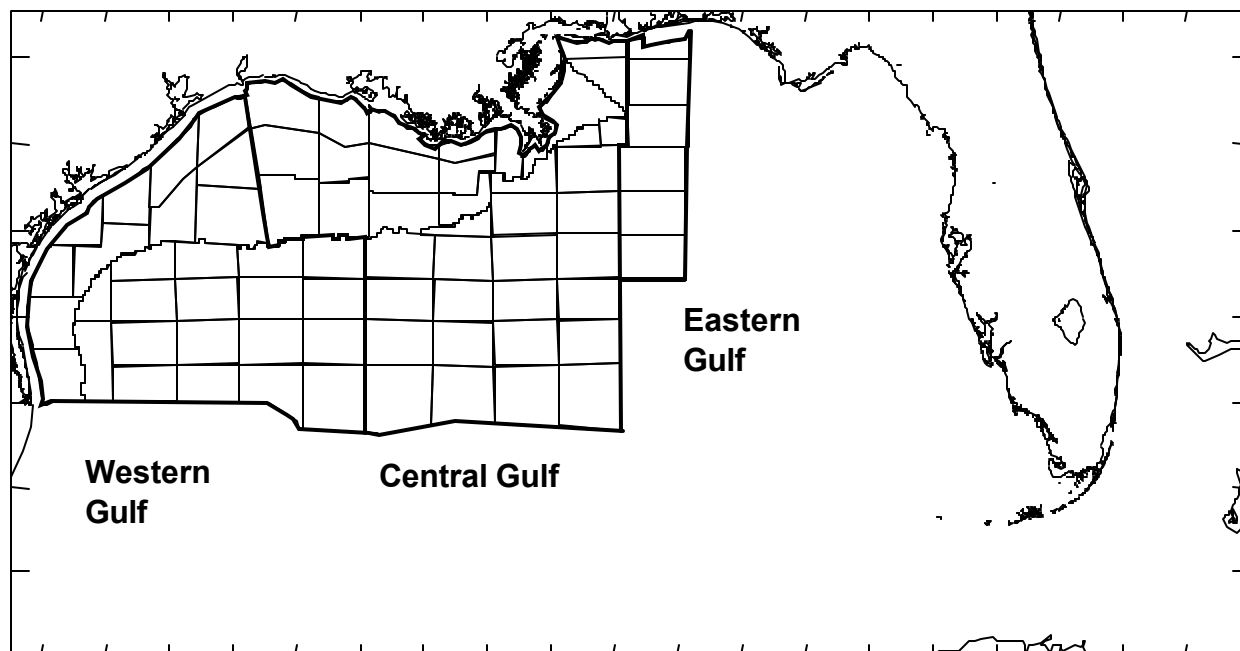


Oil-Spill Risk Analysis: Contingency Planning Statistics for Gulf of Mexico OCS Activities



Oil-Spill Risk Analysis: Contingency Planning Statistics for Gulf of Mexico OCS Activities

By:

Zhen-Gang Ji
Walter R. Johnson
Charles F. Marshall
Eileen M. Lear (Editor)

Contents

List of Figures and Tables.....	ii
Introduction.....	1
Framework of the Analysis	1
Domain/Study Areas	1
Hypothetical Spill Locations.....	2
Environmental Resources.....	2
Oil-Spill Risk Analysis	3
Oil-Spill Trajectory Simulations.....	3
Conditional Probabilities of Contact.....	6
Discussion.....	7
References Cited.....	7

List of Figures

Figure	Page
1. Locations of 75 oil-spill launch areas in the Central, Western, and Eastern Gulf of Mexico Planning Areas	9
2. Locations of Gulf of Mexico counties (set 1)	10
3. Locations of Gulf of Mexico counties (set 2)	11
4. Computational grid used by Dynalysis of Princeton in the Mellor-Blumberg primitive equation model adapted to the Gulf of Mexico.....	12
5. Deployment locations of the SCULP drifters	13

List of Tables

1. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the Western Planning Area will contact a county within 3/10/30 days	14
2. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the Central Planning Area will contact a county within 3/10/30 days	17
3. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the Eastern Planning Area will contact a county within 3/10/30 days	21
4. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the Western Planning Area in the winter season will contact a county within 3/10/30 days	22
5. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the Central Planning Area in the winter season will contact a county within 3/10/30 days	25
6. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the Eastern Planning Area in the winter season will contact a county within 3/10/30 days	29
7. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the Western Planning Area in the spring season will contact a county within 3/10/30 days	30
8. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the Central Planning Area in the spring season will contact a county within 3/10/30 days	33

9.	Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the Eastern Planning Area in the spring season will contact a county within 3/10/30 days	37
10.	Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the Western Planning Area in the summer season will contact a county within 3/10/30 days	38
11.	Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the Central Planning Area in the summer season will contact a county within 3/10/30 days	41
12.	Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the Eastern Planning Area in the summer season will contact a county within 3/10/30 days	45
13.	Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the Western Planning Area in the autumn season will contact a county within 3/10/30 days	46
14.	Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the Central Planning Area in the autumn season will contact a county within 3/10/30 days	49
15.	Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the Eastern Planning Area in the autumn season will contact a county within 3/10/30 days	53

Introduction

The Federal Government offers U.S. Outer Continental Shelf (OCS) lands in the Gulf of Mexico (GOM) for oil and gas leasing. Because oil spills may occur from activities associated with offshore oil exploration, production, and transportation resulting from these lease sales, the Minerals Management Service (MMS) has conducted a formal oil-spill risk analysis (OSRA) to provide spill statistics that can be used in contingency planning for these areas. This report summarizes the results of that analysis, the objective of which was to estimate the risk of oil-spill contact to coastal resources in the GOM from oil spills accidentally occurring from the OCS activities (LaBelle, 2001).

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 would occur, during the estimated life of a given lease sale. Neither can the winds and ocean currents that transport oil spills be known for certain. A probabilistic event such as an oil-spill occurrence or oil-spill contact to an environmentally sensitive area cannot be predicted, only an estimate of its likelihood (its probability) can be quantified.

This report provides the contingency planning statistics for the OCS activities in the GOM. The probabilities of oil spill occurrence and the combined probabilities of contact in the GOM are already presented in previous reports. (Ji et al. 2002a, 2002b). This report is available from the MMS's Internet site (<http://www.mms.gov>).

Framework of the Analysis

Domain/Study Areas

The domain (shown in fig.1) defines the geographic boundaries that encompass the environmental resources at risk from a hypothetical oil spill from OCS operations in the lease areas. Although few hypothetical oil spills were likely to extend beyond the borders of the domain within 30 days after release (the maximum elapsed time considered), we have tracked and tabulated spills that would travel beyond the open-ocean boundaries. These spills could contact land or other environmental resources outside the domain.

The study areas (shown in fig. 1) are the areas of the Western, Central, and Eastern Planning Areas that encompass the offshore waters within the Gulf of Mexico (beginning 3 miles offshore Louisiana, Mississippi, and Alabama, and 3 leagues offshore Texas) and extend seaward to the limits of the Exclusive Economic Zone—the maritime region extending 200 nautical miles from the baseline of the territorial sea, in which the United States has exclusive rights and jurisdiction over living and nonliving natural resources..

The study areas were divided into 75 hypothetical spill sites, which are used to represent oil-spill risks from platforms (fig. 1).

Hypothetical Spill Locations

The OSRA Model initiated hypothetical oil spills uniformly in space and time from within each study area, as shown in figure 1. At $1/10^\circ$ intervals in the north-south direction (about 11 km) and $1/10^\circ$ intervals in the east-west direction (about 10 km), the model launched an oil spill every 1.0 day. At this resolution, there were 3,380 total launch points in space, and a total of 3,240 oil-spill trajectories were launched from each spatial grid point over a period of 9 years. The spatial resolution of the spill simulations was well within the spatial resolution of the input data, and the interval of time between releases was sufficiently short to sample weather-scale changes in the input winds (Price et al., 2003).

The sensitivity tests on the OSRA Model (Price et al., 2002) indicated that, statistically, the above-mentioned spatial resolution ($1/10^\circ$ by $1/10^\circ$) and time resolution (1.0 day) are sufficient to represent the spatial and time variations of the particle trajectories in the area.

Environmental Resources

The environmental resources considered in this analysis include the counties and parishes along the coast of the Gulf of Mexico. Figures 2 and 3 depict locations of these counties and parishes. The MMS used data derived from the Coastal Offshore Resource Information System (CORIS) and other databases. The CORIS data were developed and supported by State and Federal Agencies and the oil industry operating along the Gulf coast.

All onshore, coastal environmental resource locations were represented by one or more partitions of the coastline, herein called land. The study area coastline was partitioned into 162 equidistant land segments of approximately 10-mile (16-km) length. The partitions were 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 10 miles, depending upon the complexity of the coastal area.

The counties and parishes examined in this OSRA are shown below.

Counties/Parishes (set 1)--shown on Figure 2

C1-Cameron, TX	C25-Baldwin, AL
C3-Kenedy, TX	C27-Santa Rosa, FL
C5-Nueces, TX	C29-Walton, FL
C7-Calhoun, TX	C31-Gulf, FL
C9-Brazoria, TX	C33-Wakulla, FL
C11-Chambers, TX	C35-Taylor, FL
C13-Cameron, LA	C37-Levy, FL
C15-Iberia, LA	C39-Hernando, FL
C17-Terrebonne, LA	C41-Pinellas, FL
C19-Jefferson, LA	C43-Manatee, FL
C21-St. Bernard, LA	C45-Charlotte, FL
C23-Jackson, MS	C47-Collier, FL

Counties/Parishes (set 2)--shown on Figure 3

C2-Willacy, TX	C26-Escambia, FL
C4-Kleberg, TX	C28-Okaloosa, FL
C6-Aransas, TX	C30-Bay, FL
C8-Matagorda, TX	C32-Franklin, FL
C10-Galveston, TX	C34-Jefferson, FL
C12-Jefferson, TX	C36-Dixie, FL
C14-Vermilion, LA	C38-Citrus, FL
C16-St. Mary, LA	C40-Pasco, FL
C18-Lafourche, LA	C42-Hillsborough, FL
C20-Plaquemines, LA	C44-Sarasota, FL
C22-Hancock & Harrison, MS	C46-Lee, FL
C24-Mobile, AL	C48-Monroe, FL

Oil-Spill Risk Analysis

In this report, the OSRA was conducted to calculate the trajectories of oil spills from hypothetical spill locations to various environmental resources.

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 hazard-based assessment. Therefore, the likelihood of oil spills occurring on the OCS was not considered in the analysis.

Oil-Spill Trajectory Simulations

The OSRA Model, originally developed by Smith et al. (1982) and enhanced by MMS over the years (LaBelle and Anderson, 1985; Ji et al., 2003, Ji et al. 2004), simulates oil-spill transport using realistic data fields of winds and ocean currents in the GOM. An oil spill on the ocean surface moves around by the complex surface ocean currents exerting a shear force on the spilled oil from below. In addition, the prevailing wind exerts an additional shear force on the spill from above, and the combination of the two forces causes the transportation of the oil spill away from its initial spill location. In the OSRA Model, the velocity of a hypothetical oil spill is the linear superposition of the surface ocean current and the wind drift caused by the winds. The model calculates the movement of hypothetical spills by successively integrating time sequences of two spatially gridded input fields: the surface ocean currents and the sea-level winds, both of which were generated by other computer models using many observations of relevant physical parameters. In this fashion, the OSRA Model generates time sequences of hypothetical oil-spill locations—essentially, oil-spill trajectories.

At each successive time step, the OSRA Model compares the location of the hypothetical spills against the geographic boundaries of shoreline and designated offshore environmental resources. The model counts the occurrences of oil-spill contact to these areas during the time periods that the habitat is known to be used by the resource. Finally, the frequencies of oil-spill contact are computed for designated oil-spill travel times (e.g., 3, 10, or 30 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 spill location. The frequencies of oil-spill contact are the model-estimated probabilities of oil-spill contact. For example, the model might count 162 oil-spill contacts to Terrebonne County, LA (C17), within 10 days of oil-spill travel time out of 3,240 hypothetical oil spills released at a particular location within the lease area. The estimated probability of oil-spill contact would be 5 percent (162/3,240). The 3,240 releases would be made at regular intervals over 9 years of model time (the time span of the ocean current and wind data from January 1, 1986, to December 31, 1994). The 10-day contacts would be those hypothetical spills that contacted Terrebonne County, LA within 10 days of their releases. The OSRA Model output provides the estimated probabilities of contact to all identified offshore environmental resources and segments of shoreline from locations chosen to represent hypothetical oil spills from oil production and transportation facilities, at several selected oil-spill travel times.

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 or the shoreline. These include possible cleanup operations, chemical composition 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 duration of time of the trajectories.

In the trajectory simulation portion of the OSRA Model, many hypothetical oil-spill trajectories 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. The winds and currents are assumed to be statistically similar to those that will occur in the Gulf during future offshore activities. In other words, the oil-spill risk analysts assume that the frequency of strong wind events in the wind field is the same as what will occur during future offshore activities. By inference, the frequencies of contact by the simulated oil spills are the same as what could occur from actual oil spills during future offshore activities.

The other portion of the OSRA Model tabulates the contacts by the simulated oil spills. The model contains the geographical boundaries of a variety of identified environmental features. At every integration time step, the OSRA Model tracks the locations of the simulated spills and counts the number of oil-spill contacts to segments of shoreline (counties). A contact to shore will stop the trajectory of an oil spill; no re-washing is assumed in this model. After specified periods of time, the OSRA Model will divide the total number of contacts to the coastline segments 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.

Conducting an oil-spill risk analysis needs detailed information on ocean currents and wind fields (Ji, 2004). The ocean currents used are numerically computed from an ocean circulation model of the GOM driven by analyzed meteorological forces (the near-surface winds and the total heat fluxes) and observed river inflow into the GOM (Herring et al., 1999). The model used is the Princeton-Dynalysis Ocean Model (PDOM), an enhanced version of the earlier constructed Mellor-Blumberg Model. It is a three-dimensional, time-dependent, primitive equation model using orthogonal curvilinear coordinates in the horizontal and a topographically conformal coordinate in the vertical. The use of these coordinates allows for a realistic coastline and bottom topography, including a sloping shelf, to be represented in the model simulation. The model incorporates the Mellor-Yamada turbulence closure model to provide a parameterization of the vertical mixing process through the water column.

The prognostic variables of the model are velocity, temperature, salinity, turbulence kinetic energy, and turbulence macroscale. The momentum equations are nonlinear and incorporate a variable Coriolis parameter. Prognostic equations governing the thermodynamic quantities (temperature and salinity) account for water mass variations brought about by highly time-dependent coastal upwelling processes. The processes responsible for eddy production, movement, and eventual dissipation are also included in the model physics. Other computed variables include density, vertical eddy viscosity, and vertical eddy diffusivity.

A 9-year simulation was performed on the computational grid shown in figure 4. The PDOM was driven by winds and heat fluxes over the 9-year period, 1986 through 1994, which were analyzed by the European Center for Medium-Range Weather Forecasts (ECMWF). Three-hourly surface currents were then computed for input into the OSRA Model along with the concurrent ECMWF wind field. The OSRA Model used the same ECMWF wind field to calculate the empirical wind drift of the simulated spills.

The PDOM was extensively skill-assessed with many observations from the GOM (Herring et al., 1999). Among the observations was a large set of long-lived, surface drifters. Under the direction of Peter Niiler and Russ Davis of Scripps Institution of Oceanography (La Jolla, California), approximately 340 drifting buoys were deployed from aircraft and three production platforms in a repeated array located southeast of Galveston, Texas (fig. 5). The investigation was called SCULP (Surface Current and Lagrangian-drift Program). Weekly deployments were made from mid-October 1993 running through January 1994, followed by monthly deployments through September 1994 (Herring et al., 1999).

This extensive set of Lagrangian observations affords a rigorous test of the model's ability to reproduce ocean transport as well as prominent features of the Gulf such as the Loop Current and strong mesoscale eddies, which are easily observed from satellite-borne instrumentation. With these observations and other current measurements from moored current meters, a good determination of

the model's veracity was made. The PDOM did an excellent job in reproducing the characteristics of the GOM surface currents both on and off the continental shelf. The surface current field manifests all the dominant structures in time and space as the observed currents and is, therefore, applicable in the statistical estimation of future spill risk that the OSRA Model makes.

Trajectories of hypothetical spills were initiated every 1.0 day from each of the 3,380 launch points in space—3,240 trajectories per launch point over the 9-year simulation period. The chosen number of trajectories per site (3,240) was small enough to be computationally practical and large enough to reduce the random sampling error to an insignificant level. Also, the weather-scale changes in the winds are at least minimally sampled with simulated spills started every 1.0 day.

The OSRA Model integrates the spill velocities (a linear superposition of surface ocean currents and empirical wind drift) by integrating in time to produce the spill trajectories. The time step selected was 30 minutes to fully utilize the spatial resolution of the ocean current field and to achieve a stable set of trajectories. The velocity field was bilinearly interpolated from the 3-hourly grid to get velocities at 30-minute intervals. Smaller time steps did not produce significant differences in the simulated trajectories after 30 model days, so the 30-minute time step was chosen for this analysis. Ji et al. (2004) summarized the latest improvement on the OSRA Model and the model sensitivity tests.

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 30 days. However, if the hypothetical spill contacted shoreline sooner than 30 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 slicks; 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 resource locations. However, an implicit analysis of weathering and decay can be considered by choosing a travel time for the simulated oil spills when they contact environmental resource locations that represent the likely persistence of the oil slick on the water surface. The MMS performed an analysis of the likely weathering and cleanup of a typical offshore oil spill of 1,000 bbl or greater occurring under the proposed action scenarios (USDOJ, MMS, 2002). The analysis of the slick's fate showed that a typical GOM oil slick of 1,000 bbl or greater, exposed to typical winds and currents, would not persist on the water surface beyond 10 days. Therefore, OSRA Model trajectories were analyzed for 3, 10, and 30 days. Spill contacts occurring within these time periods are reported in the probability tables (tables 1 through 3). The probability of spill contact was also analyzed on a seasonal basis, and these probabilities are reported in tables 4 through 15. The counties and parishes with all probabilities of less than 0.5 percent are not shown in these tables.

For instance, table 1 indicates that if an oil-spill event happened in Launch Area 1 (represented as W001 in table 1) in the Western Gulf Area (shown in fig. 1), the oil spilled in W001 has a probability of 23 percent of contacting Kenedy County, Texas, within 30 days. This probability is estimated based on trajectories calculated over the 9-year modeling period (the time span of the ocean current and wind data from January 1, 1986, to December 31, 1994). Since ocean currents and wind velocities have significant seasonal variations, the probabilities that oil spilled in a particular launch area will contact a particular environmental resource also vary seasonally. Tables 4, 7, 10 and 13 indicate that the probabilities of oil spilled in W001 contacting Kenedy County, Texas, within 30 days are 17 percent in winter (January – March), 32 percent in spring (April – June), 28 percent in summer (July – September), and 14 percent in autumn (October – December), respectively. The average of the four seasonal probability values is equal to the annual value of 23 percent, after omitting the round-off errors.

Discussion

As one might expect, the environmental resource locations closest to the spill sites had the greatest risk of contact. As the model run duration increases, more of the identified environmental resources and shoreline segments could have meaningful probabilities of contact ($\geq 0.5\%$). The longer transit times (up to 10 days) allowed by the model enable more hypothetical spills to reach the environmental resources and the shoreline from more distant spill locations. With increased travel time, the complex patterns of wind and ocean currents produce eddy-like motions of the oil spills and multiple opportunities for a spill to make contact with any given environmental resource or shoreline segment.

References Cited

- Anderson, C.M., and R.P. LaBelle. 1990. Estimated Occurrence Rates for Accidental Oil Spills on the U.S. Outer Continental Shelf: Oil and Chemical Pollution 6:21-35.
- Herring, H. J., M. Inoue, G. L. Mellor, C. N. K. Mooers, P. P. Niiler, L-Y. Oey, R. C. Patchen, F. M. Vukovich, and W. J. Wiseman, Jr. 1999. Coastal Ocean Modeling Program for the Gulf of Mexico. Report Numbers 115.1, 115.2, and 115.3 with appendices 115A through 115O-P. Prepared for the Minerals Management Service.
- Ji, Z.-G. 2004. Use of Physical Sciences in Support of Environmental Management. Environmental Management (in press).
- Ji, Z.-G., W.R. Johnson, C.F. Marshall, G.B. Rainey, and E.M. Lear. 2002a. Oil-Spill Risk Analysis: Gulf of Mexico Outer Continental Shelf (OCS) Lease Sales, Central Planning Area and Western Planning Area, 2003-2007, and Gulfwide OCS Program, 2003-2042. OCS Report 2002-032. Minerals Management Service, Herndon, Virginia.

- Ji, Z.-G., W.R. Johnson, C.F. Marshall, G.B. Rainey, and E.M. Lear. 2002b. Oil-Spill Risk Analysis: Gulf of Mexico Outer Continental Shelf (OCS) Lease Sales, Eastern Planning Area, 2003-2007, and Gulfwide OCS Program, 2003-2042. OCS Report 2002-069. Minerals Management Service, Herndon, Virginia.
- Ji, Z.-G., W.R. Johnson, J.W. Price, and C.F. Marshall. 2003. Oil-Spill Risk Analysis for Assessing Environmental Impacts. In Proceedings of the 2003 International Oil Spill Conference, Vancouver, Canada.
- Ji, Z.-G., W.R. Johnson, and C.F. Marshall. 2004. Deepwater Oil-Spill Modeling for Assessing Environmental Impacts. Proceedings of the 2004 Oil Spill Conference, Alicante, Spain (in press).
- LaBelle, R. P. 2001. Overview of U.S. Minerals Management Service Activities in Deepwater Research. *Marine Pollution Bulletin* 43(7-12): 256-261.
- LaBelle, R. P., and C. M. Anderson. 1985. The Application of Oceanography to Oil-Spill Modeling for the Outer Continental Shelf Oil and Gas Leasing Program: *Marine Technology Society Journal* 19(2):19-26.
- Price, J. M., W. R. Johnson, C. F. Marshall, and Z.-G. Ji. 2003. Overview of the Oil Spill Risk Analysis (OSRA) Model for Environmental Impact Assessment. *Spill Science & Technology Bulletin* 8(5-6):529-533.
- Samuels, W. B., N. E. Huang, and D.E. Amstutz. 1982. An Oil Spill Trajectory Analysis Model with a Variable Wind Deflection Angle. *Ocean Engineering* 9:347-360.
- Smith, R. A., J. R. Slack, T. Wyant, and K. J. Lanfear. 1982. The Oil Spill Risk Analysis Model of the U.S. Geological Survey. U.S. Geological Survey Professional Paper 1227.
- U.S. Department of the Interior (USDOI), Minerals Management Service (MMS). 2002. Gulf of Mexico OCS Oil and Gas Lease Sales: 2003-2007, Central Planning Area Sales 185, 190, 194, 198, and 201; Western Planning Area Sales 187, 192, 196, and 200 Draft Environmental Impact Statement. OCS EIS/EA MMS 2002-015. 2 vols.

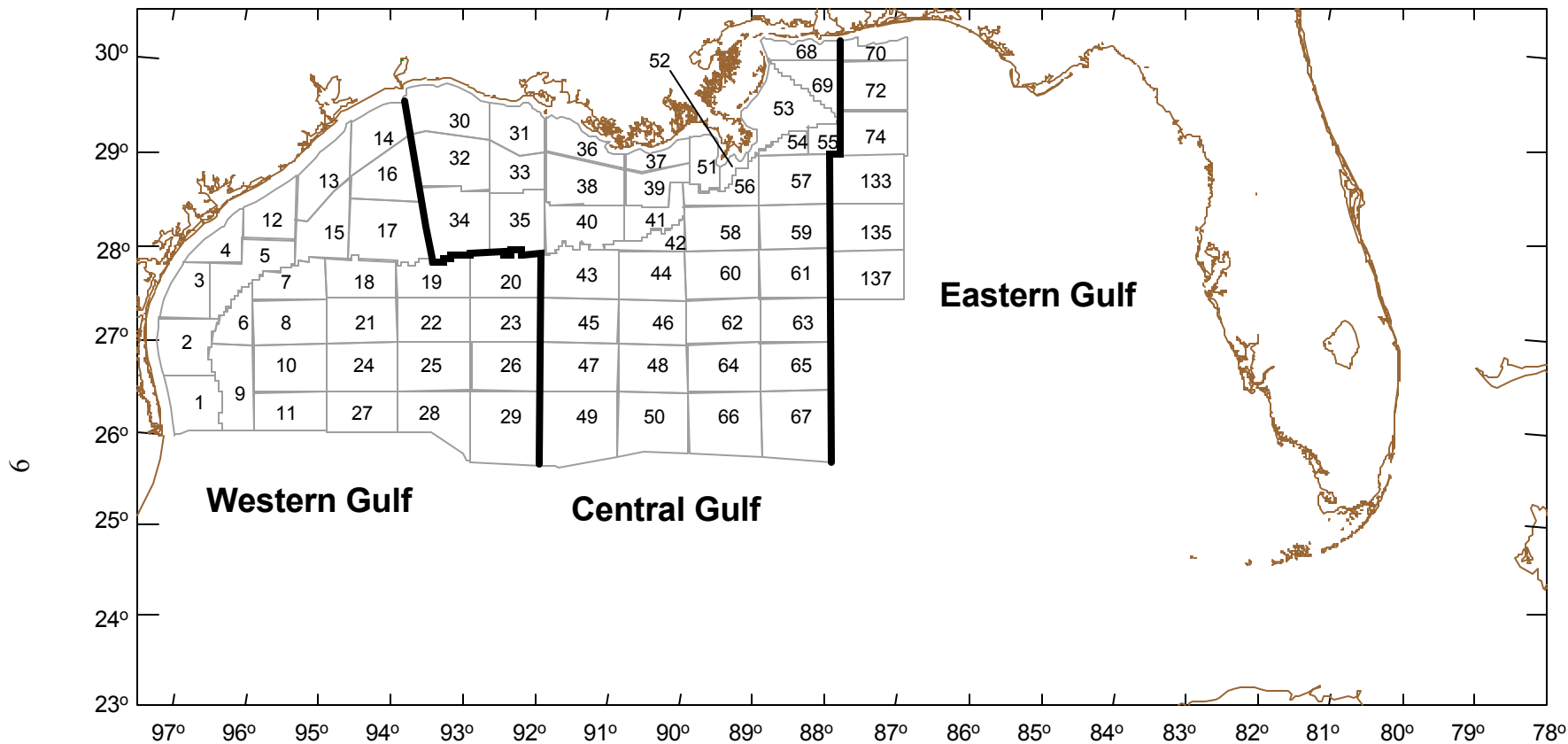


Figure 1. Locations of 75 oil-spill launch areas in the Western, Central, and Eastern Gulf of Mexico Planning Areas

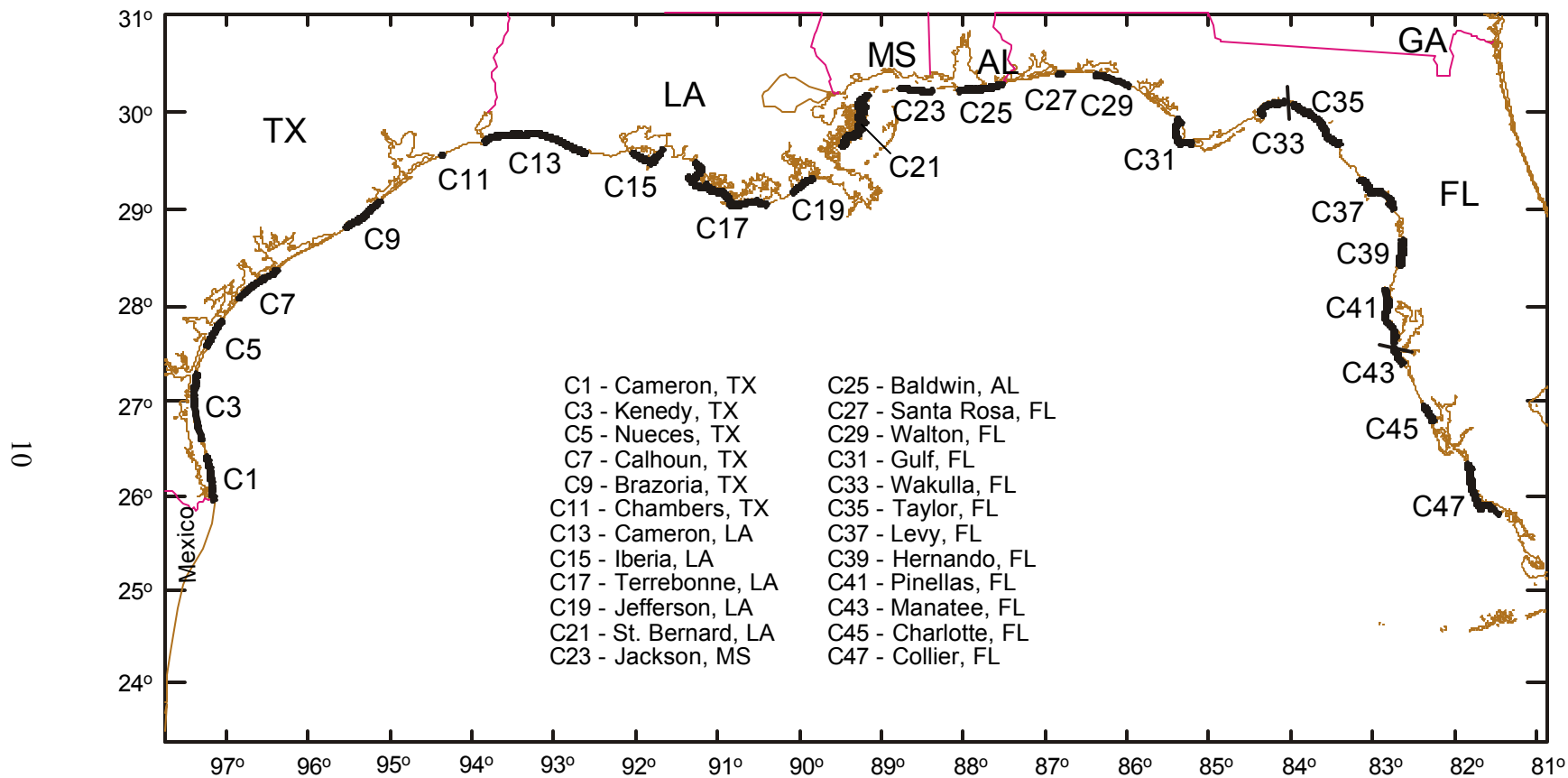


Figure 2. Locations of Gulf of Mexico counties (set 1). (Shading is not to scale.)

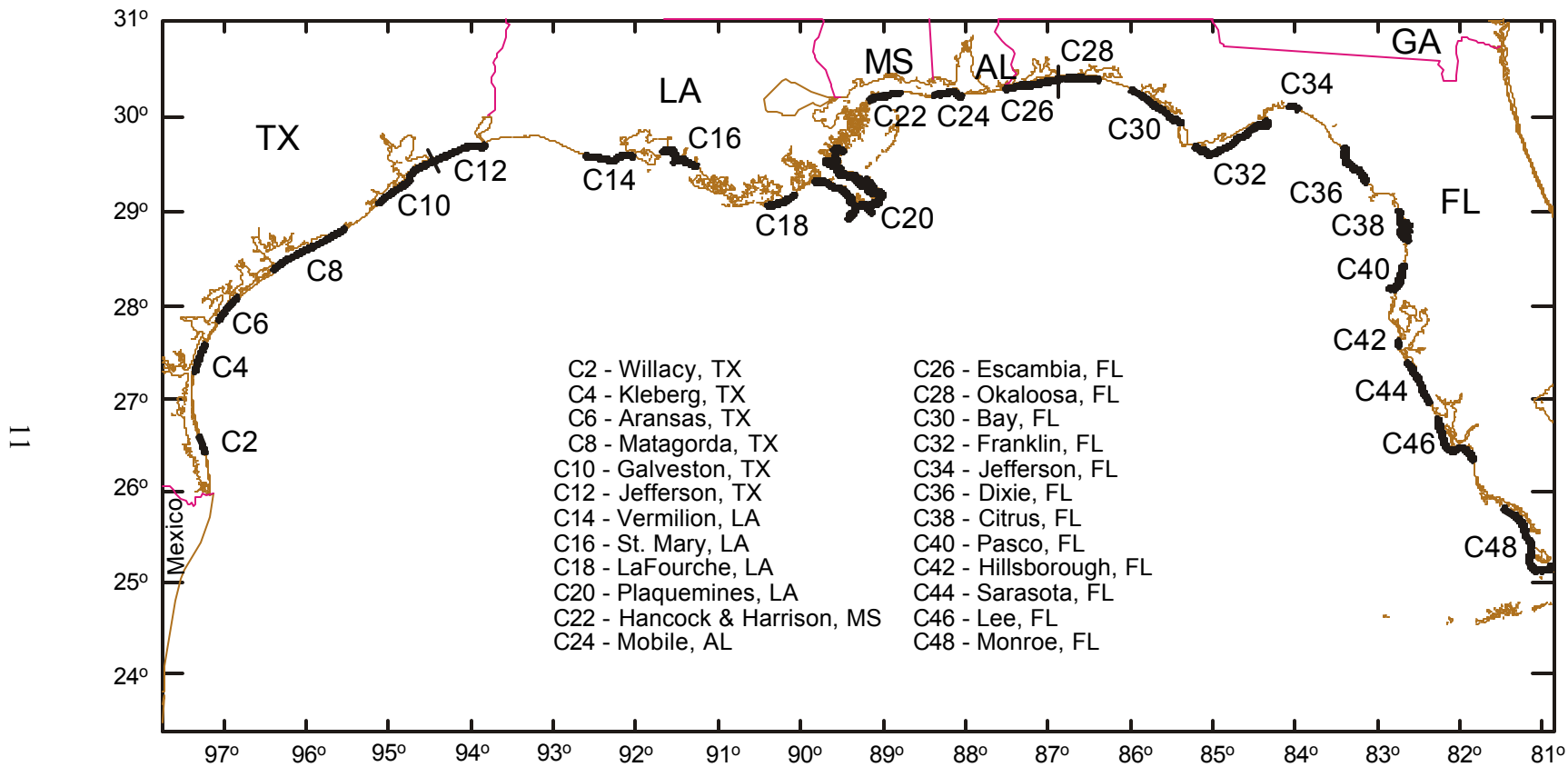


Figure 3. Locations of Gulf of Mexico counties (set 2). (Shading is not to scale.)

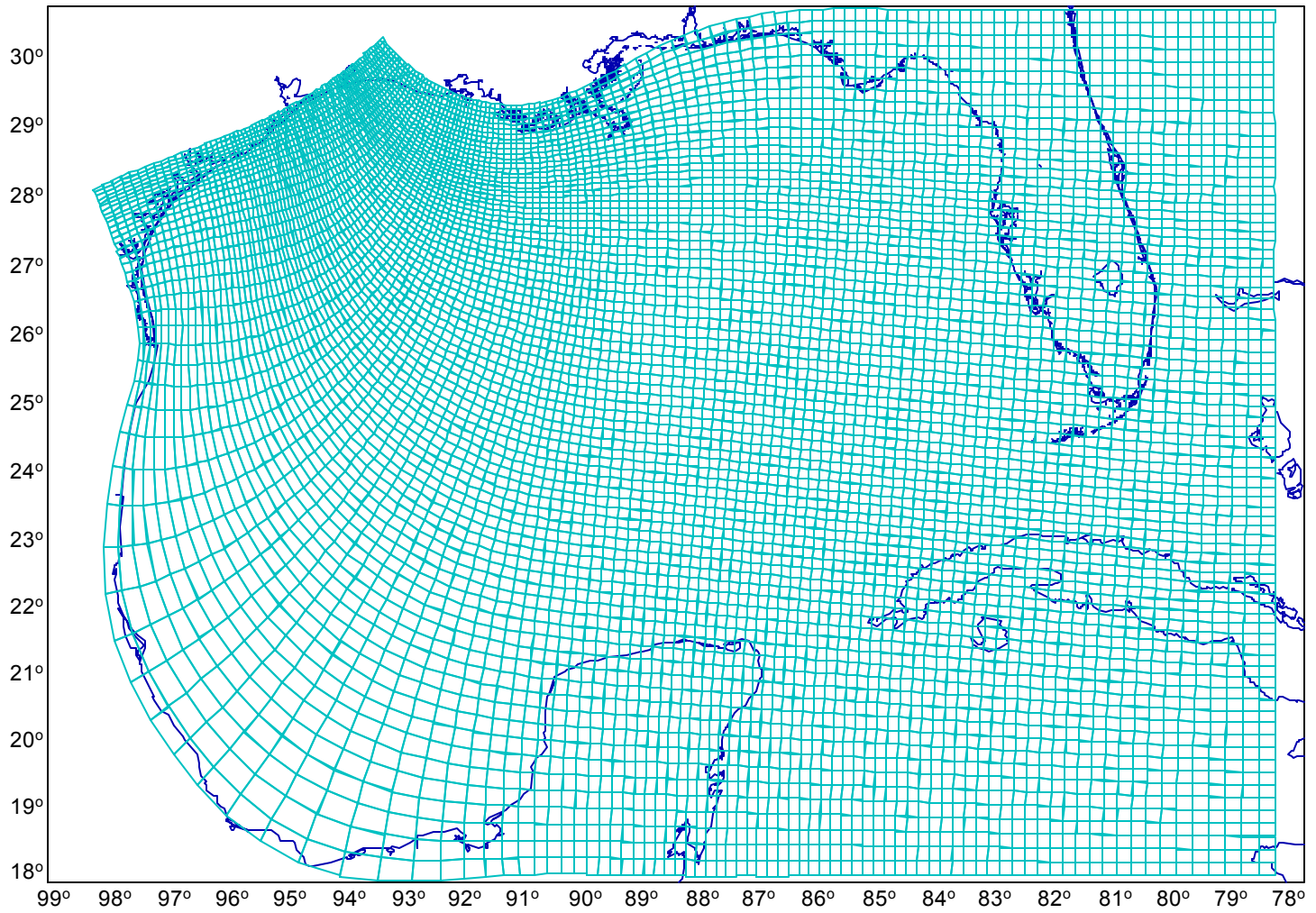


Figure 4. Computational grid used by Dynalysis of Princeton in the Mellor-Blumberg Primitive Equation Model adapted to the Gulf of Mexico

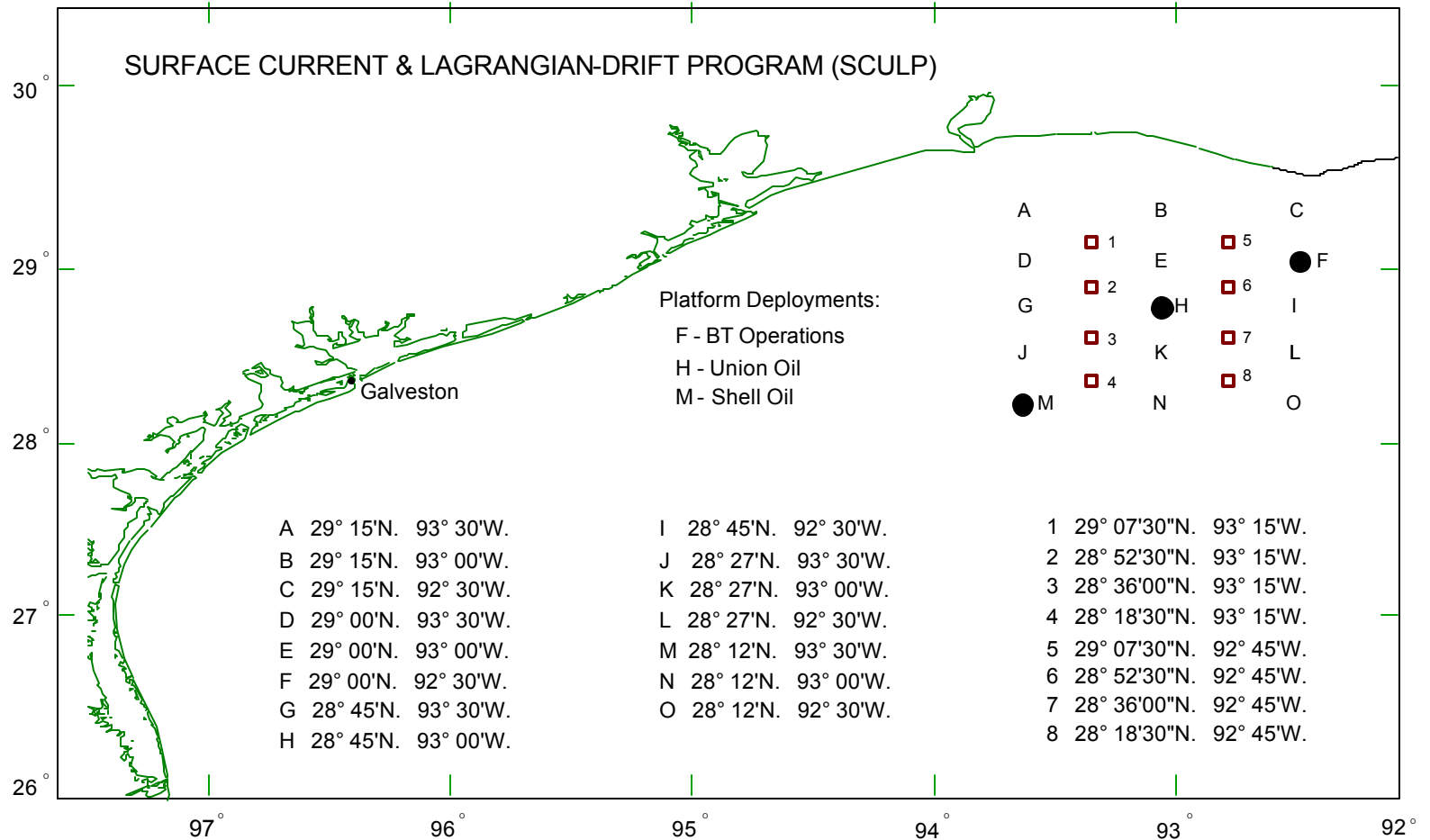


Figure 5. Deployment locations of the SCULP drifters. The letters designate the initial aircraft-deployment locations except for F, H, and M, which were offshore production platforms (filled dots). Buoys were deployed weekly from the platforms and monthly from other lettered stations. Additional aircraft deployments were made from the numbered locations (open boxes).

Table 1. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Western Planning Area** will contact a county within 3/10/30 days

COUNTY	Launch Area									
	W001	W002	W003	W004	W005	W006	W007	W008	W009	W010
C01 Cameron TX	10/20/22	4/11/12	-/5/6	-/2/3	-/1/3	-/2/5	-/-/2	-/-/2	-/5/9	-/-/4
C02 Willacy TX	3/6/7	3/6/7	-/3/3	-/1/2	-/1/2	-/1/2	-/-/1	-/-/1	-/2/4	-/-/2
C03 Kenedy TX	5/20/23	15/32/33	6/18/20	-/6/8	-/6/10	-/8/14	-/1/5	-/1/7	-/8/17	-/1/8
C04 Kleberg TX	-/8/9	7/16/17	13/21/22	2/7/8	-/8/10	-/8/12	-/2/5	-/1/6	-/6/10	-/1/6
C05 Nueces TX	-/4/4	2/7/8	13/17/18	3/8/9	1/7/8	-/7/9	-/2/5	-/2/5	-/5/7	-/1/4
C06 Aransas TX	-/3/4	1/6/6	11/16/16	13/19/20	2/12/14	-/10/13	-/4/7	-/3/7	-/6/9	-/2/6
C07 Calhoun TX	-/2/2	-/3/3	4/6/7	26/30/30	4/15/17	-/11/13	-/7/10	-/4/8	-/7/9	-/2/7
C08 Matagorda TX	-/1/1	-/1/1	-/1/1	11/14/14	2/14/16	-/8/9	-/12/18	-/7/13	-/4/7	-/3/11
C09 Brazoria TX	-/-/-	-/-/-	-/-/-	-/-/-	-/1/1	-/1/1	-/2/4	-/1/3	-/-/1	-/-/3
C10 Galveston TX	-/-/-	-/-/-	-/-/-	-/-/-	-/1/1	-/-/1	-/2/5	-/1/4	-/-/1	-/-/4
C12 Jefferson TX	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/2	-/-/2	-/-/-	-/-/1
C13 Cameron LA	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/2	-/-/2	-/-/-	-/-/2

Note: “-” = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 1. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Western Planning Area** will contact a county within 3/10/30 days --**Continued**

COUNTY	Launch Area										
	W011	W012	W013	W014	W015	W016	W017	W018	W019	W020	
C01 Cameron TX	-/ 1/ 5	-/ -/ 2	-/ -/ 1	-/ -/ 1	-/ -/ 1	-/ -/ 1	-/ -/ 1	-/ -/ 1	-/ -/ 1	-/ -/ 1	-/ -/ -
C02 Willacy TX	-/ -/ 2	-/ -/ 1	-/ -/ -	-/ -/ -	-/ -/ 1	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -
C03 Kenedy TX	-/ 1/ 8	-/ 2/ 5	-/ 1/ 3	-/ -/ 1	-/ 1/ 3	-/ -/ 2	-/ -/ 2	-/ -/ 3	-/ -/ 2	-/ -/ -	
C04 Kleberg TX	-/ 1/ 6	-/ 3/ 5	-/ 1/ 2	-/ -/ 1	-/ 1/ 3	-/ -/ 2	-/ -/ 2	-/ -/ 2	-/ -/ 2	-/ -/ 1	
C05 Nueces TX	-/ -/ 4	-/ 3/ 4	-/ 1/ 2	-/ -/ 1	-/ 1/ 3	-/ -/ 2	-/ -/ 2	-/ -/ 2	-/ -/ 1	-/ -/ 1	
C06 Aransas TX	-/ 1/ 5	1/ 6/ 7	-/ 2/ 3	-/ -/ 1	-/ 3/ 5	-/ 1/ 3	-/ -/ 3	-/ -/ 3	-/ -/ 2	-/ -/ 1	
C07 Calhoun TX	-/ 1/ 6	5/13/15	-/ 4/ 6	-/ 1/ 3	-/ 5/ 8	-/ 2/ 5	-/ 1/ 5	-/ 1/ 5	-/ -/ 3	-/ -/ 1	
C08 Matagorda TX	-/ 1/10	29/40/42	10/26/28	-/ 8/11	1/20/25	-/10/17	-/ 7/15	-/ 4/13	-/ 1/ 8	-/ -/ 3	
C09 Brazoria TX	-/ -/ 2	2/ 4/ 5	11/17/17	2/ 9/10	1/ 6/ 7	1/ 9/11	-/ 4/ 8	-/ 1/ 5	-/ 1/ 4	-/ -/ 2	
C10 Galveston TX	-/ -/ 3	-/ 3/ 3	10/18/19	17/34/35	-/ 5/ 9	1/16/20	-/ 5/12	-/ 1/ 8	-/ 1/ 8	-/ -/ 6	
C11 Chambers TX	-/ -/ -	-/ -/ -	-/ -/ -	1/ 2/ 2	-/ -/ -	-/ 1/ 1	-/ -/ -	-/ -/ -	-/ 1/ 1	-/ -/ -	
C12 Jefferson TX	-/ -/ 1	-/ -/ 1	-/ 3/ 3	9/16/17	-/ 1/ 3	-/ 6/ 8	-/ 2/ 5	-/ -/ 4	-/ -/ 4	-/ -/ 4	
C13 Cameron LA	-/ -/ 1	-/ -/ -	-/ 1/ 2	1/ 6/ 7	-/ -/ 2	-/ 4/ 8	-/ 1/ 7	-/ -/ 5	-/ 1/ 8	-/ 1/ 9	
C14 Vermilion LA	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ 1	-/ -/ 1	-/ -/ 1	-/ -/ 2	-/ -/ 3	
C15 Iberia LA	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ 1	-/ -/ 1	
C17 Terrebonne LA	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ 1	-/ -/ 2	
C20 Plaquemines LA	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ 1	

Note: "-" = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 1. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Western Planning Area** will contact a county within 3/10/30 days --**Continued**

COUNTY	Launch Area								
	W021	W022	W023	W024	W025	W026	W027	W028	W029
C01 Cameron TX	-/-2	-/-1	-/-1	-/-3	-/-1	-/-1	-/-2	-/-1	-/-
C02 Willacy TX	-/-1	-/-	-/-	-/-1	-/-	-/-	-/-1	-/-	-/-
C03 Kenedy TX	-/-4	-/-2	-/-1	-/-4	-/-2	-/-1	-/-4	-/-2	-/-1
C04 Kleberg TX	-/-3	-/-2	-/-1	-/-3	-/-2	-/-1	-/-3	-/-2	-/-1
C05 Nueces TX	-/-3	-/-1	-/-1	-/-3	-/-1	-/-	-/-2	-/-1	-/-
C06 Aransas TX	-/-4	-/-2	-/-1	-/-3	-/-2	-/-1	-/-3	-/-2	-/-1
C07 Calhoun TX	-/1/5	-/-2	-/-1	-/-4	-/-2	-/-1	-/-3	-/-2	-/-1
C08 Matagorda TX	-/1/9	-/-7	-/-3	-/-8	-/-6	-/-3	-/-7	-/-5	-/-2
C09 Brazoria TX	-/-3	-/-2	-/-2	-/-2	-/-2	-/-1	-/-2	-/-2	-/-1
C10 Galveston TX	-/-5	-/-6	-/-3	-/-4	-/-4	-/-2	-/-3	-/-3	-/-2
C12 Jefferson TX	-/-2	-/-3	-/-2	-/-2	-/-2	-/-2	-/-1	-/-1	-/-1
C13 Cameron LA	-/-5	-/-5	-/-6	-/-3	-/-4	-/-4	-/-3	-/-3	-/-2
C14 Vermilion LA	-/-1	-/-2	-/-2	-/-1	-/-2	-/-2	-/-1	-/-1	-/-1
C15 Iberia LA	-/-	-/-1	-/-1	-/-	-/-	-/-1	-/-	-/-	-/-
C17 Terrebonne LA	-/-	-/-1	-/-1	-/-	-/-	-/-1	-/-	-/-	-/-
C20 Plaquemines LA	-/-	-/-	-/-1	-/-	-/-	-/-	-/-	-/-	-/-

Note: “-” = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 2. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Central Planning Area** will contact a county within 3/10/30 days

COUNTY	Launch Area									
	C030	C031	C032	C033	C034	C035	C036	C037	C038	C039
C03 Kenedy TX	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1
C04 Kleberg TX	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1
C05 Nueces TX	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1
C06 Aransas TX	-/-/1	-/-/1	-/-/2	-/-/1	-/-/2	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1
C07 Calhoun TX	-/-/1	-/-/1	-/-/3	-/-/2	-/-/3	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1
C08 Matagorda TX	-/1/6	-/1/5	-/3/11	-/1/7	-/1/9	-/1/5	-/1/4	-/1/1	-/1/4	-/1/2
C09 Brazoria TX	-/2/4	-/1/3	-/3/6	-/1/4	-/1/5	-/1/3	-/1/2	-/1/1	-/1/2	-/1/1
C10 Galveston TX	-/9/13	-/2/6	-/10/17	-/3/10	-/4/12	-/1/9	-/1/4	-/1/1	-/1/5	-/1/2
C11 Chambers TX	-/1/1	-/-/1	-/1/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1
C12 Jefferson TX	5/14/15	-/3/6	-/7/11	-/4/8	-/2/6	-/1/6	-/1/4	-/1/1	-/1/5	-/1/3
C13 Cameron LA	27/41/43	8/24/27	1/13/18	1/13/21	-/3/11	-/4/13	-/9/15	-/1/6	-/7/16	-/2/10
C14 Vermilion LA	1/2/3	16/22/23	-/2/3	-/6/8	-/1/3	-/2/5	3/13/15	-/2/4	-/5/7	-/2/4
C15 Iberia LA	-/-/1	2/4/4	-/-/1	-/1/2	-/-/1	-/1/2	3/7/8	-/1/1	-/2/3	-/1/1
C16 St. Mary LA	-/-/1	-/1/1	-/-/1	-/-/1	-/-/1	-/-/1	1/2/2	-/-/1	-/1/1	-/-/1
C17 Terrebonne LA	-/-/1	-/1/1	-/-/1	-/1/2	-/-/1	-/1/2	8/12/13	13/18/20	1/6/7	3/8/10
C18 LaFourche LA	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/1/1	13/15/16	-/1/1	2/4/5
C19 Jefferson LA	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	2/3/4	-/-/1	-/1/2
C20 Plaquemines LA	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/1/1	-/1/1	4/9/10	-/1/2	1/5/8

Note: “-” = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 2. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Central Planning Area** will contact a county within 3/10/30 days --**Continued**

COUNTY	Launch Area									
	C040	C041	C042	C043	C044	C045	C046	C047	C048	C049
C07 Calhoun TX	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-	-/-/1
C08 Matagorda TX	-/-/3	-/-/1	-/-/1	-/-/2	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/2
C09 Brazoria TX	-/-/1	-/-/1	-/-/-	-/-/1	-/-/-	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1
C10 Galveston TX	-/-/5	-/-/2	-/-/2	-/-/3	-/-/2	-/-/2	-/-/2	-/-/2	-/-/2	-/-/1
C12 Jefferson TX	-/1/5	-/-/3	-/-/2	-/-/2	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1
C13 Cameron LA	-/3/11	-/1/9	-/1/7	-/1/7	-/-/5	-/-/4	-/-/3	-/-/3	-/-/2	-/-/2
C14 Vermilion LA	-/1/4	-/1/3	-/-/3	-/-/3	-/-/2	-/-/2	-/-/1	-/-/1	-/-/1	-/-/1
C15 Iberia LA	-/-/2	-/-/1	-/-/1	-/-/1	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-
C16 St. Mary LA	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C17 Terrebonne LA	-/2/4	-/3/5	-/1/3	-/-/3	-/1/2	-/-/2	-/-/1	-/-/1	-/-/1	-/-/1
C18 LaFourche LA	-/-/1	-/2/3	-/1/2	-/-/1	-/-/1	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-
C19 Jefferson LA	-/-/-	-/1/1	-/-/1	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C20 Plaquemines LA	-/-/2	-/3/6	-/2/5	-/-/2	-/1/4	-/-/2	-/-/3	-/-/1	-/-/2	-/-/1

Note: “-” = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 2. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Central Planning Area** will contact a county within 3/10/30 days --**Continued**

COUNTY	Launch Area									
	C050	C051	C052	C053	C054	C055	C056	C057	C058	C059
C08 Matagorda TX	-/-/1	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-
C10 Galveston TX	-/-/1	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/1	-/-/-	-/-/1	-/-/-
C12 Jefferson TX	-/-/-	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/1	-/-/-	-/-/1	-/-/-
C13 Cameron LA	-/-/1	-/-/3	-/-/3	-/-/-	-/-/-	-/-/-	-/-/3	-/-/1	-/-/3	-/-/1
C14 Vermilion LA	-/-/1	-/1/2	-/-/2	-/-/-	-/-/-	-/-/-	-/-/2	-/-/1	-/-/2	-/-/1
C15 Iberia LA	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/1	-/-/-	-/-/1	-/-/-
C17 Terrebonne LA	-/-/-	1/5/6	-/3/5	-/-/1	-/1/2	-/-/1	-/3/5	-/1/2	-/1/3	-/-/2
C18 LaFourche LA	-/-/-	9/13/14	2/6/7	-/1/1	-/1/2	-/-/1	1/4/5	-/1/2	-/2/3	-/1/2
C19 Jefferson LA	-/-/-	5/7/7	1/2/3	-/-/-	-/-/-	-/-/-	-/1/2	-/-/-	-/-/1	-/-/1
C20 Plaquemines LA	-/-/1	16/22/23	18/24/27	11/25/31	9/21/29	-/7/17	6/13/16	4/14/21	-/4/8	-/5/11
C21 St. Bernard LA	-/-/-	-/-/-	-/-/1	2/9/12	-/3/6	-/2/7	-/-/1	-/1/3	-/-/1	-/-/2
C22 Hancock & Harrison MS	-/-/-	-/-/-	-/-/-	-/1/2	-/-/1	-/-/2	-/-/-	-/-/1	-/-/-	-/-/-
C23 Jackson MS	-/-/-	-/-/-	-/-/1	-/2/4	-/1/2	-/1/2	-/-/1	-/-/1	-/-/-	-/-/-
C24 Mobile AL	-/-/-	-/-/-	-/-/-	-/2/3	-/-/1	-/1/2	-/-/-	-/-/1	-/-/-	-/-/-
C25 Baldwin AL	-/-/-	-/-/-	-/-/-	-/2/3	-/-/2	-/-/1	-/-/1	-/-/1	-/-/-	-/-/-
C26 Escambia FL	-/-/-	-/-/-	-/-/-	-/1/3	-/-/1	-/-/2	-/-/1	-/-/1	-/-/-	-/-/-
C28 Okaloosa FL	-/-/-	-/-/-	-/-/-	-/-/1	-/-/1	-/-/1	-/-/-	-/-/1	-/-/1	-/-/-
C29 Walton FL	-/-/-	-/-/-	-/-/-	-/-/1	-/-/1	-/-/1	-/-/-	-/-/1	-/-/-	-/-/1
C30 Bay FL	-/-/-	-/-/-	-/-/-	-/-/1	-/-/1	-/-/2	-/-/-	-/-/1	-/-/-	-/-/1
C31 Gulf FL	-/-/-	-/-/-	-/-/-	-/-/1	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-
C32 Franklin FL	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-

Note: “-” = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 2. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Central Planning Area** will contact a county within 3/10/30 days --**Continued**

COUNTY	Launch Area									
	C060	C061	C062	C063	C064	C065	C066	C067	C068	C069
C10 Galveston TX	-/-/1	-/-/-	-/-/-	-/-/-	-/-/1	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-
C12 Jefferson TX	-/-/1	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C13 Cameron LA	-/-/2	-/-/1	-/-/2	-/-/1	-/-/1	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-
C14 Vermilion LA	-/-/1	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C17 Terrebonne LA	-/-/2	-/-/2	-/-/1	-/-/1	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-
C18 LaFourche LA	-/-/1	-/-/1	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C20 Plaquemines LA	-/1/4	-/1/6	-/-/3	-/-/3	-/-/2	-/-/1	-/-/1	-/-/-	1/10/14	-/9/17
C21 St. Bernard LA	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	7/16/18	1/10/13
C22 Hancock & Harrison MS	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	4/6/6	-/2/3
C23 Jackson MS	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	8/11/12	1/4/4
C24 Mobile AL	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	8/11/11	2/4/5
C25 Baldwin AL	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	6/9/9	1/5/7
C26 Escambia FL	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	1/3/4	-/3/5
C28 Okaloosa FL	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/1/1	-/1/2
C29 Walton FL	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/1/1	-/1/2
C30 Bay FL	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/1/1	-/-/2
C31 Gulf FL	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/1	-/-/1
C32 Franklin FL	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/1

Note: “-“ = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 3. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Eastern Planning Area** will contact a county within 3/10/30 days

COUNTY	Launch Area					
	E070	E072	E074	E133	E135	E137
C17 Terrebonne LA	-/-	-/-	-/-	-/-	-/1	-/1
C18 LaFourche LA	-/-	-/-	-/-	-/1	-/1	-/1
C20 Plaquemines LA	-/1/5	-/1/7	-/1/8	-/2/9	-/2/8	-/1/6
C21 St. Bernard LA	-/2/3	-/2/4	-/1/4	-/3	-/2	-/1
C22 Hancock & Harrison MS	-/1/1	-/1/1	-/1	-/1	-/-	-/-
C23 Jackson MS	-/1/1	-/1/2	-/2	-/1	-/-	-/-
C24 Mobile AL	1/2/3	-/2/3	-/1/2	-/1	-/1	-/-
C25 Baldwin AL	10/15/17	1/6/9	-/1/3	-/2	-/1	-/-
C26 Escambia FL	9/15/16	1/4/7	-/1/3	-/1	-/-	-/-
C27 Santa Rosa FL	-/1	-/-	-/-	-/-	-/-	-/-
C28 Okaloosa FL	2/4/5	-/1/3	-/1	-/-	-/-	-/-
C29 Walton FL	1/2/3	-/1/2	-/1	-/1	-/-	-/-
C30 Bay FL	-/2/4	-/1/3	-/2	-/1	-/1	-/1
C31 Gulf FL	-/1/3	-/1/2	-/2	-/1	-/1	-/-
C32 Franklin FL	-/2	-/1	-/1	-/1	-/1	-/-

Note: "-" = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 4. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Western Planning Area** in the **winter season** will contact a county within 3/10/30 days

COUNTY	Launch Area									
	W001	W002	W003	W004	W005	W006	W007	W008	W009	W010
C01 Cameron TX	10/21/24	6/16/19	-/ 8/10	-/ 4/ 6	-/ 1/ 5	-/ 3/ 8	-/ -/3	-/ -/4	-/ 6/13	-/ 1/ 8
C02 Willacy TX	2/ 6/ 7	3/ 8/ 9	1/ 4/ 5	-/ 2/ 3	-/ 1/ 2	-/ 2/ 3	-/ -/ 1	-/ -/ 2	-/ 2/ 5	-/ -/ 4
C03 Kenedy TX	2/11/17	12/28/32	6/22/25	-/ 8/11	-/ 8/14	-/ 9/20	-/ 2/ 9	-/ 1/14	-/ 6/23	-/ -/14
C04 Kleberg TX	-/ 2/ 3	3/ 8/10	9/17/19	2/ 9/11	-/ 6/11	-/ 6/13	-/ 1/ 8	-/ 1/ 9	-/ 2/ 8	-/ 1/ 5
C05 Nueces TX	-/ 1/ 1	-/ 3/ 4	7/12/12	3/ 8/ 9	-/ 5/ 8	-/ 3/ 8	-/ 1/ 5	-/ 1/ 5	-/ 1/ 3	-/ -/ 3
C06 Aransas TX	-/ -/ 1	-/ 2/ 3	5/ 9/10	10/16/17	1/ 7/11	-/ 2/ 7	-/ 2/ 6	-/ 1/ 5	-/ 1/ 3	-/ -/ 3
C07 Calhoun TX	-/ -/ -	-/ 1/ 1	1/ 3/ 4	16/21/22	1/ 7/10	-/ 2/ 6	-/ 2/ 7	-/ 1/ 3	-/ -/ 2	-/ -/ 2
C08 Matagorda TX	-/ -/ -	-/ -/ -	-/ 1/ 1	5/ 8/ 9	-/ 5/ 8	-/ 1/ 2	-/ 2/ 6	-/ -/ 2	-/ -/ -	-/ -/ 1

Note: “-” = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 4. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Western Planning Area** in the **winter season** will contact a county within 3/10/30 days --**Continued**

COUNTY	Launch Area									
	W011	W012	W013	W014	W015	W016	W017	W018	W019	W020
C01 Cameron TX	-/ 1/ 9	-/ 1/ 4	-/ -/ 2	-/ -/ 1	-/ -/ 1	-/ -/ -	-/ -/ 1	-/ -/ 1	-/ -/ -	-/ -/ -
C02 Willacy TX	-/ -/ 4	-/ -/ 1	-/ -/ 1	-/ -/ -	-/ -/ 1	-/ -/ -	-/ -/ -	-/ -/ 1	-/ -/ -	-/ -/ -
C03 Kenedy TX	-/ -/ 10	-/ 2/ 6	-/ -/ 3	-/ -/ 1	-/ 1/ 5	-/ -/ 2	-/ -/ 3	-/ -/ 6	-/ -/ 3	-/ -/ 1
C04 Kleberg TX	-/ -/ 4	-/ 4/ 7	-/ 1/ 4	-/ -/ 2	-/ 2/ 5	-/ -/ 3	-/ -/ 3	-/ -/ 5	-/ -/ 3	-/ -/ 1
C05 Nueces TX	-/ -/ 2	-/ 4/ 6	-/ 1/ 4	-/ -/ 2	-/ 1/ 5	-/ -/ 3	-/ -/ 2	-/ -/ 3	-/ -/ 2	-/ -/ 1
C06 Aransas TX	-/ -/ 2	-/ 6/ 8	-/ 2/ 5	-/ -/ 2	-/ 2/ 6	-/ 1/ 4	-/ -/ 4	-/ -/ 5	-/ -/ 3	-/ -/ 1
C07 Calhoun TX	-/ -/ 1	4/ 12/ 15	-/ 5/ 8	-/ 1/ 4	-/ 3/ 8	-/ 2/ 7	-/ 1/ 6	-/ 1/ 4	-/ -/ 4	-/ -/ 3
C08 Matagorda TX	-/ -/ -	18/ 27/ 30	9/ 25/ 29	-/ 9/ 14	1/ 11/ 19	-/ 10/ 19	-/ 4/ 13	-/ 2/ 7	-/ 1/ 8	-/ -/ 6
C09 Brazoria TX	-/ -/ -	1/ 2/ 2	10/ 14/ 15	2/ 10/ 11	-/ 2/ 4	1/ 7/ 10	-/ 2/ 5	-/ -/ 2	-/ -/ 2	-/ -/ 4
C10 Galveston TX	-/ -/ -	-/ -/ 1	6/ 9/ 10	16/ 32/ 34	-/ 1/ 2	1/ 11/ 15	-/ 2/ 5	-/ -/ 1	-/ -/ 2	-/ -/ 4
C11 Chambers TX	-/ -/ -	-/ -/ -	-/ -/ -	1/ 1/ 1	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -
C12 Jefferson TX	-/ -/ -	-/ -/ -	-/ -/ -	5/ 8/ 9	-/ -/ -	-/ 1/ 2	-/ -/ -	-/ -/ -	-/ -/ 1	-/ -/ 1
C13 Cameron LA	-/ -/ -	-/ -/ -	-/ -/ -	-/ 1/ 1	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ 1

Note: "-" = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 4. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Western Planning Area** in the **winter season** will contact a county within 3/10/30 days --Continued

COUNTY	Launch Area								
	W021	W022	W023	W024	W025	W026	W027	W028	W029
C01 Cameron TX	-/-/3	-/-/1	-/-/-	-/-/4	-/-/2	-/-/-	-/-/4	-/-/2	-/-/-
C02 Willacy TX	-/-/2	-/-/1	-/-/-	-/-/2	-/-/1	-/-/-	-/-/2	-/-/1	-/-/-
C03 Kenedy TX	-/-/9	-/-/4	-/-/1	-/-/10	-/-/5	-/-/2	-/-/8	-/-/4	-/-/1
C04 Kleberg TX	-/-/6	-/-/3	-/-/2	-/-/5	-/-/4	-/-/2	-/-/4	-/-/3	-/-/1
C05 Nueces TX	-/-/4	-/-/3	-/-/1	-/-/3	-/-/3	-/-/1	-/-/2	-/-/2	-/-/1
C06 Aransas TX	-/-/4	-/-/3	-/-/2	-/-/2	-/-/3	-/-/2	-/-/2	-/-/2	-/-/1
C07 Calhoun TX	-/1/3	-/-/3	-/-/2	-/-/1	-/-/2	-/-/2	-/-/1	-/-/2	-/-/1
C08 Matagorda TX	-/-/3	-/-/4	-/-/5	-/-/2	-/-/2	-/-/2	-/-/1	-/-/1	-/-/1
C09 Brazoria TX	-/-/1	-/-/1	-/-/2	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C10 Galveston TX	-/-/-	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-

Note: “-“ = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 5. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Central Planning Area** in the **winter season** will contact a county within 3/10/30 days

COUNTY	Launch Area									
	C030	C031	C032	C033	C034	C035	C036	C037	C038	C039
C01 Cameron TX	-/-/1	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/
C03 Kenedy TX	-/-/1	-/-/	-/-/1	-/-/	-/-/1	-/-/	-/-/	-/-/	-/-/	-/-/
C04 Kleberg TX	-/-/1	-/-/1	-/-/2	-/-/1	-/-/2	-/-/1	-/-/	-/-/	-/-/	-/-/
C05 Nueces TX	-/-/1	-/-/1	-/-/2	-/-/1	-/-/1	-/-/1	-/-/1	-/-/	-/-/	-/-/
C06 Aransas TX	-/-/1	-/-/1	-/-/3	-/-/1	-/-/2	-/-/1	-/-/1	-/-/	-/-/1	-/-/
C07 Calhoun TX	-/-/2	-/-/2	-/-/5	-/-/2	-/-/4	-/-/2	-/-/1	-/-/	-/-/1	-/-/1
C08 Matagorda TX	-/2/8	-/-/7	-/3/14	-/-/11	-/1/11	-/-/8	-/-/6	-/-/2	-/-/6	-/-/3
C09 Brazoria TX	-/3/6	-/-/4	-/3/7	-/-/4	-/1/5	-/-/4	-/-/3	-/-/1	-/-/3	-/-/1
C10 Galveston TX	-/10/15	-/2/8	-/8/16	-/2/11	-/2/8	-/1/9	-/-/7	-/-/2	-/-/8	-/-/3
C11 Chambers TX	-/1/1	-/-/	-/-/1	-/-/1	-/-/	-/-/	-/-/	-/-/	-/-/1	-/-/
C12 Jefferson TX	5/13/15	-/3/6	-/5/8	-/2/7	-/1/2	-/1/4	-/1/4	-/-/2	-/1/5	-/-/3
C13 Cameron LA	18/28/30	7/20/24	-/3/5	-/8/11	-/-/1	-/1/3	-/7/13	-/1/5	-/4/11	-/1/8
C14 Vermilion LA	-/1/1	11/15/15	-/-/	-/2/2	-/-/	-/-/	3/10/11	-/1/3	-/3/3	-/1/2
C15 Iberia LA	-/-/	1/2/2	-/-/	-/-/	-/-/	-/-/	2/4/4	-/-/	-/-/	-/-/
C16 St. Mary LA	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/1/1	-/-/	-/-/	-/-/
C17 Terrebonne LA	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	5/7/7	12/17/18	1/2/2	3/6/7
C18 LaFourche LA	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	12/14/15	-/-/	2/3/3
C19 Jefferson LA	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	2/3/3	-/-/	-/1/1
C20 Plaquemines LA	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	2/4/4	-/-/	-/1/1

Note: “-” = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 5. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Central Planning Area** in the **winter season** will contact a county within 3/10/30 days --**Continued**

COUNTY	Launch Area									
	C040	C041	C042	C043	C044	C045	C046	C047	C048	C049
C04 Kleberg TX	-/-	-/-	-/-	-/-	-/-	-/1	-/-	-/-	-/-	-/-
C05 Nueces TX	-/-	-/-	-/-	-/-	-/-	-/1	-/-	-/1	-/-	-/-
C06 Aransas TX	-/-	-/-	-/-	-/-	-/-	-/1	-/-	-/1	-/-	-/1
C07 Calhoun TX	-/1	-/1	-/-	-/1	-/-	-/1	-/-	-/1	-/-	-/1
C08 Matagorda TX	-/4	-/2	-/1	-/3	-/1	-/3	-/1	-/2	-/1	-/2
C09 Brazoria TX	-/2	-/1	-/-	-/1	-/1	-/1	-/1	-/1	-/1	-/1
C10 Galveston TX	-/7	-/3	-/3	-/4	-/3	-/2	-/2	-/1	-/2	-/-
C12 Jefferson TX	-/4	-/3	-/2	-/1	-/1	-/-	-/1	-/-	-/-	-/-
C13 Cameron LA	-/1/5	-/1/5	-/3	-/1	-/1	-/-	-/-	-/-	-/-	-/-
C14 Vermilion LA	-/-	-/1	-/1	-/-	-/1	-/-	-/-	-/-	-/-	-/-
C17 Terrebonne LA	-/-	-/2/2	-/1/1	-/-	-/-	-/-	-/-	-/-	-/-	-/-
C18 LaFourche LA	-/-	-/1/1	-/1	-/-	-/-	-/-	-/-	-/-	-/-	-/-

Note: "-" = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 5. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Central Planning Area** in the **winter season** will contact a county within 3/10/30 days--**Continued**

COUNTY	Launch Area									
	C050	C051	C052	C053	C054	C055	C056	C057	C058	C059
C08 Matagorda TX	-/-/1	-/-/1	-/-/1	-/-/-	-/-/1	-/-/-	-/-/1	-/-/1	-/-/1	-/-/-
C09 Brazoria TX	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C10 Galveston TX	-/-/1	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/1	-/-/-	-/-/1	-/-/-
C12 Jefferson TX	-/-/-	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/1	-/-/-	-/-/1	-/-/-
C13 Cameron LA	-/-/-	-/-/3	-/-/3	-/-/-	-/-/-	-/-/-	-/-/3	-/-/-	-/-/2	-/-/-
C14 Vermilion LA	-/-/-	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/1	-/-/-	-/-/1	-/-/-
C17 Terrebonne LA	-/-/-	1/5/6	-/3/4	-/1/1	-/1/2	-/1/1	-/2/4	-/1/2	-/1/2	-/1/2
C18 LaFourche LA	-/-/-	9/12/14	2/6/7	-/1/2	-/1/2	-/1/1	1/3/4	-/1/2	-/1/1	-/1/1
C19 Jefferson LA	-/-/-	5/7/7	1/2/2	-/-/-	-/-/-	-/-/-	-/1/1	-/-/-	-/-/-	-/-/-
C20 Plaquemines LA	-/-/-	12/15/16	16/21/23	11/26/33	8/20/27	-/7/15	5/9/12	4/10/16	-/2/4	-/2/5
C21 St. Bernard LA	-/-/-	-/-/-	-/-/-	2/6/7	-/1/2	-/1/3	-/-/-	-/-/-	-/-/-	-/-/-
C22 Hancock & Harrison MS	-/-/-	-/-/-	-/-/-	-/1/2	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-
C23 Jackson MS	-/-/-	-/-/-	-/-/-	-/2/3	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-
C24 Mobile AL	-/-/-	-/-/-	-/-/-	-/1/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C25 Baldwin AL	-/-/-	-/-/-	-/-/-	-/1/1	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-

Note: “-” = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 5. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Central Planning Area** in the **winter season** will contact a county within 3/10/30 days --**Continued**

COUNTY	Launch Area									
	C060	C061	C062	C063	C064	C065	C066	C067	C068	C069
C10 Galveston TX	-/-/1	-/-/-	-/-/1	-/-/-	-/-/1	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-
C12 Jefferson TX	-/-/1	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C13 Cameron LA	-/-/1	-/-/-	-/-/1	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C17 Terrebonne LA	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C18 LaFourche LA	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/1
C20 Plaquemines LA	-/-/-	-/-/1	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	1/11/16	-/10/17
C21 St. Bernard LA	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	9/17/19	1/7/10
C22 Hancock & Harrison MS	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	3/5/6	-/2/2
C23 Jackson MS	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	7/10/10	1/3/4
C24 Mobile AL	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	6/8/8	1/3/3
C25 Baldwin AL	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	5/7/7	1/3/4
C26 Escambia FL	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/2/2	-/1/2
C28 Okaloosa FL	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/1	-/-/-

Note: “-” = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 6. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Eastern Planning Area** in the **winter season** will contact a county within 3/10/30 days

COUNTY	Launch Area					
	E070	E072	E074	E133	E135	E137
C17 Terrebonne LA	-/-/-	-/-/-	-/-/-	-/-/1	-/-/1	-/-/-
C18 LaFourche LA	-/-/-	-/-/-	-/-/-	-/-/1	-/-/1	-/-/-
C20 Plaquemines LA	-/1/5	-/1/5	-/1/7	-/2/8	-/1/5	-/1/2
C21 St. Bernard LA	-/1/3	-/1/4	-/1/3	-/-/1	-/-/-	-/-/-
C22 Hancock & Harrison MS	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-
C23 Jackson MS	-/1/1	-/-/1	-/-/1	-/-/1	-/-/-	-/-/-
C24 Mobile AL	1/2/2	-/1/2	-/-/1	-/-/-	-/-/-	-/-/-
C25 Baldwin AL	9/14/16	1/4/6	-/1/1	-/-/-	-/-/-	-/-/-
C26 Escambia FL	8/13/14	1/3/4	-/-/1	-/-/-	-/-/-	-/-/-
C28 Okaloosa FL	1/2/2	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C29 Walton FL	-/1/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C30 Bay FL	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C31 Gulf FL	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-

Note: "-" = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 7. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Western Planning Area** in the **spring season** will contact a county within 3/10/30 days

COUNTY	Launch Area									
	W001	W002	W003	W004	W005	W006	W007	W008	W009	W010
C01 Cameron TX	13/20/21	3/ 5/ 5	-/ 1/ 1	-/ -/ -	-/ -/ -	-/ 2/ 2	-/ -/ -	-/ -/ -	-/ 5/ 6	-/ -/ 1
C02 Willacy TX	4/ 8/ 8	2/ 5/ 5	-/ 1/ 1	-/ -/ -	-/ 1/ 1	-/ 1/ 1	-/ -/ -	-/ -/ -	-/ 2/ 3	-/ -/ 1
C03 Kenedy TX	9/31/32	22/40/40	8/16/16	-/ 3/ 3	-/ 6/ 7	-/10/12	-/ 2/ 4	-/ 2/ 5	-/13/18	-/ 2/ 8
C04 Kleberg TX	1/12/13	11/24/24	20/28/28	3/ 7/ 7	1/11/11	-/14/15	-/ 4/ 6	-/ 4/ 8	-/13/16	-/ 3/10
C05 Nueces TX	-/ 6/ 6	3/10/11	18/23/23	5/ 9/ 9	2/10/10	-/12/13	-/ 5/ 7	-/ 4/ 8	-/ 9/12	-/ 3/ 9
C06 Aransas TX	-/ 4/ 5	1/ 8/ 8	15/21/21	20/25/25	5/18/18	-/19/20	-/ 8/11	-/ 7/12	-/11/14	-/ 4/13
C07 Calhoun TX	-/ 2/ 3	-/ 4/ 4	5/ 9/ 9	35/38/39	7/23/24	-/17/18	-/13/17	-/11/16	-/ 9/13	-/ 5/13
C08 Matagorda TX	-/ 1/ 2	-/ 1/ 2	-/ 2/ 2	13/17/17	4/21/22	-/10/12	-/23/31	-/14/24	-/ 6/ 9	-/ 7/22
C09 Brazoria TX	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ 2/ 2	-/ 1/ 2	-/ 4/ 6	-/ 2/ 5	-/ -/ 1	-/ 1/ 5
C10 Galveston TX	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ 2/ 3	-/ 1/ 2	-/ 3/ 8	-/ 1/ 6	-/ -/ 2	-/ 1/ 5
C12 Jefferson TX	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ 1	-/ -/ 1	-/ -/ 3	-/ -/ 3	-/ -/ 1	-/ -/ 2
C13 Cameron LA	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ 3	-/ -/ 3	-/ -/ 1	-/ -/ 3
C14 Vermilion LA	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ 1	-/ -/ -	-/ -/ 1
C15 Iberia LA	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ 1	-/ -/ -	-/ -/ -

Note: “-” = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 7. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Western Planning Area** in the **spring season** will contact a county within 3/10/30 days--**Continued**

COUNTY	Launch Area										
	W011	W012	W013	W014	W015	W016	W017	W018	W019	W020	
C01 Cameron TX	- / 1 / 2	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -
C02 Willacy TX	- / - / 1	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -
C03 Kenedy TX	- / 2 / 10	- / 2 / 2	- / 1 / 1	- / - / -	- / 1 / 2	- / - / 1	- / - / 1	- / - / 1	- / - / 1	- / - / 1	- / - / -
C04 Kleberg TX	- / 2 / 12	- / 3 / 3	- / 1 / 1	- / - / -	- / 2 / 3	- / 1 / 1	- / - / 1	- / - / 2	- / - / 1	- / - / -	- / - / -
C05 Nueces TX	- / 2 / 9	- / 3 / 3	- / 1 / 1	- / - / -	- / 2 / 3	- / - / 1	- / - / 1	- / - / 2	- / - / 1	- / - / -	- / - / -
C06 Aransas TX	- / 2 / 12	1 / 7 / 7	- / 2 / 2	- / - / 1	- / 4 / 5	- / 1 / 1	- / 1 / 2	- / 1 / 4	- / - / 1	- / - / -	- / - / -
C07 Calhoun TX	- / 3 / 12	8 / 17 / 17	- / 4 / 4	- / 1 / 1	- / 8 / 10	- / 2 / 2	- / 2 / 4	- / 4 / 8	- / - / 3	- / - / 1	- / - / 1
C08 Matagorda TX	- / 3 / 20	41 / 54 / 55	15 / 30 / 31	- / 5 / 5	3 / 33 / 38	- / 12 / 14	- / 14 / 21	- / 11 / 24	- / 2 / 13	- / - / 4	- / - / 4
C09 Brazoria TX	- / - / 4	3 / 6 / 6	16 / 21 / 22	3 / 7 / 8	1 / 10 / 13	2 / 12 / 14	- / 9 / 13	- / 4 / 10	- / 2 / 8	- / - / 4	- / - / 4
C10 Galveston TX	- / - / 5	1 / 4 / 5	16 / 26 / 28	26 / 43 / 44	- / 9 / 14	4 / 29 / 35	- / 12 / 23	- / 4 / 17	- / 3 / 19	- / 1 / 14	- / 1 / 14
C11 Chambers TX	- / - / -	- / - / -	- / - / -	2 / 2 / 2	- / - / -	- / 1 / 1	- / - / 1	- / - / 1	- / - / 1	- / - / 1	- / - / 1
C12 Jefferson TX	- / - / 1	- / 1 / 1	- / 4 / 6	15 / 25 / 26	- / 2 / 5	- / 10 / 14	- / 4 / 12	- / 1 / 9	- / 1 / 11	- / 1 / 9	- / 1 / 9
C13 Cameron LA	- / - / 1	- / - / -	- / 1 / 2	2 / 9 / 11	- / - / 4	- / 7 / 13	- / 3 / 13	- / - / 9	- / 2 / 22	- / 2 / 26	- / 2 / 26
C14 Vermilion LA	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -	- / - / 1	- / - / 2	- / - / 2	- / - / 4	- / 1 / 9	- / 1 / 9
C15 Iberia LA	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -	- / - / 1	- / - / 1	- / - / 2	- / - / 4	- / - / 4
C16 St. Mary LA	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -	- / - / 1	- / - / 1	- / - / 1
C17 Terrebonne LA	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -	- / - / 1	- / - / 3	- / - / 4	- / - / 4
C18 LaFourche LA	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -	- / - / 1	- / - / 1
C20 Plaquemines LA	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -	- / - / -	- / - / 1	- / - / 2	- / - / 2

Note: “-” = less than 0.5 percent. Counties will all values less than 0.5 percent are not shown.

Table 7. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Western Planning Area** in the **spring season** will contact a county within 3/10/30 days --**Continued**

COUNTY	Launch Area								
	W021	W022	W023	W024	W025	W026	W027	W028	W029
C03 Kenedy TX	-/-/2	-/-/1	-/-/-	-/-/3	-/-/1	-/-/1	-/-/5	-/-/2	-/-/1
C04 Kleberg TX	-/-/3	-/-/1	-/-/1	-/-/5	-/-/2	-/-/1	-/-/6	-/-/2	-/-/1
C05 Nueces TX	-/-/4	-/-/1	-/-/-	-/-/5	-/-/2	-/-/-	-/-/5	-/-/2	-/-/1
C06 Aransas TX	-/1/7	-/-/2	-/-/1	-/-/8	-/-/4	-/-/1	-/-/7	-/-/4	-/-/2
C07 Calhoun TX	-/2/10	-/-/4	-/-/1	-/1/11	-/-/6	-/-/2	-/-/9	-/-/6	-/-/3
C08 Matagorda TX	-/5/21	-/1/15	-/-/6	-/1/19	-/-/15	-/-/8	-/-/18	-/-/13	-/-/8
C09 Brazoria TX	-/2/7	-/-/6	-/-/5	-/-/7	-/-/6	-/-/3	-/-/6	-/-/5	-/-/3
C10 Galveston TX	-/1/14	-/1/15	-/-/9	-/-/12	-/-/12	-/-/8	-/-/9	-/-/9	-/-/7
C11 Chambers TX	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C12 Jefferson TX	-/-/6	-/-/9	-/-/7	-/-/5	-/-/7	-/-/7	-/-/4	-/-/5	-/-/3
C13 Cameron LA	-/-/9	-/-/16	-/-/20	-/-/7	-/-/12	-/-/14	-/-/6	-/-/9	-/-/9
C14 Vermilion LA	-/-/2	-/-/4	-/-/6	-/-/1	-/-/4	-/-/5	-/-/1	-/-/3	-/-/4
C15 Iberia LA	-/-/1	-/-/1	-/-/3	-/-/-	-/-/1	-/-/2	-/-/-	-/-/1	-/-/1
C17 Terrebonne LA	-/-/1	-/-/2	-/-/3	-/-/1	-/-/1	-/-/2	-/-/1	-/-/1	-/-/2
C18 LaFourche LA	-/-/-	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C19 Jefferson LA	-/-/-	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C20 Plaquemines LA	-/-/-	-/-/1	-/-/2	-/-/-	-/-/1	-/-/1	-/-/-	-/-/-	-/-/1

Note: "-/" = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 8. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Central Planning Area** in the **spring season** will contact a county within 3/10/30 days

COUNTY	Launch Area									
	C030	C031	C032	C033	C034	C035	C036	C037	C038	C039
C04 Kleberg TX	-/-	-/-	-/-	-/-	-/1	-/-	-/-	-/-	-/-	-/-
C06 Aransas TX	-/-	-/-	-/1	-/1	-/1	-/-	-/-	-/-	-/-	-/-
C07 Calhoun TX	-/-	-/-	-/1	-/1	-/2	-/1	-/-	-/-	-/-	-/-
C08 Matagorda TX	-/1/2	-/1/1	-/3/5	-/1/4	-/3/8	-/4	-/1	-/1	-/3	-/2
C09 Brazoria TX	-/1/1	-/1/1	-/4/5	-/1/2	-/3/7	-/3	-/1	-/1	-/1	-/1
C10 Galveston TX	1/9/9	-/3/5	-/19/25	-/6/13	-/9/24	-/4/16	-/4	-/2	-/1/6	-/3
C11 Chambers TX	-/1/1	-/-	-/1/2	-/1/1	-/1	-/1	-/-	-/-	-/1	-/-
C12 Jefferson TX	8/19/20	-/5/7	1/15/20	-/9/16	-/6/14	-/3/13	-/2/5	-/3	-/3/10	-/6
C13 Cameron LA	41/60/62	15/40/43	1/23/31	2/30/40	-/8/26	-/11/30	-/17/25	-/3/11	-/19/33	-/6/23
C14 Vermilion LA	1/3/3	23/31/32	-/3/4	1/9/11	-/2/5	-/4/11	6/22/24	-/4/6	-/11/15	-/4/9
C15 Iberia LA	-/-	3/6/7	-/1	-/3/4	-/2	-/1/4	5/12/13	-/2/2	-/3/6	-/2/3
C16 St. Mary LA	-/-	-/1/1	-/-	-/1/1	-/-	-/1	1/5/5	-/1	-/2/3	-/2
C17 Terrebonne LA	-/-	-/1/2	-/-	-/2/3	-/2	-/1/4	11/17/18	18/25/27	2/11/13	4/14/17
C18 LaFourche LA	-/-	-/-	-/-	-/-	-/-	-/1	-/1/1	18/20/21	-/1/2	3/7/9
C19 Jefferson LA	-/-	-/-	-/-	-/-	-/-	-/-	-/-	4/5/6	-/1	-/3/3
C20 Plaquemines LA	-/-	-/-	-/-	-/-	-/-	-/1	-/1/1	7/13/16	-/1/3	2/10/15

Note: “-” = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 8. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Central Planning Area** in the **spring season** will contact a county within 3/10/30 days --**Continued**

COUNTY	Launch Area									
	C040	C041	C042	C043	C044	C045	C046	C047	C048	C049
C07 Calhoun TX	-/-	-/-	-/-	-/-	-/-	-/1	-/-	-/-	-/-	-/1
C08 Matagorda TX	-/2	-/1	-/1	-/1	-/1	-/2	-/1	-/3	-/1	-/5
C09 Brazoria TX	-/1	-/1	-/-	-/1	-/-	-/2	-/1	-/2	-/1	-/3
C10 Galveston TX	-/7	-/3	-/3	-/7	-/4	-/6	-/4	-/6	-/4	-/5
C11 Chambers TX	-/1	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
C12 Jefferson TX	-2/10	-/6	-/4	-/7	-/3	-/4	-/2	-/4	-/2	-/3
C13 Cameron LA	-9/28	-4/23	-2/19	-2/22	-1/15	-/16	-/9	-/11	-/6	-/7
C14 Vermilion LA	-4/11	-3/9	-2/8	-1/9	-1/6	-/6	-/4	-/4	-/3	-/2
C15 Iberia LA	-1/4	-1/2	-/2	-/3	-/2	-/2	-/1	-/2	-/1	-/1
C16 St. Mary LA	-/2	-/1	-/1	-/1	-/1	-/1	-/-	-/1	-/-	-/-
C17 Terrebonne LA	-5/11	-5/9	-3/7	-1/9	-1/5	-/5	-/3	-/4	-/3	-/3
C18 LaFourche LA	-1/2	-4/6	-2/5	-/3	-1/4	-/2	-/3	-/2	-/1	-/1
C19 Jefferson LA	-/1	-2/3	-1/2	-/1	-/2	-/1	-/1	-/1	-/1	-/1
C20 Plaquemines LA	-1/5	-8/17	-5/15	-1/6	-2/12	-/5	-/8	-/3	-/6	-/3
C21 St. Bernard LA	-/-	-/-	-/1	-/-	-/-	-/-	-/-	-/-	-/-	-/-
C25 Baldwin AL	-/-	-/-	-/-	-/1	-/1	-/-	-/1	-/-	-/-	-/-
C26 Escambia FL	-/-	-/1	-/1	-/-	-/1	-/-	-/1	-/-	-/-	-/-
C28 Okaloosa FL	-/-	-/-	-/1	-/-	-/1	-/-	-/1	-/-	-/1	-/-
C29 Walton FL	-/-	-/-	-/-	-/-	-/-	-/-	-/1	-/-	-/1	-/-

Note: "-" = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 8. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Central Planning Area** in the **spring season** will contact a county within 3/10/30 days --**Continued**

COUNTY	Launch Area									
	C050	C051	C052	C053	C054	C055	C056	C057	C058	C059
C08 Matagorda TX	-/-/1	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C09 Brazoria TX	-/-/1	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-
C10 Galveston TX	-/-/4	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/1	-/-/-	-/-/2	-/-/-
C12 Jefferson TX	-/-/2	-/-/2	-/-/2	-/-/-	-/-/1	-/-/-	-/-/3	-/-/1	-/-/2	-/-/1
C13 Cameron LA	-/-/4	-/1/7	-/-/6	-/-/1	-/-/1	-/-/1	-/1/9	-/-/2	-/-/9	-/-/2
C14 Vermilion LA	-/-/2	-/2/4	-/1/4	-/-/-	-/-/1	-/-/-	-/1/5	-/-/1	-/-/5	-/-/1
C15 Iberia LA	-/-/1	-/1/1	-/-/2	-/-/-	-/-/-	-/-/-	-/-/2	-/-/1	-/-/2	-/-/1
C16 St. Mary LA	-/-/-	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/1	-/-/-	-/-/1	-/-/-
C17 Terrebonne LA	-/-/2	2/7/9	1/6/8	-/-/-	-/1/2	-/-/1	-/6/9	-/2/4	-/3/7	-/1/5
C18 LaFourche LA	-/-/1	13/19/19	5/10/10	-/1/1	-/2/3	-/-/1	1/7/8	-/2/4	-/4/6	-/2/4
C19 Jefferson LA	-/-/-	9/11/11	1/4/4	-/-/-	-/-/-	-/-/-	-/2/3	-/-/1	-/-/2	-/-/1
C20 Plaquemines LA	-/-/3	23/32/34	25/34/37	9/19/23	12/26/34	1/9/15	8/20/26	7/20/30	-/8/17	1/10/22
C21 St. Bernard LA	-/-/-	-/-/-	-/-/1	3/16/21	-/6/11	-/7/15	-/-/2	-/2/7	-/-/1	-/-/3
C22 Hancock & Harrison MS	-/-/-	-/-/-	-/-/1	-/2/3	-/-/2	-/1/4	-/-/-	-/-/1	-/-/-	-/-/1
C23 Jackson MS	-/-/-	-/-/-	-/-/1	1/5/7	-/1/3	-/1/3	-/-/2	-/-/2	-/-/1	-/-/1
C24 Mobile AL	-/-/-	-/-/-	-/-/1	1/4/6	-/1/3	-/1/5	-/-/1	-/-/2	-/-/1	-/-/1
C25 Baldwin AL	-/-/-	-/-/-	-/-/1	-/3/6	-/1/4	-/1/5	-/-/1	-/-/2	-/-/1	-/-/1
C26 Escambia FL	-/-/-	-/-/-	-/-/1	-/3/6	-/1/3	-/1/4	-/-/1	-/-/2	-/-/1	-/-/1
C28 Okaloosa FL	-/-/-	-/-/-	-/-/1	-/1/3	-/1/3	-/1/3	-/-/2	-/-/2	-/-/2	-/-/1
C29 Walton FL	-/-/-	-/-/-	-/-/1	-/-/2	-/-/2	-/1/4	-/-/1	-/-/3	-/-/2	-/-/2
C30 Bay FL	-/-/-	-/-/-	-/-/-	-/-/3	-/-/3	-/-/6	-/-/1	-/-/3	-/-/1	-/-/4
C31 Gulf FL	-/-/-	-/-/-	-/-/-	-/-/1	-/-/1	-/-/3	-/-/-	-/-/1	-/-/-	-/-/1
C32 Franklin FL	-/-/-	-/-/-	-/-/-	-/-/1	-/-/1	-/-/1	-/-/-	-/-/1	-/-/-	-/-/1

Note: “-” = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 8. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Central Planning Area** in the **spring season** will contact a county within 3/10/30 days --**Continued**

COUNTY	Launch Area									
	C060	C061	C062	C063	C064	C065	C066	C067	C068	C069
C10 Galveston TX	-/-2	-/-	-/-1	-/-	-/-1	-/-	-/-1	-/-	-/-	-/-
C12 Jefferson TX	-/-2	-/-1	-/-2	-/-	-/-1	-/-	-/-1	-/-	-/-	-/-
C13 Cameron LA	-/-6	-/-3	-/-6	-/-2	-/-4	-/-1	-/-2	-/-	-/-	-/-1
C14 Vermilion LA	-/-3	-/-1	-/-3	-/-1	-/-2	-/-1	-/-1	-/-	-/-	-/-
C15 Iberia LA	-/-1	-/-	-/-1	-/-	-/-	-/-	-/-	-/-	-/-	-/-
C17 Terrebonne LA	-/1/5	-/-4	-/-3	-/-3	-/-2	-/-2	-/-1	-/-1	-/-	-/-
C18 LaFourche LA	-/1/3	-/1/3	-/-2	-/-2	-/-1	-/-1	-/-	-/-	-/-	-/-
C19 Jefferson LA	-/-1	-/-1	-/-1	-/-	-/-	-/-	-/-	-/-	-/-	-/-
C20 Plaquemines LA	-/2/12	-/3/15	-/-8	-/1/9	-/-5	-/-5	-/-3	-/-1	-/2/3	-/3/5
C21 St. Bernard LA	-/-1	-/-2	-/-	-/-1	-/-	-/-	-/-	-/-	9/19/20	2/17/21
C22 Hancock & Harrison MS	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	4/7/7	1/4/5
C23 Jackson MS	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	12/15/16	2/6/7
C24 Mobile AL	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	14/17/18	3/7/9
C25 Baldwin AL	-/-1	-/-	-/-	-/-	-/-	-/-	-/-	-/-	10/13/14	3/8/11
C26 Escambia FL	-/-1	-/-1	-/-1	-/-1	-/-	-/-	-/-	-/-	3/6/7	1/7/11
C27 Santa Rosa FL	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-1
C28 Okaloosa FL	-/-2	-/-1	-/-1	-/-1	-/-1	-/-1	-/-	-/-	-/2/3	-/3/5
C29 Walton FL	-/-2	-/-1	-/-1	-/-1	-/-1	-/-	-/-	-/-	-/1/2	-/1/4
C30 Bay FL	-/-1	-/-3	-/-1	-/-2	-/-1	-/-1	-/-	-/-	-/1/2	-/-4
C31 Gulf FL	-/-	-/-1	-/-	-/-1	-/-	-/-1	-/-	-/-	-/-2	-/-2
C32 Franklin FL	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-1

Note: "-" = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 9. Probabilities (expressed as percent chance) That an oil spill starting within a particular launch area in the **Eastern Planning Area** in the **spring season** will contact a county within 3/10/30 days

COUNTY	Launch Area					
	E070	E072	E074	E133	E135	E137
C13 Cameron LA	-/-	-/-	-/-	-/-	-/-	-/1
C17 Terrebonne LA	-/-	-/-	-/-	-/1	-/1	-/2
C18 LaFourche LA	-/-	-/-	-/1	-/1	-/2	-/2
C19 Jefferson LA	-/-	-/-	-/-	-/-	-/-	-/1
C20 Plaquemines LA	-/1	-/2	-/4	-/10	-/15	-/13
C21 St. Bernard LA	-/2/4	-/4/8	-/2/10	-/1/9	-/1/5	-/1/4
C22 Hancock & Harrison MS	-/1/1	-/2/3	-/1/2	-/2	-/1	-/-
C23 Jackson MS	-/1/1	-/2/3	-/1/4	-/2	-/1	-/-
C24 Mobile AL	1/3/3	-/3/5	-/1/4	-/3	-/2	-/-
C25 Baldwin AL	14/20/22	2/11/16	-/3/8	-/1/5	-/2	-/-
C26 Escambia FL	14/22/23	1/8/11	-/1/6	-/2	-/1	-/-
C27 Santa Rosa FL	-/1/1	-/-	-/-	-/-	-/-	-/-
C28 Okaloosa FL	4/8/10	-/4/6	-/1/3	-/2	-/1	-/-
C29 Walton FL	1/5/7	-/4/7	-/1/4	-/2	-/1	-/1
C30 Bay FL	-/4/8	-/2/7	-/2/7	-/5	-/3	-/2
C31 Gulf FL	-/2/5	-/1/5	-/1/5	-/4	-/3	-/1
C32 Franklin FL	-/2	-/3	-/3	-/3	-/2	-/2
C35 Taylor FL	-/-	-/-	-/-	-/1	-/-	-/-

Note: “-“ = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 10. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Western Planning Area** in the **summer season** will contact a county within 3/10/30 days

COUNTY	Launch Area									
	W001	W002	W003	W004	W005	W006	W007	W008	W009	W010
C01 Cameron TX	10/17/17	2/ 6/ 6	-/ 2/ 2	-/ 1/ 1	-/ 1/ 2	-/ 2/ 3	-/ -/ 2	-/ -/ 2	-/ 4/ 6	-/ 1/ 3
C02 Willacy TX	3/ 6/ 6	2/ 4/ 4	-/ 2/ 2	-/ 1/ 1	-/ 1/ 1	-/ 1/ 2	-/ -/ 1	-/ -/ 1	-/ 1/ 2	-/ -/ 1
C03 Kenedy TX	5/27/28	16/31/32	5/13/13	-/ 5/ 6	-/ 6/ 8	-/ 8/11	-/ 1/ 4	-/ 1/ 5	-/ 7/12	-/ 1/ 4
C04 Kleberg TX	1/15/16	11/25/25	15/21/21	1/ 4/ 4	-/ 7/ 8	-/ 9/10	-/ 2/ 5	-/ 1/ 5	-/ 6/10	-/ -/ 4
C05 Nueces TX	-/ 9/ 9	4/13/13	18/23/23	3/ 6/ 6	-/ 7/ 8	-/ 8/ 9	-/ 2/ 4	-/ 1/ 4	-/ 7/ 9	-/ -/ 3
C06 Aransas TX	-/ 8/ 8	2/11/12	19/25/25	14/18/18	2/14/15	-/15/16	-/ 4/ 7	-/ 2/ 6	-/12/15	-/ 1/ 5
C07 Calhoun TX	-/ 4/ 4	-/ 5/ 5	7/11/11	37/39/39	6/22/22	-/22/23	-/ 8/11	-/ 4/ 9	-/16/18	-/ 2/ 8
C08 Matagorda TX	-/ 1/ 1	-/ 1/ 1	-/ 2/ 2	20/23/23	5/27/27	-/19/20	-/20/27	-/11/23	-/11/17	-/ 4/20
C09 Brazoria TX	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ 3/ 3	-/ 1/ 2	-/ 4/ 7	-/ 2/ 6	-/ -/ 2	-/ 1/ 6
C10 Galveston TX	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ 1/ 3	-/ -/ 1	-/ 3/10	-/ 1/ 9	-/ -/ 2	-/ -/ 9
C12 Jefferson TX	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ 1	-/ -/ -	-/ -/ 4	-/ -/ 4	-/ -/ -	-/ -/ 4
C13 Cameron LA	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ 4	-/ -/ 5	-/ -/ -	-/ -/ 5
C14 Vermilion LA	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ 1	-/ -/ 1	-/ -/ -	-/ -/ -

Note: “-” = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 10. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Western Planning Area** in the **summer season** will contact a county within 3/10/30 days --**Continued**

COUNTY	Launch Area									
	W011	W012	W013	W014	W015	W016	W017	W018	W019	W020
C01 Cameron TX	-/ 1/ 3	-/ 1/ 1	-/ -/ 1	-/ -/ 1	-/ -/ 2	-/ -/ 1	-/ -/ 2	-/ -/ 2	-/ -/ 2	-/ -/ 1
C02 Willacy TX	-/ -/ 1	-/ -/ 1	-/ -/ 1	-/ -/ -	-/ -/ 1	-/ -/ 1	-/ -/ 1	-/ -/ 1	-/ -/ 1	-/ -/ -
C03 Kenedy TX	-/ -/ 4	-/ 3/ 4	-/ 1/ 2	-/ -/ 1	-/ 1/ 4	-/ -/ 3	-/ -/ 3	-/ -/ 4	-/ -/ 2	-/ -/ 1
C04 Kleberg TX	-/ -/ 5	-/ 3/ 3	-/ 1/ 2	-/ -/ 1	-/ 1/ 3	-/ -/ 2	-/ -/ 2	-/ -/ 1	-/ -/ 1	-/ -/ 1
C05 Nueces TX	-/ -/ 3	-/ 2/ 3	-/ 1/ 1	-/ -/ 1	-/ 2/ 3	-/ -/ 1	-/ -/ 1	-/ -/ 2	-/ -/ 1	-/ -/ 1
C06 Aransas TX	-/ 1/ 5	-/ 5/ 5	-/ 2/ 2	-/ -/ 1	-/ 3/ 5	-/ -/ 2	-/ -/ 3	-/ 1/ 3	-/ -/ 1	-/ -/ 1
C07 Calhoun TX	-/ 2/ 9	4/12/12	-/ 4/ 4	-/ 1/ 2	-/ 6/ 8	-/ 1/ 3	-/ 1/ 4	-/ 1/ 6	-/ -/ 2	-/ -/ 1
C08 Matagorda TX	-/ 3/19	37/52/52	7/22/23	-/ 6/ 7	1/23/28	-/ 8/13	-/ 7/16	-/ 2/14	-/ 1/ 7	-/ -/ 2
C09 Brazoria TX	-/ -/ 5	5/ 9/ 9	11/18/19	1/ 7/ 7	-/ 9/11	-/ 8/10	-/ 3/ 9	-/ 1/ 7	-/ -/ 4	-/ -/ 2
C10 Galveston TX	-/ -/ 7	1/ 6/ 6	13/31/32	13/31/32	-/11/17	-/16/22	-/ 5/17	-/ 1/11	-/ -/10	-/ -/ 5
C11 Chambers TX	-/ -/ -	-/ -/ -	-/ -/ 1	1/ 2/ 2	-/ -/ 1	-/ 1/ 1	-/ -/ 1	-/ -/ -	-/ -/ 1	-/ -/ -
C12 Jefferson TX	-/ -/ 3	-/ 1/ 1	-/ 5/ 6	12/26/27	-/ 2/ 6	-/11/15	-/ 2/ 8	-/ -/ 5	-/ -/ 5	-/ -/ 5
C13 Cameron LA	-/ -/ 3	-/ -/ 1	-/ 2/ 4	3/14/15	-/ 1/ 5	-/10/18	-/ 3/14	-/ -/13	-/ 1/11	-/ -/ 9
C14 Vermilion LA	-/ -/ -	-/ -/ -	-/ -/ 1	-/ -/ 1	-/ -/ 1	-/ 1/ 2	-/ -/ 3	-/ -/ 3	-/ -/ 5	-/ -/ 4
C15 Iberia LA	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ 1	-/ -/ 1	-/ -/ -	-/ -/ 1	-/ -/ 1
C16 St. Mary LA	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ 1
C17 Terrebonne LA	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ 1	-/ -/ 1	-/ -/ -	-/ -/ 1	-/ -/ 3
C18 LaFourche LA	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ 1
C20 Plaquemines LA	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ 1	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ 1

Note: “-” = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 10. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Western Planning Area** in the **summer season** will contact a county within 3/10/30 days --**Continued**

COUNTY	Launch Area								
	W021	W022	W023	W024	W025	W026	W027	W028	W029
C01 Cameron TX	-/-/3	-/-/2	-/-/1	-/-/3	-/-/2	-/-/1	-/-/1	-/-/1	-/-/1
C02 Willacy TX	-/-/1	-/-/-	-/-/-	-/-/1	-/-/-	-/-/-	-/-/1	-/-/-	-/-/-
C03 Kenedy TX	-/-/2	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/2	-/-/-	-/-/-
C04 Kleberg TX	-/-/1	-/-/1	-/-/-	-/-/1	-/-/-	-/-/-	-/-/1	-/-/-	-/-/-
C05 Nueces TX	-/-/2	-/-/-	-/-/-	-/-/1	-/-/-	-/-/-	-/-/1	-/-/-	-/-/-
C06 Aransas TX	-/-/2	-/-/1	-/-/-	-/-/2	-/-/1	-/-/-	-/-/2	-/-/-	-/-/-
C07 Calhoun TX	-/-/4	-/-/1	-/-/-	-/-/3	-/-/1	-/-/-	-/-/3	-/-/1	-/-/-
C08 Matagorda TX	-/ 1/11	-/-/6	-/-/2	-/-/10	-/-/4	-/-/2	-/-/7	-/-/4	-/-/1
C09 Brazoria TX	-/-/4	-/-/3	-/-/2	-/-/2	-/-/2	-/-/1	-/-/2	-/-/1	-/-/-
C10 Galveston TX	-/-/6	-/-/6	-/-/3	-/-/4	-/-/4	-/-/1	-/-/3	-/-/2	-/-/1
C12 Jefferson TX	-/-/3	-/-/3	-/-/3	-/-/2	-/-/1	-/-/1	-/-/1	-/-/-	-/-/-
C13 Cameron LA	-/-/10	-/-/5	-/-/3	-/-/6	-/-/2	-/-/1	-/-/4	-/-/1	-/-/1
C14 Vermilion LA	-/-/3	-/-/4	-/-/2	-/-/2	-/-/2	-/-/1	-/-/1	-/-/1	-/-/1
C15 Iberia LA	-/-/-	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C17 Terrebonne LA	-/-/-	-/-/1	-/-/2	-/-/-	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-
C20 Plaquemines LA	-/-/-	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-

Note: “-” = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 11. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Central Planning Area** in the **summer season** will contact a county within 3/10/30 days

COUNTY	Launch Area									
	C030	C031	C032	C033	C034	C035	C036	C037	C038	C039
C01 Cameron TX	-/-/1	-/-/-	-/-/1	-/-/1	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-
C02 Willacy TX	-/-/-	-/-/-	-/-/1	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C03 Kenedy TX	-/-/1	-/-/1	-/-/2	-/-/2	-/-/2	-/-/1	-/-/1	-/-/-	-/-/1	-/-/1
C04 Kleberg TX	-/-/-	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/-
C05 Nueces TX	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-
C06 Aransas TX	-/-/1	-/-/1	-/-/1	-/-/1	-/-/2	-/-/1	-/-/-	-/-/-	-/-/-	-/-/1
C07 Calhoun TX	-/-/1	-/-/1	-/-/2	-/-/1	-/-/3	-/-/2	-/-/1	-/-/-	-/-/-	-/-/-
C08 Matagorda TX	-/-/3	-/-/3	-/1/7	-/-/4	-/1/9	-/-/3	-/-/2	-/-/1	-/-/2	-/-/1
C09 Brazoria TX	-/1/2	-/-/1	-/2/4	-/-/2	-/1/6	-/-/3	-/-/1	-/-/-	-/-/1	-/-/-
C10 Galveston TX	-/7/9	-/1/4	-/8/15	-/1/8	-/2/14	-/-/9	-/-/2	-/-/1	-/-/4	-/-/2
C11 Chambers TX	-/-/1	-/-/-	-/-/1	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C12 Jefferson TX	3/11/12	-/3/5	-/7/12	-/2/7	-/1/9	-/-/6	-/1/3	-/-/1	-/-/4	-/-/2
C13 Cameron LA	34/56/58	5/21/27	1/23/33	-/12/26	-/5/18	-/3/18	-/7/17	-/-/6	-/5/17	-/1/11
C14 Vermilion LA	2/5/6	19/32/34	-/4/8	-/12/17	-/2/7	-/3/9	1/13/16	-/1/4	-/4/9	-/2/5
C15 Iberia LA	-/1/1	3/7/8	-/-/1	-/2/5	-/-/2	-/1/3	3/10/11	-/1/1	-/2/4	-/1/1
C16 St. Mary LA	-/-/-	-/1/2	-/-/1	-/1/1	-/-/1	-/-/1	1/3/4	-/-/-	-/1/1	-/-/-
C17 Terrebonne LA	-/-/1	-/2/3	-/-/1	-/1/4	-/-/2	-/-/4	10/18/20	11/17/18	1/8/12	2/8/10
C18 LaFourche LA	-/-/-	-/-/-	-/-/-	-/-/1	-/-/-	-/-/1	-/-/1	11/14/15	-/1/2	1/5/7
C19 Jefferson LA	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	3/5/5	-/-/1	-/2/3
C20 Plaquemines LA	-/-/-	-/-/1	-/-/1	-/-/2	-/-/1	-/-/1	-/1/3	8/16/18	-/1/4	1/9/13
C21 St. Bernard LA	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/1

Note: “-” = less than 0.5 percent. Counties will all values less than 0.5 percent are not shown.

Table 11. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Central Planning Area** in the **summer season** will contact a county within 3/10/30 days --**Continued**

COUNTY	Launch Area									
	C040	C041	C042	C043	C044	C045	C046	C047	C048	C049
C01 Cameron TX	-/-1	-/-	-/-	-/-1	-/-	-/-1	-/-	-/-	-/-	-/-
C02 Willacy TX	-/-1	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
C03 Kenedy TX	-/-1	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
C05 Nueces TX	-/-	-/-	-/-	-/-1	-/-	-/-	-/-	-/-	-/-	-/-
C06 Aransas TX	-/-	-/-	-/-	-/-1	-/-	-/-	-/-	-/-	-/-	-/-
C07 Calhoun TX	-/-1	-/-	-/-1	-/-	-/-1	-/-	-/-	-/-	-/-	-/-
C08 Matagorda TX	-/-2	-/-1	-/-1	-/-1	-/-1	-/-	-/-	-/-	-/-	-/-
C09 Brazoria TX	-/-1	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
C10 Galveston TX	-/-4	-/-2	-/-1	-/-2	-/-1	-/-1	-/-	-/-1	-/-	-/-
C12 Jefferson TX	-/-5	-/-2	-/-1	-/-2	-/-1	-/-1	-/-1	-/-	-/-	-/-
C13 Cameron LA	-/ 1/12	-/ -/10	-/-7	-/-5	-/-4	-/-1	-/-1	-/-	-/-	-/-
C14 Vermilion LA	-/ 1/ 4	-/ 1/ 3	-/-2	-/-1	-/-1	-/-	-/-	-/-	-/-	-/-
C15 Iberia LA	-/-2	-/-1	-/-	-/-1	-/-	-/-	-/-	-/-	-/-	-/-
C16 St. Mary LA	-/-1	-/-	-/-	-/-1	-/-	-/-	-/-	-/-	-/-	-/-
C17 Terrebonne LA	-/2/ 6	-/2/ 4	-/1/ 3	-/-3	-/-2	-/-1	-/-1	-/-	-/-	-/-
C18 LaFourche LA	-/ 1/ 2	-/2/ 3	-/ 1/ 2	-/-1	-/-1	-/-1	-/-1	-/-	-/-	-/-
C19 Jefferson LA	-/-1	-/ 1/ 1	-/-1	-/-	-/-	-/-	-/-	-/-	-/-	-/-
C20 Plaquemines LA	-/-3	-/4/ 8	-/2/ 6	-/-3	-/ 1/ 4	-/-2	-/-3	-/-1	-/-1	-/-
C21 St. Bernard LA	-/-	-/-1	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-

Note: “-” = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 11. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Central Planning Area** in the **summer season** will contact a county within 3/10/30 days --**Continued**

COUNTY	Launch Area									
	C050	C051	C052	C053	C054	C055	C056	C057	C058	C059
C08 Matagorda TX	-/-/1	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C09 Brazoria TX	-/-/1	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-
C10 Galveston TX	-/-/4	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/1	-/-/-	-/-/2	-/-/-
C12 Jefferson TX	-/-/2	-/-/2	-/-/2	-/-/-	-/-/1	-/-/-	-/-/3	-/-/1	-/-/2	-/-/1
C13 Cameron LA	-/-/4	-/1/7	-/-/6	-/-/1	-/-/1	-/-/1	-/1/9	-/-/2	-/-/9	-/-/2
C14 Vermilion LA	-/-/2	-/2/4	-/1/4	-/-/-	-/-/1	-/-/-	-/1/5	-/-/1	-/-/5	-/-/1
C15 Iberia LA	-/-/1	-/1/1	-/-/2	-/-/-	-/-/-	-/-/-	-/-/2	-/-/1	-/-/2	-/-/1
C16 St. Mary LA	-/-/-	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/1	-/-/-	-/-/1	-/-/-
C17 Terrebonne LA	-/-/2	2/7/9	1/6/8	-/-/-	-/1/2	-/-/1	-/6/9	-/2/4	-/3/7	-/1/5
C18 LaFourche LA	-/-/1	13/19/19	5/10/10	-/1/1	-/2/3	-/-/1	1/7/8	-/2/4	-/4/6	-/2/4
C19 Jefferson LA	-/-/-	9/11/11	1/4/4	-/-/-	-/-/-	-/-/-	-/2/3	-/-/1	-/-/2	-/-/1
C20 Plaquemines LA	-/-/3	23/32/34	25/34/37	9/19/23	12/26/34	1/9/15	8/20/26	7/20/30	-/8/17	1/10/22
C21 St. Bernard LA	-/-/-	-/-/-	-/-/1	3/16/21	-/6/11	-/7/15	-/-/2	-/2/7	-/-/1	-/-/3
C22 Hancock & Harrison MS	-/-/-	-/-/-	-/-/1	-/2/3	-/-/2	-/1/4	-/-/-	-/-/1	-/-/-	-/-/1
C23 Jackson MS	-/-/-	-/-/-	-/-/1	1/5/7	-/1/3	-/1/3	-/-/2	-/-/2	-/-/1	-/-/1
C24 Mobile AL	-/-/-	-/-/-	-/-/1	1/4/6	-/1/3	-/1/5	-/-/1	-/-/2	-/-/1	-/-/1
C25 Baldwin AL	-/-/-	-/-/-	-/-/1	-/3/6	-/1/4	-/1/5	-/-/1	-/-/2	-/-/1	-/-/1
C26 Escambia FL	-/-/-	-/-/-	-/-/1	-/3/6	-/1/3	-/1/4	-/-/1	-/-/2	-/-/1	-/-/1
C28 Okaloosa FL	-/-/-	-/-/-	-/-/1	-/1/3	-/1/3	-/1/3	-/-/2	-/-/2	-/-/2	-/-/1
C29 Walton FL	-/-/-	-/-/-	-/-/1	-/-/2	-/-/2	-/1/4	-/-/1	-/-/3	-/-/2	-/-/2
C30 Bay FL	-/-/-	-/-/-	-/-/-	-/-/3	-/-/3	-/-/6	-/-/1	-/-/3	-/-/1	-/-/4
C31 Gulf FL	-/-/-	-/-/-	-/-/-	-/-/1	-/-/1	-/-/3	-/-/-	-/-/1	-/-/-	-/-/1
C32 Franklin FL	-/-/-	-/-/-	-/-/-	-/-/1	-/-/1	-/-/1	-/-/-	-/-/1	-/-/-	-/-/1

Note: "-/" = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 11. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Central Planning Area** in the **summer season** will contact a county within 3/10/30 days --**Continued**

COUNTY	Launch Area									
	C060	C061	C062	C063	C064	C065	C066	C067	C068	C069
C08 Matagorda TX	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C13 Cameron LA	-/-/3	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C14 Vermilion LA	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C17 Terrebonne LA	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C18 LaFourche LA	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C20 Plaquemines LA	-/1/5	-/1/7	-/-/3	-/-/3	-/-/2	-/-/1	-/-/-	-/-/-	1/7/10	-/8/14
C21 St. Bernard LA	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	5/15/17	1/8/12
C22 Hancock & Harrison MS	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	2/4/4	-/2/2
C23 Jackson MS	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	8/12/13	1/3/4
C24 Mobile AL	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	10/13/13	1/5/6
C25 Baldwin AL	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	7/10/11	1/7/8
C26 Escambia FL	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	2/5/6	-/4/7
C28 Okaloosa FL	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/2/2	-/1/3
C29 Walton FL	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/1/2	-/1/2
C30 Bay FL	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/2/3	-/1/3
C31 Gulf FL	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/1/3	-/1/3
C32 Franklin FL	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/1	-/-/1

Note: “-” = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 12. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Eastern Planning Area** in the **summer season** will contact a county within 3/10/30 days

COUNTY	Launch Area					
	E070	E072	E074	E133	E135	E137
C17 Terrebonne LA	-/-	-/-	-/-	-/-	-/1	-/1
C18 LaFourche LA	-/-	-/-	-/-	-/-	-/1	-/1
C20 Plaquemines LA	-/1/5	-/1/7	-/1/8	-/2/9	-/2/11	-/1/8
C21 St. Bernard LA	-/3/4	-/1/3	-/3	-/3	-/2	-/1
C22 Hancock & Harrison MS	-/1	-/1/1	-/1	-/1	-/-	-/-
C23 Jackson MS	-/1/2	-/1/2	-/1/2	-/1/1	-/-	-/1
C24 Mobile AL	1/2/3	-/1/3	-/1/2	-/1	-/1	-/1
C25 Baldwin AL	7/11/13	1/5/8	-/2/4	-/1/3	-/2	-/1
C26 Escambia FL	8/14/16	1/5/8	-/2/4	-/1	-/-	-/-
C27 Santa Rosa FL	-/1/1	-/-	-/-	-/-	-/-	-/-
C28 Okaloosa FL	2/6/6	-/1/4	-/1	-/-	-/-	-/-
C29 Walton FL	1/3/4	-/1/3	-/1	-/-	-/-	-/-
C30 Bay FL	-/4/7	-/1/3	-/2	-/-	-/-	-/-
C31 Gulf FL	-/4/6	-/1/4	-/2	-/1	-/-	-/-
C32 Franklin FL	-/1/4	-/2	-/1	-/1	-/-	-/-
C35 Taylor FL	-/1	-/1	-/-	-/-	-/-	-/-
C36 Dixie FL	-/1	-/-	-/-	-/-	-/-	-/-

Note: “-” = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 13. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Western Planning Area** in the **autumn season** will contact a county within 3/10/30 days

COUNTY	Launch Area									
	W001	W002	W003	W004	W005	W006	W007	W008	W009	W010
C01 Cameron TX	9/21/25	4/17/19	-/ 8/11	-/ 2/ 5	-/ 2/ 6	-/ 2/ 9	-/ -/ 2	-/ -/ 2	-/ 4/12	-/ -/ 4
C02 Willacy TX	2/ 5/ 7	3/ 8/ 8	-/ 4/ 6	-/ 1/ 3	-/ 1/ 3	-/ 1/ 3	-/ -/ 1	-/ -/ 1	-/ 2/ 4	-/ -/ 2
C03 Kenedy TX	2/11/14	12/28/30	4/21/24	-/ 8/12	-/ 5/11	-/ 5/13	-/ -/ 3	-/ -/ 4	-/ 4/15	-/ -/ 5
C04 Kleberg TX	-/ 2/ 2	3/ 9/10	9/18/19	1/ 9/10	-/ 6/ 9	-/ 4/ 9	-/ -/ 3	-/ -/ 4	-/ 2/ 7	-/ -/ 3
C05 Nueces TX	-/ 1/ 1	1/ 3/ 3	8/12/12	3/ 9/10	-/ 5/ 7	-/ 4/ 7	-/ -/ 3	-/ -/ 2	-/ 2/ 4	-/ -/ 2
C06 Aransas TX	-/ 1/ 1	-/ 2/ 2	6/ 9/ 9	10/17/17	1/ 7/10	-/ 5/ 8	-/ 1/ 4	-/ 1/ 3	-/ 2/ 4	-/ -/ 4
C07 Calhoun TX	-/ -/ 1	-/ 1/ 1	1/ 3/ 3	18/22/22	2/ 8/11	-/ 4/ 6	-/ 2/ 6	-/ 1/ 5	-/ 1/ 3	-/ -/ 3
C08 Matagorda TX	-/ -/ -	-/ -/ -	-/ -/ -	5/ 6/ 6	1/ 5/ 6	-/ 2/ 3	-/ 3/ 7	-/ 1/ 4	-/ 1/ 2	-/ -/ 3
C09 Brazoria TX	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ 1	-/ -/ 1	-/ -/ -	-/ -/ -

Note: “-” = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 13. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Western Planning Area** in the **autumn season** will contact a county within 3/10/30 days --**Continued**

COUNTY	Launch Area									
	W011	W012	W013	W014	W015	W016	W017	W018	W019	W020
C01 Cameron TX	-/-/5	-/-/3	-/-/1	-/-/-	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1
C02 Willacy TX	-/-/2	-/-/2	-/-/1	-/-/-	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1	-/-/1
C03 Kenedy TX	-/-/5	-/2/7	-/-/4	-/-/2	-/-/3	-/-/3	-/-/2	-/-/2	-/-/1	-/-/1
C04 Kleberg TX	-/-/2	-/3/5	-/-/3	-/-/1	-/-/3	-/-/2	-/-/1	-/-/1	-/-/1	-/-/1
C05 Nueces TX	-/-/2	-/4/6	-/1/3	-/-/1	-/1/4	-/-/2	-/-/1	-/-/1	-/-/1	-/-/1
C06 Aransas TX	-/-/2	-/6/8	-/2/5	-/-/2	-/1/5	-/-/3	-/-/3	-/-/1	-/-/1	-/-/1
C07 Calhoun TX	-/-/2	4/12/14	-/5/8	-/1/5	-/3/6	-/1/6	-/1/4	-/-/3	-/-/2	-/-/1
C08 Matagorda TX	-/-/1	19/28/30	8/27/30	-/12/18	1/12/17	-/11/22	-/3/12	-/-/5	-/-/3	-/-/1
C09 Brazoria TX	-/-/-	1/1/1	10/14/14	2/11/12	-/2/2	-/7/9	-/2/4	-/-/1	-/-/1	-/-/1
C10 Galveston TX	-/-/-	-/-/-	5/7/7	15/30/31	-/-/1	-/8/9	-/1/2	-/-/1	-/-/1	-/-/1
C11 Chambers TX	-/-/-	-/-/-	-/-/-	1/1/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C12 Jefferson TX	-/-/-	-/-/-	-/-/-	4/6/7	-/-/-	-/1/1	-/-/-	-/-/-	-/-/-	-/-/-
C13 Cameron LA	-/-/-	-/-/-	-/-/-	-/1/1	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-

Note: “-” = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 13. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Western Planning Area** in the **autumn season** will contact a county within 3/10/30 days --**Continued**

COUNTY	Launch Area								
	W021	W022	W023	W024	W025	W026	W027	W028	W029
C01 Cameron TX	-/-/2	-/-/2	-/-/1	-/-/3	-/-/1	-/-/1	-/-/3	-/-/1	-/-/-
C02 Willacy TX	-/-/1	-/-/-	-/-/-	-/-/1	-/-/-	-/-/-	-/-/1	-/-/-	-/-/-
C03 Kenedy TX	-/-/3	-/-/2	-/-/1	-/-/3	-/-/2	-/-/1	-/-/3	-/-/1	-/-/-
C04 Kleberg TX	-/-/2	-/-/1	-/-/-	-/-/2	-/-/1	-/-/-	-/-/1	-/-/1	-/-/-
C05 Nueces TX	-/-/1	-/-/1	-/-/-	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-
C06 Aransas TX	-/-/2	-/-/1	-/-/-	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-
C07 Calhoun TX	-/-/3	-/-/1	-/-/1	-/-/1	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-
C08 Matagorda TX	-/-/2	-/-/2	-/-/-	-/-/1	-/-/1	-/-/-	-/-/1	-/-/1	-/-/-
C09 Brazoria TX	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-

Note: “-“ = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 14. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Central Planning Area** in the **autumn season** will contact a county within 3/10/30 days

COUNTY	Launch Area									
	C030	C031	C032	C033	C034	C035	C036	C037	C038	C039
C01 Cameron TX	-/-	-/-	-/1	-/-	-/1	-/-	-/-	-/-	-/-	-/-
C03 Kenedy TX	-/1	-/1	-/2	-/-	-/-	-/-	-/-	-/-	-/-	-/-
C04 Kleberg TX	-/1	-/-	-/1	-/-	-/-	-/-	-/-	-/-	-/-	-/-
C05 Nueces TX	-/-	-/-	-/1	-/1	-/1	-/-	-/-	-/-	-/-	-/-
C06 Aransas TX	-/1	-/1	-/2	-/1	-/2	-/1	-/-	-/-	-/-	-/-
C07 Calhoun TX	-/2	-/2	-/4	-/3	-/3	-/1	-/1	-/-	-/1	-/-
C08 Matagorda TX	-/2/11	-/9	-/2/18	-/11	-/9	-/5	-/6	-/1	-/5	-/1
C09 Brazoria TX	-/3/8	-/6	-/3/8	-/6	-/3	-/3	-/3	-/1	-/3	-/1
C10 Galveston TX	1/12/18	-/9	-/6/11	-/7	-/3	-/2	-/5	-/1	-/4	-/1
C11 Chambers TX	-/1/1	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
C12 Jefferson TX	5/13/14	-/2/5	-/3/4	-/1/2	-/1	-/-	-/2	-/-	-/1	-/-
C13 Cameron LA	14/21/22	5/14/16	-/2/3	-/3/5	-/-	-/1	-/4/6	-/1	-/1/3	-/-
C14 Vermilion LA	-/1/1	10/12/13	-/-	-/1/2	-/-	-/-	2/7/9	-/1/1	-/2/2	-/1
C15 Iberia LA	-/-	1/1/1	-/-	-/-	-/-	-/-	2/4/4	-/1	-/-	-/-
C17 Terrebonne LA	-/-	-/-	-/-	-/-	-/-	-/-	4/5/5	11/15/16	-/2/2	2/5/6
C18 LaFourche LA	-/-	-/-	-/-	-/-	-/-	-/-	-/-	10/11/12	-/-	1/2/2
C19 Jefferson LA	-/-	-/-	-/-	-/-	-/-	-/-	-/-	1/1/1	-/-	-/-
C20 Plaquemines LA	-/-	-/-	-/-	-/-	-/-	-/-	-/-	1/1/1	-/-	-/1/1

Note: “-“ = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 14. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Central Planning Area** in the **autumn season** will contact a county within 3/10/30 days --**Continued**

COUNTY	Launch Area									
	C040	C041	C042	C043	C044	C045	C046	C047	C048	C049
C08 Matagorda TX	-/-/3	-/-/1	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C09 Brazoria TX	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C10 Galveston TX	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C14 Vermilion LA	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C17 Terrebonne LA	-/-/-	-/2/2	-/1/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
C18 LaFourche LA	-/-/-	-/-/1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-

Note: “-” = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 14. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Central Planning Area** in the **autumn season** will contact a county within 3/10/30 days --**Continued**

COUNTY	Launch Area									
	C050	C051	C052	C053	C054	C055	C056	C057	C058	C059
C14 Vermilion LA	-/-/	-/-/	-/-/1	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/
C17 Terrebonne LA	-/-/	1/5/6	-/3/4	-/-/1	-/-/1	-/-/1	-/2/2	-/-/1	-/1/1	-/-/
C18 LaFourche LA	-/-/	8/11/12	2/5/7	-/1/2	-/1/3	-/-/2	-/3/4	-/1/2	-/1/1	-/-/1
C19 Jefferson LA	-/-/	4/5/5	1/2/2	-/-/	-/-/1	-/-/1	-/1/1	-/-/	-/-/	-/-/
C20 Plaquemines LA	-/-/	6/8/9	15/18/20	14/33/42	7/22/29	-/6/22	6/10/11	4/12/17	-/1/2	-/3/5
C21 St. Bernard LA	-/-/	-/-/	-/-/	2/7/8	-/1/2	-/1/2	-/-/	-/-/	-/-/	-/-/
C22 Hancock & Harrison MS	-/-/	-/-/	-/-/	-/1/1	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/
C23 Jackson MS	-/-/	-/-/	-/-/	-/1/1	-/-/1	-/-/	-/-/	-/-/	-/-/	-/-/
C24 Mobile AL	-/-/	-/-/	-/-/	-/-/1	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/
C25 Baldwin AL	-/-/	-/-/	-/-/	-/-/1	-/-/	-/-/1	-/-/	-/-/	-/-/	-/-/

Note: "-/" = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 14. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Central Planning Area** in the **autumn season** will contact a county within 3/10/30 days --**Continued**

COUNTY	Launch Area										
	C060	C061	C062	C063	C064	C065	C066	C067	C068	C069	
C18 LaFourche LA	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/1
C20 Plaquemines LA	-/-/	-/-/1	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	2/20/29	1/15/31
C21 St. Bernard LA	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	6/14/17	1/6/8
C22 Hancock & Harrison MS	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	5/8/8	-/2/3
C23 Jackson MS	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	6/8/8	1/2/3
C24 Mobile AL	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	5/6/6	1/2/3
C25 Baldwin AL	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	3/4/5	-/2/3
C26 Escambia FL	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/-/	-/1/1	-/1/1

Note: “-” = less than 0.5 percent. Counties with all values less than 0.5 percent are not shown.

Table 15. Probabilities (expressed as percent chance) that an oil spill starting within a particular launch area in the **Eastern Planning Area** in the **autumn season** will contact a county within 3/10/30 days

COUNTY	Launch Area					
	E070	E072	E074	E133	E135	E137
C18 LaFourche LA	-/-/-	-/-/-	-/-/1	-/-/1	-/-/-	-/-/-
C20 Plaquemines LA	-/ 1/10	-/ 1/13	-/ 1/13	-/2/ 7	-/ 1/ 3	-/-/ 1
C21 St. Bernard LA	-/-/2	-/-/2	-/ 1/ 1	-/-/-	-/-/-	-/-/-
C22 Hancock & Harrison MS	-/ 1/ 1	-/ 1/ 1	-/-/-	-/-/-	-/-/-	-/-/-
C23 Jackson MS	-/ 1/ 2	-/ 1/ 1	-/-/-	-/-/-	-/-/-	-/-/-
C24 Mobile AL	1/2/ 3	-/ 1/ 2	-/-/-	-/-/-	-/-/-	-/-/-
C25 Baldwin AL	9/15/16	1/4/ 5	-/-/-	-/-/-	-/-/-	-/-/-
C26 Escambia FL	6/10/11	-/2/ 3	-/-/-	-/-/-	-/-/-	-/-/-
C28 Okaloosa FL	-/ 1/ 1	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-

Note: “-“ = less than 0.5 percent. Counties 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 U.S. administration.



The Minerals Management Service Mission

As a bureau of the Department of the Interior, the Minerals Management Service's (MMS) primary responsibilities are to manage the mineral resources located on the Nation's Outer Continental Shelf (OCS), collect revenue from the Federal OCS and onshore Federal and Indian lands, and distribute those revenues.

Moreover, in working to meet its responsibilities, the **Offshore Minerals Management Program** administers the OCS competitive leasing program and oversees the safe and environmentally sound exploration and production of our Nation's offshore natural gas, oil and other mineral resources. The MMS **Minerals Revenue Management** meets its responsibilities by ensuring the efficient, timely and accurate collection and disbursement of revenue from mineral leasing and production due to Indian tribes and allottees, States and the U.S. Treasury.

The MMS strives to fulfill its responsibilities through the general guiding principles of: (1) being responsive to the public's concerns and interests by maintaining a dialogue with all potentially affected parties and (2) carrying out its programs with an emphasis on working to enhance the quality of life for all Americans by lending MMS assistance and expertise to economic development and environmental protection.