-	2	-	1	-	-
61	Pt Lay-Barrow BH GW SSF	2	4	6	6	9	18	4	6	9	20	11	35
62	Herald Shoal Polynya 2	2	7	4	1	1	2	7	1	4	1	1	1
63	North Chukchi	1	-	-	-	-	-	-	-	-	-	-	-
64	Peard Bay Area	-	1	2	2	2	6	1	1	3	4	3	13
66	Herald Island	1	-	-	-	-	-	-	-	-	-	-	-
70	North Central Chukchi	3	-	-	1	-	-	-	-	-	-	-	-
74	Offshore Herald Island	2	1	1	1	-	-	1	-	1	-	-	-
82	N Chukotka Nrshr 2	-	1	-	-	-	-	-	-	-	-	-	-
83	N Chukotka Nrshr 3	-	1	-	-	1	-	1	1	-	-	-	-
91	Hope Sea Valley	1	2	1	-	1	-	1	1	1	-	-	-
102	Opilio Crab EFH	-	-	-	-	5	1	-	7	-	3	-	1
103	Saffron Cod EFH	1	4	6	4	22	25	4	28	10	47	10	55
107	Pt Hope Offshore	-	-	-	-	1	-	-	2	-	-	-	-
108	Barrow Feeding Aggregation	-	-	1	1	-	1	-	-	1	1	2	3
116	AK BFT Outer Shelf and Slope 7	-	-	-	-	-	-	-	-	-	-	1	1
117	AK BFT Outer Shelf and Slope 8	-	-	-	-	-	1	-	-	-	-	1	1
118	AK BFT Outer Shelf and Slope 9	-	-	-	1	-	1	-	-	-	-	1	2
119	AK BFT Outer Shelf and Slope 10	-	-	1	2	-	3	-	-	1	1	4	6
120	Russia CH GW Fall 1 and 2	-	1	-	-	1	-	1	2	-	1	-	-
121	C Lisburne - Pt Hope	-	-	-	-	2	-	-	6	-	2	-	-
123	AK Chukchi Offshore	4	5	8	5	1	2	2	1	5	-	4	1
124	Central Chukchi Offshore	2	5	3	1	1	1	5	1	3	1	1	1

Table B-6: 30 Days-Annual-ERA: Annual Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Environmental Resource Area (ERA) within 30 Days.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
0	Land	17	30	24	17	38	32	28	42	27	47	19	36
1	Kasegaluk Lagoon Area	-	1	1	-	4	2	1	4	1	9	-	1

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
2	Point Barrow, Plover Islands	-	-	-	1	-	-	-	-	-	-	1	1
3	SUA: Uelen/Russia	-	1	1	-	2	1	1	2	1	1	-	-
4	SUA:Naukan/Russia	-	-	-	-	2	1	-	3	-	1	-	1
6	Hanna Shoal	4	3	7	20	3	9	3	2	7	3	30	9
7	Krill Trap	1	1	1	2	2	3	1	1	2	2	3	4
10	Ledyard Bay SPEI Critical Habitat Area	1	3	2	1	14	7	3	16	2	30	1	3
11	Wrangel Island 12 nm and Offshore	5	4	4	3	2	1	4	2	3	1	2	1
14	Cape Thompson Seabird Colony Area	-	-	-	-	1	-	-	1	-	-	-	-
15	Cape Lisburne Seabird Colony Area	-	1	1	-	6	2	1	12	1	5	-	1
16	Barrow Canyon	2	4	5	5	7	12	4	5	7	8	9	20
18	Murre Rearing and Molting Area	2	7	4	2	11	5	5	14	4	7	2	3
19	Chukchi Spring Lead System	-	1	1	1	8	9	1	8	3	19	3	16
20	East Chukchi Offshore	-	-	-	1	-	1	-	-	-	-	1	1
23	Polar Bear Offshore	2	7	7	4	47	28	6	47	11	52	8	18
30	Beaufort Spring Lead 1	-	-	-	-	1	2	-	1	1	1	1	4
31	Beaufort Spring Lead 2	-	-	-	-	-	1	-	-	-	1	-	2
38	SUA: Pt. Hope - Cape Lisburne	-	1	1	-	4	2	1	6	1	5	-	1
39	SUA: Pt. Lay - Kasegaluk	-	2	2	1	7	5	2	6	2	29	1	4
40	SUA: Icy Cape - Wainwright	4	8	9	6	18	26	8	14	13	32	10	64
41	SUA: Barrow - Chukchi	-	-	-	-	1	1	-	-	-	1	1	3
42	SUA: Barrow - East Arch	1	1	2	3	1	3	1	1	2	2	4	4
43	SUA: Nuiqsut - Cross Island	-	-	1	1	1	1	-	-	1	-	2	2
46	Wrangel Island 12 nmi Buffer 2	5	2	2	2	1	1	3	-	2	-	2	1
47	Hanna Shoal Walrus Use Area	11	10	16	38	9	24	10	6	17	9	52	30
48	Chukchi Lead System 4	2	3	5	5	14	20	3	13	7	36	10	32
49	Chukchi Spring Lead 1	-	-	-	-	4	2	-	6	-	4	-	1
50	Pt Lay Walrus Offshore	1	5	4	1	19	10	4	19	5	30	2	5
51	Pt Lay Walrus Nearshore	-	1	1	-	5	2	1	6	1	19	-	1
52	Russian Coast Walrus Offshore	3	9	5	2	13	6	7	16	6	9	2	4
53	Chukchi Spring Lead 2	-	1	1	-	14	9	1	15	2	22	1	5
54	Chukchi Spring Lead 3	-	2	2	2	6	10	1	4	4	9	4	21
55	Point Barrow, Plover Islands	-	-	-	1	-	1	-	-	-	-	1	1
56	Hanna Shoal Area	5	3	5	13	3	7	3	2	5	3	21	10
57	Skull Cliffs	1	2	2	2	4	6	2	3	4	6	3	14
58	Russian Coast Walrus Nearshore	1	2	2	1	5	2	2	7	1	3	1	1
59	Ostrov Kolyuchin	-	1	1	-	1	1	1	1	1	1	-	-
61	Pt Lay-Barrow BH GW SSF	6	9	11	9	15	22	9	12	14	24	15	36
62	Herald Shoal Polynya 2	4	11	8	5	4	5	11	4	7	3	4	4
63	North Chukchi	3	-	1	1	-	-	1	-	1	-	-	-
64	Peard Bay Area	2	3	4	3	6	9	4	4	6	8	6	16
66	Herald Island	2	1	1	1	1	1	1	1	1	-	1	-
70	North Central Chukchi	3	-	1	2	-	1	-	-	1	-	1	1
74	Offshore Herald Island	4	2	3	3	1	2	3	1	3	1	3	1

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
80	Beaufort Outer Shelf 1	-	-	-	1	-	1	-	-	1	-	1	1
82	N Chukotka Nrshr 2	2	4	2	1	3	2	3	3	2	2	1	1
83	N Chukotka Nrshr 3	1	3	2	1	4	2	3	5	2	2	1	1
91	Hope Sea Valley	3	4	3	2	3	2	4	3	4	2	2	2
101	Beaufort Outer Shelf 2	-	-	-	-	-	1	-	-	-	-	1	1
102	Opilio Crab EFH	1	3	2	1	9	4	2	12	2	8	1	3
103	Saffron Cod EFH	6	14	15	12	37	37	14	41	21	58	19	62
107	Pt Hope Offshore	-	-	-	-	2	1	-	3	-	1	-	-
108	Barrow Feeding Aggregation	1	1	1	2	1	2	1	-	1	1	3	4
113	AK BFT Outer Shelf and Slope 4	-	-	-	-	-	-	-	-	-	-	1	1
114	AK BFT Outer Shelf and Slope 5	-	-	-	1	-	-	-	-	-	-	1	1
115	AK BFT Outer Shelf and Slope 6	1	-	1	1	-	1	-	-	1	-	1	1
116	AK BFT Outer Shelf and Slope 7	1	-	1	1	-	1	-	-	1	-	2	2
117	AK BFT Outer Shelf and Slope 8	1	1	1	2	1	2	1	-	1	1	3	3
118	AK BFT Outer Shelf and Slope 9	1	1	1	2	1	2	1	1	1	1	3	3
119	AK BFT Outer Shelf and Slope 10	2	2	3	4	3	6	2	2	4	4	7	9
120	Russia CH GW Fall 1 and 2	1	3	2	1	4	2	2	5	2	2	1	1
121	C Lisburne - Pt Hope	-	1	-	-	3	1	1	7	-	2	-	-
122	North Chukotka Offshore	2	2	2	1	1	1	2	1	2	1	1	1
123	AK Chukchi Offshore	5	5	9	7	2	3	3	2	6	1	6	3
124	Central Chukchi Offshore	4	7	5	4	3	4	7	3	5	3	4	2

Table B-7: 60 Days-Annual-ERA: Annual Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Environmental Resource Area (ERA) within 60 Days.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
0	Land	28	45	39	29	52	45	43	54	41	59	32	47
1	Kasegaluk Lagoon Area	-	1	1	-	4	2	1	4	1	9	-	1
2	Point Barrow, Plover Islands	-	-	-	1	-	-	-	-	-	-	1	1
3	SUA: Uelen/Russia	1	1	1	-	2	1	1	2	1	1	-	-
4	SUA:Naukan/Russia	-	1	1	-	3	1	1	4	1	2	-	1
6	Hanna Shoal	6	5	8	21	4	10	5	3	8	4	31	11
7	Krill Trap	1	1	2	2	2	3	1	1	2	2	3	5
10	Ledyard Bay SPEI Critical Habitat Area	1	3	2	1	14	7	3	16	3	30	1	3
11	Wrangel Island 12 nm & Offshore	6	5	4	4	2	2	5	2	4	1	3	1
14	Cape Thompson Seabird Colony Area	-	-	-	-	1	-	-	1	-	-	-	-
15	Cape Lisburne Seabird Colony Area	-	1	1	-	7	2	1	12	1	6	-	1
16	Barrow Canyon	3	5	6	6	8	13	5	6	8	10	9	21
18	Murre Rearing and Molting Area	2	7	5	3	12	6	6	15	5	8	3	4
19	Chukchi Spring Lead System	-	1	2	1	9	10	1	9	3	20	3	16
20	East Chukchi Offshore	1	-	-	1	-	1	-	-	-	-	2	2

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
23	Polar Bear Offshore	3	9	8	5	47	28	8	47	12	52	9	19
29	AK BFT Bowhead FM 8	-	-	-	-	-	-	-	-	-	-	-	1
30	Beaufort Spring Lead 1	-	-	1	-	1	2	-	1	1	2	1	4
31	Beaufort Spring Lead 2	-	-	-	-	1	1	-	-	-	1	-	2
32	Beaufort Spring Lead 3	-	-	-	-	-	-	-	-	-	-	-	1
38	SUA: Pt. Hope - Cape Lisburne	-	1	1	1	4	2	1	7	1	5	-	1
39	SUA: Pt. Lay - Kasegaluk	1	2	2	1	7	5	2	7	2	29	2	4
40	SUA: Icy Cape - Wainwright	4	9	11	7	20	28	9	15	15	34	11	64
41	SUA: Barrow - Chukchi	-	-	-	-	1	1	-	1	1	1	1	3
42	SUA: Barrow - East Arch	2	2	2	3	2	3	2	1	2	2	4	4
43	SUA: Nuiqsut - Cross Island	1	1	1	1	1	1	1	-	1	1	2	2
46	Wrangel Island 12 nmi Buffer 2	8	5	5	5	2	3	6	2	4	2	4	2
47	Hanna Shoal Walrus Use Area	13	13	18	39	12	26	13	9	19	12	53	32
48	Chukchi Lead System 4	2	4	6	7	15	21	4	14	9	37	11	33
49	Chukchi Spring Lead 1	-	1	1	-	5	2	-	6	1	4	1	2
50	Pt Lay Walrus Offshore	1	5	4	1	20	11	5	19	5	30	2	6
51	Pt Lay Walrus Nearshore	-	1	1	-	5	2	1	6	1	20	-	1
52	Russian Coast Walrus Offshore	3	10	6	3	14	7	8	18	6	10	3	5
53	Chukchi Spring Lead 2	-	1	1	1	14	9	1	15	2	22	2	6
54	Chukchi Spring Lead 3	-	2	3	2	7	11	2	5	5	10	5	22
55	Point Barrow, Plover Islands	-	-	-	1	-	1	-	-	-	-	1	1
56	Hanna Shoal Area	6	4	6	14	3	8	4	2	6	3	22	10
57	Skull Cliffs	1	2	3	2	4	7	2	3	4	6	3	15
58	Russian Coast Walrus Nearshore	1	3	2	1	5	2	2	7	2	4	1	1
59	Ostrov Kolyuchin	-	1	1	-	1	1	1	1	1	1	-	-
61	Pt Lay-Barrow BH GW SSF	7	11	12	10	17	23	11	14	15	25	15	36
62	Herald Shoal Polynya 2	5	12	9	6	6	6	12	4	9	5	6	5
63	North Chukchi	3	1	1	1	-	-	1	-	1	-	1	-
64	Peard Bay Area	2	4	5	4	7	10	4	5	7	8	6	16
66	Herald Island	2	1	1	2	1	1	1	1	1	1	1	1
70	North Central Chukchi	3	-	1	2	-	1	-	-	1	-	1	1
74	Offshore Herald Island	5	2	3	3	1	2	3	1	3	1	3	1
80	Beaufort Outer Shelf 1	-	-	1	1	-	1	-	-	1	-	1	2
82	N Chukotka Nrshr 2	2	4	2	1	3	2	3	4	2	2	1	1
83	N Chukotka Nrshr 3	1	4	2	1	4	2	3	5	2	2	1	1
91	Hope Sea Valley	3	4	4	3	3	3	4	3	4	2	3	2
101	Beaufort Outer Shelf 2	-	-	-	1	-	1	-	-	-	-	1	1
102	Opilio Crab EFH	1	3	3	1	10	5	3	13	3	9	2	3
103	Saffron Cod EFH	8	17	18	14	40	40	16	43	23	60	21	63
107	Pt Hope Offshore	-	1	-	-	2	1	-	3	-	1	-	-
108	Barrow Feeding Aggregation	2	1	2	3	1	2	1	-	2	1	3	4
111	AK BFT Outer Shelf and Slope 2	-	-	-	-	-	-	-	-	-	-	1	1
112	AK BFT Outer Shelf and Slope 3	-	-	-	-	-	1	-	-	-	-	1	1
113	AK BFT Outer Shelf and Slope 4	-	-	1	1	-	1	-	-	1	-	1	1

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
114	AK BFT Outer Shelf and Slope 5	1	-	1	1	-	1	-	-	1	-	1	1
115	AK BFT Outer Shelf and Slope 6	1	1	1	1	-	1	1	-	1	1	2	2
116	AK BFT Outer Shelf and Slope 7	1	1	1	2	1	2	1	-	1	1	2	3
117	AK BFT Outer Shelf and Slope 8	2	1	2	2	1	2	1	1	2	1	3	3
118	AK BFT Outer Shelf and Slope 9	2	1	2	3	2	3	1	1	2	2	4	4
119	AK BFT Outer Shelf and Slope 10	3	3	4	5	4	7	3	4	5	5	7	10
120	Russia CH GW Fall 1&2	1	3	2	1	4	2	2	5	2	2	1	1
121	C Lisburne - Pt Hope	-	1	-	-	4	1	1	8	1	3	-	1
122	North Chukotka Offshore	2	2	2	2	1	1	2	1	2	1	1	1
123	AK Chukchi Offshore	5	5	9	8	2	4	3	2	7	2	7	3
124	Central Chukchi Offshore	4	7	5	4	3	4	7	3	5	3	4	3

Table B-8: 180 Days-Annual-ERA: Annual Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Environmental Resource Area (ERA) within 180 Days.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
0	Land	35	52	46	37	58	52	50	60	49	63	40	54
1	Kasegaluk Lagoon Area	-	1	1	-	4	2	1	4	1	9	-	1
2	Point Barrow, Plover Islands	-	-	1	1	-	1	-	-	-	-	1	1
3	SUA: Uelen/Russia	1	2	1	1	2	1	2	2	1	1	1	-
4	SUA:Naukan/Russia	-	1	1	1	3	2	1	4	1	2	1	1
6	Hanna Shoal	6	7	10	22	6	12	7	4	10	6	32	12
7	Krill Trap	1	2	2	2	2	3	2	2	2	3	3	5
10	Ledyard Bay SPEI Critical Habitat Area	1	3	2	1	14	7	3	16	3	30	1	3
11	Wrangel Island 12 nm & Offshore	6	7	6	5	4	4	7	4	5	3	4	3
14	Cape Thompson Seabird Colony Area	-	-	-	-	1	-	-	1	-	-	-	-
15	Cape Lisburne Seabird Colony Area	-	1	1	-	7	2	1	12	1	6	1	1
16	Barrow Canyon	3	5	7	6	9	13	6	7	9	10	10	22
18	Murre Rearing and Molting Area	3	8	6	3	13	7	7	16	6	9	4	4
19	Chukchi Spring Lead System	-	2	2	2	10	10	1	10	4	20	3	16
20	East Chukchi Offshore	1	-	1	2	-	1	-	-	1	1	2	2
23	Polar Bear Offshore	3	9	8	5	47	29	8	47	12	53	9	19
29	AK BFT Bowhead FM 8	-	-	-	-	-	-	-	-	-	-	1	1
30	Beaufort Spring Lead 1	-	-	1	1	2	3	-	1	1	2	1	4
31	Beaufort Spring Lead 2	-	-	-	-	1	1	-	1	-	1	1	2
32	Beaufort Spring Lead 3	-	-	-	-	-	-	-	-	-	-	-	1
38	SUA: Pt. Hope - Cape Lisburne	-	1	1	1	4	2	1	7	1	5	-	1
39	SUA: Pt. Lay - Kasegaluk	1	2	2	1	7	5	2	7	2	29	2	4
40	SUA: Icy Cape - Wainwright	5	10	11	8	20	28	10	16	15	35	12	65

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
41	SUA: Barrow - Chukchi	-	-	-	-	1	2	-	1	1	1	1	3
42	SUA: Barrow - East Arch	2	3	3	4	3	4	3	2	3	3	5	5
43	SUA: Nuiqsut - Cross Island	1	1	1	1	1	2	1	1	2	1	2	2
44	SUA: Kaktovik	-	-	-	-	-	-	-	-	-	-	1	1
46	Wrangel Island 12 nmi Buffer 2	9	6	6	7	3	4	6	2	6	2	5	3
47	Hanna Shoal Walrus Use Area	14	15	20	40	14	28	15	11	22	14	55	34
48	Chukchi Lead System 4	3	4	6	7	15	21	4	14	9	37	11	33
49	Chukchi Spring Lead 1	-	1	1	1	5	2	-	6	1	4	1	2
50	Pt Lay Walrus Offshore	2	5	4	2	20	11	5	20	5	30	2	6
51	Pt Lay Walrus Nearshore	-	2	1	-	5	2	1	6	1	20	-	1
52	Russian Coast Walrus Offshore	4	10	7	4	15	8	9	18	7	10	4	5
53	Chukchi Spring Lead 2	-	1	1	1	14	9	1	15	2	23	2	6
54	Chukchi Spring Lead 3	-	3	3	2	7	11	2	6	5	11	5	22
55	Point Barrow, Plover Islands	-	-	1	1	-	1	-	-	1	1	2	2
56	Hanna Shoal Area	6	6	8	15	5	9	6	4	8	5	24	12
57	Skull Cliffs	2	2	3	2	4	7	2	3	4	6	4	15
58	Russian Coast Walrus Nearshore	1	3	2	1	6	3	3	7	3	4	1	1
59	Ostrov Kolyuchin	-	1	1	-	1	1	1	1	1	1	-	-
61	Pt Lay-Barrow BH GW SSF	7	12	13	10	18	24	12	15	16	26	16	37
62	Herald Shoal Polynya 2	6	12	10	7	6	7	12	5	9	5	6	6
63	North Chukchi	3	1	1	2	-	1	1	-	1	-	1	1
64	Peard Bay Area	3	5	5	4	7	10	5	6	7	9	6	16
66	Herald Island	2	2	2	2	1	1	2	1	2	1	2	1
70	North Central Chukchi	4	1	1	3	1	1	1	1	1	1	2	1
74	Offshore Herald Island	5	3	3	4	1	2	3	1	3	1	3	2
80	Beaufort Outer Shelf 1	1	1	1	1	1	1	1	1	1	1	2	2
82	N Chukotka Nrshr 2	2	4	2	1	3	2	4	4	2	2	1	1
83	N Chukotka Nrshr 3	2	4	3	2	4	2	3	5	3	3	1	1
91	Hope Sea Valley	3	4	4	3	3	3	4	3	4	2	3	2
101	Beaufort Outer Shelf 2	1	1	1	1	1	1	1	-	1	1	1	1
102	Opilio Crab EFH	1	3	3	1	10	5	3	13	3	9	2	4
103	Saffron Cod EFH	9	18	19	15	41	41	17	44	24	61	23	64
107	Pt Hope Offshore	-	1	-	-	2	1	-	3	-	1	-	-
108	Barrow Feeding Aggregation	2	1	2	3	1	3	1	1	2	1	4	4
110	AK BFT Outer Shelf and Slope 1	-	-	-	-	-	1	-	-	1	1	1	1
111	AK BFT Outer Shelf and Slope 2	1	1	1	1	1	1	1	-	1	1	1	1
112	AK BFT Outer Shelf and Slope 3	1	1	1	1	1	1	1	1	1	1	1	1
113	AK BFT Outer Shelf and Slope 4	1	1	1	1	1	1	1	1	1	1	1	1

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
114	AK BFT Outer Shelf and Slope 5	1	1	1	1	1	1	1	1	1	1	1	1
115	AK BFT Outer Shelf and Slope 6	1	1	1	1	1	2	1	1	2	1	2	2
116	AK BFT Outer Shelf and Slope 7	1	2	2	2	1	2	2	1	2	1	3	3
117	AK BFT Outer Shelf and Slope 8	2	2	2	3	2	3	2	2	3	2	4	4
118	AK BFT Outer Shelf and Slope 9	2	2	3	3	3	4	2	2	3	3	4	5
119	AK BFT Outer Shelf and Slope 10	4	5	5	5	6	8	5	5	6	6	8	10
120	Russia CH GW Fall 1&2	1	3	2	1	4	2	3	5	2	3	1	1
121	C Lisburne - Pt Hope	-	1	1	-	4	1	1	8	1	3	-	1
122	North Chukotka Offshore	2	2	2	2	1	1	3	1	2	1	1	1
123	AK Chukchi Offshore	5	5	9	8	2	4	3	2	7	2	7	3
124	Central Chukchi Offshore	4	7	6	4	3	4	7	3	5	3	4	3

Table B-9: 360 Days-Annual-ERA: Annual Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Environmental Resource Area (ERA) within 360 Days.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
0	Land	35	52	46	37	58	52	51	60	49	64	40	54
1	Kasegaluk Lagoon Area	-	1	1	-	4	2	1	4	1	9	-	1
2	Point Barrow, Plover Islands	-	-	1	1	-	1	-	-	-	-	1	1
3	SUA: Uelen/Russia	1	2	1	1	2	1	2	2	1	1	1	-
4	SUA:Naukan/Russia	-	1	1	1	3	2	1	4	1	2	1	1
6	Hanna Shoal	6	7	10	22	6	12	7	5	10	6	33	12
7	Krill Trap	1	2	2	2	2	3	2	2	2	3	3	5
10	Ledyard Bay SPEI Critical Habitat Area	1	3	2	1	14	7	3	16	3	30	1	3
11	Wrangel Island 12 nm & Offshore	6	7	6	5	4	4	7	4	5	3	4	3
14	Cape Thompson Seabird Colony Area	-	-	-	-	1	-	-	1	-	-	-	-
15	Cape Lisburne Seabird Colony Area	-	1	1	-	7	2	1	12	1	6	1	1
16	Barrow Canyon	3	5	7	6	9	13	6	7	9	10	10	22
18	Murre Rearing and Molting Area	3	8	6	3	13	7	7	16	6	9	4	4
19	Chukchi Spring Lead System	-	2	2	2	10	10	1	10	4	20	3	16
20	East Chukchi Offshore	1	-	1	2	-	1	-	-	1	1	2	3
23	Polar Bear Offshore	3	9	8	5	47	29	8	47	12	53	9	19
29	AK BFT Bowhead FM 8	-	-	-	-	-	-	-	-	-	-	1	1
30	Beaufort Spring Lead 1	-	-	1	1	2	3	-	1	1	2	1	4
31	Beaufort Spring Lead 2	-	-	-	-	1	1	-	1	-	1	1	2
32	Beaufort Spring Lead 3	-	-	-	-	-	-	-	-	-	-	-	1
38	SUA: Pt. Hope - Cape Lisburne	-	1	1	1	4	2	1	7	1	5	-	1
39	SUA: Pt. Lay - Kasegaluk	1	2	2	1	7	5	2	7	2	29	2	4

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
40	SUA: Icy Cape - Wainwright	5	10	11	8	20	28	10	16	15	35	12	65
41	SUA: Barrow - Chukchi	-	-	-	-	1	2	-	1	1	1	1	3
42	SUA: Barrow - East Arch	2	3	3	4	3	4	3	2	3	3	5	5
43	SUA: Nuiqsut - Cross Island	1	1	1	1	1	2	1	1	2	1	2	2
44	SUA: Kaktovik	-	-	-	-	-	1	-	-	-	-	1	1
46	Wrangel Island 12 nmi Buffer 2	9	6	6	7	3	4	7	2	6	2	5	3
47	Hanna Shoal Walrus Use Area	14	15	20	40	14	28	15	11	22	14	55	34
48	Chukchi Lead System 4	3	4	6	7	15	21	4	14	9	37	11	33
49	Chukchi Spring Lead 1	-	1	1	1	5	2	-	6	1	4	1	2
50	Pt Lay Walrus Offshore	2	5	4	2	20	11	5	20	5	30	2	6
51	Pt Lay Walrus Nearshore	-	2	1	-	5	2	1	6	1	20	-	1
52	Russian Coast Walrus Offshore	4	10	7	4	15	8	9	18	7	10	4	5
53	Chukchi Spring Lead 2	-	1	1	1	14	9	1	15	2	23	2	6
54	Chukchi Spring Lead 3	-	3	3	2	7	11	2	6	5	11	5	22
55	Point Barrow, Plover Islands	-	-	1	1	-	1	-	-	1	1	2	2
56	Hanna Shoal Area	6	6	8	15	5	9	6	4	8	5	24	12
57	Skull Cliffs	2	2	3	2	4	7	2	3	4	6	4	15
58	Russian Coast Walrus Nearshore	1	3	2	1	6	3	3	7	3	4	1	1
59	Ostrov Kolyuchin	-	1	1	-	1	1	1	1	1	1	-	-
61	Pt Lay-Barrow BH GW SSF	7	12	13	10	18	24	12	15	16	26	16	37
62	Herald Shoal Polynya 2	6	12	10	7	6	7	12	5	9	5	6	6
63	North Chukchi	3	1	1	2	-	1	1	-	1	-	1	1
64	Peard Bay Area	3	5	5	4	7	10	5	6	7	9	6	16
66	Herald Island	2	2	2	2	1	1	2	1	2	1	2	1
70	North Central Chukchi	4	1	1	3	1	1	1	1	1	1	2	1
74	Offshore Herald Island	5	3	3	4	1	2	3	1	3	1	3	2
80	Beaufort Outer Shelf 1	1	1	1	1	1	1	1	1	1	1	2	2
82	N Chukotka Nrshr 2	2	4	2	1	3	2	4	4	2	2	1	1
83	N Chukotka Nrshr 3	2	4	3	2	4	2	3	5	3	3	1	1
91	Hope Sea Valley	3	4	4	3	3	3	4	3	4	2	3	2
101	Beaufort Outer Shelf 2	1	1	1	1	1	1	1	-	1	1	1	1
102	Opilio Crab EFH	1	3	3	1	10	5	3	13	3	9	2	4
103	Saffron Cod EFH	9	18	19	15	41	41	17	44	24	61	23	64
107	Pt Hope Offshore	-	1	-	-	2	1	-	3	-	1	-	-
108	Barrow Feeding Aggregation	2	1	2	3	1	3	1	1	2	1	4	4
110	AK BFT Outer Shelf and Slope 1	-	-	-	-	-	1	-	-	1	1	1	1
111	AK BFT Outer Shelf and Slope 2	1	1	1	1	1	1	1	-	1	1	1	1
112	AK BFT Outer Shelf and Slope 3	1	1	1	1	1	1	1	1	1	1	1	1

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
113	AK BFT Outer Shelf and Slope 4	1	1	1	1	1	1	1	1	1	1	1	1
114	AK BFT Outer Shelf and Slope 5	1	1	1	1	1	1	1	1	1	1	1	1
115	AK BFT Outer Shelf and Slope 6	1	1	1	1	1	2	1	1	2	1	2	2
116	AK BFT Outer Shelf and Slope 7	1	2	2	2	1	2	2	1	2	1	3	3
117	AK BFT Outer Shelf and Slope 8	2	2	2	3	2	3	2	2	3	2	4	4
118	AK BFT Outer Shelf and Slope 9	2	2	3	3	3	4	2	2	3	3	4	5
119	AK BFT Outer Shelf and Slope 10	4	5	5	5	6	8	5	5	6	6	8	10
120	Russia CH GW Fall 1&2	1	3	2	1	4	2	3	5	2	3	1	1
121	C Lisburne - Pt Hope	-	1	1	-	4	1	1	8	1	3	-	1
122	North Chukotka Offshore	2	2	2	2	1	1	3	1	2	1	1	1
123	AK Chukchi Offshore	5	5	9	8	2	4	3	2	7	2	7	3
124	Central Chukchi Offshore	4	7	6	4	3	4	7	3	5	3	4	3

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

B.2.2 Annual Conditional Probabilities for Land Segments

Tables B-10 through B-15 represent annual conditional probabilities (expressed as percent chance) that a large oil spill starting at a particular location will contact a certain land segment within 3, 10, 30, 60, 180, and 360 days.

Table B-10: 3 Days-Annual LS: Annual Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Land Segment within 3 Days.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
65	Buckland, Cape Lisburne	-	-	-	-	-	-	-	1	-	-	-	-
72	Point Lay, Siksrikpak Point	-	-	-	-	-	-	-	-	-	2	-	-
73	Tungaich Point, Tungak Creek	-	-	-	-	-	-	-	-	-	2	-	-
74	Kasegaluk Lagoon, Solivik Isl.	-	-	-	-	-	-	-	-	-	1	-	-
75	Akeonik, Icy Cape	-	-	-	-	-	-	-	-	-	1	-	-
79	Point Belcher, Wainwright	-	-	-	-	-	-	-	-	-	-	-	2
80	Eluksingiak Point, Kugrua Bay	-	-	-	-	-	-	-	-	-	-	-	2
84	Will Rogers & Wiley Post Mem.	-	-	-	-	-	-	-	-	-	-	-	1
85	Barrow, Browerville, Elson Lag.	-	-	-	-	-	-	-	-	-	-	-	1

Table B-11: 10 Days-Annual LS: Annual Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Land Segment within 10 Days.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
64	Kukpuk River, Point Hope	-	-	-	-	-	-	-	1	-	-	-	-
65	Buckland, Cape Lisburne	-	-	-	-	1	-	-	2	-	1	-	-
66	Ayugatak Lagoon	-	-	-	-	-	-	-	1	-	1	-	-
72	Point Lay, Siksrikpak Point	-	-	-	-	-	-	-	-	-	3	-	-
73	Tungaich Point, Tungak Creek	-	-	-	-	-	-	-	-	-	2	-	-
74	Kasegaluk Lagoon, Solivik Isl.	-	-	-	-	1	-	-	-	-	2	-	-
75	Akeonik, Icy Cape	-	-	-	-	1	1	-	-	-	2	-	-
76	Avak Inlet, Tunalik River	-	-	-	-	-	-	-	-	-	1	-	1
77	Nivat Point, Nokotlek Point	-	-	-	-	-	-	-	-	-	1	-	-
78	Point Collie, Sigeakruk Point	-	-	-	-	-	1	-	-	-	1	-	1
79	Point Belcher, Wainwright	-	-	-	-	1	2	-	-	1	2	-	3
80	Eluksingiak Point, Kugrua Bay	-	-	-	-	-	1	-	-	-	1	-	3
81	Peard Bay, Point Franklin	-	-	-	-	-	-	-	-	-	-	-	1
82	Skull Cliff	-	-	-	-	-	-	-	-	-	-	-	1
83	Nulavik, Loran Radio Station	-	-	-	-	-	-	-	-	-	-	-	1
84	Will Rogers & Wiley Post Mem.	-	-	-	-	-	1	-	-	-	1	1	3

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
85	Barrow, Browerville, Elson Lag.	-	-	1	1	1	2	-	-	1	1	1	4

Table B-12: 30 Days-Annual LS: Annual Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Land Segment within 30 Days.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
5	Mys Evans	1	-	-	-	-	-	-	-	-	-	-	-
6	Ostrov Mushtakova	1	1	1	1	-	-	1	-	-	-	-	-
7	Kosa Bruch	1	1	1	1	-	-	1	-	1	-	1	-
8	E. Wrangel Island, Skeletov	1	1	1	1	-	-	1	-	1	-	1	-
20	Polyarnyy, Pil'gyn	-	-	-	-	-	-	1	-	-	-	-	-
21	Laguna Pil'khikay, Pil'khikay	-	1	-	-	-	-	1	-	1	-	-	-
22	Rypkarpyy, Mys Shmidta	1	1	1	-	-	-	1	-	1	-	-	-
23	Emuem, Tenkergin	-	1	1	-	-	-	1	-	1	-	-	-
24	LS 24	1	1	1	-	1	-	1	1	1	-	-	-
25	Laguna Amguema, Yulinu	1	1	1	-	1	1	1	1	1	-	-	-
26	Ekugvaam, Kepin, Pil'khin	1	1	1	1	1	1	1	1	1	1	-	-
27	Laguna Nut, Rigol'	1	1	1	1	1	1	1	1	1	1	1	1
28	Vankarem,Vankarem Laguna	1	2	1	1	1	1	1	1	1	1	1	1
29	Mys Onman, Vel'may	-	1	1	1	1	1	1	1	1	1	1	1
30	Nutepynmin, Pyngopil'gyn	1	2	1	1	2	1	1	2	1	1	1	1
31	Alyatki, Zaliv Tasytkhin	1	2	1	1	2	1	2	3	1	2	1	1
32	Mys Dzhenretlen, Eynenekvyk	-	1	1	-	2	1	1	2	1	1	-	1
33	Neskan, Laguna Neskan	-	1	1	-	1	1	1	2	1	1	-	1
34	Tepken, Memino	-	1	1	-	1	1	1	2	1	1	-	1
35	Enurmino, Mys Neten	-	1	-	-	2	1	1	2	1	1	-	1
36	Mys Serdtse-Kamen	-	1	-	-	1	1	-	2	-	1	-	1
37	Chegitun, Utkan	-	-	-	-	1	-	-	1	-	1	-	-
38	Enmytagyn, Inchoun, Mitkulen	-	-	-	-	1	-	-	1	-	1	-	-
39	Cape Dezhnev, Naukan, Uelen	-	-	-	-	1	-	-	1	-	1	-	-
64	Kukpuk River, Point Hope	-	-	-	-	1	-	-	1	-	1	-	-
65	Buckland, Cape Lisburne	-	-	-	-	1	1	-	3	-	2	-	-
66	Ayugatak Lagoon	-	-	-	-	1	-	-	1	-	1	-	-
67	Cape Sabine, Pitmegea River	-	-	-	-	-	-	-	1	-	1	-	-
71	Kukpowruk River, Sitkok Point	-	-	-	-	-	-	-	1	-	1	-	-
72	Point Lay, Siksrikpak Point	-	-	-	-	1	-	-	1	-	3	-	-
73	Tungaich Point, Tungak Creek	-	-	-	-	1	-	-	1	-	3	-	-

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
74	Kasegaluk Lagoon, Solivik Isl.	-	-	-	-	1	1	-	1	-	3	-	-
75	Akeonik, Icy Cape	-	-	-	-	1	1	-	1	-	2	-	1
76	Avak Inlet, Tunalik River	-	-	-	-	-	1	-	-	-	1	-	1
77	Nivat Point, Nokotlek Point	-	-	-	-	-	-	-	-	-	1	-	-
78	Point Collie, Sigeakruk Point	-	-	-	-	1	1	1	1	1	2	-	1
79	Point Belcher, Wainwright	-	1	1	1	2	2	1	1	1	3	1	4
80	Eluksingiak Point, Kugrua Bay	-	-	1	-	1	2	-	1	1	2	-	4
81	Peard Bay, Point Franklin	-	-	-	-	-	-	-	-	-	-	-	1
82	Skull Cliff	-	-	-	-	-	-	-	-	-	-	-	1
83	Nulavik, Loran Radio Station	-	-	-	-	-	1	-	-	-	-	-	1
84	Will Rogers & Wiley Post Mem.	-	1	1	1	1	2	1	1	1	2	1	4
85	Barrow, Browerville, Elson Lag.	1	1	2	2	2	4	1	1	2	2	3	6

Table B-13: 60 Days-Annual LS: Annual Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Land Segment within 60 Days.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
5	Mys Evans	1	-	1	1	-	-	1	-	-	-	-	-
6	Ostrov Mushtakova	2	1	1	1	-	-	1	-	1	-	1	-
7	Kosa Bruch	2	1	1	1	-	1	1	-	1	-	1	1
8	E. Wrangel Island, Skeletov	2	1	1	1	1	1	2	-	1	-	1	1
9	Mys Proletarskiy	1	1	1	-	-	-	1	-	-	-	-	-
19	Laguna Kuepil'khin, Leningradskiy	1	1	1	-	-	-	-	-	-	-	-	-
20	Polyarnyy, Pil'gyn	1	1	1	1	-	-	1	-	1	-	1	-
21	Laguna Pil'khikay, Pil'khikay	1	1	1	1	1	-	1	-	1	-	1	-
22	Rypkarpyy, Mys Shmidta	1	1	1	1	1	1	1	1	1	1	1	-
23	Emuem, Tenkergin	1	1	1	1	1	1	1	1	1	1	1	-
24	LS 24	1	1	1	1	1	1	1	1	1	1	1	-
25	Laguna Amguema, Yulinu	1	2	1	1	1	1	2	1	1	1	1	1
26	Ekugvaam, Kepin, Pil'khin	1	2	1	1	1	1	2	1	1	1	1	1
27	Laguna Nut, Rigol'	1	2	2	1	1	1	2	1	2	1	1	1
28	Vankarem,Vankarem Laguna	1	2	2	1	2	1	2	2	2	1	1	1
29	Mys Onman, Vel'may	1	2	1	1	2	1	2	2	2	1	1	1
30	Nutepynmin, Pyngopil'gyn	1	2	2	1	3	2	2	3	2	2	2	1
31	Alyatki, Zaliv Tasytkhin	1	3	2	1	3	2	2	3	2	2	2	2
32	Mys Dzhenretlen, Eynenekvyk	1	2	1	1	2	2	2	2	1	2	1	1
33	Neskan, Laguna Neskan	1	2	1	1	2	1	2	2	1	2	1	1
34	Tepken, Memino	-	2	1	-	2	1	1	2	1	1	1	1

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
35	Enurmino, Mys Neten	-	1	1	-	2	1	1	2	1	2	-	1
36	Mys Serdtse-Kamen	-	1	1	-	2	1	1	3	1	2	-	1
37	Chegitun, Utkan	-	1	-	-	2	1	1	2	-	1	-	-
38	Enmytagyn, Inchoun, Mitkulen	-	-	-	-	1	1	-	1	-	1	-	-
39	Cape Dezhnev, Naukan, Uelen	-	-	-	-	1	1	-	1	-	1	-	-
64	Kukpuk River, Point Hope	-	-	-	-	1	-	-	1	-	1	-	-
65	Buckland, Cape Lisburne	-	-	-	-	2	1	-	3	-	2	-	-
66	Ayugatak Lagoon	-	-	-	-	1	-	-	1	-	1	-	-
67	Cape Sabine, Pitmegea River	-	-	-	-	-	-	-	1	-	1	-	-
71	Kukpowruk River, Sitkok Point	-	-	-	-	-	-	-	1	-	1	-	-
72	Point Lay, Siksrikpak Point	-	-	-	-	1	-	-	1	-	3	-	-
73	Tungaich Point, Tungak Creek	-	-	-	-	1	-	-	1	-	3	-	-
74	Kasegaluk Lagoon, Solivik Isl.	-	-	-	-	1	1	-	1	-	3	-	-
75	Akeonik, Icy Cape	-	-	-	-	1	1	-	1	-	2	-	1
76	Avak Inlet, Tunalik River	-	-	-	-	-	1	-	-	-	1	-	1
77	Nivat Point, Nokotlek Point	-	-	-	-	-	1	-	-	-	1	-	-
78	Point Collie, Sigeakruk Point	-	1	1	-	1	1	1	1	1	2	-	1
79	Point Belcher, Wainwright	1	1	1	1	2	3	1	1	2	3	1	4
80	Eluksingiak Point, Kugrua Bay	-	1	1	1	1	2	1	1	1	2	-	4
81	Peard Bay, Point Franklin	-	-	-	-	-	1	-	-	-	-	-	1
82	Skull Cliff	-	-	-	-	-	-	-	-	-	-	-	1
83	Nulavik, Loran Radio Station	-	-	-	-	-	1	-	-	-	-	1	1
84	Will Rogers & Wiley Post Mem.	-	1	1	1	1	2	1	1	1	2	2	4
85	Barrow, Browerville, Elson Lag.	1	1	2	2	2	4	1	2	3	3	3	6

Table B-14: 180 Days-Annual LS: Annual Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Land Segment within 180 Days.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
3	Mys Florens, Gusinaya	1	-	-	-	-	-	-	-	-	-	-	-
4	Mys Ushakova, Laguna Drem-Khed	1	-	-	-	-	-	-	-	-	-	-	-
5	Mys Evans	1	1	1	1	-	-	1	-	1	-	1	-
6	Ostrov Mushtakova	2	1	1	1	-	1	1	-	1	1	1	1
7	Kosa Bruch	2	1	2	1	1	1	2	1	1	1	1	1
8	E. Wrangel Island, Skeletov	2	2	2	2	1	1	2	1	2	1	2	1
9	Mys Proletarskiy	1	1	1	1	1	1	1	-	1	-	1	-
10	Bukhta Davidova	1	1	1	-	-	-	1	-	-	-	-	-
19	Laguna Kuepil'khin, Leningradskiy	1	1	1	1	-	-	1	-	-	-	-	-

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
20	Polyarnyy, Pil'gyn	1	1	1	1	-	-	1	-	1	-	1	-
21	Laguna Pil'khikay, Pil'khikay	1	1	1	1	1	1	1	1	1	-	1	-
22	Rypkarpyy, Mys Shmidta	1	1	1	1	1	1	2	1	1	1	1	1
23	Emuem, Tenkergin	1	1	1	1	1	1	1	1	1	1	1	-
24	LS 24	1	2	1	1	1	1	2	1	1	1	1	1
25	Laguna Amguema, Yulinu	1	2	2	1	1	1	2	1	1	1	1	1
26	Ekugvaam, Kepin, Pil'khin	1	2	2	1	1	1	2	1	1	1	1	1
27	Laguna Nut, Rigol'	1	2	2	1	2	1	2	2	2	1	1	1
28	Vankarem,Vankarem Laguna	1	2	2	1	2	2	2	2	2	1	1	1
29	Mys Onman, Vel'may	1	2	2	1	2	2	2	2	2	2	1	1
30	Nutepynmin, Pyngopil'gyn	1	3	2	1	3	2	2	3	2	2	2	1
31	Alyatki, Zaliv Tasytkhin	1	3	2	1	3	2	3	4	2	3	2	2
32	Mys Dzhenretlen, Eynenekvyk	1	2	2	1	2	2	2	3	2	2	1	2
33	Neskan, Laguna Neskan	1	2	2	1	2	1	2	2	2	2	1	1
34	Tepken, Memino	1	2	1	1	2	1	2	3	2	2	1	1
35	Enurmino, Mys Neten	1	2	1	1	2	1	2	3	1	2	1	1
36	Mys Serdtse-Kamen	1	1	1	1	2	1	1	3	1	2	1	1
37	Chegitun, Utkan	-	1	1	-	2	1	1	2	1	1	-	1
38	Enmytagyn, Inchoun, Mitkulen	-	-	-	-	1	1	-	1	-	1	-	1
39	Cape Dezhnev, Naukan, Uelen	-	-	-	-	1	1	-	1	-	1	-	-
64	Kukpuk River, Point Hope	-	-	-	-	1	-	-	1	-	1	-	-
65	Buckland, Cape Lisburne	-	-	-	-	2	1	-	3	-	2	-	-
66	Ayugatak Lagoon	-	-	-	-	1	-	-	1	-	1	-	-
67	Cape Sabine, Pitmegea River	-	-	-	-	-	-	-	1	-	1	-	-
71	Kukpowruk River, Sitkok Point	-	-	-	-	-	-	-	1	-	1	-	-
72	Point Lay, Siksrikpak Point	-	-	-	-	1	-	-	1	-	3	-	-
73	Tungaich Point, Tungak Creek	-	-	-	-	1	-	-	1	-	3	-	-
74	Kasegaluk Lagoon, Solivik Isl.	-	-	-	-	1	1	-	1	-	3	-	-
75	Akeonik, Icy Cape	-	-	-	-	1	1	-	1	-	2	-	1
76	Avak Inlet, Tunalik River	-	-	-	-	-	1	-	-	-	1	-	1
77	Nivat Point, Nokotlek Point	-	-	-	-	-	1	-	-	-	1	-	-
78	Point Collie, Sigeakruk Point	-	1	1	-	1	1	1	1	1	2	-	1
79	Point Belcher, Wainwright	1	1	1	1	2	3	1	1	2	4	1	4
80	Eluksingiak Point, Kugrua Bay	-	1	1	1	1	2	1	1	1	2	1	4
81	Peard Bay, Point Franklin	-	-	-	-	-	1	-	-	-	-	-	1
82	Skull Cliff	-	-	-	-	-	-	-	-	-	-	-	1
83	Nulavik, Loran Radio Station	-	-	-	-	-	1	-	-	1	-	1	1
84	Will Rogers & Wiley Post Mem.	1	1	1	1	1	2	1	1	1	2	2	4

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
85	Barrow, Browerville, Elson Lag.	1	2	2	2	2	4	2	2	3	3	4	7
86	Dease Inlet, Plover Islands	-	-	-	-	-	-	-	-	-	-	1	-

Table B-15: 360 Days-Annual LS: Annual Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Land Segment within 360 Days.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
3	Mys Florens, Gusinaya	1	-	-	-	-	-	-	-	-	-	-	-
4	Mys Ushakova, Laguna Drem-Khed	1	-	-	-	-	-	-	-	-	-	-	-
5	Mys Evans	1	1	1	1	-	-	1	-	1	-	1	-
6	Ostrov Mushtakova	2	1	1	1	-	1	1	-	1	1	1	1
7	Kosa Bruch	2	1	2	1	1	1	2	1	1	1	1	1
8	E. Wrangel Island, Skeletov	2	2	2	2	1	1	2	1	2	1	2	1
9	Mys Proletarskiy	1	1	1	1	1	1	1	-	1	-	1	1
10	Bukhta Davidova	1	1	1	-	-	-	1	-	-	-	-	-
19	Laguna Kuepil'khin, Leningradskiy	1	1	1	1	-	-	1	-	1	-	-	-
20	Polyarnyy, Pil'gyn	1	1	1	1	-	-	1	-	1	-	1	-
21	Laguna Pil'khikay, Pil'khikay	1	1	1	1	1	1	1	1	1	-	1	-
22	Rypkarpyy, Mys Shmidta	1	1	1	1	1	1	2	1	1	1	1	1
23	Emuem, Tenkergin	1	1	1	1	1	1	1	1	1	1	1	-
24	LS 24	1	2	1	1	1	1	2	1	1	1	1	1
25	Laguna Amguema, Yulinu	1	2	2	1	1	1	2	1	1	1	1	1
26	Ekugvaam, Kepin, Pil'khin	1	2	2	1	1	1	2	1	1	1	1	1
27	Laguna Nut, Rigol'	1	2	2	1	2	1	2	2	2	1	1	1
28	Vankarem,Vankarem Laguna	1	2	2	1	2	2	2	2	2	1	1	1
29	Mys Onman, Vel'may	1	2	2	1	2	2	2	2	2	2	1	1
30	Nutepynmin, Pyngopil'gyn	1	3	2	1	3	2	2	3	2	2	2	1
31	Alyatki, Zaliv Tasytkhin	1	3	2	1	3	2	3	4	2	3	2	2
32	Mys Dzhenretlen, Eynenekvyk	1	2	2	1	2	2	2	3	2	2	1	2
33	Neskan, Laguna Neskan	1	2	2	1	2	1	2	2	2	2	1	1
34	Tepken, Memino	1	2	1	1	2	1	2	3	2	2	1	1
35	Enurmino, Mys Neten	1	2	1	1	2	1	2	3	1	2	1	1
36	Mys Serdtse-Kamen	1	1	1	1	2	1	1	3	1	2	1	1
37	Chegitun, Utkan	-	1	1	-	2	1	1	2	1	1	-	1
38	Enmytagyn, Inchoun, Mitkulen	-	-	-	-	1	1	-	1	-	1	-	1
39	Cape Dezhnev, Naukan, Uelen	-	-	-	-	1	1	-	1	-	1	-	-
64	Kukpuk River, Point Hope	-	-	-	-	1	-	-	1	-	1	-	-
65	Buckland, Cape Lisburne	-	-	-	-	2	1	-	3	-	2	-	-

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
66	Ayugatak Lagoon	-	-	-	-	1	-	-	1	-	1	-	-
67	Cape Sabine, Pitmegea River	-	-	-	-	-	-	-	1	-	1	-	-
71	Kukpowruk River, Sitkok Point	-	-	-	-	-	-	-	1	-	1	-	-
72	Point Lay, Siksrikpak Point	-	-	-	-	1	-	-	1	-	3	-	-
73	Tungaich Point, Tungak Creek	-	-	-	-	1	-	-	1	-	3	-	-
74	Kasegaluk Lagoon, Solivik Isl.	-	-	-	-	1	1	-	1	-	3	-	-
75	Akeonik, Icy Cape	-	-	-	-	1	1	-	1	-	2	-	1
76	Avak Inlet, Tunalik River	-	-	-	-	-	1	-	-	-	1	-	1
77	Nivat Point, Nokotlek Point	-	-	-	-	-	1	-	-	-	1	-	-
78	Point Collie, Sigeakruk Point	-	1	1	-	1	1	1	1	1	2	-	1
79	Point Belcher, Wainwright	1	1	1	1	2	3	1	1	2	4	1	4
80	Eluksingiak Point, Kugrua Bay	-	1	1	1	1	2	1	1	1	2	1	4
81	Peard Bay, Point Franklin	-	-	-	-	-	1	-	-	-	-	-	1
82	Skull Cliff	-	-	-	-	-	-	-	-	-	-	-	1
83	Nulavik, Loran Radio Station	-	-	-	-	-	1	-	-	1	-	1	1
84	Will Rogers & Wiley Post Mem.	1	1	1	1	1	2	1	1	1	2	2	4
85	Barrow, Browerville, Elson Lag.	1	2	2	2	2	4	2	2	3	3	4	7
86	Dease Inlet, Plover Islands	-	-	-	-	-	-	-	-	-	-	1	-

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

B.2.3 Annual Conditional Probabilities for Grouped Land Segments

Tables B-16 through B-21 represent annual conditional probabilities (expressed as percent chance) that a large oil spill starting at a particular location will contact a certain group of land segments within 3, 10, 30, 60, 180, and 360 days.

Table B-16: 3 Days-Annual GLS: Annual Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Group of Land Segment within 3 Days.

ID	Grouped Land Segments Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
144	Alaska Maritime Wildlife Refuge	-	-	-	-	-	-	-	1	-	-	-	-
145	Cape Lisburne	-	-	-	-	-	-	-	1	-	-	-	-
146	Ledyard Bay	-	-	-	-	-	-	-	1	-	-	-	-
147	Point Lay Haulout	-	-	-	-	-	-	-	-	-	5	-	-
148	Kasegaluk Brown Bears	-	-	-	-	-	-	-	-	-	3	-	-
149	National Petroleum Reserve Alaska	-	-	-	-	-	-	-	-	-	-	-	3
151	Kuk River	-	-	-	-	-	-	-	-	-	1	-	2
152	TCH Insect Relief/Calving	-	-	-	-	-	-	-	-	-	-	-	1
176	United States Chukchi Coast	-	-	-	-	-	1	-	2	-	7	-	6
177	United States Beaufort Coast	-	-	-	-	-	-	-	-	-	-	-	1

Table B-17: 10 Days-Annual GLS: Annual Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Group of Land Segment within 10 Days.

ID	Grouped Land Segments Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
133	Mys Blossom	1	-	-	-	-	-	-	-	-	-	-	-
143	WAH Insect Relief	-	-	-	-	-	-	-	1	-	-	-	-
144	Alaska Maritime Wildlife Refuge	-	-	-	-	1	-	-	2	-	1	-	-
145	Cape Lisburne	-	-	-	-	1	-	-	1	-	1	-	-
146	Ledyard Bay	-	-	-	-	1	-	-	2	-	1	-	-
147	Point Lay Haulout	-	-	-	-	2	1	-	2	-	7	-	-
148	Kasegaluk Brown Bears	-	-	-	-	2	1	-	1	-	5	-	-
149	National Petroleum Reserve Alaska	-	-	1	-	1	2	-	1	1	3	1	6
150	Kasegaluk Lagoon Special Use Area	-	-	-	-	-	1	-	-	-	1	-	1
151	Kuk River	-	1	1	-	1	2	1	1	1	3	-	3
152	TCH Insect Relief/Calving	-	-	-	-	-	1	-	-	1	1	-	2
174	Russia Chukchi Coast Marine Mammals	1	1	-	-	1	-	1	2	-	-	-	-
175	Russia Chukchi Coast	1	2	1	-	2	-	2	3	1	1	-	-
176	United States Chukchi Coast	-	2	2	1	7	7	1	8	3	20	1	13
177	United States Beaufort Coast	-	-	1	1	1	2	-	-	1	1	1	4

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

Table B-18: 30 Days-Annual GLS: Annual Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Group of Land Segment within 30 Days.

ID	Grouped Land Segments Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
133	Mys Blossom	3	2	2	1	1	1	2	1	1	-	1	-
135	Kolyuchin Bay	1	2	1	-	2	1	2	3	1	1	1	1
136	Ostrov Idlidlya	-	1	-	-	1	-	1	1	1	1	-	-
137	Mys Serditse Kamen	-	-	-	-	1	-	-	1	-	1	-	-
138	Chukota Coast Haulout	-	1	1	-	2	1	1	3	1	2	1	1
143	WAH Insect Relief	-	-	-	-	1	-	-	2	-	1	-	-
144	Alaska Maritime Wildlife Refuge	-	-	-	-	1	1	-	3	-	2	-	-
145	Cape Lisburne	-	-	-	-	1	-	-	2	-	1	-	-
146	Ledyard Bay	-	-	-	-	2	1	-	3	-	2	-	-
147	Point Lay Haulout	-	1	1	-	3	1	1	3	1	9	-	1
148	Kasegaluk Brown Bears	-	1	1	-	3	2	1	2	1	6	-	1
149	National Petroleum Reserve Alaska	1	1	2	2	3	5	1	2	3	5	3	9
150	Kasegaluk Lagoon Special Use Area	-	-	-	-	1	1	-	1	-	2	-	1
151	Kuk River	1	1	1	1	3	3	1	2	2	5	1	4
152	TCH Insect Relief/Calving	-	1	1	1	1	2	1	1	1	2	1	3
174	Russia Chukchi Coast Marine Mammals	8	12	9	6	10	7	11	12	8	7	6	5
175	Russia Chukchi Coast	15	24	17	11	22	14	22	25	16	16	11	10
176	United States Chukchi Coast	2	5	5	3	14	14	5	15	8	28	5	19
177	United States Beaufort Coast	1	1	2	2	2	4	1	1	3	3	4	7

Table B-19: 60 Days-Annual GLS: Annual Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Group of Land Segment within 60 Days.

ID	Grouped Land Segments Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
133	Mys Blossom	3	2	2	2	1	1	3	1	2	1	2	1
135	Kolyuchin Bay	1	2	1	1	2	1	2	3	1	1	1	1
136	Ostrov Idlidlya	-	1	1	-	1	-	1	1	1	1	-	-
137	Mys Serditse Kamen	-	-	-	-	1	-	-	1	-	1	-	-
138	Chukota Coast Haulout	1	1	1	1	3	2	1	3	1	2	1	1
143	WAH Insect Relief	-	-	-	-	1	-	-	2	-	1	-	-
144	Alaska Maritime Wildlife Refuge	-	-	-	-	1	1	-	3	-	2	-	-
145	Cape Lisburne	-	-	-	-	1	-	-	2	-	1	-	-
146	Ledyard Bay	-	1	-	-	2	1	-	3	-	2	-	-
147	Point Lay Haulout	-	1	1	-	3	1	1	3	1	9	1	1
148	Kasegaluk Brown Bears	-	1	1	1	3	2	1	2	1	6	-	1

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Grouped Land Segments Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
149	National Petroleum Reserve Alaska	1	2	2	2	3	5	2	2	3	5	3	10
150	Kasegaluk Lagoon Special Use Area	-	1	-	-	1	1	-	1	1	2	-	1
151	Kuk River	1	2	2	1	3	3	1	2	2	5	1	4
152	TCH Insect Relief/Calving	-	1	1	1	1	2	1	1	1	2	1	3
174	Russia Chukchi Coast Marine Mammals	12	16	13	10	14	10	15	15	12	10	9	7
175	Russia Chukchi Coast	25	38	30	23	34	26	36	37	30	26	22	20
176	United States Chukchi Coast	3	6	6	4	15	15	6	16	9	29	6	20
177	United States Beaufort Coast	1	2	2	3	3	5	1	2	3	3	5	7

Table B-20: 180 Days-Annual GLS. Annual Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Group of Land Segment within 180 Days.

ID	Grouped Land Segments Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
133	Mys Blossom	4	4	4	3	3	3	5	3	4	2	3	2
135	Kolyuchin Bay	1	2	1	1	2	1	2	3	1	1	1	1
136	Ostrov Idlidlya	-	1	1	-	1	1	1	1	1	1	-	-
137	Mys Serditse Kamen	-	-	-	-	1	-	-	1	-	1	-	-
138	Chukota Coast Haulout	1	2	1	1	3	2	2	3	2	3	1	2
143	WAH Insect Relief	-	-	-	-	1	-	-	2	-	1	-	-
144	Alaska Maritime Wildlife Refuge	-	-	-	-	1	1	-	3	-	2	-	-
145	Cape Lisburne	-	-	-	-	1	-	-	2	-	1	-	-
146	Ledyard Bay	-	1	-	-	2	1	1	3	-	2	-	-
147	Point Lay Haulout	-	1	1	-	3	1	1	3	1	9	1	1
148	Kasegaluk Brown Bears	-	1	1	1	3	2	1	2	1	6	1	1
149	National Petroleum Reserve Alaska	1	2	3	2	3	5	2	2	3	5	4	10
150	Kasegaluk Lagoon Special Use Area	-	1	-	-	1	1	-	1	1	2	-	1
151	Kuk River	1	2	2	1	3	3	1	2	2	5	1	5
152	TCH Insect Relief/Calving	1	1	1	1	2	2	1	1	2	2	1	3
174	Russia Chukchi Coast Marine Mammals	15	19	17	13	17	14	19	17	16	13	13	11
175	Russia Chukchi Coast	31	44	38	30	40	33	43	42	37	31	29	26
176	United States Chukchi Coast	3	7	7	5	16	15	6	16	9	30	7	21
177	United States Beaufort Coast	1	2	3	3	3	5	2	2	4	3	5	8

Table B-21: 360 Days-Annual GLS: Annual Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Group of Land Segment within 360 Days.

ID	Grouped Land Segments Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Grouped Land Segments Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
133	Mys Blossom	4	5	4	3	3	3	5	3	4	2	3	2
135	Kolyuchin Bay	1	2	1	1	2	1	2	3	1	1	1	1
136	Ostrov Idlidlya	-	1	1	-	1	1	1	1	1	1	-	-
137	Mys Serditse Kamen	-	-	-	-	1	-	-	1	-	1	-	-
138	Chukota Coast Haulout	1	2	1	1	3	2	2	3	2	3	1	2
143	WAH Insect Relief	-	-	-	-	1	-	-	2	-	1	-	-
144	Alaska Maritime Wildlife Refuge	-	-	-	-	1	1	-	3	-	2	-	-
145	Cape Lisburne	-	-	-	-	1	-	-	2	-	1	-	-
146	Ledyard Bay	-	1	-	-	2	1	1	3	-	2	-	-
147	Point Lay Haulout	-	1	1	-	3	1	1	3	1	9	1	1
148	Kasegaluk Brown Bears	-	1	1	1	3	2	1	2	1	6	1	1
149	National Petroleum Reserve Alaska	1	2	3	2	3	5	2	2	3	5	4	10
150	Kasegaluk Lagoon Special Use Area	-	1	-	-	1	1	-	1	1	2	-	1
151	Kuk River	1	2	2	1	3	3	1	2	2	5	1	5
152	TCH Insect Relief/Calving	1	1	1	1	2	2	1	1	2	2	1	3
174	Russia Chukchi Coast Marine Mammals	15	19	17	14	17	14	19	18	16	13	13	11
175	Russia Chukchi Coast	31	44	38	30	40	33	43	42	37	31	29	26
176	United States Chukchi Coast	3	7	7	5	16	15	6	16	9	30	7	21
177	United States Beaufort Coast	1	2	3	3	3	5	2	2	4	3	5	8

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

3.2.4 Annual Conditional Probabilities for Boundary Segments

Tables B-22 through B-27 represent annual conditional probabilities (expressed as percent chance) that a large oil spill starting at a particular location will contact a certain boundary segment within 3, 10, 30, 60, 180, and 360 days.

Table B-22: 3 Days-(Annual BS): Annual Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Boundary Segment within 3 Days.

ID	Boundary Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9

Note: All rows have all values less than 0.5 percent and are not shown

Table B-23: 10 Days-(Annual BS): Annual Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Boundary Segment within 10 Days.

ID	Boundary Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9

Note: All rows have all values less than 0.5 percent and are not shown

Table B-24: 30 Days-(Annual BS): Annual Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Boundary Segment within 30 Days.

ID	Boundary Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
2	Bering Strait	-	-	-	-	-	-	-	1	-	-	-	-
3	Chukchi Sea	1	-	-	-	-	-	-	-	-	-	-	-
4	Chukchi Sea	1	-	-	-	-	-	-	-	-	-	-	-
5	Chukchi Sea	1	-	-	1	-	-	-	-	-	-	-	-
6	Chukchi Sea	1	-	-	-	-	-	-	-	-	-	-	-
7	Chukchi Sea	1	-	-	-	-	-	-	-	-	-	-	-
17	Chukchi Sea	1	-	-	-	-	-	-	-	-	-	-	-
18	Chukchi Sea	1	-	-	1	-	-	-	-	-	-	1	1
19	Chukchi Sea	1	-	-	1	-	-	-	-	-	-	1	-

Table B-25: 60 Days-(Annual BS): Annual Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Boundary Segment within 60 Days.

ID	Boundary Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
1	Bering Strait	-	-	-	-	1	-	-	1	-	-	-	-
2	Bering Strait	-	-	-	-	1	-	-	1	-	1	-	-
3	Chukchi Sea	1	1	1	1	-	-	1	-	1	-	1	-
4	Chukchi Sea	2	1	1	1	-	-	1	-	1	-	1	-
5	Chukchi Sea	3	1	1	1	-	-	1	-	1	-	1	-

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Boundary Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
6	Chukchi Sea	3	1	1	2	-	1	2	-	1	-	1	-
7	Chukchi Sea	3	1	1	1	-	-	1	-	1	-	1	-
8	Chukchi Sea	2	1	1	1	-	-	1	-	-	-	1	-
9	Chukchi Sea	1	-	-	1	-	-	-	-	-	-	-	-
10	Chukchi Sea	1	-	1	1	-	-	-	-	-	-	-	-
11	Chukchi Sea	2	-	1	1	-	-	-	-	-	-	1	-
12	Chukchi Sea	1	-	-	1	-	-	-	-	-	-	1	-
13	Chukchi Sea	1	-	-	1	-	-	-	-	-	-	-	-
14	Chukchi Sea	1	-	-	1	-	-	-	-	-	-	-	-
15	Chukchi Sea	1	-	-	1	-	-	-	-	-	-	-	-
16	Chukchi Sea	1	-	-	1	-	-	-	-	-	-	1	-
17	Chukchi Sea	2	-	1	2	-	1	-	-	-	-	1	1
18	Chukchi Sea	2	-	1	3	-	1	1	-	1	-	2	2
19	Chukchi Sea	2	-	1	2	-	1	1	-	1	-	2	1
20	Chukchi Sea	1	-	-	1	-	-	-	-	-	-	1	1
21	Chukchi Sea	1	-	-	-	-	-	-	-	-	-	-	-

Table B-26: 180 Days-(Annual BS: Annual Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Boundary Segment within 180 Days.

ID	Boundary Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
1	Bering Strait	-	-	-	-	1	-	-	1	-	-	-	-
2	Bering Strait	-	-	-	-	1	-	-	1	-	1	-	-
3	Chukchi Sea	1	1	1	1	-	1	1	-	1	-	1	-
4	Chukchi Sea	2	1	1	2	1	1	1	1	1	-	2	1
5	Chukchi Sea	4	2	2	2	1	1	2	1	1	1	2	1
6	Chukchi Sea	5	3	3	3	1	2	3	1	2	1	3	2
7	Chukchi Sea	5	3	3	4	1	2	3	1	3	1	4	2
8	Chukchi Sea	3	1	2	2	1	1	2	1	1	1	2	1
9	Chukchi Sea	2	1	1	1	1	1	1	-	1	-	1	-
10	Chukchi Sea	2	1	1	2	1	1	1	1	1	-	1	1
11	Chukchi Sea	3	1	2	2	1	1	1	1	1	1	2	1
12	Chukchi Sea	2	1	1	2	1	1	1	-	1	1	1	1
13	Chukchi Sea	2	1	1	1	1	1	1	-	1	1	1	1
14	Chukchi Sea	2	1	1	2	1	1	1	1	1	-	1	1
15	Chukchi Sea	1	1	1	2	1	1	1	1	1	1	1	1
16	Chukchi Sea	1	1	1	2	1	1	1	1	1	1	1	1
17	Chukchi Sea	2	1	2	3	1	2	1	1	2	1	3	2

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Boundary Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
18	Chukchi Sea	3	2	3	4	3	3	2	2	3	2	4	4
19	Chukchi Sea	3	2	2	4	2	2	2	1	2	2	3	3
20	Chukchi Sea	1	1	1	2	1	1	1	1	1	1	1	1
21	Chukchi Sea	1	-	1	1	-	1	1	-	1	-	1	1
22	Chukchi Sea	1	-	-	1	-	-	-	-	-	-	1	-
23	Beaufort Sea	-	-	-	1	-	-	-	-	-	-	-	1
24	Beaufort Sea	-	-	1	1	-	-	-	-	-	-	1	1
25	Beaufort Sea	-	-	-	1	-	-	-	-	-	-	1	-
26	Beaufort Sea	-	-	-	-	-	-	-	-	-	-	1	-
38	Beaufort Sea	-	-	1	-	-	-	-	-	1	-	-	-

Table B-27: 360 Days-(Annual BS): Annual Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Boundary Segment within 360 Days.

ID	Boundary Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
1	Bering Strait	-	-	-	-	1	-	-	1	-	-	-	-
2	Bering Strait	-	-	-	-	1	-	-	1	-	1	-	-
3	Chukchi Sea	1	1	1	1	-	1	1	-	1	-	1	1
4	Chukchi Sea	2	1	1	2	1	1	1	1	1	-	2	1
5	Chukchi Sea	4	2	2	2	1	1	2	1	1	1	2	1
6	Chukchi Sea	5	3	3	4	1	2	3	1	2	1	3	2
7	Chukchi Sea	5	3	3	4	1	2	3	1	3	1	4	2
8	Chukchi Sea	3	1	2	2	1	1	2	1	1	1	2	1
9	Chukchi Sea	2	1	1	2	1	1	1	-	1	-	1	-
10	Chukchi Sea	2	1	1	2	1	1	1	1	1	-	1	1
11	Chukchi Sea	3	1	2	2	1	1	1	1	1	1	2	1
12	Chukchi Sea	2	1	1	2	1	1	1	-	1	1	1	1
13	Chukchi Sea	2	1	1	1	1	1	1	-	1	1	1	1
14	Chukchi Sea	2	1	1	2	1	1	1	1	1	-	1	1
15	Chukchi Sea	2	1	1	2	1	1	1	1	1	1	2	1
16	Chukchi Sea	1	1	1	2	1	1	1	1	1	1	1	1
17	Chukchi Sea	3	1	2	3	1	2	2	1	2	1	3	2
18	Chukchi Sea	3	2	3	4	3	3	2	2	3	2	4	4
19	Chukchi Sea	3	2	2	4	2	3	2	1	2	2	3	3
20	Chukchi Sea	1	1	1	2	1	1	1	1	1	1	1	1
21	Chukchi Sea	1	-	1	1	-	1	1	-	1	-	1	1
22	Chukchi Sea	1	-	-	1	-	-	-	-	-	-	1	-
23	Beaufort Sea	-	-	-	1	-	-	-	-	-	-	1	1

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

24	Beaufort Sea	-	-	1	1	-	-	-	-	-	-	1	1
25	Beaufort Sea	-	-	-	1	-	-	-	-	-	-	1	-
26	Beaufort Sea	-	-	-	-	-	-	-	-	-	-	1	-
38	Beaufort Sea	-	-	1	-	-	-	-	-	1	-	-	-

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

B.2.5 Summer Conditional Probabilities for Environmental Resource Areas

Tables B-28 through B-33 represent summer conditional probabilities (expressed as percent chance) that a large oil spill starting at a particular location will contact a certain environmental resource area within 3, 10, 30, 60, 180, and 360 days.

Table B-28: 3 Days-Summer ERA: Summer Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Environmental Resource Area within 3 Days.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
0	Land	-	-	-	-	1	2	-	2	-	11	-	12
1	Kasegaluk Lagoon Area	-	-	-	-	1	1	-	-	-	11	-	-
6	Hanna Shoal	-	-	-	12	-	2	-	-	-	-	24	-
7	Krill Trap	-	-	-	-	-	-	-	-	-	-	-	2
10	Ledyard Bay SPEI Critical Habitat Area	-	-	-	-	16	8	-	19	-	54	-	1
15	Cape Lisburne Seabird Colony Area	-	-	-	-	5	-	-	16	-	2	-	-
16	Barrow Canyon	-	-	-	-	-	1	-	-	-	-	1	11
18	Murre Rearing and Molting Area	-	1	-	-	1	-	-	1	-	-	-	-
19	Chukchi Spring Lead System	-	-	-	-	3	4	-	3	-	12	-	9
23	Polar Bear Offshore	-	-	-	-	11	4	-	11	-	11	-	-
38	SUA: Pt. Hope - Cape Lisburne	-	-	-	-	-	-	-	3	-	-	-	-
39	SUA: Pt. Lay - Kasegaluk	-	-	-	-	2	1	-	1	-	25	-	-
40	SUA: Icy Cape - Wainwright	-	-	1	-	2	14	-	-	3	19	1	56
42	SUA: Barrow - East Arch	-	-	-	-	-	-	-	-	-	-	-	2
43	SUA: Nuiqsut - Cross Island	-	-	-	-	-	-	-	-	-	-	-	1
47	Hanna Shoal Walrus Use Area	1	-	4	62	1	27	-	-	5	1	**	37
49	Chukchi Spring Lead 1	-	-	-	-	1	-	-	1	-	-	-	-
50	Pt Lay Walrus Offshore	-	-	-	-	25	12	-	22	1	50	-	3
51	Pt Lay Walrus Nearshore	-	-	-	-	3	1	-	2	-	35	-	-
53	Chukchi Spring Lead 2	-	-	-	-	9	5	-	9	-	16	-	-
54	Chukchi Spring Lead 3	-	-	-	-	-	4	-	-	-	3	-	15
56	Hanna Shoal Area	-	-	1	21	-	6	-	-	-	-	44	13
57	Skull Cliffs	-	-	-	-	-	1	-	-	-	-	-	10
61	Pt Lay-Barrow BH GW SSF	-	-	2	4	4	31	-	-	7	35	16	81
64	Peard Bay Area	-	-	-	-	-	2	-	-	-	-	1	18
70	North Central Chukchi	2	-	-	-	-	-	-	-	-	-	-	-
102	Opilio Crab EFH	-	-	-	-	-	-	-	1	-	-	-	-
103	Saffron Cod EFH	-	-	-	-	5	13	-	13	2	34	3	49
107	Pt Hope Offshore	-	-	-	-	-	-	-	1	-	-	-	-
108	Barrow Feeding Aggregation	-	-	-	-	-	-	-	-	-	-	1	3

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
119	AK BFT Outer Shelf&Slope 10	-	-	-	-	-	-	-	-	-	-	1	3
121	C Lisburne - Pt Hope	-	-	-	-	1	-	-	10	-	-	-	-
123	AK Chukchi Offshore	2	3	5	1	-	-	1	-	3	-	-	-
124	Central Chukchi Offshore	-	2	-	-	-	-	2	-	-	-	-	-

Table B-29: 10 Days-Summer ERA: Summer Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Environmental Resource Area within 10 Days.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
0	Land	2	5	5	2	14	15	5	15	8	30	5	23
1	Kasegaluk Lagoon Area	-	1	1	-	6	3	1	5	1	16	-	1
3	SUA: Uelen/Russia	-	-	-	-	1	-	-	1	-	-	-	-
6	Hanna Shoal	2	1	4	19	1	6	1	-	4	-	31	5
7	Krill Trap	-	-	1	2	1	3	-	-	1	1	3	6
10	Ledyard Bay SPEI Critical Habitat Area	-	3	2	-	24	11	2	28	2	57	1	3
11	Wrangel Island 12 nm & Offshore	2	1	1	-	-	-	1	-	-	-	-	-
14	Cape Thompson Seabird Colony Area	-	-	-	-	1	-	-	1	-	-	-	-
15	Cape Lisburne Seabird Colony Area	-	1	-	-	10	2	-	21	1	8	-	1
16	Barrow Canyon	1	1	4	3	3	11	1	1	6	7	8	24
18	Murre Rearing and Molting Area	1	7	3	-	9	3	5	13	3	5	-	1
19	Chukchi Spring Lead System	-	-	1	-	6	6	-	6	2	14	1	11
20	East Chukchi Offshore	-	-	-	-	-	-	-	-	-	-	1	1
23	Polar Bear Offshore	-	1	-	-	13	5	1	14	1	14	-	1
29	AK BFT Bowhead FM 8	-	-	-	-	-	-	-	-	-	-	-	1
30	Beaufort Spring Lead 1	-	-	-	-	-	1	-	-	-	-	-	2
31	Beaufort Spring Lead 2	-	-	-	-	-	-	-	-	-	-	-	1
38	SUA: Pt. Hope - Cape Lisburne	-	-	-	-	2	-	-	4	-	2	-	-
39	SUA: Pt. Lay - Kasegaluk	-	2	1	-	7	3	1	7	1	29	-	1
40	SUA: Icy Cape - Wainwright	2	6	8	2	17	27	6	11	13	38	4	60
42	SUA: Barrow - East Arch	1	-	1	3	1	4	-	-	2	2	5	7
43	SUA: Nuiqsut - Cross Island	-	-	-	1	-	1	-	-	1	-	1	2
47	Hanna Shoal Walrus Use Area	12	6	20	71	6	37	7	2	22	7	**	48
49	Chukchi Spring Lead 1	-	-	-	-	1	-	-	2	-	-	-	-
50	Pt Lay Walrus Offshore	1	5	4	1	35	18	5	34	5	57	1	7
51	Pt Lay Walrus Nearshore	-	1	1	-	8	3	1	9	1	37	-	1
52	Russian Coast Walrus Offshore	1	5	2	-	8	2	4	11	2	4	-	-
53	Chukchi Spring Lead 2	-	-	-	-	10	5	-	11	1	16	-	1
54	Chukchi Spring Lead 3	-	1	1	1	3	7	1	1	2	7	2	16

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
56	Hanna Shoal Area	5	2	7	28	2	13	2	1	7	3	48	20
57	Skull Cliffs	-	1	2	1	3	6	1	1	3	6	2	13
58	Russian Coast Walrus Nearshore	-	1	-	-	2	-	1	3	-	1	-	-
61	Pt Lay-Barrow BH GW SSF	5	9	15	13	22	44	10	14	23	49	27	83
63	North Chukchi	1	-	-	-	-	-	-	-	-	-	-	-
64	Peard Bay Area	1	2	4	4	4	13	2	2	7	9	8	28
66	Herald Island	1	-	-	-	-	-	1	-	-	-	-	-
70	North Central Chukchi	3	-	1	1	-	-	-	-	-	-	-	-
74	Offshore Herald Island	1	1	1	1	-	-	1	-	1	-	-	-
80	Beaufort Outer Shelf 1	-	-	-	-	-	-	-	-	-	-	1	1
82	N Chukotka Nrshr 2	-	1	-	-	1	-	1	1	-	-	-	-
83	N Chukotka Nrshr 3	-	2	-	-	2	-	1	3	-	1	-	-
91	Hope Sea Valley	1	1	1	-	1	-	1	1	-	-	-	-
102	Opilio Crab EFH	-	-	-	-	3	1	-	5	-	1	-	-
103	Saffron Cod EFH	2	8	10	6	28	33	7	31	16	54	14	59
107	Pt Hope Offshore	-	-	-	-	2	-	-	4	-	1	-	-
108	Barrow Feeding Aggregation	1	-	1	2	1	3	-	-	2	1	5	7
115	AK BFT Outer Shelf and Slope 6	-	-	-	-	-	-	-	-	-	-	1	1
116	AK BFT Outer Shelf and Slope 7	-	-	-	1	-	1	-	-	-	-	1	2
117	AK BFT Outer Shelf and Slope 8	-	-	-	1	-	1	-	-	-	-	2	3
118	AK BFT Outer Shelf and Slope 9	-	-	-	1	-	1	-	-	1	-	2	4
119	AK BFT Outer Shelf and Slope 10	1	-	2	5	1	6	-	-	3	3	9	13
120	Russia CH GW Fall 1&2	-	2	-	-	3	1	1	5	-	1	-	-
121	C Lisburne - Pt Hope	-	-	-	-	5	1	-	14	-	4	-	-
123	AK Chukchi Offshore	3	4	7	5	1	2	3	1	6	1	3	1
124	Central Chukchi Offshore	2	5	3	1	1	1	5	1	2	1	1	-

Table B-30: 30 Days-Summer ERA: Summer Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Environmental Resource Area within 30 Days.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
0	Land	17	32	26	16	44	37	30	46	30	54	20	39
1	Kasegaluk Lagoon Area	1	3	2	1	9	4	3	9	2	19	1	1
2	Point Barrow, Plover Islands	-	-	1	1	-	1	-	-	1	1	2	2
3	SUA: Uelen/Russia	1	3	2	1	4	1	3	5	2	2	1	1
4	SUA:Naukan/Russia	-	-	-	-	1	-	-	1	-	-	-	-
6	Hanna Shoal	7	6	10	23	4	11	6	2	10	3	36	12
7	Krill Trap	2	2	3	4	3	6	2	2	4	4	6	10

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
10	Ledyard Bay SPEI Critical Habitat Area	1	7	5	2	29	13	6	33	6	59	2	5
11	Wrangel Island 12 nm & Offshore	8	8	7	6	3	3	8	3	6	2	4	2
14	Cape Thompson Seabird Colony Area	-	-	-	-	2	-	-	2	-	1	-	-
15	Cape Lisburne Seabird Colony Area	1	3	2	-	13	4	3	24	2	10	1	2
16	Barrow Canyon	4	7	10	7	11	18	8	8	13	14	12	30
18	Murre Rearing and Molting Area	4	13	8	4	19	9	10	24	9	11	4	5
19	Chukchi Spring Lead System	-	1	2	1	8	8	1	8	3	15	2	12
20	East Chukchi Offshore	-	-	-	1	-	1	-	-	-	-	2	2
23	Polar Bear Offshore	-	1	1	1	14	7	1	14	2	16	1	4
27	AK BFT Bowhead FM 6	-	-	-	-	-	-	-	-	-	-	1	-
28	AK BFT Bowhead FM 7	-	-	-	-	-	-	-	-	-	-	1	-
29	AK BFT Bowhead FM 8	-	-	1	1	-	1	-	-	-	-	1	1
30	Beaufort Spring Lead 1	-	-	-	-	1	2	-	-	1	1	1	4
31	Beaufort Spring Lead 2	-	-	-	-	-	1	-	-	-	1	-	2
38	SUA: Pt. Hope - Cape Lisburne	-	1	-	-	4	1	1	7	1	3	-	1
39	SUA: Pt. Lay - Kasegaluk	1	4	3	1	11	5	3	11	3	31	1	2
40	SUA: Icy Cape - Wainwright	6	14	14	7	29	34	14	23	20	46	9	62
42	SUA: Barrow - East Arch	3	3	5	7	3	7	3	3	5	4	10	10
43	SUA: Nuiqsut - Cross Island	1	1	2	2	1	3	1	1	2	1	4	4
44	SUA: Kaktovik	-	-	-	-	-	-	-	-	-	-	-	1
47	Hanna Shoal Walrus Use Area	24	20	32	75	17	46	20	12	34	17	**	55
49	Chukchi Spring Lead 1	-	-	-	-	1	-	-	3	-	1	-	-
50	Pt Lay Walrus Offshore	3	11	8	3	40	21	10	39	10	60	3	9
51	Pt Lay Walrus Nearshore	1	3	2	1	11	5	3	12	2	38	1	2
52	Russian Coast Walrus Offshore	5	14	10	5	20	10	12	24	10	13	5	6
53	Chukchi Spring Lead 2	-	1	1	-	11	5	1	12	1	17	-	1
54	Chukchi Spring Lead 3	-	2	2	1	6	9	2	4	4	10	3	16
55	Point Barrow, Plover Islands	-	-	1	1	-	1	-	-	1	1	2	2
56	Hanna Shoal Area	12	8	13	32	6	17	8	5	12	7	51	24
57	Skull Cliffs	2	4	4	2	6	10	3	5	6	9	4	16
58	Russian Coast Walrus Nearshore	1	4	3	1	8	3	4	11	3	5	1	2
59	Ostrov Kolyuchin	1	2	1	-	2	1	2	2	1	1	-	1
61	Pt Lay-Barrow BH GW SSF	14	23	27	22	37	53	23	30	34	58	36	86
63	North Chukchi	4	1	2	2	-	-	1	-	1	-	1	-
64	Peard Bay Area	5	8	10	8	12	21	9	9	14	16	13	34
66	Herald Island	3	3	3	3	1	1	3	1	2	1	2	1
70	North Central Chukchi	4	1	2	4	1	1	1	1	2	1	3	1
74	Offshore Herald Island	4	3	4	4	2	2	3	1	4	1	4	1

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
80	Beaufort Outer Shelf 1	1	1	1	1	-	1	1	-	1	1	2	3
82	N Chukotka Nrshr 2	4	9	5	2	6	4	8	8	5	4	2	2
83	N Chukotka Nrshr 3	3	8	5	2	10	4	7	13	5	6	2	2
91	Hope Sea Valley	3	5	4	3	4	3	5	4	5	3	3	2
101	Beaufort Outer Shelf 2	-	-	1	1	-	1	-	-	1	1	2	1
102	Opilio Crab EFH	-	2	1	1	6	3	1	8	2	4	1	1
103	Saffron Cod EFH	10	22	23	15	47	47	22	49	30	67	24	66
107	Pt Hope Offshore	-	1	1	-	4	2	1	6	1	3	-	1
108	Barrow Feeding Aggregation	3	2	4	6	1	5	2	1	3	2	8	9
111	AK BFT Outer Shelf and Slope 2	-	-	-	1	-	-	-	-	-	-	1	1
112	AK BFT Outer Shelf and Slope 3	-	-	-	1	-	1	-	-	1	-	1	1
113	AK BFT Outer Shelf and Slope 4	1	-	1	1	-	1	-	-	1	1	2	1
114	AK BFT Outer Shelf and Slope 5	1	-	1	1	-	1	1	-	1	-	2	1
115	AK BFT Outer Shelf and Slope 6	1	1	1	2	1	2	1	-	2	1	3	3
116	AK BFT Outer Shelf and Slope 7	2	1	2	3	1	3	1	-	2	1	4	4
117	AK BFT Outer Shelf and Slope 8	3	1	3	4	1	4	2	1	3	2	6	6
118	AK BFT Outer Shelf and Slope 9	3	2	3	5	2	5	2	2	3	3	6	8
119	AK BFT Outer Shelf and Slope 10	5	5	8	10	8	14	5	6	9	9	16	21
120	Russia CH GW Fall 1&2	2	6	4	2	9	4	5	12	5	6	2	2
121	C Lisburne - Pt Hope	-	2	1	-	8	2	1	17	1	5	1	1
122	North Chukotka Offshore	2	3	2	1	1	1	3	1	2	1	1	1
123	AK Chukchi Offshore	4	6	9	7	3	4	4	2	7	2	7	4
124	Central Chukchi Offshore	4	7	5	4	4	5	7	4	6	4	4	3

Table B-31: 60 Days-Summer ERA: Summer Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Environmental Resource Area within 60 Days.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
0	Land	22	36	31	22	47	40	34	49	35	56	24	43
1	Kasegaluk Lagoon Area	1	3	2	1	9	4	3	9	3	19	1	1
2	Point Barrow, Plover Islands	-	-	1	1	1	1	-	-	1	1	2	2
3	SUA: Uelen/Russia	1	4	2	1	4	2	3	5	2	2	1	1
4	SUA:Naukan/Russia	-	-	-	-	1	-	-	1	-	1	-	-
6	Hanna Shoal	9	8	11	24	5	12	8	3	11	4	37	12
7	Krill Trap	2	3	4	4	4	7	3	3	4	5	6	10
10	Ledyard Bay SPEI Critical Habitat Area	2	8	5	2	29	14	7	33	6	59	2	5
11	Wrangel Island 12 nm & Offshore	11	10	9	8	5	5	10	5	7	3	6	3
14	Cape Thompson Seabird Colony Area	-	-	-	-	2	-	-	2	-	1	-	-

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
15	Cape Lisburne Seabird Colony Area	1	3	2	1	13	4	3	24	2	10	1	2
16	Barrow Canyon	5	8	10	8	12	19	9	9	13	15	13	31
18	Murre Rearing and Molting Area	4	14	9	5	19	9	11	24	9	11	5	5
19	Chukchi Spring Lead System	-	1	2	1	8	8	1	8	3	15	2	12
20	East Chukchi Offshore	1	-	1	2	-	1	-	-	1	-	3	2
23	Polar Bear Offshore	-	1	1	1	14	7	1	14	2	16	1	4
27	AK BFT Bowhead FM 6	-	-	-	1	-	-	-	-	-	-	1	1
28	AK BFT Bowhead FM 7	-	-	-	1	-	-	-	-	-	-	1	1
29	AK BFT Bowhead FM 8	-	-	1	1	-	1	-	-	-	-	1	1
30	Beaufort Spring Lead 1	-	-	-	-	1	2	-	-	1	1	1	4
31	Beaufort Spring Lead 2	-	-	-	-	-	1	-	-	-	1	-	2
38	SUA: Pt. Hope - Cape Lisburne	-	1	-	-	4	1	1	7	1	3	-	1
39	SUA: Pt. Lay - Kasegaluk	1	4	3	1	11	5	3	12	3	31	1	2
40	SUA: Icy Cape - Wainwright	7	15	15	7	30	34	15	25	21	47	9	62
42	SUA: Barrow - East Arch	4	4	6	8	4	8	4	3	6	5	11	10
43	SUA: Nuiqsut - Cross Island	1	1	2	3	1	3	1	1	2	1	4	4
44	SUA: Kaktovik	-	-	-	-	-	-	-	-	-	-	1	1
46	Wrangel Island 12 nmi Buffer 2	1	-	1	1	-	1	-	-	1	-	1	1
47	Hanna Shoal Walrus Use Area	26	23	34	76	19	47	23	14	36	19	**	56
48	Chukchi Lead System 4	-	-	-	-	-	-	-	-	-	1	-	1
49	Chukchi Spring Lead 1	-	-	-	-	1	-	-	3	-	1	-	-
50	Pt Lay Walrus Offshore	3	12	9	3	41	21	11	39	11	60	3	9
51	Pt Lay Walrus Nearshore	1	4	2	1	12	5	3	12	3	38	1	2
52	Russian Coast Walrus Offshore	5	15	10	6	20	10	13	24	10	13	5	6
53	Chukchi Spring Lead 2	-	1	1	-	11	5	1	12	1	17	-	1
54	Chukchi Spring Lead 3	-	2	2	1	6	9	2	4	4	10	3	16
55	Point Barrow, Plover Islands	-	-	1	1	1	1	-	-	1	1	2	2
56	Hanna Shoal Area	13	10	14	33	8	19	11	6	14	8	52	25
57	Skull Cliffs	3	4	4	3	7	10	4	5	6	9	4	16
58	Russian Coast Walrus Nearshore	1	5	3	2	8	3	4	11	3	5	2	2
59	Ostrov Kolyuchin	1	2	1	1	2	1	2	3	1	1	1	1
61	Pt Lay-Barrow BH GW SSF	16	25	29	23	38	54	25	31	36	60	36	86
63	North Chukchi	5	1	2	2	-	1	1	-	2	1	2	1
64	Peard Bay Area	6	9	11	8	13	21	10	10	14	17	14	35
65	Smith Bay	-	-	-	-	-	-	-	-	-	-	1	1
66	Herald Island	4	3	3	3	2	2	3	2	3	1	3	1
70	North Central Chukchi	5	1	2	4	1	1	1	1	2	1	3	1
74	Offshore Herald Island	5	3	4	4	2	2	3	1	4	1	4	2

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
80	Beaufort Outer Shelf 1	1	1	1	2	1	2	1	-	2	1	3	3
82	N Chukotka Nrshr 2	4	9	5	2	7	4	8	8	5	4	2	2
83	N Chukotka Nrshr 3	3	9	6	3	10	5	8	13	5	6	2	2
91	Hope Sea Valley	3	5	4	3	4	4	5	4	5	3	3	3
101	Beaufort Outer Shelf 2	1	1	1	1	-	1	1	-	1	1	2	2
102	Opilio Crab EFH	-	2	1	1	6	3	1	8	2	4	1	1
103	Saffron Cod EFH	12	25	25	16	49	48	24	51	32	68	25	67
107	Pt Hope Offshore	-	1	1	1	4	2	1	7	1	3	1	1
108	Barrow Feeding Aggregation	4	2	4	6	1	5	3	1	4	2	8	10
109	AK BFT Shelf Edge	-	-	-	1	-	-	-	-	-	-	1	-
110	AK BFT Outer Shelf and Slope 1	1	-	1	1	-	-	-	-	-	-	1	1
111	AK BFT Outer Shelf and Slope 2	1	-	1	1	-	1	-	-	1	-	2	1
112	AK BFT Outer Shelf and Slope 3	1	-	1	1	-	1	1	-	1	1	2	1
113	AK BFT Outer Shelf and Slope 4	1	1	1	2	1	2	1	-	1	1	2	2
114	AK BFT Outer Shelf and Slope 5	1	1	2	2	1	2	1	-	2	1	3	2
115	AK BFT Outer Shelf and Slope 6	2	1	2	3	1	3	2	1	2	1	4	4
116	AK BFT Outer Shelf and Slope 7	3	2	3	4	1	4	2	1	3	2	5	6
117	AK BFT Outer Shelf and Slope 8	4	2	4	5	2	5	3	2	4	3	8	8
118	AK BFT Outer Shelf and Slope 9	4	3	5	6	4	7	3	3	5	4	8	10
119	AK BFT Outer Shelf and Slope 10	7	7	10	12	10	15	8	8	11	11	17	22
120	Russia CH GW Fall 1&2	2	7	5	2	9	4	6	12	5	6	2	2
121	C Lisburne - Pt Hope	-	2	1	1	8	2	2	17	1	5	1	1
122	North Chukotka Offshore	2	3	2	2	1	1	3	1	2	1	2	1
123	AK Chukchi Offshore	5	6	9	8	3	5	4	3	8	3	8	4
124	Central Chukchi Offshore	4	7	5	4	4	5	7	4	6	4	5	3

Table B-32: 180 Days-Summer ERA: Summer Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Environmental Resource Area within 180 Days.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
0	Land	25	39	35	26	49	43	38	50	38	58	28	45
1	Kasegaluk Lagoon Area	1	3	3	1	9	4	3	9	3	19	1	1
2	Point Barrow, Plover Islands	1	-	1	1	1	1	-	-	1	1	2	2
3	SUA: Uelen/Russia	2	4	3	2	4	2	4	5	3	2	1	1
4	SUA:Naukan/Russia	-	-	-	-	1	-	-	1	-	1	-	-
6	Hanna Shoal	10	9	12	25	5	13	9	4	12	5	38	13
7	Krill Trap	3	3	4	4	4	7	3	3	5	5	6	10
10	Ledyard Bay SPEI Critical Habitat Area	2	8	6	2	29	14	7	33	6	59	2	5

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
11	Wrangel Island 12 nm & Offshore	12	11	10	9	5	6	12	5	8	4	7	5
14	Cape Thompson Seabird Colony Area	-	-	-	-	2	-	-	2	-	1	-	-
15	Cape Lisburne Seabird Colony Area	1	3	2	1	13	4	3	24	2	10	1	2
16	Barrow Canyon	5	9	11	8	12	19	9	9	14	15	13	31
18	Murre Rearing and Molting Area	5	14	10	6	20	10	11	25	10	12	5	5
19	Chukchi Spring Lead System	-	1	2	1	8	8	1	8	3	15	2	12
20	East Chukchi Offshore	1	1	1	2	1	2	1	1	1	1	3	4
23	Polar Bear Offshore	-	1	1	1	14	7	1	14	2	16	2	4
26	AK BFT Bowhead FM 5	-	-	-	-	-	-	-	-	-	-	1	1
27	AK BFT Bowhead FM 6	-	-	-	1	-	-	-	-	-	-	1	1
28	AK BFT Bowhead FM 7	-	-	-	1	-	-	-	-	-	-	1	1
29	AK BFT Bowhead FM 8	-	-	1	1	-	1	-	-	-	-	1	1
30	Beaufort Spring Lead 1	-	-	-	-	1	2	-	-	1	1	1	4
31	Beaufort Spring Lead 2	-	-	-	-	-	1	-	-	-	1	-	2
32	Beaufort Spring Lead 3	-	-	-	-	-	-	-	-	-	-	-	1
38	SUA: Pt. Hope - Cape Lisburne	-	1	-	-	4	1	1	7	1	3	-	1
39	SUA: Pt. Lay - Kasegaluk	1	4	3	1	11	5	3	12	3	31	1	2
40	SUA: Icy Cape - Wainwright	7	16	16	8	30	35	16	25	21	47	10	62
42	SUA: Barrow - East Arch	5	5	6	8	5	8	5	4	6	5	11	11
43	SUA: Nuiqsut - Cross Island	2	2	3	3	2	3	2	1	3	2	5	4
44	SUA: Kaktovik	1	-	1	1	-	1	-	-	1	-	1	1
46	Wrangel Island 12 nmi Buffer 2	1	1	2	2	1	1	1	-	2	1	2	1
47	Hanna Shoal Walrus Use Area	27	23	35	76	20	48	24	14	36	20	**	57
48	Chukchi Lead System 4	-	-	-	-	-	1	-	-	-	1	1	1
49	Chukchi Spring Lead 1	-	-	-	-	1	-	-	3	-	1	-	-
50	Pt Lay Walrus Offshore	4	12	9	3	41	21	11	39	11	60	3	9
51	Pt Lay Walrus Nearshore	1	4	2	1	12	5	3	12	3	38	1	2
52	Russian Coast Walrus Offshore	6	16	11	6	20	11	14	25	12	13	6	6
53	Chukchi Spring Lead 2	-	1	1	-	11	5	1	12	1	17	-	1
54	Chukchi Spring Lead 3	-	2	2	1	6	9	2	4	4	10	3	16
55	Point Barrow, Plover Islands	1	-	1	1	1	1	-	-	1	1	2	2
56	Hanna Shoal Area	15	12	16	35	9	20	13	6	16	9	54	26
57	Skull Cliffs	3	4	5	3	7	10	4	6	7	10	4	16
58	Russian Coast Walrus Nearshore	2	5	4	2	8	4	4	11	4	5	2	2
59	Ostrov Kolyuchin	1	2	1	1	2	1	2	3	1	1	1	1
61	Pt Lay-Barrow BH GW SSF	17	26	29	24	38	55	26	32	36	60	37	86
63	North Chukchi	5	1	3	3	1	1	2	-	2	1	2	1
64	Peard Bay Area	6	9	11	8	13	21	10	10	15	17	14	35

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
65	Smith Bay	-	-	-	-	-	-	-	-	-	-	1	1
66	Herald Island	4	3	3	3	2	2	3	2	3	1	3	2
70	North Central Chukchi	5	1	3	5	1	2	1	1	3	1	4	2
74	Offshore Herald Island	5	3	4	5	2	3	4	2	4	1	5	2
80	Beaufort Outer Shelf 1	1	1	2	2	1	2	1	-	2	1	3	3
82	N Chukotka Nrshr 2	4	9	5	2	7	4	8	8	5	4	2	2
83	N Chukotka Nrshr 3	4	9	7	4	10	5	8	13	6	6	3	3
91	Hope Sea Valley	4	6	4	3	4	4	5	4	5	3	3	3
101	Beaufort Outer Shelf 2	1	1	1	2	1	2	1	-	1	1	2	2
102	Opilio Crab EFH	-	2	1	1	6	3	1	8	2	4	1	1
103	Saffron Cod EFH	13	25	25	17	49	49	25	51	32	68	26	67
107	Pt Hope Offshore	-	1	1	1	4	2	1	7	1	3	1	1
108	Barrow Feeding Aggregation	4	3	4	6	2	6	3	1	4	3	9	10
109	AK BFT Shelf Edge	1	1	1	1	-	1	1	-	1	-	1	1
110	AK BFT Outer Shelf and Slope 1	1	1	1	1	-	1	1	-	1	-	1	1
111	AK BFT Outer Shelf and Slope 2	1	1	1	1	1	1	1	-	1	1	2	2
112	AK BFT Outer Shelf and Slope 3	1	1	1	1	1	2	1	-	2	1	2	2
113	AK BFT Outer Shelf and Slope 4	1	2	2	2	1	2	2	1	2	1	3	3
114	AK BFT Outer Shelf and Slope 5	2	2	2	2	1	2	2	1	2	1	3	3
115	AK BFT Outer Shelf and Slope 6	2	2	3	3	1	3	2	1	3	1	4	4
116	AK BFT Outer Shelf and Slope 7	3	3	3	4	2	5	3	1	4	2	6	6
117	AK BFT Outer Shelf and Slope 8	4	3	5	6	3	6	4	2	5	3	8	8
118	AK BFT Outer Shelf and Slope 9	4	4	5	6	4	8	4	4	6	5	9	11
119	AK BFT Outer Shelf and Slope 10	7	8	10	12	10	16	8	8	11	11	18	23
120	Russia CH GW Fall 1&2	3	7	5	3	10	5	6	12	6	6	3	2
121	C Lisburne - Pt Hope	-	2	1	1	8	2	2	17	1	5	1	1
122	North Chukotka Offshore	2	3	3	2	1	2	3	1	3	1	2	1
123	AK Chukchi Offshore	5	6	9	8	4	5	4	3	8	3	8	5
124	Central Chukchi Offshore	4	7	6	4	4	5	7	4	6	4	5	3

Table B-33: 360 Days-Summer ERA: Summer Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Environmental Resource Area within 360 Days.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
0	Land	25	40	35	26	49	43	38	50	38	58	28	45
1	Kasegaluk Lagoon Area	1	3	3	1	9	4	3	9	3	19	1	1
2	Point Barrow, Plover Islands	1	-	1	1	1	1	-	-	1	1	2	2
3	SUA: Uelen/Russia	2	4	3	2	4	2	4	5	3	2	1	1

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
4	SUA:Naukan/Russia	-	-	-	-	1	-	-	1	-	1	-	-
6	Hanna Shoal	10	9	12	25	5	13	9	4	12	5	38	14
7	Krill Trap	3	3	4	4	4	7	3	3	5	5	6	10
10	Ledyard Bay SPEI Critical Habitat Area	2	8	6	2	29	14	7	33	6	59	2	5
11	Wrangel Island 12 nm & Offshore	12	11	10	9	5	6	12	5	8	4	7	5
14	Cape Thompson Seabird Colony Area	-	-	-	-	2	-	-	2	-	1	-	-
15	Cape Lisburne Seabird Colony Area	1	3	2	1	13	4	3	24	2	10	1	2
16	Barrow Canyon	5	9	11	8	12	19	9	9	14	15	13	31
18	Murre Rearing and Molting Area	5	14	10	6	20	10	11	25	10	12	5	5
19	Chukchi Spring Lead System	-	1	2	1	8	8	1	8	3	15	2	12
20	East Chukchi Offshore	1	1	1	2	1	2	1	1	1	1	3	4
23	Polar Bear Offshore	-	1	1	1	14	7	1	14	2	16	2	4
26	AK BFT Bowhead FM 5	-	-	-	-	-	-	-	-	-	-	1	1
27	AK BFT Bowhead FM 6	-	-	-	1	-	-	-	-	-	-	1	1
28	AK BFT Bowhead FM 7	-	-	-	1	-	-	-	-	-	-	1	1
29	AK BFT Bowhead FM 8	-	-	1	1	-	1	-	-	-	-	1	1
30	Beaufort Spring Lead 1	-	-	-	-	1	2	-	-	1	1	1	4
31	Beaufort Spring Lead 2	-	-	-	-	-	1	-	-	-	1	-	2
32	Beaufort Spring Lead 3	-	-	-	-	-	-	-	-	-	-	-	1
38	SUA: Pt. Hope - Cape Lisburne	-	1	-	-	4	1	1	7	1	3	-	1
39	SUA: Pt. Lay - Kasegaluk	1	4	3	1	11	5	3	12	3	31	1	2
40	SUA: Icy Cape - Wainwright	7	16	16	8	30	35	16	25	21	47	10	62
42	SUA: Barrow - East Arch	5	5	6	8	5	8	5	4	6	5	11	11
43	SUA: Nuiqsut - Cross Island	2	2	3	3	2	3	2	1	3	2	5	4
44	SUA: Kaktovik	1	-	1	1	-	1	-	-	1	-	1	1
46	Wrangel Island 12 nmi Buffer 2	1	1	2	2	1	2	1	-	2	1	2	1
47	Hanna Shoal Walrus Use Area	27	23	35	76	20	48	24	14	36	20	**	57
48	Chukchi Lead System 4	-	-	-	-	-	1	-	-	-	1	1	1
49	Chukchi Spring Lead 1	-	-	-	-	1	-	-	3	-	1	-	-
50	Pt Lay Walrus Offshore	4	12	9	3	41	21	11	39	11	60	3	9
51	Pt Lay Walrus Nearshore	1	4	2	1	12	5	3	12	3	38	1	2
52	Russian Coast Walrus Offshore	6	16	11	6	20	11	14	25	12	13	6	6
53	Chukchi Spring Lead 2	-	1	1	-	11	5	1	12	1	17	-	1
54	Chukchi Spring Lead 3	-	2	2	1	6	9	2	4	4	10	3	16
55	Point Barrow, Plover Islands	1	-	1	1	1	1	-	-	1	1	2	2
56	Hanna Shoal Area	15	12	16	35	9	20	13	6	16	9	54	26
57	Skull Cliffs	3	4	5	3	7	10	4	6	7	10	4	16
58	Russian Coast Walrus Nearshore	2	5	4	2	8	4	4	11	4	5	2	2

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
59	Ostrov Kolyuchin	1	2	1	1	2	1	2	3	1	1	1	1
61	Pt Lay-Barrow BH GW SSF	17	26	29	24	38	55	26	32	36	60	37	86
63	North Chukchi	5	1	3	3	1	1	2	-	2	1	2	1
64	Peard Bay Area	6	9	11	8	13	21	10	10	15	17	14	35
65	Smith Bay	-	-	-	-	-	-	-	-	-	-	1	1
66	Herald Island	4	3	3	3	2	2	3	2	3	1	3	2
70	North Central Chukchi	5	1	3	5	1	2	1	1	3	1	4	2
74	Offshore Herald Island	5	3	4	5	2	3	4	2	4	1	5	2
80	Beaufort Outer Shelf 1	1	1	2	2	1	2	1	-	2	1	3	3
82	N Chukotka Nrshr 2	4	9	5	2	7	4	8	8	5	4	2	2
83	N Chukotka Nrshr 3	4	9	7	4	10	5	8	13	6	6	3	3
91	Hope Sea Valley	4	6	4	3	4	4	5	4	5	3	3	3
101	Beaufort Outer Shelf 2	1	1	1	2	1	2	1	-	1	1	2	2
102	Opilio Crab EFH	-	2	1	1	6	3	1	8	2	4	1	1
103	Saffron Cod EFH	13	25	25	17	49	49	25	51	32	68	26	67
107	Pt Hope Offshore	-	1	1	1	4	2	1	7	1	3	1	1
108	Barrow Feeding Aggregation	4	3	4	6	2	6	3	1	4	3	9	10
109	AK BFT Shelf Edge	1	1	1	1	-	1	1	-	1	-	1	1
110	AK BFT Outer Shelf and Slope 1	1	1	1	1	-	1	1	-	1	-	1	1
111	AK BFT Outer Shelf and Slope 2	1	1	1	1	1	1	1	-	1	1	2	2
112	AK BFT Outer Shelf and Slope 3	1	1	1	1	1	2	1	-	2	1	2	2
113	AK BFT Outer Shelf and Slope 4	1	2	2	2	1	2	2	1	2	1	3	3
114	AK BFT Outer Shelf and Slope 5	2	2	2	2	1	2	2	1	2	1	3	3
115	AK BFT Outer Shelf and Slope 6	2	2	3	3	1	3	2	1	3	1	4	4
116	AK BFT Outer Shelf and Slope 7	3	3	3	4	2	5	3	1	4	2	6	6
117	AK BFT Outer Shelf and Slope 8	4	3	5	6	3	6	4	2	5	3	8	8
118	AK BFT Outer Shelf and Slope 9	4	4	5	6	4	8	4	4	6	5	9	11
119	AK BFT Outer Shelf and Slope 10	7	8	10	12	10	16	8	8	11	11	18	23
120	Russia CH GW Fall 1&2	3	7	5	3	10	5	6	12	6	6	3	2
121	C Lisburne - Pt Hope	-	2	1	1	8	2	2	17	1	5	1	1
122	North Chukotka Offshore	2	3	3	2	1	2	3	1	3	1	2	1
123	AK Chukchi Offshore	5	6	9	8	4	5	4	3	8	3	8	5
124	Central Chukchi Offshore	4	7	6	4	4	5	7	4	6	4	5	3

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

B.2.6 Summer Conditional Probabilities for Land Segments

Tables B-34 through B-39 represent summer conditional probabilities (expressed as percent chance) that a large oil spill starting at a particular location will contact a certain land segment within 3, 10, 30, 60, 180, and 360 days.

Table B-34: 3 Days-Summer LS: Summer Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Land Segment within 3 Days.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
65	Buckland, Cape Lisburne	-	-	-	-	-	-	-	1	-	-	-	-
72	Point Lay, Siksrikpak Point	-	-	-	-	-	-	-	-	-	3	-	-
73	Tungaich Point, Tungak Creek	-	-	-	-	-	-	-	-	-	3	-	-
74	Kasegaluk Lagoon, Solivik Isl.	-	-	-	-	-	-	-	-	-	2	-	-
75	Akeonik, Icy Cape	-	-	-	-	-	-	-	-	-	1	-	-
78	Point Collie, Sigeakruk Point	-	-	-	-	-	-	-	-	-	1	-	-
79	Point Belcher, Wainwright	-	-	-	-	-	1	-	-	-	1	-	2
80	Eluksingiak Point, Kugrua Bay	-	-	-	-	-	-	-	-	-	-	-	3
84	Will Rogers & Wiley Post Mem.	-	-	-	-	-	-	-	-	-	-	-	2
85	Barrow, Browerville, Elson Lag.	-	-	-	-	-	-	-	-	-	-	-	3

Table B-35: 10 Days-Summer LS: Summer Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Land Segment within 10 Days.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
64	Kukpuk River, Point Hope	-	-	-	-	-	-	-	1	-	-	-	-
65	Buckland, Cape Lisburne	-	-	-	-	1	-	-	2	-	1	-	-
66	Ayugatak Lagoon	-	-	-	-	-	-	-	1	-	1	-	-
67	Cape Sabine, Pitmegea River	-	-	-	-	-	-	-	1	-	-	-	-
71	Kukpowruk River, Sitkok Point	-	-	-	-	1	-	-	1	-	-	-	-
72	Point Lay, Siksrikpak Point	-	-	-	-	1	-	-	1	-	3	-	-
73	Tungaich Point, Tungak Creek	-	-	-	-	1	-	-	1	-	3	-	-
74	Kasegaluk Lagoon, Solivik Isl.	-	-	-	-	1	-	-	1	-	3	-	-
75	Akeonik, Icy Cape	-	-	-	-	1	1	-	1	-	3	-	-
76	Avak Inlet, Tunalik River	-	-	-	-	-	-	-	-	-	1	-	-
77	Nivat Point, Nokotlek Point	-	-	-	-	-	-	-	-	-	1	-	-
78	Point Collie, Sigeakruk Point	-	-	-	-	1	1	1	1	1	2	-	1
79	Point Belcher, Wainwright	-	1	1	-	2	2	1	1	1	4	-	3
80	Eluksingiak Point, Kugrua Bay	-	-	1	-	1	2	-	-	1	2	-	4
81	Peard Bay, Point Franklin	-	-	-	-	-	-	-	-	-	-	-	1

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
82	Skull Cliff	-	-	-	-	-	-	-	-	-	-	-	1
83	Nulavik, Loran Radio Station	-	-	-	-	-	1	-	-	-	-	-	1
84	Will Rogers & Wiley Post Mem.	-	-	1	-	1	2	-	-	1	1	1	4
85	Barrow, Browerville, Elson Lag.	-	-	1	1	1	4	-	-	2	2	2	7

Table B-36: 30 Days-Summer LS: Summer Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Land Segment within 30 Days.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
5	Mys Evans	1	-	-	-	-	-	1	-	-	-	-	-
6	Ostrov Mushtakova	1	1	1	1	-	-	1	-	1	-	-	-
7	Kosa Bruch	1	1	1	1	-	-	1	-	1	-	-	-
8	E. Wrangel Island, Skeletov	1	1	1	1	-	-	1	-	1	-	1	-
21	Laguna Pil'khikay, Pil'khikay	-	1	-	-	-	-	-	-	-	-	-	-
22	Rypkarpyy, Mys Shmidta	-	1	-	-	1	-	1	1	1	1	-	-
23	Emuem, Tenkergin	-	1	-	-	1	-	1	1	-	-	-	-
24	LS 24	-	1	-	-	1	-	1	1	-	-	-	-
25	Laguna Amguema, Yulinu	1	1	1	-	1	1	1	1	-	1	-	-
26	Ekugvaam, Kepin, Pil'khin	-	1	1	-	1	1	1	1	-	1	-	-
27	Laguna Nut, Rigol'	-	1	1	-	1	1	1	1	1	1	1	1
28	Vankarem,Vankarem Laguna	-	1	1	-	1	1	1	1	1	1	1	1
29	Mys Onman, Vel'may	-	1	1	-	1	1	1	1	1	1	-	1
30	Nutepynmin, Pyngopil'gyn	-	1	1	-	1	1	1	2	1	1	-	-
31	Alyatki, Zaliv Tasytkhin	-	1	1	-	1	1	1	1	1	1	-	-
32	Mys Dzhenretlen, Eynenekvyk	-	1	1	-	1	-	1	1	1	1	-	-
33	Neskan, Laguna Neskan	-	1	1	-	1	-	1	1	1	1	-	-
34	Tepken, Memino	-	1	-	-	1	-	1	1	1	1	-	-
35	Enurmino, Mys Neten	-	1	-	-	1	-	1	1	-	1	-	-
36	Mys Serdtse-Kamen	-	-	-	-	1	-	-	1	-	-	-	-
37	Chegitun, Utkan	-	-	-	-	-	-	-	1	-	-	-	-
64	Kukpuk River, Point Hope	-	-	-	-	1	-	-	1	-	1	-	-
65	Buckland, Cape Lisburne	-	-	-	-	2	1	-	3	-	1	-	-
66	Ayugatak Lagoon	-	-	-	-	1	-	-	1	-	1	-	-
67	Cape Sabine, Pitmegea River	-	-	-	-	-	-	-	1	-	-	-	-
69	Cape Beaufort, Omalik Lagoon	-	-	-	-	-	-	-	1	-	-	-	-
70	Kuchaurak and Kuchiak Creek	-	-	-	-	-	-	-	1	-	-	-	-
71	Kukpowruk River, Sitkok Point	-	-	-	-	1	-	-	1	-	1	-	-
72	Point Lay, Siksrikpak Point	-	-	-	-	1	-	-	2	-	4	-	-

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
73	Tungaich Point, Tungak Creek	-	-	-	-	1	1	-	1	-	4	-	-
74	Kasegaluk Lagoon, Solivik Isl.	-	1	-	-	2	1	1	1	-	3	-	-
75	Akeonik, Icy Cape	-	1	1	-	2	1	1	1	1	3	-	-
76	Avak Inlet, Tunalik River	-	-	-	-	1	1	-	1	-	2	-	-
77	Nivat Point, Nokotlek Point	-	-	-	-	1	1	-	1	-	1	-	-
78	Point Collie, Sigeakruk Point	-	1	1	-	2	2	1	1	1	3	-	1
79	Point Belcher, Wainwright	1	2	2	1	4	3	2	2	2	6	1	4
80	Eluksingiak Point, Kugrua Bay	1	1	1	1	2	3	1	2	2	3	-	4
81	Peard Bay, Point Franklin	-	-	-	-	-	1	-	-	1	1	-	1
82	Skull Cliff	-	-	-	-	-	1	-	-	-	-	-	1
83	Nulavik, Loran Radio Station	-	-	-	-	-	1	-	-	1	1	1	1
84	Will Rogers & Wiley Post Mem.	1	1	1	1	2	3	1	1	2	3	2	6
85	Barrow, Browerville, Elson Lag.	1	2	4	3	4	6	2	3	5	4	5	10
88	Cape Simpson, Piasuk River	-	-	-	-	-	-	-	-	-	-	1	-

Table B-37: 60 Days-Summer LS: Summer Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Land Segment within 60 Days.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
5	Mys Evans	1	1	1	1	-	-	1	-	-	-	-	-
6	Ostrov Mushtakova	1	1	1	1	-	-	1	-	1	-	-	-
7	Kosa Bruch	1	1	1	1	-	1	1	-	1	-	1	1
8	E. Wrangel Island, Skeletov	1	1	1	1	1	1	1	-	1	-	1	1
21	Laguna Pil'khikay, Pil'khikay	-	1	-	-	-	-	-	-	-	-	-	-
22	Rypkarpyy, Mys Shmidta	-	1	1	-	1	1	1	1	1	1	-	-
23	Emuem, Tenkergin	-	1	-	-	1	1	1	1	-	1	-	-
24	LS 24	1	1	-	-	1	1	1	1	1	1	-	-
25	Laguna Amguema, Yulinu	1	1	1	-	1	1	1	1	1	1	1	1
26	Ekugvaam, Kepin, Pil'khin	1	1	1	-	1	1	1	1	1	1	-	-
27	Laguna Nut, Rigol'	-	1	1	1	1	1	1	1	1	1	1	1
28	Vankarem,Vankarem Laguna	-	1	1	1	1	1	1	1	1	1	1	1
29	Mys Onman, Vel'may	-	1	1	-	1	1	1	1	1	1	-	1
30	Nutepynmin, Pyngopil'gyn	1	1	1	1	1	1	1	2	1	1	1	-
31	Alyatki, Zaliv Tasytkhin	1	1	1	-	1	1	1	2	1	1	1	1
32	Mys Dzhenretlen, Eynenekvyk	1	1	1	-	1	1	1	1	1	1	-	1
33	Neskan, Laguna Neskan	-	1	1	-	1	1	1	1	1	1	-	-
34	Tepken, Memino	-	1	1	-	1	-	1	1	1	1	-	-
35	Enurmino, Mys Neten	-	1	-	-	1	-	1	1	-	1	-	-

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
36	Mys Serdtse-Kamen	-	-	-	-	1	-	-	1	-	-	-	-
37	Chegitun, Utkan	-	-	-	-	-	-	-	1	-	-	-	-
64	Kukpuk River, Point Hope	-	-	-	-	1	-	-	1	-	1	-	-
65	Buckland, Cape Lisburne	-	-	-	-	2	1	-	4	-	1	-	-
66	Ayugatak Lagoon	-	-	-	-	1	-	-	1	-	1	-	-
67	Cape Sabine, Pitmegea River	-	-	-	-	-	-	-	1	-	-	-	-
69	Cape Beaufort, Omalik Lagoon	-	-	-	-	-	-	-	1	-	-	-	-
70	Kuchaurak and Kuchiak Creek	-	-	-	-	-	-	-	1	-	-	-	-
71	Kukpowruk River, Sitkok Point	-	-	-	-	1	-	-	1	-	1	-	-
72	Point Lay, Siksrikpak Point	-	-	-	-	1	-	-	2	-	4	-	-
73	Tungaich Point, Tungak Creek	-	1	-	-	1	1	1	1	-	4	-	-
74	Kasegaluk Lagoon, Solivik Isl.	-	1	-	-	2	1	1	1	-	3	-	-
75	Akeonik, Icy Cape	-	1	1	-	2	1	1	1	1	3	-	-
76	Avak Inlet, Tunalik River	-	-	-	-	1	1	-	1	-	2	-	-
77	Nivat Point, Nokotlek Point	-	-	-	-	1	1	-	1	-	1	-	-
78	Point Collie, Sigeakruk Point	-	1	1	-	2	2	1	1	1	3	-	1
79	Point Belcher, Wainwright	1	2	2	1	4	4	2	3	3	6	1	4
80	Eluksingiak Point, Kugrua Bay	1	1	1	1	2	3	1	2	2	3	-	4
81	Peard Bay, Point Franklin	-	-	-	-	-	1	-	-	1	1	-	1
82	Skull Cliff	-	-	-	-	-	1	-	-	-	-	-	1
83	Nulavik, Loran Radio Station	-	-	-	-	1	1	-	-	1	1	1	1
84	Will Rogers & Wiley Post Mem.	1	1	2	1	2	3	1	1	2	3	2	6
85	Barrow, Browerville, Elson Lag.	2	3	4	3	4	6	3	3	5	5	5	10
88	Cape Simpson, Piasuk River	-	-	-	-	-	-	-	-	-	-	1	-

Table B-38: 180 Days-Summer LS: Summer Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Land Segment within 180 Days.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
3	Mys Florens, Gusinaya	1	-	-	-	-	-	-	-	-	-	-	-
4	Mys Ushakova, Laguna Drem-Khed	1	-	-	1	-	-	1	-	1	-	-	-
5	Mys Evans	1	1	1	1	-	1	1	-	1	-	1	-
6	Ostrov Mushtakova	2	1	1	1	-	1	1	-	1	-	1	1
7	Kosa Bruch	2	1	1	1	1	1	2	1	1	-	1	1
8	E. Wrangel Island, Skeletov	1	1	1	1	1	1	1	-	1	-	1	1
21	Laguna Pil'khikay, Pil'khikay	-	1	-	-	-	-	1	-	-	-	-	-
22	Rypkarpyy, Mys Shmidta	-	1	1	1	1	1	1	1	1	1	1	-
23	Emuem, Tenkergin	-	1	-	-	1	1	1	1	1	1	-	-

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
24	LS 24	1	1	1	-	1	1	1	1	1	1	1	-
25	Laguna Amguema, Yulinu	1	1	1	1	1	1	1	1	1	1	1	1
26	Ekugvaam, Kepin, Pil'khin	1	1	1	1	1	1	1	1	1	1	-	-
27	Laguna Nut, Rigol'	1	1	1	1	1	1	1	1	1	1	1	1
28	Vankarem,Vankarem Laguna	1	1	1	1	1	1	1	1	1	1	1	1
29	Mys Onman, Vel'may	-	1	1	1	1	1	1	1	1	1	-	1
30	Nutepynmin, Pyngopil'gyn	1	1	1	1	1	1	1	2	1	1	1	1
31	Alyatki, Zaliv Tasytkhin	1	1	1	1	1	1	1	2	1	1	1	1
32	Mys Dzhenretlen, Eynenekvyk	1	1	1	1	1	1	1	1	1	1	-	1
33	Neskan, Laguna Neskan	1	1	1	-	1	1	1	1	1	1	-	-
34	Tepken, Memino	-	1	1	-	1	1	1	1	1	1	-	-
35	Enurmino, Mys Neten	-	1	1	-	1	1	1	1	1	1	-	-
36	Mys Serdtse-Kamen	-	-	-	-	1	-	-	1	-	-	-	-
37	Chegitun, Utkan	-	-	-	-	-	-	-	1	-	-	-	-
64	Kukpuk River, Point Hope	-	-	-	-	1	-	-	1	-	1	-	-
65	Buckland, Cape Lisburne	-	-	-	-	2	1	-	4	-	1	-	-
66	Ayugatak Lagoon	-	-	-	-	1	-	-	1	-	1	-	-
67	Cape Sabine, Pitmegea River	-	-	-	-	-	-	-	1	-	-	-	-
69	Cape Beaufort, Omalik Lagoon	-	-	-	-	-	-	-	1	-	-	-	-
70	Kuchaurak and Kuchiak Creek	-	-	-	-	-	-	-	1	-	-	-	-
71	Kukpowruk River, Sitkok Point	-	-	-	-	1	-	-	1	-	1	-	-
72	Point Lay, Siksrikpak Point	-	1	-	-	1	-	-	2	-	4	-	-
73	Tungaich Point, Tungak Creek	-	1	-	-	1	1	1	1	-	4	-	-
74	Kasegaluk Lagoon, Solivik Isl.	-	1	-	-	2	1	1	1	-	3	-	-
75	Akeonik, Icy Cape	-	1	1	-	2	1	1	1	1	3	-	-
76	Avak Inlet, Tunalik River	-	-	-	-	1	1	-	1	-	2	-	-
77	Nivat Point, Nokotlek Point	-	-	-	-	1	1	-	1	-	1	-	-
78	Point Collie, Sigeakruk Point	-	1	1	-	2	2	1	1	1	3	-	1
79	Point Belcher, Wainwright	1	2	2	1	4	4	2	3	3	6	1	4
80	Eluksingiak Point, Kugrua Bay	1	1	1	1	2	3	1	2	2	3	-	4
81	Peard Bay, Point Franklin	-	-	-	-	-	1	-	-	1	1	-	1
82	Skull Cliff	-	-	-	-	-	1	-	-	-	-	-	1
83	Nulavik, Loran Radio Station	-	-	-	-	1	1	-	-	1	1	1	1
84	Will Rogers & Wiley Post Mem.	1	1	2	1	2	4	1	2	2	3	2	6
85	Barrow, Browerville, Elson Lag.	2	3	4	3	4	7	3	3	5	5	5	10
88	Cape Simpson, Piasuk River	-	-	-	-	-	-	-	-	-	-	1	-

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

Table B-39: 360 Days-Summer LS: Summer Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Land Segment within 360 Days.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
3	Mys Florens, Gusinaya	1	-	-	1	-	-	-	-	-	-	-	-
4	Mys Ushakova, Laguna Drem-Khed	1	-	1	1	-	-	1	-	1	-	-	-
5	Mys Evans	1	1	1	1	-	1	1	-	1	-	1	-
6	Ostrov Mushtakova	2	1	1	1	-	1	1	-	1	-	1	1
7	Kosa Bruch	2	1	1	1	1	1	2	1	1	-	1	1
8	E. Wrangel Island, Skeletov	1	1	1	1	1	1	1	-	1	-	1	1
21	Laguna Pil'khikay, Pil'khikay	-	1	-	-	-	-	1	-	-	-	-	-
22	Rypkarpyy, Mys Shmidta	-	1	1	1	1	1	1	1	1	1	1	-
23	Emuem, Tenkergin	-	1	-	-	1	1	1	1	1	1	-	-
24	LS 24	1	1	1	-	1	1	1	1	1	1	1	-
25	Laguna Amguema, Yulinu	1	1	1	1	1	1	1	1	1	1	1	1
26	Ekugvaam, Kepin, Pil'khin	1	1	1	1	1	1	1	1	1	1	-	-
27	Laguna Nut, Rigol'	1	1	1	1	1	1	1	1	1	1	1	1
28	Vankarem,Vankarem Laguna	1	1	1	1	1	1	1	1	1	1	1	1
29	Mys Onman, Vel'may	-	1	1	1	1	1	1	1	1	1	-	1
30	Nutepynmin, Pyngopil'gyn	1	1	1	1	1	1	1	2	1	1	1	1
31	Alyatki, Zaliv Tasytkhin	1	1	1	1	1	1	1	2	1	1	1	1
32	Mys Dzhenretlen, Eynenekvyk	1	1	1	1	1	1	1	1	1	1	-	1
33	Neskan, Laguna Neskan	1	1	1	-	1	1	1	1	1	1	-	-
34	Tepken, Memino	-	1	1	-	1	1	1	1	1	1	-	-
35	Enurmino, Mys Neten	-	1	1	-	1	1	1	1	1	1	-	-
36	Mys Serdtse-Kamen	-	-	-	-	1	-	-	1	-	-	-	-
37	Chegitun, Utkan	-	-	-	-	-	-	-	1	-	-	-	-
64	Kukpuk River, Point Hope	-	-	-	-	1	-	-	1	-	1	-	-
65	Buckland, Cape Lisburne	-	-	-	-	2	1	-	4	-	1	-	-
66	Ayugatak Lagoon	-	-	-	-	1	-	-	1	-	1	-	-
67	Cape Sabine, Pitmegea River	-	-	-	-	-	-	-	1	-	-	-	-
69	Cape Beaufort, Omalik Lagoon	-	-	-	-	-	-	-	1	-	-	-	-
70	Kuchaurak and Kuchiak Creek	-	-	-	-	-	-	-	1	-	-	-	-
71	Kukpowruk River, Sitkok Point	-	-	-	-	1	-	-	1	-	1	-	-
72	Point Lay, Siksrikpak Point	-	1	-	-	1	-	-	2	-	4	-	-
73	Tungaich Point, Tungak Creek	-	1	-	-	1	1	1	1	-	4	-	-
74	Kasegaluk Lagoon, Solivik Isl.	-	1	-	-	2	1	1	1	-	3	-	-
75	Akeonik, Icy Cape	-	1	1	-	2	1	1	1	1	3	-	-
76	Avak Inlet, Tunalik River	-	-	-	-	1	1	-	1	-	2	-	-

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
77	Nivat Point, Nokotlek Point	-	-	-	-	1	1	-	1	-	1	-	-
78	Point Collie, Sigeakruk Point	-	1	1	-	2	2	1	1	1	3	-	1
79	Point Belcher, Wainwright	1	2	2	1	4	4	2	3	3	6	1	4
80	Eluksingiak Point, Kugrua Bay	1	1	1	1	2	3	1	2	2	3	-	4
81	Peard Bay, Point Franklin	-	-	-	-	-	1	-	-	1	1	-	1
82	Skull Cliff	-	-	-	-	-	1	-	-	-	-	-	1
83	Nulavik, Loran Radio Station	-	-	-	-	1	1	-	-	1	1	1	1
84	Will Rogers & Wiley Post Mem.	1	1	2	1	2	4	1	2	2	3	2	6
85	Barrow, Browerville, Elson Lag.	2	3	4	3	4	7	3	3	5	5	5	10
88	Cape Simpson, Piasuk River	-	-	-	-	-	-	-	-	-	-	1	-

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

B.2.7 Summer Conditional Probabilities for Grouped Land Segments

Tables B-40 through B-45 represent summer conditional probabilities (expressed as percent chance) that a large oil spill starting at a particular location will contact a certain group of land segments 3, 10, 30, 60, 180, and 360 days.

Table B-40: 3 Days-Summer GLS: Summer Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Group of Land Segments within 3 Days.

ID	Grouped Land Segments Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
143	WAH Insect Relief	-	-	-	-	-	-	-	1	-	-	-	-
144	Alaska Maritime Wildlife Refuge	-	-	-	-	-	-	-	1	-	-	-	-
145	Cape Lisburne	-	-	-	-	-	-	-	2	-	-	-	-
146	Ledyard Bay	-	-	-	-	-	-	-	2	-	-	-	-
147	Point Lay Haulout	-	-	-	-	-	-	-	-	-	8	-	-
148	Kasegaluk Brown Bears	-	-	-	-	-	1	-	-	-	6	-	-
149	National Petroleum Reserve Alaska	-	-	-	-	-	1	-	-	-	-	-	4
151	Kuk River	-	-	-	-	-	1	-	-	-	1	-	2
152	TCH Insect Relief/Calving	-	-	-	-	-	-	-	-	-	-	-	2
176	United States Chukchi Coast	-	-	-	-	1	2	-	2	-	11	-	9
177	United States Beaufort Coast	-	-	-	-	-	-	-	-	-	-	-	3

Table B-41: 10 Days-Summer GLS: Summer Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Group of Land Segments within 10 Days.

ID	Grouped Land Segments Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
133	Mys Blossom	1	-	-	-	-	-	-	-	-	-	-	-
135	Kolyuchin Bay	-	-	-	-	-	-	-	1	-	-	-	-
143	WAH Insect Relief	-	-	-	-	1	-	-	2	-	-	-	-
144	Alaska Maritime Wildlife Refuge	-	-	-	-	1	-	-	2	-	1	-	-
145	Cape Lisburne	-	-	-	-	1	-	-	3	-	2	-	-
146	Ledyard Bay	-	-	-	-	2	-	-	5	-	2	-	-
147	Point Lay Haulout	-	1	-	-	3	1	-	3	-	10	-	-
148	Kasegaluk Brown Bears	-	1	1	-	4	2	1	3	1	11	-	1
149	National Petroleum Reserve Alaska	-	1	1	-	2	4	1	1	2	5	1	7
150	Kasegaluk Lagoon Special Use Area	-	-	-	-	1	1	-	-	-	2	-	1
151	Kuk River	-	1	1	-	3	3	1	2	2	6	-	4
152	TCH Insect Relief/Calving	-	-	1	-	1	2	-	-	1	1	1	4
174	Russia Chukchi Coast Marine Mammals	1	2	-	-	1	-	1	2	-	-	-	-
175	Russia Chukchi Coast	1	2	-	-	1	-	1	2	-	-	-	-

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Grouped Land Segments Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
176	United States Chukchi Coast	1	3	3	1	12	11	3	13	5	28	2	16
177	United States Beaufort Coast	-	-	1	1	1	4	-	-	2	2	3	7

Table B-42: 30 Days-Summer GLS: Summer Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Group of Land Segments within 30 Days.

ID	Grouped Land Segments Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
133	Mys Blossom	5	4	4	3	1	1	5	1	3	1	2	1
135	Kolyuchin Bay	1	4	2	1	4	2	4	5	2	3	1	1
136	Ostrov Idlidlya	1	2	1	-	2	1	2	2	1	1	-	-
137	Mys Serditse Kamen	-	1	1	-	2	1	1	2	1	1	-	-
138	Chukota Coast Haulout	-	1	1	-	3	1	1	3	1	2	-	1
143	WAH Insect Relief	-	-	-	-	2	-	-	3	-	1	-	-
144	Alaska Maritime Wildlife Refuge	-	-	-	-	2	1	-	4	-	1	-	-
145	Cape Lisburne	-	1	-	-	3	1	1	4	-	3	-	1
146	Ledyard Bay	-	1	-	-	4	1	1	7	1	4	-	-
147	Point Lay Haulout	-	2	1	-	5	2	2	5	1	12	-	1
148	Kasegaluk Brown Bears	1	2	2	1	6	4	2	5	2	13	1	1
149	National Petroleum Reserve Alaska	1	3	3	3	5	7	2	4	5	8	4	10
150	Kasegaluk Lagoon Special Use Area	-	1	1	-	2	1	1	1	1	3	-	1
151	Kuk River	1	3	3	1	5	5	3	4	4	8	1	5
152	TCH Insect Relief/Calving	1	1	2	1	3	4	1	2	3	3	2	7
153	Smith Bay Spotted Seal Haulout	-	-	-	-	-	-	-	-	-	-	1	-
154	Teshekpuk Lake Special Use Area	-	-	-	-	-	-	-	-	-	-	1	1
174	Russia Chukchi Coast Marine Mammals	11	19	13	8	16	10	18	19	12	11	7	6
175	Russia Chukchi Coast	12	19	13	8	16	10	18	20	12	12	7	7
176	United States Chukchi Coast	4	10	9	4	23	19	9	24	12	38	5	21
177	United States Beaufort Coast	2	3	4	4	4	7	3	3	6	5	7	12

Table B-43: 60 Days-Summer GLS: Summer Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Group of Land Segments within 60 Days.

ID	Grouped Land Segments Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
133	Mys Blossom	7	5	5	5	2	2	6	2	4	1	4	2
135	Kolyuchin Bay	2	4	3	1	4	2	4	5	3	3	1	1
136	Ostrov Idlidlya	1	2	1	1	2	1	2	2	1	1	-	-
137	Mys Serditse Kamen	-	1	1	-	2	1	1	2	1	1	-	-

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Grouped Land Segments Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
138	Chukota Coast Haulout	1	1	1	1	3	1	1	4	1	2	-	1
143	WAH Insect Relief	-	-	-	-	2	-	-	3	-	1	-	-
144	Alaska Maritime Wildlife Refuge	-	-	-	-	2	1	-	4	-	1	-	-
145	Cape Lisburne	-	1	-	-	3	1	1	4	-	3	-	1
146	Ledyard Bay	-	1	1	-	4	1	1	7	1	4	-	-
147	Point Lay Haulout	-	2	1	-	5	2	2	6	1	12	1	1
148	Kasegaluk Brown Bears	1	3	2	1	6	4	2	5	2	13	1	1
149	National Petroleum Reserve Alaska	2	3	4	3	5	7	3	4	5	8	4	10
150	Kasegaluk Lagoon Special Use Area	-	1	1	-	2	1	1	1	1	3	-	1
151	Kuk River	1	3	3	1	6	5	3	4	4	8	1	5
152	TCH Insect Relief/Calving	1	2	2	1	3	4	2	2	3	4	3	7
153	Smith Bay Spotted Seal Haulout	-	-	-	-	-	-	-	-	-	-	1	-
154	Teshekpuk Lake Special Use Area	-	-	-	-	-	1	-	-	-	-	1	1
174	Russia Chukchi Coast Marine Mammals	14	21	15	11	17	12	20	20	15	12	10	8
175	Russia Chukchi Coast	16	22	17	13	18	13	22	21	16	13	12	10
176	United States Chukchi Coast	5	11	10	5	24	20	10	25	13	38	6	21
177	United States Beaufort Coast	2	3	5	4	5	8	3	3	6	5	7	12

Table B-44: 180 Days-Summer GLS: Summer Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Group of Land Segments within 180 Days.

ID	Grouped Land Segments Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
133	Mys Blossom	8	6	6	5	2	3	7	2	5	2	5	3
135	Kolyuchin Bay	2	5	3	2	5	2	4	5	3	3	2	1
136	Ostrov Idlidlya	1	2	2	1	2	1	2	2	2	1	1	-
137	Mys Serditse Kamen	-	1	1	-	2	1	1	2	1	1	-	-
138	Chukota Coast Haulout	1	1	1	1	3	1	1	4	1	2	1	1
143	WAH Insect Relief	-	-	-	-	2	-	-	3	-	1	-	-
144	Alaska Maritime Wildlife Refuge	-	-	-	-	2	1	-	4	-	1	-	-
145	Cape Lisburne	-	1	-	-	3	1	1	4	-	3	-	1
146	Ledyard Bay	-	1	1	-	4	1	1	7	1	4	-	-
147	Point Lay Haulout	-	2	1	1	5	2	2	6	1	12	1	1
148	Kasegaluk Brown Bears	1	3	2	1	6	4	3	5	2	13	1	1
149	National Petroleum Reserve Alaska	2	3	4	3	5	8	3	4	5	8	4	10
150	Kasegaluk Lagoon Special Use Area	-	1	1	-	2	1	1	1	1	3	-	1
151	Kuk River	1	3	3	1	6	5	3	4	4	8	1	5
152	TCH Insect Relief/Calving	1	2	2	1	3	4	2	2	3	4	3	7
153	Smith Bay Spotted Seal Haulout	-	-	-	-	-	-	-	-	-	-	1	-

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Grouped Land Segments Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
154	Teshekpuk Lake Special Use Area	-	-	-	-	-	1	-	-	-	-	1	1
174	Russia Chukchi Coast Marine Mammals	16	23	18	13	19	14	23	21	17	13	12	10
175	Russia Chukchi Coast	19	25	21	16	20	16	25	22	19	14	15	12
176	United States Chukchi Coast	5	11	10	5	24	20	11	25	13	38	6	21
177	United States Beaufort Coast	2	3	5	4	5	8	3	3	6	5	7	12

Table B-45: 360 Days-Summer GLS: Summer Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Group of Land Segments within 360 Days.

ID	Grouped Land Segments Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
133	Mys Blossom	8	6	6	5	2	3	7	2	5	2	5	3
135	Kolyuchin Bay	2	5	3	2	5	2	4	5	3	3	2	1
136	Ostrov Idlidlya	1	2	2	1	2	1	2	2	2	1	1	-
137	Mys Serditse Kamen	-	1	1	-	2	1	1	2	1	1	-	-
138	Chukota Coast Haulout	1	1	1	1	3	1	1	4	1	2	1	1
143	WAH Insect Relief	-	-	-	-	2	-	-	3	-	1	-	-
144	Alaska Maritime Wildlife Refuge	-	-	-	-	2	1	-	4	-	1	-	-
145	Cape Lisburne	-	1	-	-	3	1	1	4	-	3	-	1
146	Ledyard Bay	-	1	1	-	4	1	1	7	1	4	-	-
147	Point Lay Haulout	-	2	1	1	5	2	2	6	1	12	1	1
148	Kasegaluk Brown Bears	1	3	2	1	6	4	3	5	2	13	1	1
149	National Petroleum Reserve Alaska	2	3	4	3	5	8	3	4	5	8	4	10
150	Kasegaluk Lagoon Special Use Area	-	1	1	-	2	1	1	1	1	3	-	1
151	Kuk River	1	3	3	1	6	5	3	4	4	8	1	5
152	TCH Insect Relief/Calving	1	2	2	1	3	4	2	2	3	4	3	7
153	Smith Bay Spotted Seal Haulout	-	-	-	-	-	-	-	-	-	-	1	-
154	Teshekpuk Lake Special Use Area	-	-	-	-	-	1	-	-	-	-	1	1
174	Russia Chukchi Coast Marine Mammals	16	23	19	13	19	14	23	21	18	13	12	10
175	Russia Chukchi Coast	19	25	21	16	20	16	25	22	19	14	15	12
176	United States Chukchi Coast	5	11	10	5	24	20	11	25	13	38	6	21
177	United States Beaufort Coast	2	3	5	4	5	8	3	4	6	5	7	12

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

B.2.8 Summer Conditional Probabilities for Boundary Segments

Tables B-46 through B-51 represent summer conditional probabilities (expressed as percent chance) that a large oil spill starting at a particular location will contact a certain boundary segment within 3, 10, 30, 60, 180, and 360 days.

Table B-46: 3 Days-Summer BS: Summer Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Boundary Segment within 3 Days.

ID	Boundary Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9

Note: All rows have all values less than 0.5 percent and are not shown

Table B-47: 10 Days-Summer BS: Summer Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Boundary Segment within 10 Days.

ID	Boundary Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9

Note: All rows have all values less than 0.5 percent and are not shown

Table B-48: 30 Days-Summer BS: Summer Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Boundary Segment within 30 Days.

ID	Boundary Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
5	Chukchi Sea	-	1	-	-	-	-	1	-	-	-	-	-
6	Chukchi Sea	1	1	1	1	-	-	1	-	1	-	1	-
7	Chukchi Sea	1	-	-	-	-	-	-	-	-	-	-	-
8	Chukchi Sea	1	-	-	-	-	-	-	-	-	-	-	-
13	Chukchi Sea	1	-	-	-	-	-	-	-	-	-	-	-
14	Chukchi Sea	1	-	-	-	-	-	-	-	-	-	-	-
17	Chukchi Sea	1	-	-	1	-	-	-	-	-	-	1	-
18	Chukchi Sea	2	-	-	2	-	-	-	-	-	-	1	1
19	Chukchi Sea	1	-	-	2	-	-	-	-	-	-	1	1
20	Chukchi Sea	1	-	-	1	-	-	-	-	-	-	-	-

Table B-49: 60 Days-Summer BS: Summer Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Boundary Segment within 60 Days.

ID	Boundary Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
3	Chukchi Sea	1	-	-	-	-	-	-	-	-	-	-	-
4	Chukchi Sea	1	-	-	-	-	-	-	1	-	-	-	-
5	Chukchi Sea	1	1	1	1	1	1	1	1	1	-	-	-
6	Chukchi Sea	2	2	2	2	-	1	2	-	1	-	1	1

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Boundary Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
7	Chukchi Sea	3	1	1	1	-	-	1	-	1	-	-	-
8	Chukchi Sea	2	-	-	1	-	-	-	-	-	-	1	-
9	Chukchi Sea	1	-	-	-	-	-	-	-	-	-	-	-
10	Chukchi Sea	1	-	-	-	-	-	-	-	-	-	-	-
11	Chukchi Sea	1	-	-	-	-	-	-	-	-	-	-	-
12	Chukchi Sea	1	-	-	-	-	-	-	-	-	-	-	-
13	Chukchi Sea	1	-	-	1	-	-	-	-	-	-	-	-
14	Chukchi Sea	1	-	-	1	-	-	-	-	-	-	1	-
15	Chukchi Sea	1	-	-	1	-	-	-	-	-	-	1	-
16	Chukchi Sea	1	-	-	1	-	-	-	-	-	-	1	-
17	Chukchi Sea	3	-	1	2	-	1	-	-	-	-	2	1
18	Chukchi Sea	4	1	2	4	-	2	1	-	1	-	3	3
19	Chukchi Sea	3	1	1	3	-	1	1	-	1	-	3	2
20	Chukchi Sea	1	-	1	1	-	-	-	-	-	-	1	1
21	Chukchi Sea	1	-	-	1	-	-	1	-	-	-	1	-
22	Chukchi Sea	1	-	-	1	-	-	-	-	-	-	1	-
25	Beaufort Sea	-	-	-	1	-	-	-	-	-	-	-	-

Table B-50: 180 Days-Summer BS: Summer Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Boundary Segment within 180 Days.

ID	Boundary Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
3	Chukchi Sea	1	-	-	-	-	-	-	-	-	-	-	-
4	Chukchi Sea	1	-	-	1	1	-	-	1	-	-	-	-
5	Chukchi Sea	2	1	1	1	1	1	1	1	1	1	1	1
6	Chukchi Sea	3	2	2	2	1	1	2	-	2	1	2	1
7	Chukchi Sea	4	2	2	3	-	1	2	-	2	-	3	1
8	Chukchi Sea	3	1	1	1	-	-	1	-	1	-	1	-
9	Chukchi Sea	2	1	1	1	-	-	1	-	1	-	-	-
10	Chukchi Sea	2	-	-	1	-	-	1	-	-	-	-	-
11	Chukchi Sea	2	-	1	1	-	-	1	-	-	-	1	-
12	Chukchi Sea	1	-	1	1	-	-	-	-	-	-	-	-
13	Chukchi Sea	1	-	1	1	-	-	1	-	-	-	-	-
14	Chukchi Sea	1	1	1	1	-	-	1	-	1	-	1	-
15	Chukchi Sea	1	1	1	1	-	-	1	-	1	-	1	1
16	Chukchi Sea	1	-	1	1	-	1	-	-	1	-	1	1
17	Chukchi Sea	3	1	1	3	-	1	1	-	1	1	3	2
18	Chukchi Sea	5	2	3	5	1	3	2	1	3	1	4	4

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Boundary Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
19	Chukchi Sea	4	1	2	4	1	2	1	1	2	1	3	3
20	Chukchi Sea	1	1	1	2	-	1	1	-	1	-	1	1
21	Chukchi Sea	1	-	1	1	-	-	1	-	-	-	1	-
22	Chukchi Sea	1	-	1	1	-	-	-	-	-	-	1	-
23	Beaufort Sea	-	-	-	-	-	-	-	-	-	-	-	1
24	Beaufort Sea	-	-	1	1	-	-	-	-	1	-	1	1
25	Beaufort Sea	-	-	-	1	-	-	-	-	-	-	1	-
26	Beaufort Sea	-	-	-	1	-	-	-	-	-	-	1	-

Table B-51: 360 Days-Summer BS: Summer Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Boundary Segment within 360 Days.

ID	Boundary Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
3	Chukchi Sea	1	-	-	-	-	-	-	-	-	-	1	-
4	Chukchi Sea	1	-	-	1	1	-	-	1	-	-	-	-
5	Chukchi Sea	2	1	1	1	1	1	1	1	1	1	1	1
6	Chukchi Sea	3	2	2	2	1	2	2	-	2	1	2	2
7	Chukchi Sea	4	2	2	3	-	1	2	-	2	-	3	1
8	Chukchi Sea	3	1	1	1	-	1	1	-	1	-	1	-
9	Chukchi Sea	2	1	1	1	-	-	1	-	1	-	-	-
10	Chukchi Sea	2	-	-	1	-	-	1	-	-	-	-	-
11	Chukchi Sea	2	-	1	1	-	-	1	-	-	-	1	-
12	Chukchi Sea	1	-	1	1	-	-	-	-	-	-	-	-
13	Chukchi Sea	1	-	1	1	-	-	1	-	-	-	-	-
14	Chukchi Sea	1	1	1	1	-	-	1	-	1	-	1	1
15	Chukchi Sea	1	1	1	1	-	1	1	-	1	-	1	1
16	Chukchi Sea	1	-	1	1	-	1	-	-	1	-	1	1
17	Chukchi Sea	3	1	1	3	1	1	1	-	1	1	3	2
18	Chukchi Sea	5	2	3	5	1	3	2	1	3	1	4	4
19	Chukchi Sea	4	1	2	4	1	2	1	1	2	1	4	3
20	Chukchi Sea	1	1	1	2	-	1	1	-	1	-	1	1
21	Chukchi Sea	1	1	1	1	-	-	1	-	-	-	1	-
22	Chukchi Sea	1	-	1	1	-	-	-	-	-	-	1	-
23	Beaufort Sea	-	-	-	-	-	-	-	-	-	-	-	1
24	Beaufort Sea	-	-	1	1	-	-	-	-	1	-	1	1
25	Beaufort Sea	-	-	-	1	-	-	-	-	-	-	1	-
26	Beaufort Sea	-	-	-	1	-	-	-	-	-	-	1	-

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

B.2.9 Winter Conditional Probabilities for Environmental Resource Areas

Tables B-52 through B-57 represent winter conditional probabilities (expressed as percent chance) that a large oil spill starting at a particular location will contact a certain environmental resource area within 3, 10, 30, 60, 180, and 360 days.

Table B-52: 3 Days-Winter ERA: Winter Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Environmental Resource Area within 3 Days.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
0	Land	-	-	-	-	-	-	-	2	-	5	-	4
1	Kasegaluk Lagoon Area	-	-	-	-	-	-	-	-	-	1	-	-
6	Hanna Shoal	-	-	-	9	-	1	-	-	-	-	17	1
10	Ledyard Bay SPEI Critical Habitat Area	-	-	-	-	1	1	-	2	-	8	-	-
15	Cape Lisburne Seabird Colony Area	-	-	-	-	1	-	-	2	-	-	-	-
16	Barrow Canyon	-	-	-	-	-	-	-	-	-	-	-	3
19	Chukchi Spring Lead System	-	-	-	-	3	4	-	4	-	16	-	11
23	Polar Bear Offshore	-	1	1	-	59	24	1	58	2	65	-	5
38	SUA: Pt. Hope - Cape Lisburne	-	-	-	-	-	-	-	3	-	-	-	-
39	SUA: Pt. Lay - Kasegaluk	-	-	-	-	-	-	-	-	-	22	-	1
40	SUA: Icy Cape - Wainwright	-	-	-	-	-	7	-	-	1	7	-	57
41	SUA: Barrow - Chukchi	-	-	-	-	-	-	-	-	-	-	-	1
47	Hanna Shoal Walrus Use Area	-	-	-	8	-	4	-	-	-	-	15	6
48	Chukchi Lead System 4	-	-	-	-	10	15	-	12	1	50	1	37
49	Chukchi Spring Lead 1	-	-	-	-	1	-	-	4	-	-	-	-
50	Pt Lay Walrus Offshore	-	-	-	-	3	1	-	2	-	6	-	1
51	Pt Lay Walrus Nearshore	-	-	-	-	-	-	-	-	-	5	-	-
53	Chukchi Spring Lead 2	-	-	-	-	11	7	-	13	-	22	-	2
54	Chukchi Spring Lead 3	-	-	-	-	-	4	-	-	-	2	-	18
57	Skull Cliffs	-	-	-	-	-	-	-	-	-	-	-	5
62	Herald Shoal Polynya 2	-	4	1	-	-	-	4	-	-	-	-	-
64	Peard Bay Area	-	-	-	-	-	-	-	-	-	-	-	1
70	North Central Chukchi	1	-	-	-	-	-	-	-	-	-	-	-
102	Opilio Crab EFH	-	-	-	-	1	-	-	3	-	-	-	-
103	Saffron Cod EFH	-	-	-	-	3	5	-	13	-	25	1	41
123	AK Chukchi Offshore	3	4	6	2	-	-	2	-	3	-	1	-
124	Central Chukchi Offshore	-	2	1	-	-	-	2	-	-	-	-	-

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

Table B-53: 10 Days- Winter ERA: Winter Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Environmental Resource Area within 10 Days.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
0	Land	2	3	2	1	5	6	2	8	2	15	2	14
1	Kasegaluk Lagoon Area	-	-	-	-	-	-	-	-	-	1	-	-
6	Hanna Shoal	1	-	2	14	1	4	-	-	2	1	22	3
10	Ledyard Bay SPEI Critical Habitat Area	-	-	-	-	2	1	-	3	-	9	-	1
11	Wrangel Island 12 nm & Offshore	1	-	-	-	-	-	-	-	-	-	-	-
15	Cape Lisburne Seabird Colony Area	-	-	-	-	1	-	-	3	-	1	-	-
16	Barrow Canyon	-	-	1	1	1	4	-	-	1	2	3	10
18	Murre Rearing and Molting Area	-	-	-	-	1	-	-	2	-	-	-	-
19	Chukchi Spring Lead System	-	-	-	-	6	7	-	6	1	19	1	14
20	East Chukchi Offshore	-	-	-	-	-	-	-	-	-	-	1	-
23	Polar Bear Offshore	-	7	5	1	67	35	5	67	11	76	4	19
30	Beaufort Spring Lead 1	-	-	-	-	-	-	-	-	-	-	-	2
31	Beaufort Spring Lead 2	-	-	-	-	-	-	-	-	-	-	-	1
38	SUA: Pt. Hope - Cape Lisburne	-	-	-	-	2	-	-	5	-	3	-	-
39	SUA: Pt. Lay - Kasegaluk	-	-	-	-	2	3	-	1	1	26	-	3
40	SUA: Icy Cape - Wainwright	-	1	2	2	5	16	1	3	5	17	6	62
41	SUA: Barrow - Chukchi	-	-	-	-	-	1	-	-	-	1	1	3
46	Wrangel Island 12 nmi Buffer 2	2	-	-	-	-	-	-	-	-	-	-	-
47	Hanna Shoal Walrus Use Area	1	1	2	9	1	5	1	-	2	1	16	9
48	Chukchi Lead System 4	-	2	3	3	19	27	1	18	6	58	8	49
49	Chukchi Spring Lead 1	-	-	-	-	4	1	-	6	-	3	-	-
50	Pt Lay Walrus Offshore	-	-	-	-	4	2	-	3	-	7	-	1
51	Pt Lay Walrus Nearshore	-	-	-	-	-	-	-	-	-	5	-	-
52	Russian Coast Walrus Offshore	-	2	1	-	3	1	1	5	1	2	-	1
53	Chukchi Spring Lead 2	-	-	-	-	14	9	-	15	1	24	-	6
54	Chukchi Spring Lead 3	-	-	1	1	2	7	-	1	2	5	3	21
57	Skull Cliffs	-	-	-	-	1	2	-	-	-	2	1	10
58	Russian Coast Walrus Nearshore	-	-	-	-	1	-	-	1	-	1	-	-
62	Herald Shoal Polynya 2	3	13	7	2	2	3	12	2	6	1	2	1
63	North Chukchi	1	-	-	-	-	-	-	-	-	-	-	-
64	Peard Bay Area	-	-	-	-	-	1	-	-	-	1	-	2
70	North Central Chukchi	2	-	-	-	-	-	-	-	-	-	-	-
74	Offshore Herald Island	3	1	1	1	-	-	1	-	1	-	1	-
91	Hope Sea Valley	1	2	1	1	1	-	2	1	1	-	-	-
102	Opilio Crab EFH	-	-	-	-	6	1	-	9	-	4	-	1

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
103	Saffron Cod EFH	-	2	3	3	18	19	2	25	6	41	8	51
122	North Chukotka Offshore	-	-	-	-	-	-	1	-	-	-	-	-
123	AK Chukchi Offshore	4	5	8	6	1	2	2	1	5	-	4	1
124	Central Chukchi Offshore	2	6	3	2	1	1	6	1	3	1	1	1

Table B-54: 30 Days-Winter ERA: Winter Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Environmental Resource Area within 30 Days.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
0	Land	18	29	23	17	34	29	27	38	24	41	19	35
1	Kasegaluk Lagoon Area	-	-	-	-	-	-	-	-	-	1	-	-
4	SUA:Naukan/Russia	-	1	-	-	3	1	-	4	-	2	-	1
6	Hanna Shoal	2	2	5	17	2	7	2	1	5	2	25	8
7	Krill Trap	-	-	-	-	-	-	-	-	-	-	-	1
10	Ledyard Bay SPEI Critical Habitat Area	-	-	-	-	3	2	-	4	-	9	-	1
11	Wrangel Island 12 nm & Offshore	2	1	1	1	-	-	1	-	1	-	-	-
15	Cape Lisburne Seabird Colony Area	-	-	-	-	1	1	-	3	-	2	-	1
16	Barrow Canyon	1	1	2	4	4	7	1	2	3	4	6	14
18	Murre Rearing and Molting Area	-	2	1	-	6	2	1	7	1	4	-	2
19	Chukchi Spring Lead System	-	1	1	1	8	10	1	8	3	22	3	18
20	East Chukchi Offshore	-	-	-	1	-	-	-	-	-	-	1	1
23	Polar Bear Offshore	3	12	11	7	70	43	10	70	18	78	12	28
30	Beaufort Spring Lead 1	-	-	-	1	1	2	-	1	1	2	1	3
31	Beaufort Spring Lead 2	-	-	-	-	1	1	-	-	-	1	-	2
38	SUA: Pt. Hope - Cape Lisburne	-	1	1	-	4	2	1	6	1	6	-	1
39	SUA: Pt. Lay - Kasegaluk	-	1	1	1	4	5	1	3	2	27	1	5
40	SUA: Icy Cape - Wainwright	2	4	6	5	10	21	3	7	9	23	10	65
41	SUA: Barrow - Chukchi	-	-	-	1	1	2	-	1	1	1	1	5
46	Wrangel Island 12 nmi Buffer 2	9	4	4	4	1	2	5	1	3	-	3	1
47	Hanna Shoal Walrus Use Area	2	3	4	11	3	8	3	2	5	3	18	11
48	Chukchi Lead System 4	3	6	8	9	24	34	5	22	12	62	17	55
49	Chukchi Spring Lead 1	-	-	-	-	6	3	-	8	-	6	-	2
50	Pt Lay Walrus Offshore	-	-	-	-	5	2	-	5	-	8	-	2
51	Pt Lay Walrus Nearshore	-	-	-	-	1	-	-	1	-	6	-	-
52	Russian Coast Walrus Offshore	1	5	2	1	9	3	4	11	2	6	1	2
53	Chukchi Spring Lead 2	-	1	1	-	16	11	1	17	2	26	2	8
54	Chukchi Spring Lead 3	-	1	2	2	5	10	1	4	4	9	5	24
55	Point Barrow, Plover Islands	-	-	-	-	-	-	-	-	-	-	-	1

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
57	Skull Cliffs	1	-	1	1	2	4	-	1	2	4	3	13
58	Russian Coast Walrus Nearshore	-	1	-	-	3	1	1	4	-	2	-	1
59	Ostrov Kolyuchin	-	-	-	-	-	-	-	1	-	-	-	-
62	Herald Shoal Polynya 2	8	19	13	8	8	8	19	6	12	6	7	6
63	North Chukchi	1	-	-	1	-	-	-	-	-	-	-	-
64	Peard Bay Area	-	-	-	-	1	1	-	1	-	2	-	3
66	Herald Island	1	-	-	-	-	-	-	-	-	-	-	-
70	North Central Chukchi	2	-	-	1	-	-	-	-	-	-	-	-
74	Offshore Herald Island	5	2	2	3	1	1	2	-	2	1	2	1
80	Beaufort Outer Shelf 1	-	-	-	-	-	-	-	-	-	-	-	1
91	Hope Sea Valley	3	3	3	2	2	2	3	2	3	1	2	1
102	Opilio Crab EFH	1	3	2	1	11	5	3	15	3	10	1	4
103	Saffron Cod EFH	3	8	10	9	30	31	8	35	14	52	16	59
121	C Lisburne - Pt Hope	-	-	-	-	-	-	-	1	-	-	-	-
122	North Chukotka Offshore	2	2	2	1	1	-	2	-	1	-	1	-
123	AK Chukchi Offshore	5	5	9	7	1	2	3	1	6	1	6	2
124	Central Chukchi Offshore	4	7	5	4	2	3	7	2	5	2	3	2

Table B-55: 60 Days-Winter ERA: Winter Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Environmental Resource Area within 60 Days.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
0	Land	33	52	44	35	55	49	49	58	46	60	38	51
1	Kasegaluk Lagoon Area	-	-	-	-	-	-	-	-	-	2	-	-
4	SUA:Naukan/Russia	-	2	1	1	4	2	2	6	1	4	1	2
6	Hanna Shoal	3	3	6	19	4	9	3	3	6	4	27	9
7	Krill Trap	-	-	-	-	1	1	-	-	-	1	-	1
10	Ledyard Bay SPEI Critical Habitat Area	-	-	-	-	3	2	-	4	-	10	-	2
11	Wrangel Island 12 nm & Offshore	2	1	1	1	-	-	1	-	1	-	-	-
15	Cape Lisburne Seabird Colony Area	-	-	-	-	2	1	-	3	-	2	-	1
16	Barrow Canyon	1	2	3	4	5	9	2	4	5	6	7	15
18	Murre Rearing and Molting Area	1	3	2	1	7	4	2	9	2	6	1	3
19	Chukchi Spring Lead System	-	1	2	2	10	12	1	10	4	23	4	19
20	East Chukchi Offshore	-	-	-	1	-	-	-	-	-	-	1	1
23	Polar Bear Offshore	5	14	13	8	71	44	12	71	20	79	14	30
30	Beaufort Spring Lead 1	-	-	1	1	2	2	-	1	1	2	1	4
31	Beaufort Spring Lead 2	-	-	-	-	1	1	-	1	-	1	1	2
32	Beaufort Spring Lead 3	-	-	-	-	-	-	-	-	-	-	-	1

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
38	SUA: Pt. Hope - Cape Lisburne	-	1	1	1	4	2	1	7	2	7	-	1
39	SUA: Pt. Lay - Kasegaluk	1	1	1	1	4	5	1	3	2	28	2	5
40	SUA: Icy Cape - Wainwright	3	5	7	7	13	23	5	9	11	25	12	66
41	SUA: Barrow - Chukchi	-	-	-	1	2	2	-	1	1	2	2	5
46	Wrangel Island 12 nmi Buffer 2	13	8	8	8	3	4	9	3	7	3	6	3
47	Hanna Shoal Walrus Use Area	3	6	7	13	7	11	6	6	8	7	19	14
48	Chukchi Lead System 4	4	7	10	11	25	35	7	24	14	62	18	56
49	Chukchi Spring Lead 1	-	1	1	1	7	4	1	9	1	7	1	3
50	Pt Lay Walrus Offshore	-	-	-	-	5	3	-	5	1	9	-	3
51	Pt Lay Walrus Nearshore	-	-	-	-	1	-	-	1	-	6	-	-
52	Russian Coast Walrus Offshore	1	6	3	1	10	5	4	13	3	8	2	4
53	Chukchi Spring Lead 2	-	2	2	1	17	12	1	17	3	27	3	9
54	Chukchi Spring Lead 3	-	3	3	3	7	12	2	6	5	11	6	25
55	Point Barrow, Plover Islands	-	-	-	-	-	1	-	-	-	-	1	1
57	Skull Cliffs	1	1	2	2	2	4	1	2	2	4	3	13
58	Russian Coast Walrus Nearshore	-	1	1	-	3	1	1	5	1	2	1	1
59	Ostrov Kolyuchin	-	-	-	-	-	-	-	1	-	-	-	-
61	Pt Lay-Barrow BH GW SSF	-	1	1	-	1	1	1	1	1	1	-	1
62	Herald Shoal Polynya 2	9	20	16	11	9	11	21	8	15	8	10	9
63	North Chukchi	1	-	-	1	-	-	-	-	-	-	-	-
64	Peard Bay Area	-	-	-	-	2	2	-	1	1	2	-	3
66	Herald Island	1	-	-	-	-	-	-	-	-	-	-	-
70	North Central Chukchi	2	-	-	1	-	-	-	-	-	-	-	-
74	Offshore Herald Island	5	2	2	3	1	1	2	-	2	1	2	1
80	Beaufort Outer Shelf 1	-	-	-	-	-	-	-	-	-	-	-	1
91	Hope Sea Valley	3	4	3	2	2	2	3	2	3	1	2	2
102	Opilio Crab EFH	2	4	3	1	13	6	4	16	4	12	2	5
103	Saffron Cod EFH	5	11	13	12	33	34	11	38	18	55	19	60
107	Pt Hope Offshore	-	-	-	-	-	-	-	1	-	-	-	-
119	AK BFT Outer Shelf&Slope 10	-	-	-	-	1	-	-	1	-	1	-	-
121	C Lisburne - Pt Hope	-	-	-	-	1	-	-	1	-	1	-	-
122	North Chukotka Offshore	2	2	2	2	1	1	2	1	1	-	1	-
123	AK Chukchi Offshore	5	5	9	7	1	3	3	1	6	1	6	2
124	Central Chukchi Offshore	4	7	5	4	2	3	7	2	5	2	3	3

Table B-56: 180 Days-Winter ERA: Winter Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Environmental Resource Area within 180 Days.

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
0	Land	41	61	54	45	64	58	59	66	56	67	48	60
1	Kasegaluk Lagoon Area	-	-	-	-	-	-	-	-	-	2	-	-
4	SUA:Naukan/Russia	1	2	1	1	4	2	2	6	1	4	1	2
6	Hanna Shoal	4	6	8	20	6	11	5	5	8	6	29	11
7	Krill Trap	-	1	1	-	1	1	1	1	1	1	-	1
10	Ledyard Bay SPEI Critical Habitat Area	-	-	-	-	3	2	-	4	-	10	-	2
11	Wrangel Island 12 nm & Offshore	3	3	3	2	3	2	3	3	3	2	1	2
15	Cape Lisburne Seabird Colony Area	-	-	-	-	2	1	-	3	-	2	-	1
16	Barrow Canyon	2	3	4	5	6	9	3	5	6	7	7	16
18	Murre Rearing and Molting Area	1	4	3	1	8	5	3	10	3	7	2	4
19	Chukchi Spring Lead System	-	2	2	2	11	12	1	11	4	23	5	19
20	East Chukchi Offshore	-	-	-	1	-	1	-	-	-	-	1	1
23	Polar Bear Offshore	6	14	13	9	71	44	13	71	20	79	14	31
30	Beaufort Spring Lead 1	-	-	1	1	2	3	-	2	1	3	2	4
31	Beaufort Spring Lead 2	-	-	-	-	1	1	-	1	-	2	1	3
32	Beaufort Spring Lead 3	-	-	-	-	-	-	-	-	-	-	-	1
38	SUA: Pt. Hope - Cape Lisburne	-	1	1	1	4	2	1	7	2	7	1	2
39	SUA: Pt. Lay - Kasegaluk	1	1	1	1	4	5	1	3	2	28	2	5
40	SUA: Icy Cape - Wainwright	3	6	8	8	14	24	6	10	11	26	13	66
41	SUA: Barrow - Chukchi	-	-	-	1	2	3	-	1	1	2	2	5
42	SUA: Barrow - East Arch	1	1	1	-	1	1	1	1	1	1	1	1
43	SUA: Nuiqsut - Cross Island	-	1	-	-	1	-	1	1	1	1	-	-
46	Wrangel Island 12 nmi Buffer 2	15	9	10	10	4	6	11	4	8	3	8	5
47	Hanna Shoal Walrus Use Area	4	10	10	15	10	14	9	9	11	10	22	17
48	Chukchi Lead System 4	5	7	11	12	26	36	7	24	15	62	19	56
49	Chukchi Spring Lead 1	-	1	1	1	7	4	1	9	1	7	1	3
50	Pt Lay Walrus Offshore	-	-	-	-	5	3	-	5	1	9	1	3
51	Pt Lay Walrus Nearshore	-	-	-	-	1	-	-	1	-	6	-	1
52	Russian Coast Walrus Offshore	2	7	4	2	11	6	5	14	4	8	2	5
53	Chukchi Spring Lead 2	-	2	2	1	17	12	2	18	3	27	3	9
54	Chukchi Spring Lead 3	-	3	4	3	8	13	3	7	6	12	7	26
55	Point Barrow, Plover Islands	-	-	-	1	-	1	-	-	-	-	1	1
56	Hanna Shoal Area	1	2	1	1	2	2	1	2	2	2	2	1
57	Skull Cliffs	1	1	2	2	2	5	1	2	3	4	4	14
58	Russian Coast Walrus Nearshore	1	2	1	1	4	2	1	5	1	3	1	1
59	Ostrov Kolyuchin	-	-	-	-	-	-	-	1	-	-	-	-
61	Pt Lay-Barrow BH GW SSF	1	3	2	1	3	2	2	3	2	3	1	2
62	Herald Shoal Polynya 2	10	21	16	12	10	11	21	8	16	8	11	9

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
63	North Chukchi	1	-	-	1	-	-	-	-	-	-	-	-
64	Peard Bay Area	-	1	1	-	3	2	1	2	1	3	1	3
66	Herald Island	1	1	1	1	1	1	1	1	1	1	1	-
70	North Central Chukchi	2	-	-	1	-	-	-	-	-	-	-	-
74	Offshore Herald Island	5	2	2	3	1	1	2	-	2	1	2	1
80	Beaufort Outer Shelf 1	-	1	-	-	1	1	-	1	1	1	1	1
82	N Chukotka Nrshr 2	-	-	-	-	-	-	-	1	-	-	-	-
91	Hope Sea Valley	3	4	3	2	2	2	3	2	3	1	2	2
101	Beaufort Outer Shelf 2	-	1	-	-	1	1	-	1	1	1	-	1
102	Opilio Crab EFH	2	4	3	2	13	6	4	16	4	12	2	5
103	Saffron Cod EFH	6	13	14	13	35	35	12	39	19	55	20	61
107	Pt Hope Offshore	-	-	-	-	-	-	-	1	-	-	-	-
109	AK BFT Shelf Edge	-	-	-	-	-	-	-	-	-	1	-	-
110	AK BFT Outer Shelf and Slope 1	-	-	-	-	1	-	-	1	-	1	-	-
111	AK BFT Outer Shelf and Slope 2	-	-	-	-	1	-	-	1	-	1	-	-
112	AK BFT Outer Shelf and Slope 3	-	-	-	-	1	-	-	1	-	1	-	-
113	AK BFT Outer Shelf and Slope 4	-	-	-	-	1	-	-	1	-	1	-	-
114	AK BFT Outer Shelf and Slope 5	-	1	-	-	1	1	-	1	1	1	-	-
115	AK BFT Outer Shelf and Slope 6	-	1	-	-	1	1	1	1	1	1	-	-
116	AK BFT Outer Shelf and Slope 7	-	1	1	-	1	1	1	1	1	1	1	1
117	AK BFT Outer Shelf and Slope 8	-	1	1	-	1	1	1	1	1	1	1	1
118	AK BFT Outer Shelf and Slope 9	-	1	1	-	1	1	1	1	1	1	1	1
119	AK BFT Outer Shelf and Slope 10	1	2	2	1	3	2	2	3	2	2	1	1
121	C Lisburne - Pt Hope	-	-	-	-	1	-	-	1	-	1	-	-
122	North Chukotka Offshore	2	2	2	2	1	1	2	1	1	-	1	-
123	AK Chukchi Offshore	5	5	9	7	1	3	3	1	6	1	6	2
124	Central Chukchi Offshore	4	7	5	4	2	3	7	2	5	2	3	3

Table B-57: 360 Days-Winter ERA: Winter Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Environmental Resource Area within 360 Days.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
0	Land	42	61	54	45	64	59	59	66	56	68	48	60
1	Kasegaluk Lagoon Area	-	-	-	-	-	-	-	-	-	2	-	-
4	SUA:Naukan/Russia	1	2	1	1	4	2	2	6	1	4	1	2
6	Hanna Shoal	4	6	8	20	6	11	5	5	8	6	29	11
7	Krill Trap	-	1	1	-	1	1	1	1	1	1	-	1
10	Ledyard Bay SPEI Critical Habitat Area	-	-	-	-	3	2	-	4	-	10	-	2

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
11	Wrangel Island 12 nm & Offshore	3	3	3	2	3	2	3	3	3	2	2	2
15	Cape Lisburne Seabird Colony Area	-	-	-	-	2	1	-	3	-	2	-	1
16	Barrow Canyon	2	3	4	5	6	9	3	5	6	7	7	16
18	Murre Rearing and Molting Area	1	4	3	1	8	5	3	10	3	7	2	4
19	Chukchi Spring Lead System	-	2	2	2	11	12	1	11	4	23	5	19
20	East Chukchi Offshore	-	-	-	1	-	1	-	-	-	-	1	1
23	Polar Bear Offshore	6	14	13	9	71	44	13	71	20	79	14	31
30	Beaufort Spring Lead 1	-	-	1	1	2	3	-	2	1	3	2	4
31	Beaufort Spring Lead 2	-	-	-	-	1	1	-	1	-	2	1	3
32	Beaufort Spring Lead 3	-	-	-	-	-	-	-	-	-	-	-	1
38	SUA: Pt. Hope - Cape Lisburne	-	1	1	1	4	2	1	7	2	7	1	2
39	SUA: Pt. Lay - Kasegaluk	1	1	1	1	4	5	1	3	2	28	2	5
40	SUA: Icy Cape - Wainwright	3	6	8	8	14	24	6	10	11	26	13	66
41	SUA: Barrow - Chukchi	-	-	-	1	2	3	-	1	1	2	2	5
42	SUA: Barrow - East Arch	1	1	1	-	1	1	1	1	1	1	1	1
43	SUA: Nuiqsut - Cross Island	-	1	-	-	1	-	1	1	1	1	-	-
46	Wrangel Island 12 nmi Buffer 2	15	9	10	10	4	6	11	4	8	3	8	5
47	Hanna Shoal Walrus Use Area	4	10	10	15	10	15	9	9	11	10	22	17
48	Chukchi Lead System 4	5	7	11	12	26	36	7	24	15	62	19	56
49	Chukchi Spring Lead 1	-	1	1	1	7	4	1	9	1	7	1	3
50	Pt Lay Walrus Offshore	-	-	-	-	5	3	-	5	1	9	1	3
51	Pt Lay Walrus Nearshore	-	-	-	-	1	-	-	1	-	6	-	1
52	Russian Coast Walrus Offshore	2	7	4	2	11	6	5	14	4	8	2	5
53	Chukchi Spring Lead 2	-	2	2	1	17	12	2	18	3	27	3	9
54	Chukchi Spring Lead 3	-	3	4	3	8	13	3	7	6	12	7	26
55	Point Barrow, Plover Islands	-	-	-	1	-	1	-	-	-	-	1	1
56	Hanna Shoal Area	1	2	1	1	2	2	1	2	2	2	2	1
57	Skull Cliffs	1	1	2	2	2	5	1	2	3	4	4	14
58	Russian Coast Walrus Nearshore	1	2	1	1	4	2	1	5	1	3	1	1
59	Ostrov Kolyuchin	-	-	-	-	-	-	-	1	-	-	-	-
61	Pt Lay-Barrow BH GW SSF	1	3	2	1	3	2	2	4	2	3	1	2
62	Herald Shoal Polynya 2	10	21	16	12	10	11	21	8	16	8	11	9
63	North Chukchi	1	-	-	1	-	-	-	-	-	-	-	-
64	Peard Bay Area	-	1	1	-	3	2	1	2	1	3	1	3
66	Herald Island	1	1	1	1	1	1	1	1	1	1	1	-
70	North Central Chukchi	2	-	-	1	-	1	-	-	-	1	-	-
74	Offshore Herald Island	5	2	2	3	1	1	2	1	2	1	2	1
80	Beaufort Outer Shelf 1	-	1	-	-	1	1	-	1	1	1	1	1

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Environmental Resource Area Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
82	N Chukotka Nrshr 2	-	-	-	-	-	-	-	1	-	-	-	-
91	Hope Sea Valley	3	4	3	2	2	2	4	2	3	1	2	2
101	Beaufort Outer Shelf 2	-	1	-	-	1	1	-	1	1	1	-	1
102	Opilio Crab EFH	2	4	3	2	13	6	4	16	4	12	2	5
103	Saffron Cod EFH	6	13	14	13	35	35	12	39	19	55	20	61
107	Pt Hope Offshore	-	-	-	-	-	-	-	1	-	-	-	-
109	AK BFT Shelf Edge	-	-	-	-	-	-	-	-	-	1	-	-
110	AK BFT Outer Shelf and Slope 1	-	-	-	-	1	-	-	1	-	1	-	-
111	AK BFT Outer Shelf and Slope 2	-	-	-	-	1	-	-	1	-	1	-	-
112	AK BFT Outer Shelf and Slope 3	-	-	-	-	1	-	-	1	-	1	-	-
113	AK BFT Outer Shelf and Slope 4	-	-	-	-	1	-	-	1	-	1	-	-
114	AK BFT Outer Shelf and Slope 5	-	1	-	-	1	1	-	1	1	1	-	-
115	AK BFT Outer Shelf and Slope 6	-	1	1	-	1	1	1	1	1	1	-	-
116	AK BFT Outer Shelf and Slope 7	-	1	1	-	1	1	1	1	1	1	1	1
117	AK BFT Outer Shelf and Slope 8	-	1	1	1	1	1	1	1	1	1	1	1
118	AK BFT Outer Shelf and Slope 9	-	1	1	1	1	1	1	1	1	1	1	1
119	AK BFT Outer Shelf and Slope 10	1	2	2	1	3	2	2	3	2	2	1	1
121	C Lisburne - Pt Hope	-	-	-	-	1	-	-	1	-	1	-	-
122	North Chukotka Offshore	2	2	2	2	1	1	2	1	1	-	1	-
123	AK Chukchi Offshore	5	5	9	7	1	3	3	1	6	1	6	2
124	Central Chukchi Offshore	4	7	5	4	2	3	7	2	5	2	3	3

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

B.2.10 Winter Conditional Probabilities for Land Segments

Tables B-58 through B-63 represent winter conditional probabilities (expressed as percent chance) that a large oil spill starting at a particular location will contact a certain land segment within 3, 10, 30, 60, 180, and 360 days.

Table B-58: 3 Days-Winter LS: Winter Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Land Segment within 3 Days.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
65	Buckland, Cape Lisburne	-	-	-	-	-	-	-	1	-	-	-	-
72	Point Lay, Siksrikpak Point	-	-	-	-	-	-	-	-	-	2	-	-
73	Tungaich Point, Tungak Creek	-	-	-	-	-	-	-	-	-	1	-	-
74	Kasegaluk Lagoon, Solivik Isl.	-	-	-	-	-	-	-	-	-	1	-	-
79	Point Belcher, Wainwright	-	-	-	-	-	-	-	-	-	-	-	1
80	Eluksingiak Point, Kugrua Bay	-	-	-	-	-	-	-	-	-	-	-	1

Table B-59: 10 Days-Winter LS: Winter Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Land Segment within 10 Days.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
64	Kukpuk River, Point Hope	-	-	-	-	-	-	-	1	-	-	-	-
65	Buckland, Cape Lisburne	-	-	-	-	1	-	-	2	-	2	-	-
66	Ayugatak Lagoon	-	-	-	-	-	-	-	1	-	1	-	-
67	Cape Sabine, Pitmegea River	-	-	-	-	-	-	-	-	-	1	-	-
72	Point Lay, Siksrikpak Point	-	-	-	-	-	-	-	-	-	2	-	-
73	Tungaich Point, Tungak Creek	-	-	-	-	-	-	-	-	-	2	-	-
74	Kasegaluk Lagoon, Solivik Isl.	-	-	-	-	-	-	-	-	-	2	-	-
75	Akeonik, Icy Cape	-	-	-	-	-	-	-	-	-	1	-	-
76	Avak Inlet, Tunalik River	-	-	-	-	-	-	-	-	-	-	-	1
78	Point Collie, Sigeakruk Point	-	-	-	-	-	-	-	-	-	-	-	1
79	Point Belcher, Wainwright	-	-	-	-	-	1	-	-	-	1	-	3
80	Eluksingiak Point, Kugrua Bay	-	-	-	-	-	1	-	-	-	-	-	3
81	Peard Bay, Point Franklin	-	-	-	-	-	-	-	-	-	-	-	1
82	Skull Cliff	-	-	-	-	-	-	-	-	-	-	-	1
83	Nulavik, Loran Radio Station	-	-	-	-	-	-	-	-	-	-	-	1
84	Will Rogers & Wiley Post Mem.	-	-	-	-	-	1	-	-	-	-	1	2
85	Barrow, Browerville, Elson Lag.	-	-	-	-	-	1	-	-	-	-	1	2

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

Table B-60: 30 Days-Winter LS: Winter Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Land Segment within 30 Days.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
5	Mys Evans	1	-	-	-	-	-	-	-	-	-	-	-
6	Ostrov Mushtakova	1	-	-	-	-	-	1	-	-	-	-	-
7	Kosa Bruch	2	1	1	1	-	-	1	-	1	-	1	-
8	E. Wrangel Island, Skeletov	2	1	1	1	-	-	1	-	1	-	-	-
20	Polyarnyy, Pil'gyn	-	1	1	-	-	-	1	-	-	-	-	-
21	Laguna Pil'khikay, Pil'khikay	-	1	1	-	-	-	1	-	1	-	-	-
22	Rypkarpyy, Mys Shmidta	1	1	1	1	-	-	1	-	1	-	1	-
23	Emuem, Tenkergin	1	1	1	1	-	-	1	-	1	-	-	-
24	LS 24	1	1	1	-	-	-	1	-	1	-	-	-
25	Laguna Amguema, Yulinu	1	1	1	1	1	1	1	1	1	-	1	-
26	Ekugvaam, Kepin, Pil'khin	1	1	1	1	1	1	1	1	1	1	1	-
27	Laguna Nut, Rigol'	1	2	1	1	1	1	1	1	1	1	1	1
28	Vankarem,Vankarem Laguna	1	2	1	1	1	1	2	1	1	1	1	1
29	Mys Onman, Vel'may	1	2	1	1	1	1	1	2	1	1	1	1
30	Nutepynmin, Pyngopil'gyn	1	2	1	1	2	2	2	3	2	1	1	1
31	Alyatki, Zaliv Tasytkhin	1	2	1	1	3	2	2	3	1	2	1	1
32	Mys Dzhenretlen, Eynenekvyk	-	1	1	1	2	1	1	2	1	1	1	1
33	Neskan, Laguna Neskan	-	1	1	-	2	1	1	2	1	1	-	1
34	Tepken, Memino	-	1	1	-	2	1	1	2	1	1	-	1
35	Enurmino, Mys Neten	-	1	1	-	2	1	1	2	1	1	-	1
36	Mys Serdtse-Kamen	-	1	-	-	2	1	1	2	1	2	-	1
37	Chegitun, Utkan	-	-	-	-	1	1	-	2	-	1	-	-
38	Enmytagyn, Inchoun, Mitkulen	-	-	-	-	1	-	-	1	-	1	-	-
39	Cape Dezhnev, Naukan, Uelen	-	-	-	-	1	-	-	1	-	1	-	-
64	Kukpuk River, Point Hope	-	-	-	-	1	-	-	1	-	1	-	-
65	Buckland, Cape Lisburne	-	-	-	-	1	1	-	3	-	3	-	-
66	Ayugatak Lagoon	-	-	-	-	1	-	-	1	-	2	-	-
67	Cape Sabine, Pitmegea River	-	-	-	-	-	-	-	-	-	1	-	-
72	Point Lay, Siksrikpak Point	-	-	-	-	-	-	-	-	-	3	-	-
73	Tungaich Point, Tungak Creek	-	-	-	-	-	-	-	-	-	2	-	-
74	Kasegaluk Lagoon, Solivik Isl.	-	-	-	-	-	1	-	-	-	2	-	-
75	Akeonik, Icy Cape	-	-	-	-	-	1	-	-	-	2	-	1
76	Avak Inlet, Tunalik River	-	-	-	-	-	1	-	-	-	1	-	1
78	Point Collie, Sigeakruk Point	-	-	-	-	-	1	-	-	-	1	-	1

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
79	Point Belcher, Wainwright	-	-	-	-	1	2	-	-	1	2	1	4
80	Eluksingiak Point, Kugrua Bay	-	-	-	-	-	1	-	-	-	1	-	3
81	Peard Bay, Point Franklin	-	-	-	-	-	-	-	-	-	-	-	1
82	Skull Cliff	-	-	-	-	-	-	-	-	-	-	-	1
83	Nulavik, Loran Radio Station	-	-	-	-	-	-	-	-	-	-	-	1
84	Will Rogers & Wiley Post Mem.	-	-	-	1	-	1	-	-	-	1	1	3
85	Barrow, Browerville, Elson Lag.	-	-	-	1	1	2	-	-	1	1	2	4

Table B-61: 60 Days-Winter LS: Winter Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Land Segment within 60 Days.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
5	Mys Evans	1	-	-	-	-	-	-	-	-	-	-	-
6	Ostrov Mushtakova	2	1	1	1	-	-	1	-	1	-	1	-
7	Kosa Bruch	2	1	1	1	-	1	1	-	1	-	1	1
8	E. Wrangel Island, Skeletov	2	2	2	1	1	1	2	-	1	1	1	1
9	Mys Proletarskiy	1	1	1	1	-	-	1	-	1	-	-	1
10	Bukhta Davidova	1	1	-	-	-	-	1	-	-	-	-	-
17	Mys Yakan	-	-	1	-	-	-	-	-	-	-	-	-
18	Pil'khikay, Laguna Rypil'khin	-	-	1	-	-	-	1	-	1	-	-	-
19	Laguna Kuepil'khin, Leningradskiy	1	1	1	1	-	-	1	-	1	-	1	-
20	Polyarnyy, Pil'gyn	1	1	1	1	-	-	1	-	1	-	1	-
21	Laguna Pil'khikay, Pil'khikay	1	1	1	1	1	1	1	1	1	-	1	-
22	Rypkarpyy, Mys Shmidta	2	2	2	1	1	1	2	1	1	1	1	1
23	Emuem, Tenkergin	1	2	1	1	1	1	2	1	1	1	1	-
24	LS 24	1	2	2	1	1	1	2	1	2	1	1	1
25	Laguna Amguema, Yulinu	1	2	2	1	1	1	2	1	2	1	1	1
26	Ekugvaam, Kepin, Pil'khin	1	2	2	1	2	1	2	2	2	1	1	1
27	Laguna Nut, Rigol'	1	3	2	2	2	2	2	2	2	2	1	1
28	Vankarem,Vankarem Laguna	1	3	2	2	2	2	3	2	2	2	2	2
29	Mys Onman, Vel'may	1	3	2	1	2	2	2	3	2	2	2	1
30	Nutepynmin, Pyngopil'gyn	1	3	2	2	4	3	3	4	3	3	2	2
31	Alyatki, Zaliv Tasytkhin	1	3	2	2	4	3	3	5	2	4	3	2
32	Mys Dzhenretlen, Eynenekvyk	1	2	2	1	3	2	2	3	2	2	1	2
33	Neskan, Laguna Neskan	1	2	2	1	3	2	2	3	2	2	1	2
34	Tepken, Memino	1	2	1	1	3	2	2	3	2	2	1	2
35	Enurmino, Mys Neten	1	2	1	1	3	2	2	3	1	2	1	1
36	Mys Serdtse-Kamen	-	2	1	-	3	2	1	4	1	3	1	1

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
37	Chegitun, Utkan	-	1	1	-	2	1	1	3	1	2	-	1
38	Enmytagyn, Inchoun, Mitkulen	-	1	-	-	2	1	1	2	-	1	-	1
39	Cape Dezhnev, Naukan, Uelen	-	1	-	-	2	1	1	2	-	2	-	1
64	Kukpuk River, Point Hope	-	-	-	-	1	-	-	1	-	1	-	-
65	Buckland, Cape Lisburne	-	-	-	-	1	1	-	3	1	3	-	-
66	Ayugatak Lagoon	-	-	-	-	1	-	-	1	-	2	-	-
67	Cape Sabine, Pitmegea River	-	-	-	-	-	-	-	-	-	1	-	-
72	Point Lay, Siksrikpak Point	-	-	-	-	-	-	-	-	-	3	-	-
73	Tungaich Point, Tungak Creek	-	-	-	-	-	-	-	-	-	2	-	-
74	Kasegaluk Lagoon, Solivik Isl.	-	-	-	-	1	1	-	-	-	2	-	-
75	Akeonik, Icy Cape	-	-	-	-	1	1	-	-	-	2	-	1
76	Avak Inlet, Tunalik River	-	-	-	-	-	1	-	-	-	1	-	1
77	Nivat Point, Nokotlek Point	-	-	-	-	-	-	-	-	-	-	-	1
78	Point Collie, Sigeakruk Point	-	-	-	-	-	1	-	-	-	1	-	1
79	Point Belcher, Wainwright	-	-	1	-	1	2	-	1	1	2	1	4
80	Eluksingiak Point, Kugrua Bay	-	-	-	-	-	1	-	-	-	1	-	3
81	Peard Bay, Point Franklin	-	-	-	-	-	-	-	-	-	-	-	1
82	Skull Cliff	-	-	-	-	-	-	-	-	-	-	-	1
83	Nulavik, Loran Radio Station	-	-	-	-	-	-	-	-	-	-	1	2
84	Will Rogers & Wiley Post Mem.	-	-	-	1	1	1	-	-	1	1	1	3
85	Barrow, Browerville, Elson Lag.	-	-	1	1	1	2	-	1	1	1	2	4

Table B-62: 180 Days-Winter LS: Winter Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Land Segment within 180 Days.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
1	Mys Blossom, Laguna Vaygach	-	1	-	-	-	-	1	-	-	-	-	-
3	Mys Florens, Gusinaya	1	-	-	-	-	-	-	-	-	-	-	-
4	Mys Ushakova, Laguna Drem-Khed	1	-	-	-	-	-	-	-	-	-	-	-
5	Mys Evans	1	1	1	1	-	-	1	-	1	-	1	-
6	Ostrov Mushtakova	2	1	1	1	-	1	1	-	1	1	1	1
7	Kosa Bruch	2	1	2	2	1	1	2	1	1	1	1	1
8	E. Wrangel Island, Skeletov	2	2	2	2	1	1	2	1	2	1	2	1
9	Mys Proletarskiy	1	1	1	1	1	1	1	1	1	1	1	1
10	Bukhta Davidova	1	1	1	1	1	1	1	1	1	1	-	-
12	Bukhta Predatel'skaya	-	1	1	-	1	-	1	1	1	-	-	-
15	Billings, Laguna Adtaynung	1	-	-	-	-	-	1	-	-	-	-	-
16	Mys Enmytagyn	-	-	-	-	-	-	1	-	-	-	-	-

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
17	Mys Yakan	1	1	1	1	-	-	1	-	-	-	-	-
18	Pil'khikay, Laguna Rypil'khin	1	1	1	1	-	-	1	-	1	-	-	-
19	Laguna Kuepil'khin, Leningradskiy	1	1	1	1	-	-	1	-	1	-	1	-
20	Polyarnyy, Pil'gyn	1	1	1	1	1	1	1	-	1	-	1	1
21	Laguna Pil'khikay, Pil'khikay	1	1	1	1	1	1	1	1	1	-	1	1
22	Rypkarpyy, Mys Shmidta	2	2	2	2	1	1	2	1	2	1	1	1
23	Emuem, Tenkergin	2	2	2	2	1	1	2	1	2	1	1	1
24	LS 24	1	2	2	1	1	1	2	1	2	1	2	1
25	Laguna Amguema, Yulinu	1	2	2	2	1	2	2	1	2	1	2	1
26	Ekugvaam, Kepin, Pil'khin	1	3	2	2	2	2	3	2	2	1	1	2
27	Laguna Nut, Rigol'	1	3	2	2	2	2	2	2	3	2	2	2
28	Vankarem,Vankarem Laguna	1	3	2	2	2	2	3	2	3	2	2	2
29	Mys Onman, Vel'may	1	3	2	2	3	2	2	3	3	2	2	2
30	Nutepynmin, Pyngopil'gyn	2	3	3	2	4	3	3	4	3	3	3	2
31	Alyatki, Zaliv Tasytkhin	2	4	3	2	5	4	4	5	3	4	3	3
32	Mys Dzhenretlen, Eynenekvyk	1	3	2	1	3	2	3	3	2	3	2	2
33	Neskan, Laguna Neskan	1	3	2	1	3	2	2	3	2	2	1	2
34	Tepken, Memino	1	3	2	1	3	2	2	3	2	2	1	2
35	Enurmino, Mys Neten	1	2	1	1	3	2	2	3	2	3	1	2
36	Mys Serdtse-Kamen	1	2	1	1	3	2	2	4	1	3	1	2
37	Chegitun, Utkan	-	1	1	-	2	1	1	3	1	2	1	1
38	Enmytagyn, Inchoun, Mitkulen	-	1	-	-	2	1	1	2	1	1	-	1
39	Cape Dezhnev, Naukan, Uelen	-	1	-	-	2	1	1	2	-	2	-	1
64	Kukpuk River, Point Hope	-	-	-	-	1	-	-	1	-	1	-	-
65	Buckland, Cape Lisburne	-	-	-	-	1	1	-	3	1	3	-	-
66	Ayugatak Lagoon	-	-	-	-	1	-	-	1	-	2	-	-
67	Cape Sabine, Pitmegea River	-	-	-	-	-	-	-	-	-	1	-	-
72	Point Lay, Siksrikpak Point	-	-	-	-	-	-	-	-	-	3	-	-
73	Tungaich Point, Tungak Creek	-	-	-	-	-	-	-	-	-	2	-	-
74	Kasegaluk Lagoon, Solivik Isl.	-	-	-	-	1	1	-	-	-	2	-	-
75	Akeonik, Icy Cape	-	-	-	-	1	1	-	-	-	2	-	1
76	Avak Inlet, Tunalik River	-	-	-	-	-	1	-	-	-	1	-	1
77	Nivat Point, Nokotlek Point	-	-	-	-	-	-	-	-	-	-	-	1
78	Point Collie, Sigeakruk Point	-	-	-	-	-	1	-	-	-	1	-	1
79	Point Belcher, Wainwright	-	-	1	1	1	2	-	1	1	2	1	4
80	Eluksingiak Point, Kugrua Bay	-	-	-	-	-	1	-	-	-	1	1	3
81	Peard Bay, Point Franklin	-	-	-	-	-	-	-	-	-	-	-	1
82	Skull Cliff	-	-	-	-	-	-	-	-	-	-	-	1

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
83	Nulavik, Loran Radio Station	-	-	-	-	-	1	-	-	-	-	1	2
84	Will Rogers & Wiley Post Mem.	-	-	1	1	1	1	-	-	1	1	2	3
85	Barrow, Browerville, Elson Lag.	-	1	1	2	1	2	1	1	1	2	2	4
86	Dease Inlet, Plover Islands	-	-	-	-	-	-	-	-	-	-	1	1

Table B-63: 360 Days-Winter LS: Winter Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Land Segment within 360 Days.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
1	Mys Blossom, Laguna Vaygach	-	1	-	-	-	-	1	-	-	-	-	-
3	Mys Florens, Gusinaya	1	-	-	-	-	-	-	-	-	-	-	-
4	Mys Ushakova, Laguna Drem-Khed	1	-	-	-	-	-	-	-	-	-	-	-
5	Mys Evans	1	1	1	1	-	-	1	-	1	-	1	-
6	Ostrov Mushtakova	2	1	1	1	-	1	1	-	1	1	1	1
7	Kosa Bruch	2	1	2	2	1	1	2	1	1	1	1	1
8	E. Wrangel Island, Skeletov	2	2	2	2	1	1	2	1	2	1	2	1
9	Mys Proletarskiy	1	1	1	1	1	1	1	1	1	1	1	1
10	Bukhta Davidova	1	1	1	1	1	1	1	1	1	1	-	-
12	Bukhta Predatel'skaya	-	1	1	-	1	-	1	1	1	-	-	-
15	Billings, Laguna Adtaynung	1	-	-	-	-	-	1	-	-	-	-	-
16	Mys Enmytagyn	-	-	-	-	-	-	1	-	-	-	-	-
17	Mys Yakan	1	1	1	1	-	-	1	-	-	-	-	-
18	Pil'khikay, Laguna Rypil'khin	1	1	1	1	-	-	1	-	1	-	-	-
19	Laguna Kuepil'khin, Leningradskiy	1	1	1	1	-	-	1	-	1	-	1	-
20	Polyarnyy, Pil'gyn	1	1	1	1	1	1	1	-	1	-	1	1
21	Laguna Pil'khikay, Pil'khikay	1	1	1	1	1	1	1	1	1	-	1	1
22	Rypkarpyy, Mys Shmidta	2	2	2	2	1	1	2	1	2	1	1	1
23	Emuem, Tenkergin	2	2	2	2	1	1	2	1	2	1	1	1
24	LS 24	1	2	2	2	1	1	2	1	2	1	2	1
25	Laguna Amguema, Yulinu	1	2	2	2	1	2	2	1	2	1	2	1
26	Ekugvaam, Kepin, Pil'khin	1	3	2	2	2	2	3	2	2	1	1	2
27	Laguna Nut, Rigol'	1	3	2	2	2	2	2	2	3	2	2	2
28	Vankarem,Vankarem Laguna	1	3	2	2	2	2	3	2	3	2	2	2
29	Mys Onman, Vel'may	1	3	2	2	3	2	2	3	3	2	2	2
30	Nutepynmin, Pyngopil'gyn	2	3	3	2	4	3	3	4	3	3	3	2
31	Alyatki, Zaliv Tasytkhin	2	4	3	2	5	4	4	5	3	4	3	3
32	Mys Dzhenretlen, Eynenekvyk	1	3	2	1	3	2	3	3	2	3	2	2
33	Neskan, Laguna Neskan	1	3	2	1	3	2	2	3	2	2	1	2

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Land Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
34	Tepken, Memino	1	3	2	1	3	2	2	3	2	2	1	2
35	Enurmino, Mys Neten	1	2	1	1	3	2	2	3	2	3	1	2
36	Mys Serdtse-Kamen	1	2	1	1	3	2	2	4	1	3	1	2
37	Chegitun, Utkan	-	1	1	-	2	1	1	3	1	2	1	1
38	Enmytagyn, Inchoun, Mitkulen	-	1	-	-	2	1	1	2	1	1	-	1
39	Cape Dezhnev, Naukan, Uelen	-	1	-	-	2	1	1	2	-	2	-	1
64	Kukpuk River, Point Hope	-	-	-	-	1	-	-	1	-	1	-	-
65	Buckland, Cape Lisburne	-	-	-	-	1	1	-	3	1	3	-	-
66	Ayugatak Lagoon	-	-	-	-	1	-	-	1	-	2	-	-
67	Cape Sabine, Pitmegea River	-	-	-	-	-	-	-	-	-	1	-	-
72	Point Lay, Siksrikpak Point	-	-	-	-	-	-	-	-	-	3	-	-
73	Tungaich Point, Tungak Creek	-	-	-	-	-	-	-	-	-	2	-	-
74	Kasegaluk Lagoon, Solivik Isl.	-	-	-	-	1	1	-	-	-	2	-	-
75	Akeonik, Icy Cape	-	-	-	-	1	1	-	-	-	2	-	1
76	Avak Inlet, Tunalik River	-	-	-	-	-	1	-	-	-	1	-	1
77	Nivat Point, Nokotlek Point	-	-	-	-	-	-	-	-	-	-	-	1
78	Point Collie, Sigeakruk Point	-	-	-	-	-	1	-	-	-	1	-	1
79	Point Belcher, Wainwright	-	-	1	1	1	2	-	1	1	2	1	4
80	Eluksingiak Point, Kugrua Bay	-	-	-	-	-	1	-	-	-	1	1	3
81	Peard Bay, Point Franklin	-	-	-	-	-	-	-	-	-	-	-	1
82	Skull Cliff	-	-	-	-	-	-	-	-	-	-	-	1
83	Nulavik, Loran Radio Station	-	-	-	-	-	1	-	-	-	-	1	2
84	Will Rogers & Wiley Post Mem.	-	-	1	1	1	1	-	-	1	1	2	3
85	Barrow, Browerville, Elson Lag.	-	1	1	2	1	2	1	1	1	2	2	4
86	Dease Inlet, Plover Islands	-	-	-	-	-	-	-	-	-	-	1	1

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

B.2.11 Winter Combined Probabilities for Grouped Land Segments

Tables B-64 through B-69 represent winter conditional probabilities (expressed as percent chance) that a large oil spill starting at a particular location will contact a certain group of land segments within 3, 10, 30, 60, 180, and 360 days.

Table B-64: 3 Days-Winter GLS: Winter Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Group of Land Segments within 3 Days.

ID	Grouped Land Segments Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
144	Alaska Maritime Wildlife Refuge	-	-	-	-	-	-	-	1	-	-	-	-
147	Point Lay Haulout	-	-	-	-	-	-	-	-	-	4	-	-
149	National Petroleum Reserve Alaska	-	-	-	-	-	-	-	-	-	-	-	2
151	Kuk River	-	-	-	-	-	-	-	-	-	-	-	1
176	United States Chukchi Coast	-	-	-	-	-	-	-	2	-	5	-	4

Table B-65: 10 Days-Winter GLS: Winter Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Group of Land Segments within 10 Days.

ID	Grouped Land Segments Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
144	Alaska Maritime Wildlife Refuge	-	-	-	-	1	-	-	2	-	2	-	-
147	Point Lay Haulout	-	-	-	-	1	-	-	-	-	6	-	-
149	National Petroleum Reserve Alaska	-	-	-	-	-	1	-	-	-	1	-	6
150	Kasegaluk Lagoon Special Use Area	-	-	-	-	-	-	-	-	-	1	-	1
151	Kuk River	-	-	-	-	-	1	-	-	-	1	-	3
174	Russia Chukchi Coast Marine Mammals	1	1	-	-	1	-	1	1	-	1	-	-
175	Russia Chukchi Coast	2	2	1	-	2	-	2	3	1	1	-	-
176	United States Chukchi Coast	-	-	1	-	3	4	-	5	1	14	1	12
177	United States Beaufort Coast	-	-	-	-	-	1	-	-	-	-	1	2

Table B-66: 30 Days-Winter GLS: Winter Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Group of Land Segments within 30 Days.

ID	Grouped Land Segments Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
133	Mys Blossom	1	-	-	-	-	-	-	-	-	-	-	-
135	Kolyuchin Bay	-	-	-	-	1	-	-	1	-	-	-	-
138	Chukota Coast Haulout	-	1	-	-	2	1	-	2	1	2	1	1
143	WAH Insect Relief	-	-	-	-	1	-	-	1	-	1	-	-
144	Alaska Maritime Wildlife Refuge	-	-	-	-	1	1	-	2	-	3	-	-
146	Ledyard Bay	-	-	-	-	-	-	-	1	-	1	-	-

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Grouped Land Segments Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
147	Point Lay Haulout	-	-	-	-	1	1	-	1	-	7	-	1
148	Kasegaluk Brown Bears	-	-	-	-	-	-	-	-	-	1	-	-
149	National Petroleum Reserve Alaska	-	1	1	1	1	3	1	-	1	2	2	9
150	Kasegaluk Lagoon Special Use Area	-	-	-	-	-	1	-	-	-	1	-	2
151	Kuk River	-	-	-	-	1	2	-	1	1	2	1	4
174	Russia Chukchi Coast Marine Mammals	5	6	5	5	6	5	6	7	5	5	5	4
175	Russia Chukchi Coast	17	27	19	13	26	17	25	30	19	19	13	13
176	United States Chukchi Coast	1	2	3	3	7	10	2	8	4	22	4	18
177	United States Beaufort Coast	-	-	-	1	1	2	-	-	1	1	2	4

Table B-67: 60 Days-Winter GLS: Winter Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Group of Land Segments within 60 Days.

ID	Grouped Land Segments Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
133	Mys Blossom	1	1	1	-	-	-	1	-	-	-	-	-
135	Kolyuchin Bay	-	-	-	-	1	-	-	1	-	-	-	-
138	Chukota Coast Haulout	1	2	1	1	3	2	1	3	2	3	1	2
143	WAH Insect Relief	-	-	-	-	1	1	-	1	1	1	-	-
144	Alaska Maritime Wildlife Refuge	-	-	-	-	1	1	-	2	-	3	-	-
146	Ledyard Bay	-	-	-	-	1	-	-	1	-	1	-	-
147	Point Lay Haulout	-	-	-	-	1	1	-	1	-	7	1	1
148	Kasegaluk Brown Bears	-	-	-	-	-	1	-	-	-	1	-	-
149	National Petroleum Reserve Alaska	1	1	1	2	1	3	1	1	2	3	3	9
150	Kasegaluk Lagoon Special Use Area	-	-	-	-	-	1	-	-	-	1	-	2
151	Kuk River	-	-	1	-	1	2	-	1	1	2	1	4
174	Russia Chukchi Coast Marine Mammals	10	12	11	9	11	9	11	11	10	9	8	7
175	Russia Chukchi Coast	31	49	39	30	46	35	47	48	39	36	29	27
176	United States Chukchi Coast	2	3	4	4	9	11	3	9	6	23	6	20
177	United States Beaufort Coast	-	-	1	2	1	2	-	1	1	1	3	4

Table B-68: 180 Days-Winter GLS: Winter Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Group of Land Segments within 180 Days.

ID	Grouped Land Segments Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
133	Mys Blossom	2	3	2	2	3	2	3	3	3	2	2	2
135	Kolyuchin Bay	-	-	-	-	1	-	-	1	-	-	-	-
138	Chukota Coast Haulout	1	2	2	1	3	3	2	3	2	3	2	2

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Grouped Land Segments Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
143	WAH Insect Relief	-	-	-	-	1	1	-	1	1	1	-	-
144	Alaska Maritime Wildlife Refuge	-	-	-	-	1	1	-	2	-	3	-	-
146	Ledyard Bay	-	-	-	-	1	-	-	1	-	1	-	-
147	Point Lay Haulout	-	-	-	-	1	1	-	1	-	7	1	1
148	Kasegaluk Brown Bears	-	-	1	1	-	1	-	-	1	1	1	-
149	National Petroleum Reserve Alaska	1	1	2	2	2	4	1	1	2	3	3	10
150	Kasegaluk Lagoon Special Use Area	-	-	-	-	-	1	-	-	-	1	1	2
151	Kuk River	-	-	1	1	1	2	-	1	1	2	1	4
152	TCH Insect Relief/Calving	-	-	-	-	1	-	-	1	-	1	-	1
174	Russia Chukchi Coast Marine Mammals	14	17	16	14	15	14	16	15	15	13	13	12
175	Russia Chukchi Coast	40	58	50	40	54	45	56	56	50	43	39	36
176	United States Chukchi Coast	2	3	5	5	10	12	3	10	6	23	7	20
177	United States Beaufort Coast	1	1	1	2	2	3	1	1	2	2	3	5

Table B-69: 360 Days-Winter GLS: Winter Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Group of Land Segments within 360 Days.

ID	Grouped Land Segments Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
133	Mys Blossom	2	3	3	2	3	2	3	3	3	2	2	2
135	Kolyuchin Bay	-	-	-	-	1	-	-	1	-	-	-	-
138	Chukota Coast Haulout	1	2	2	1	3	3	2	3	2	3	2	2
143	WAH Insect Relief	-	-	-	-	1	1	-	1	1	1	-	-
144	Alaska Maritime Wildlife Refuge	-	-	-	-	1	1	-	2	-	3	-	-
146	Ledyard Bay	-	-	-	-	1	-	-	1	-	1	-	-
147	Point Lay Haulout	-	-	-	-	1	1	-	1	-	7	1	1
148	Kasegaluk Brown Bears	-	-	1	1	-	1	-	-	1	1	1	-
149	National Petroleum Reserve Alaska	1	1	2	2	2	4	1	1	2	3	3	10
150	Kasegaluk Lagoon Special Use Area	-	-	-	-	-	1	-	-	-	1	1	2
151	Kuk River	-	-	1	1	1	2	-	1	1	2	1	4
152	TCH Insect Relief/Calving	-	-	-	-	1	-	-	1	-	1	-	1
174	Russia Chukchi Coast Marine Mammals	14	17	16	14	15	14	16	15	16	13	13	12
175	Russia Chukchi Coast	40	58	50	40	54	45	57	56	50	43	39	36
176	United States Chukchi Coast	2	3	5	5	10	12	3	10	6	23	7	20
177	United States Beaufort Coast	1	1	1	2	2	3	1	1	2	2	3	5

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

B.2.12 Winter Conditional Probabilities for Boundary Segments

Tables B-70 through B-75 represent winter conditional probabilities (expressed as percent chance) that a large oil spill starting at a particular location will contact a certain boundary segment within 3, 10, 30, 60, 180, and 360 days.

Table B-70: 3 Days-Winter BS: Winter Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Boundary Segments within 3 Days.

ID	Boundary Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9

Note: All rows have all values less than 0.5 percent and are not shown

Table B-71: 10 Days-Winter BS: Winter Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Boundary Segments within 10 Days.

ID	Boundary Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9

Note: All rows have all values less than 0.5 percent and are not shown

Table B-72: 30 Days-Winter BS: Winter Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Boundary Segments within 30 Days.

ID	Boundary Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
1	Bering Strait	-	-	-	-	-	-	-	1	-	-	-	-
2	Bering Strait	-	-	-	-	1	-	-	1	-	-	-	-
3	Chukchi Sea	1	1	-	-	-	-	1	-	-	-	-	-
4	Chukchi Sea	2	-	1	-	-	-	1	-	-	-	-	-
5	Chukchi Sea	2	-	-	1	-	-	-	-	-	-	-	-
6	Chukchi Sea	1	-	-	-	-	-	-	-	-	-	-	-
7	Chukchi Sea	1	-	-	-	-	-	-	-	-	-	-	-
11	Chukchi Sea	1	-	-	-	-	-	-	-	-	-	-	-
12	Chukchi Sea	1	-	-	-	-	-	-	-	-	-	-	-
19	Chukchi Sea	-	-	-	1	-	-	-	-	-	-	-	-

Table B-73: 60 Days-Winter BS: Winter Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Boundary Segments within 60 Days.

ID	Boundary Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
1	Bering Strait	-	-	-	-	1	-	-	1	-	-	-	-
2	Bering Strait	-	-	-	-	1	1	-	2	-	1	-	-
3	Chukchi Sea	1	1	1	1	-	1	1	-	1	-	1	-
4	Chukchi Sea	3	1	1	2	-	-	1	-	1	-	2	-

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Boundary Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
5	Chukchi Sea	4	1	1	2	-	-	1	-	1	-	1	-
6	Chukchi Sea	4	1	1	2	-	-	2	-	1	-	1	-
7	Chukchi Sea	3	1	2	2	-	-	2	-	1	-	1	-
8	Chukchi Sea	2	1	1	1	-	-	1	-	1	-	1	-
9	Chukchi Sea	2	1	1	1	-	-	1	-	1	-	1	-
10	Chukchi Sea	2	-	1	1	-	-	-	-	1	-	1	-
11	Chukchi Sea	2	-	1	1	-	-	-	-	1	-	1	-
12	Chukchi Sea	2	-	-	1	-	-	-	-	-	-	1	-
13	Chukchi Sea	1	-	-	1	-	-	-	-	-	-	-	-
14	Chukchi Sea	1	-	-	-	-	-	-	-	-	-	-	-
15	Chukchi Sea	1	-	-	1	-	-	-	-	-	-	-	-
16	Chukchi Sea	1	-	-	1	-	-	-	-	-	-	-	-
17	Chukchi Sea	1	-	1	1	-	-	1	-	-	-	1	-
18	Chukchi Sea	1	-	1	2	-	1	-	-	1	-	1	1
19	Chukchi Sea	1	-	1	2	-	1	-	-	1	-	1	1
20	Chukchi Sea	1	-	-	1	-	-	-	-	-	-	1	1

Table B-74: 180 Days-Winter BS: Winter Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Boundary Segments within 180 Days.

ID	Boundary Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
1	Bering Strait	-	-	-	-	1	-	-	1	-	1	-	-
2	Bering Strait	-	-	-	-	1	1	-	2	-	1	-	-
3	Chukchi Sea	2	1	1	1	-	1	2	-	1	-	1	1
4	Chukchi Sea	4	2	2	2	1	1	2	1	1	1	3	1
5	Chukchi Sea	6	2	2	3	1	1	3	2	2	1	3	1
6	Chukchi Sea	6	3	4	4	2	2	4	2	3	1	3	2
7	Chukchi Sea	5	3	4	4	2	3	3	2	3	2	4	3
8	Chukchi Sea	3	2	2	3	1	1	2	1	2	1	2	1
9	Chukchi Sea	3	1	2	2	1	1	1	1	1	-	1	1
10	Chukchi Sea	3	1	2	3	1	1	1	1	2	1	2	1
11	Chukchi Sea	3	2	2	3	1	1	2	1	2	1	2	1
12	Chukchi Sea	3	1	2	2	1	1	1	1	2	1	2	1
13	Chukchi Sea	2	1	2	2	1	1	1	1	1	1	1	1
14	Chukchi Sea	2	1	2	2	1	1	1	1	1	1	2	1
15	Chukchi Sea	2	1	1	2	1	1	1	1	1	1	2	1
16	Chukchi Sea	2	1	1	2	1	1	1	1	1	1	1	1
17	Chukchi Sea	2	2	2	3	2	2	2	2	2	1	3	2

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Boundary Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
18	Chukchi Sea	2	2	3	4	4	4	2	3	4	3	4	3
19	Chukchi Sea	3	2	2	3	2	3	2	1	2	2	3	3
20	Chukchi Sea	1	1	2	2	1	1	1	1	2	1	1	1
21	Chukchi Sea	1	-	1	1	-	1	1	-	1	-	1	1
22	Chukchi Sea	1	-	-	1	-	-	-	-	-	-	1	-
23	Beaufort Sea	-	-	-	1	-	1	-	-	-	-	1	-
24	Beaufort Sea	-	-	-	1	-	-	-	-	-	-	1	1
25	Beaufort Sea	-	-	-	-	-	-	-	-	-	-	1	1
38	Beaufort Sea	-	1	1	1	1	1	1	1	1	1	-	-

Table B-75: 360 Days-Winter BS: Winter Conditional Probabilities (Expressed as Percent Chance) that a Large Oil Spill Starting at a Particular Location will Contact a Certain Boundary Segments within 360 Days.

ID	Boundary Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
1	Bering Strait	-	-	-	-	1	-	-	1	-	1	-	-
2	Bering Strait	-	-	-	-	1	1	-	2	-	1	-	-
3	Chukchi Sea	2	1	1	1	-	1	2	-	1	-	1	1
4	Chukchi Sea	4	2	2	2	1	1	2	1	1	1	3	1
5	Chukchi Sea	6	2	2	3	1	1	3	2	2	1	3	1
6	Chukchi Sea	6	4	4	5	2	2	4	2	3	1	3	2
7	Chukchi Sea	5	3	4	4	2	3	3	2	4	2	4	3
8	Chukchi Sea	3	2	2	3	1	1	2	1	2	1	2	1
9	Chukchi Sea	3	1	2	2	1	1	1	1	1	-	2	1
10	Chukchi Sea	3	1	2	3	1	1	1	1	2	1	2	1
11	Chukchi Sea	3	2	2	3	1	2	2	1	2	1	2	1
12	Chukchi Sea	3	1	2	2	1	1	1	1	2	1	2	1
13	Chukchi Sea	2	1	2	2	1	1	1	1	1	1	1	1
14	Chukchi Sea	2	1	2	2	1	1	1	1	2	1	2	1
15	Chukchi Sea	2	1	1	2	1	1	1	1	1	1	2	1
16	Chukchi Sea	2	1	1	2	1	1	1	1	1	1	1	1
17	Chukchi Sea	2	2	2	3	2	2	2	2	2	2	3	3
18	Chukchi Sea	2	2	3	4	4	4	2	3	4	3	4	3
19	Chukchi Sea	3	2	2	3	2	3	3	1	2	2	3	3
20	Chukchi Sea	1	1	2	2	1	1	1	1	2	1	2	1
21	Chukchi Sea	1	-	1	1	1	1	1	-	1	-	1	1
22	Chukchi Sea	1	-	-	1	-	-	-	-	-	-	1	-
23	Beaufort Sea	-	-	-	1	-	1	-	-	-	-	1	-
24	Beaufort Sea	-	-	-	1	-	1	1	-	-	-	1	1

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ID	Boundary Segment Name	LA 1	LA 4	LA 5	LA 6	LA 10	LA 11	PL 2	PL 3	PL 5	PL 6	PL 8	PL 9
25	Beaufort Sea	-	-	-	1	-	1	-	-	-	-	1	1
38	Beaufort Sea	-	1	1	1	1	1	1	1	1	1	-	-

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

B.2.13 Combined Probabilities of Spills Greater Than or Equal to 1,000 Barrels Occurring and Contacting Specified Areas

Tables B-76 through B-78 represent combined probabilities (expressed as percent chance), over the assumed life of the leased area, Alternatives I, III, or IV, of one or more spills ≥1,000 bbl, and the estimated number of spills (mean), occurring and contacting a certain environmental resource area, land segment and grouped land segments.

Table B-76: Combined Probabilities (Expressed as Percent Chance) of One or More Large Spills Occurring and Contacting a Specific Environmental Resource Area.

ERA ID	Environmental Resource Area Name	3 days		10 days		30 days		60 days		180 days		360 days	
		%	mean	%	mean	%	mean	%	mean	%	mean	%	mean
0	Land	3	0.04	13	0.14	37	0.45	47	0.64	51	0.72	52	0.73
1	Kasegaluk Lagoon Area	2	0.02	3	0.03	4	0.05	5	0.05	5	0.05	5	0.05
2	Point Barrow, Plover Islands	-	-	-	-	-	-	1	0.01	1	0.01	1	0.01
3	SUA: Uelen/Russia	-	-	-	-	1	0.01	1	0.01	2	0.02	2	0.02
4	SUA:Naukan/Russia	-	-	-	-	1	0.01	2	0.02	2	0.02	2	0.02
6	Hanna Shoal	2	0.02	5	0.05	9	0.10	11	0.12	13	0.14	13	0.14
7	Krill Trap	0	0	1	0.01	3	0.03	3	0.03	3	0.03	3	0.03
10	Ledyard Bay SPEI Crit.Hab. Area	11	0.11	13	0.14	14	0.15	15	0.16	15	0.16	15	0.16
11	Wrangel Island 12 nmi & Offshore	-	-	-	-	3	0.03	4	0.04	6	0.06	6	0.06
15	Cape Lisburne Seabird Col. Area	1	0.01	3	0.03	4	0.05	5	0.05	5	0.05	5	0.05
16	Barrow Canyon	1	0.01	5	0.05	10	0.10	11	0.12	12	0.13	12	0.13
18	Murre Rearing and Molting Area	-	-	3	0.03	8	0.08	9	0.09	10	0.11	10	0.11
19	Chukchi Spring Lead System	6	0.07	9	0.09	11	0.11	11	0.12	12	0.12	12	0.12
20	East Chukchi Offshore	-	-	-	-	-	-	1	0.01	1	0.01	1	0.01
23	Polar Bear Offshore	21	0.24	27	0.31	30	0.36	31	0.37	31	0.37	31	0.37
30	Beaufort Spring Lead 1	-	-	-	-	1	0.01	2	0.02	2	0.02	2	0.02
31	Beaufort Spring Lead 2	-	-	-	-	1	0.01	1	0.01	1	0.01	1	0.01
38	SUA: Pt. Hope - Cape Lisburne	0	0	2	0.02	3	0.03	4	0.04	4	0.04	4	0.04
39	SUA: Pt. Lay - Kasegaluk	8	0.08	10	0.11	12	0.13	13	0.13	13	0.13	13	0.13
40	SUA: Icy Cape - Wainwright	9	0.09	18	0.20	24	0.27	25	0.29	26	0.30	26	0.30
41	SUA: Barrow - Chukchi	-	-	-	-	1	0.01	1	0.01	1	0.01	1	0.01
42	SUA: Barrow - East Arch	-	-	1	0.01	3	0.03	3	0.03	4	0.04	4	0.04
43	SUA: Nuiqsut - Cross Island	-	-	-	-	1	0.01	1	0.01	2	0.02	2	0.02
46	Wrangel Island 12 nmi Buffer 2	-	-	-	-	2	0.02	5	0.05	6	0.06	6	0.06
47	Hanna Shoal Walrus Use Area	9	0.09	14	0.16	21	0.23	23	0.26	25	0.29	25	0.29
48	Chukchi Lead System 4	13	0.14	17	0.19	20	0.23	21	0.24	22	0.24	22	0.25

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ERA ID	Environmental Resource Area Name	3 days		10 days		30 days		60 days		180 days		360 days	
		%	mean	%	mean	%	mean	%	mean	%	mean	%	mean
49	Chukchi Spring Lead 1	0	0	1	0.01	2	0.03	3	0.03	3	0.03	3	0.03
50	Pt Lay Walrus Offshore	11	0.11	14	0.15	16	0.17	16	0.18	17	0.18	17	0.18
51	Pt Lay Walrus Nearshore	6	0.06	7	0.08	8	0.09	8	0.09	8	0.09	8	0.09
52	Russian Coast Walrus Offshore	-	-	3	0.03	10	0.10	11	0.11	12	0.12	12	0.12
53	Chukchi Spring Lead 2	9	0.09	10	0.11	11	0.12	12	0.13	12	0.13	12	0.13
54	Chukchi Spring Lead 3	2	0.02	5	0.05	8	0.08	9	0.09	9	0.09	9	0.09
55	Point Barrow, Plover Islands	-	-	-	-	1	0.01	1	0.01	1	0.01	1	0.01
56	Hanna Shoal Area	3	0.03	5	0.05	7	0.08	8	0.09	10	0.11	10	0.11
57	Skull Cliffs	1	0.01	3	0.03	6	0.06	6	0.06	7	0.07	7	0.07
58	Russian Coast Walrus Nearshore	-	-	1	0.01	3	0.03	4	0.04	4	0.04	4	0.04
59	Ostrov Kolyuchin	-	-	-	-	1	0.01	1	0.01	1	0.01	1	0.01
61	Pt Lay-Barrow BH GW SSF	9	0.10	16	0.17	21	0.23	22	0.25	23	0.26	23	0.26
62	Herald Shoal Polynya 2	-	-	3	0.03	7	0.07	9	0.09	9	0.10	9	0.10
63	North Chukchi	-	-	-	-	1	0.01	1	0.01	1	0.01	1	0.01
64	Peard Bay Area	1	0.01	4	0.05	8	0.09	9	0.09	9	0.10	9	0.10
66	Herald Island	-	-	-	-	1	0.01	1	0.01	2	0.02	2	0.02
70	North Central Chukchi	-	-	-	-	1	0.01	1	0.01	1	0.02	2	0.02
74	Offshore Herald Island	-	-	1	0.01	3	0.03	3	0.03	3	0.03	3	0.03
80	Beaufort Outer Shelf 1	-	-	-	-	1	0.01	1	0.01	1	0.01	1	0.01
82	N Chukotka Nrshr 2	-	-	-	-	3	0.03	3	0.03	3	0.03	3	0.03
83	N Chukotka Nrshr 3	-	-	-	-	3	0.03	3	0.03	4	0.04	4	0.04
91	Hope Sea Valley	-	-	1	0.01	4	0.04	4	0.04	4	0.04	4	0.04
101	Beaufort Outer Shelf 2	-	-	-	-	-	-	1	0.01	1	0.01	1	0.01
102	Opilio Crab EFH	-	-	2	0.03	6	0.06	7	0.08	7	0.08	7	0.08
103	Saffron Cod EFH	15	0.16	27	0.32	37	0.46	39	0.49	40	0.51	40	0.51
107	Pt Hope Offshore	-	-	-	-	1	0.01	1	0.01	1	0.01	1	0.01
108	Barrow Feeding Aggregation	-	-	1	0.01	2	0.02	2	0.02	2	0.02	2	0.03
109	AK BFT Shelf Edge	-	-	-	-	-	-	-	-	1	0.01	1	0.01
110	AK BFT Outer Shelf&Slope 1	-	-	-	-	-	-	-	-	1	0.01	1	0.01
111	AK BFT Outer Shelf&Slope 2	-	-	-	-	-	-	-	-	1	0.01	1	0.01
112	AK BFT Outer Shelf&Slope 3	-	-	-	-	-	-	-	-	1	0.01	1	0.01
113	AK BFT Outer Shelf&Slope 4	-	-	-	-	-	-	1	0.01	1	0.01	1	0.01
114	AK BFT Outer Shelf&Slope 5	-	-	-	-	-	-	1	0.01	1	0.01	1	0.01
115	AK BFT Outer Shelf&Slope 6	-	-	-	-	1	0.01	1	0.01	2	0.02	2	0.02

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

ERA ID	Environmental Resource Area Name	3 days		10 days		30 days		60 days		180 days		360 days	
		%	mean	%	mean	%	mean	%	mean	%	mean	%	mean
116	AK BFT Outer Shelf&Slope 7	-	-	-	-	1	0.01	2	0.02	2	0.03	3	0.03
117	AK BFT Outer Shelf&Slope 8	-	-	-	-	2	0.02	2	0.02	3	0.03	3	0.03
118	AK BFT Outer Shelf&Slope 9	-	-	-	-	2	0.02	3	0.03	4	0.04	4	0.04
119	AK BFT Outer Shelf&Slope 10	-	-	2	0.02	5	0.05	7	0.07	8	0.08	8	0.08
120	Russia CH GW Fall 1&2	-	-	1	0.01	3	0.03	3	0.03	3	0.03	3	0.03
121	C Lisburne - Pt Hope	1	0.01	2	0.02	2	0.02	3	0.03	3	0.03	3	0.03
122	North Chukotka Offshore	-	-	-	-	2	0.02	2	0.02	2	0.02	2	0.02
123	AK Chukchi Offshore	2	0.02	4	0.04	6	0.06	6	0.06	6	0.06	6	0.06
124	Central Chukchi Offshore	-	-	2	0.03	5	0.05	5	0.06	5	0.06	5	0.06

Table B-77: Combined Probabilities (Expressed as Percent Chance) of One or More Large Spills Occurring and Contacting a Specific Land Segment.

LS ID	Land Segment Name	3 days		10 days		30 days		60 days		180 days		360 days	
		%	mean	%	mean	%	mean	%	mean	%	mean	%	mean
5	Mys Evans	-	-	-	-	-	-	-	-	1	0.01	1	0.01
6	Ostrov Mushtakova	-	-	-	-	-	-	1	0.01	1	0.01	1	0.01
7	Kosa Bruch	-	-	-	-	1	0.01	1	0.01	1	0.01	1	0.01
8	E. Wrangel Island, Skeletov	-	-	-	-	1	0.01	1	0.01	2	0.02	2	0.02
9	Mys Proletarskiy	-	-	-	-	-	-	1	0.01	1	0.01	1	0.01
10	Bukhta Davidova	-	-	-	-	-	-	-	-	1	0.01	1	0.01
19	Laguna Kuepil'khin, Leningradskiy	-	-	-	-	-	-	-	-	1	0.01	1	0.01
20	Polyarnyy, Pil'gyn	-	-	-	-	-	-	1	0.01	1	0.01	1	0.01
21	Laguna Pil'khikay, Pil'khikay	-	-	-	-	-	-	1	0.01	1	0.01	1	0.01
22	Rypkarpyy, Mys Shmidta	-	-	-	-	1	0.01	1	0.01	1	0.01	1	0.01
23	Emuem, Tenkergin	-	-	-	-	1	0.01	1	0.01	1	0.01	1	0.01
24	LS 24	-	-	-	-	1	0.01	1	0.01	1	0.01	1	0.01
25	Laguna Amguema, Yulinu	-	-	-	-	1	0.01	2	0.02	2	0.02	2	0.02
26	Ekugvaam, Kepin, Pil'khin	-	-	-	-	1	0.01	2	0.02	2	0.02	2	0.02
27	Laguna Nut, Rigol'	-	-	-	-	1	0.01	2	0.02	2	0.02	2	0.02
28	Vankarem,Vankarem Laguna	-	-	-	-	1	0.01	2	0.02	2	0.02	2	0.02
29	Mys Onman, Vel'may	-	-	-	-	1	0.01	2	0.02	2	0.02	2	0.02
30	Nutepynmin, Pyngopil'gyn	-	-	-	-	2	0.02	3	0.03	3	0.03	3	0.03
31	Alyatki, Zaliv Tasytkhin	-	-	-	-	2	0.02	3	0.03	3	0.03	3	0.03
32	Mys Dzhenretlen, Eynenekvyk	-	-	-	-	1	0.01	2	0.02	2	0.02	2	0.02
33	Neskan, Laguna Neskan	-	-	-	-	1	0.01	2	0.02	2	0.02	2	0.02

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

LS ID	Land Segment Name	3 days		10 days		30 days		60 days		180 days		360 days	
		%	mean	%	mean	%	mean	%	mean	%	mean	%	mean
34	Tepken, Memino	-	-	-	-	1	0.01	2	0.02	2	0.02	2	0.02
35	Enurmino, Mys Neten	-	-	-	-	1	0.01	2	0.02	2	0.02	2	0.02
36	Mys Serdtse-Kamen	-	-	-	-	1	0.01	2	0.02	2	0.02	2	0.02
37	Chegitun, Utkan	-	-	-	-	1	0.01	1	0.01	1	0.01	1	0.01
38	Enmytagyn, Inchoun, Mitkulen	-	-	-	-	-	-	1	0.01	1	0.01	1	0.01
39	Cape Dezhnev, Naukan, Uelen	-	-	-	-	-	-	1	0.01	1	0.01	1	0.01
64	Kukpuk River, Point Hope	-	-	-	-	1	0.01	1	0.01	1	0.01	1	0.01
65	Buckland, Cape Lisburne	-	-	1	0.01	1	0.01	2	0.02	2	0.02	2	0.02
66	Ayugatak Lagoon	-	-	-	-	1	0.01	1	0.01	1	0.01	1	0.01
72	Point Lay, Siksrikpak Point	1	0.01	1	0.01	1	0.01	1	0.01	1	0.01	1	0.01
73	Tungaich Point, Tungak Creek	1	0.01	1	0.01	1	0.01	1	0.01	1	0.01	1	0.01
74	Kasegaluk Lagoon, Solivik Isl.	-	-	1	0.01	1	0.01	1	0.01	1	0.01	1	0.01
75	Akeonik, Icy Cape	-	-	1	0.01	1	0.01	1	0.01	1	0.01	1	0.01
76	Avak Inlet, Tunalik River	-	-	-	-	1	0.01	1	0.01	1	0.01	1	0.01
77	Nivat Point, Nokotlek Point	-	-	-	-	1	0.01	1	0.01	1	0.01	1	0.01
78	Point Collie, Sigeakruk Point	-	-	1	0.01	1	0.01	1	0.01	1	0.01	1	0.01
79	Point Belcher, Wainwright	-	-	1	0.01	3	0.03	3	0.03	3	0.03	3	0.03
80	Eluksingiak Point, Kugrua Bay	-	-	1	0.01	2	0.02	2	0.02	2	0.02	2	0.02
81	Peard Bay, Point Franklin	-	-	-	-	-	-	-	-	1	0.01	1	0.01
83	Nulavik, Loran Radio Station	-	-	-	-	-	-	1	0.01	1	0.01	1	0.01
84	Will Rogers & Wiley Post Mem.	-	-	1	0.01	2	0.02	2	0.02	2	0.02	2	0.02
85	Barrow, Browerville, Elson Lag.	-	-	1	0.01	3	0.03	3	0.04	4	0.04	4	0.04

Table B-78: Combined Probabilities (Expressed as Percent Chance) of One or More Large Spills Occurring and Contacting a Specific Grouped Land Segment.

GLS ID	Grouped Land Segment Name	3 days		10 days		30 days		60 days		180 days		360 days	
		%	mean	%	mean	%	mean	%	mean	%	mean	%	mean
133	Mys Blossom	-	-	-	-	1	0.01	2	0.02	4	0.04	4	0.04
135	Kolyuchin Bay	-	-	-	-	2	0.02	2	0.02	2	0.02	2	0.02
136	Ostrov Idlidlya	-	-	-	-	1	0.01	1	0.01	1	0.01	1	0.01
137	Mys Serditse Kamen	-	-	-	-	1	0.01	1	0.01	1	0.01	1	0.01
138	Chukotka Coast Haulout	-	-	-	-	2	0.02	2	0.02	3	0.03	3	0.03
143	WAH Insect Relief	-	-	-	-	1	0.01	1	0.01	1	0.01	1	0.01
144	Alaska Maritime National Wildlife Refuge	-	-	1	0.01	1	0.01	1	0.01	1	0.01	1	0.01

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

GLS ID	Grouped Land Segment Name	3 days		10 days		30 days		60 days		180 days		360 days	
		%	mean	%	mean	%	mean	%	mean	%	mean	%	mean
145	Cape Lisburne	-	-	1	0.01	1	0.01	1	0.01	1	0.01	1	0.01
146	Ledyard Brown Bears	-	-	1	0.01	1	0.01	2	0.02	2	0.02	2	0.02
147	Point Lay Haulout	2	0.02	3	0.03	4	0.04	4	0.04	4	0.04	4	0.04
148	Kasegaluk Brown Bears	1	0.01	2	0.02	3	0.03	3	0.03	3	0.04	3	0.04
149	National Petroleum Reserve Alaska	-	-	2	0.02	4	0.04	5	0.05	5	0.05	5	0.05
150	Kasegaluk Lagoon Special Area (NPR-A)	-	-	1	0.01	1	0.01	1	0.01	1	0.01	1	0.01
151	Kuk River	-	-	2	0.02	3	0.04	4	0.04	4	0.04	4	0.04
152	TCH Insect Relief/Calving	-	-	1	0.01	2	0.02	2	0.02	2	0.02	2	0.02
174	Russia Chukchi Coast Marine Mammals	-	-	1	0.01	11	0.11	15	0.16	19	0.21	19	0.21
175	Russia Chukchi Coast	-	-	1	0.01	21	0.23	33	0.39	38	0.48	38	0.48
176	United States Chukchi Coast	3	0.03	10	0.11	17	0.19	18	0.20	19	0.21	19	0.21
177	United States Beaufort Coast	-	-	1	0.01	4	0.04	4	0.04	5	0.05	5	0.05

Note: For all tables in Section B2, OSRA Conditional and Combined Probability Tables: ** = Greater than 99.5 percent; - = less than 0.5 percent; LA = Launch Area, PL = Pipeline. Rows with all values less than 0.5 percent are not shown.

The Department of the Interior Mission

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The Department also has a major responsibility for American Indian reservation communities and for people who live in island territories under US administration.

BOEM
Bureau of Ocean Energy Management

The Bureau of Ocean Energy Management

As a bureau of the Department of the Interior, the Bureau of Ocean Energy (BOEM) primary responsibilities are to manage the mineral resources located on the Nation's Outer Continental Shelf (OCS) in an environmentally sound and safe manner.