

# Gulf of Mexico OCS Oil and Gas Lease Sales 189 and 197

## Eastern Planning Area

## Final Environmental Impact Statement

## Volume II: Figures and Tables



# **Gulf of Mexico OCS Oil and Gas Lease Sales 189 and 197**

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#### **Volume II: Figures and Tables**

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Gulf of Mexico OCS Region

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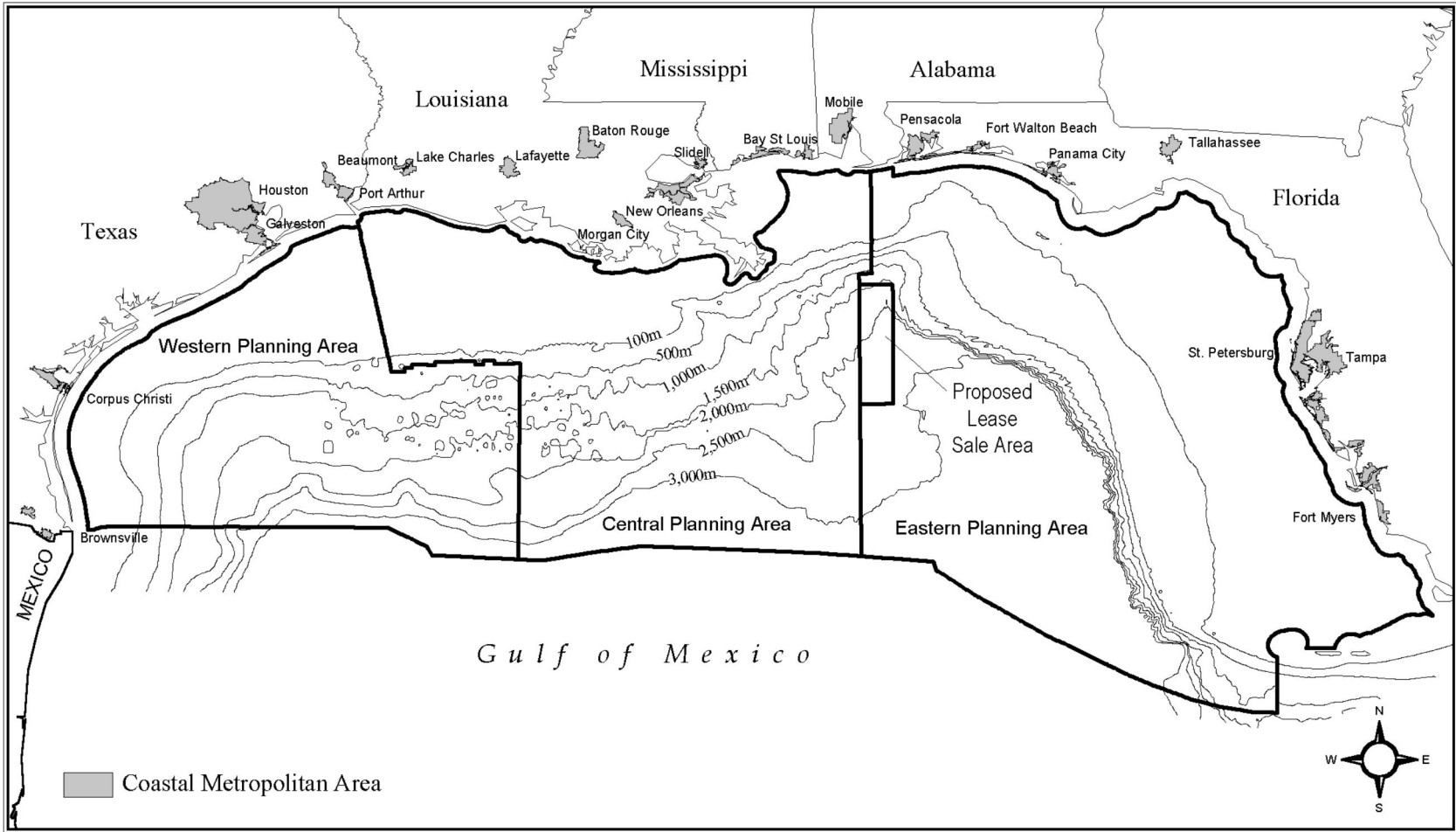


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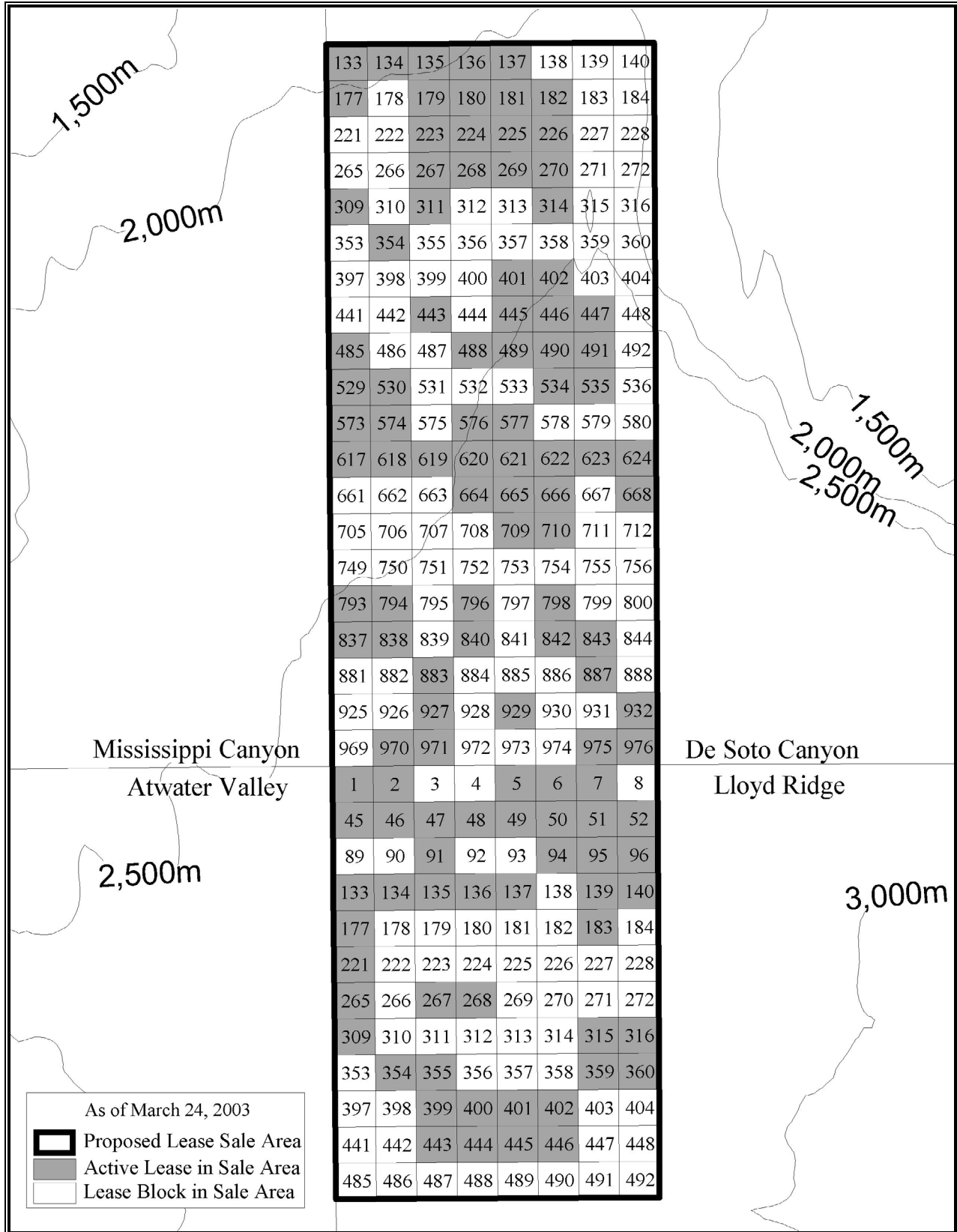


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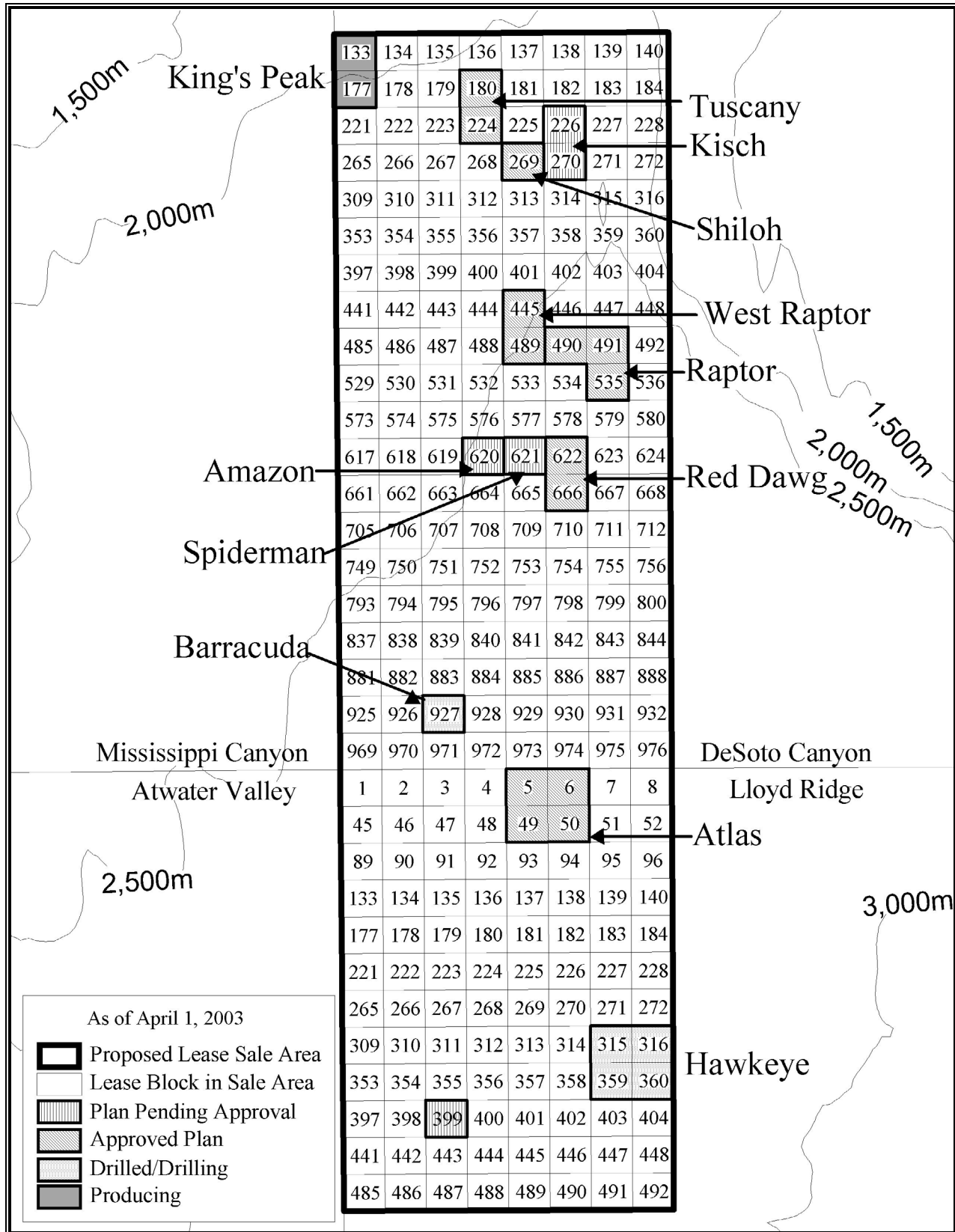


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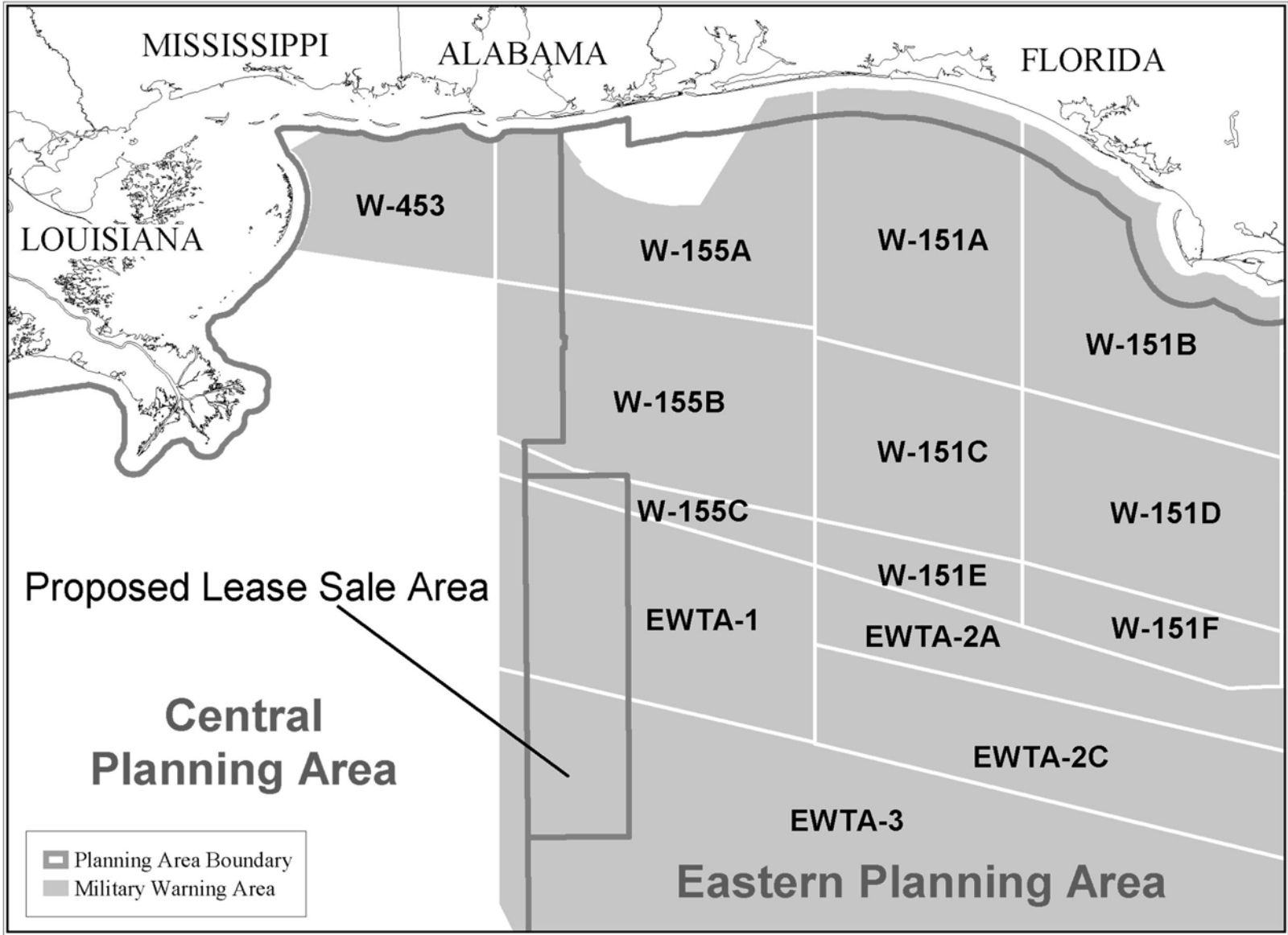


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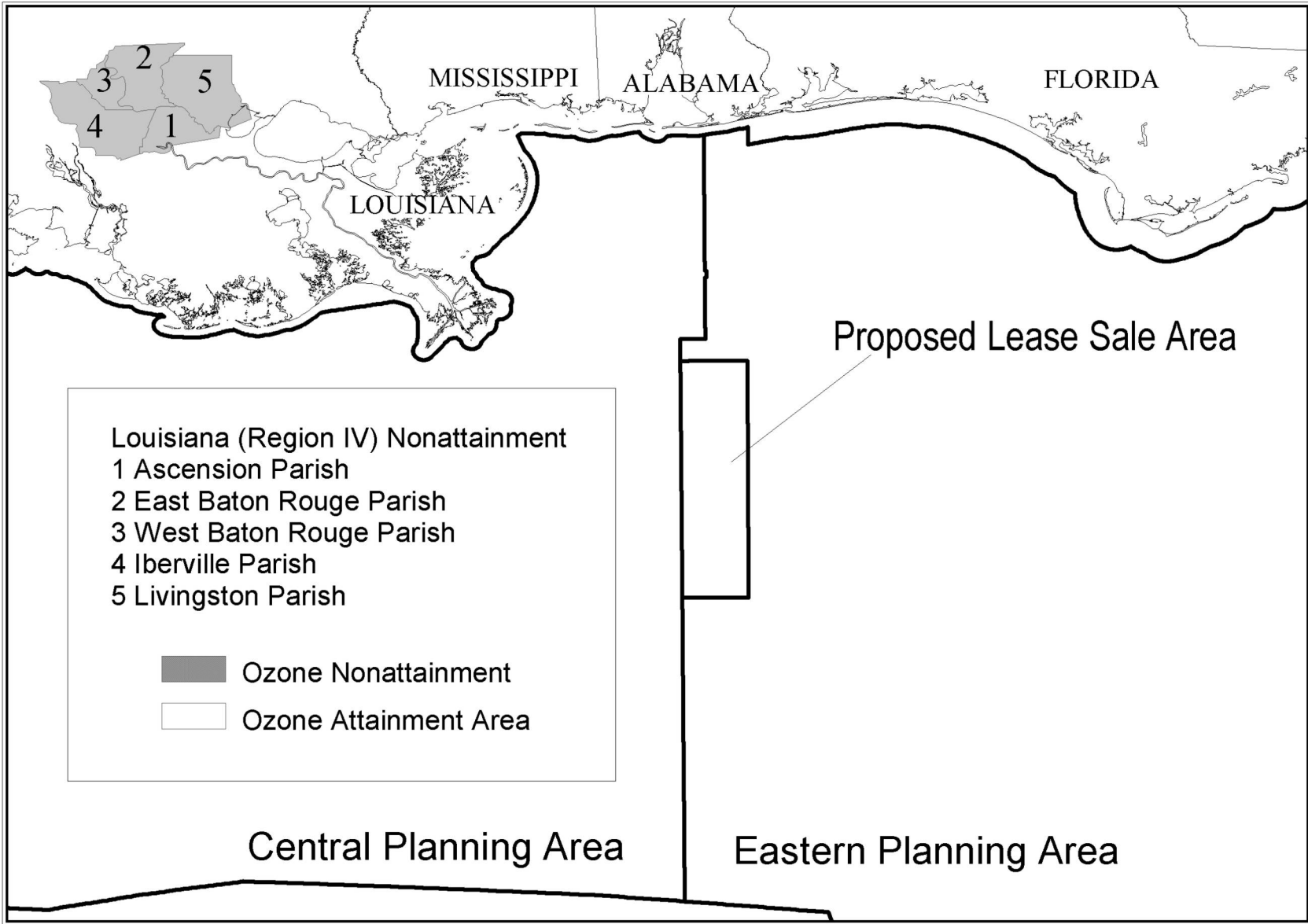


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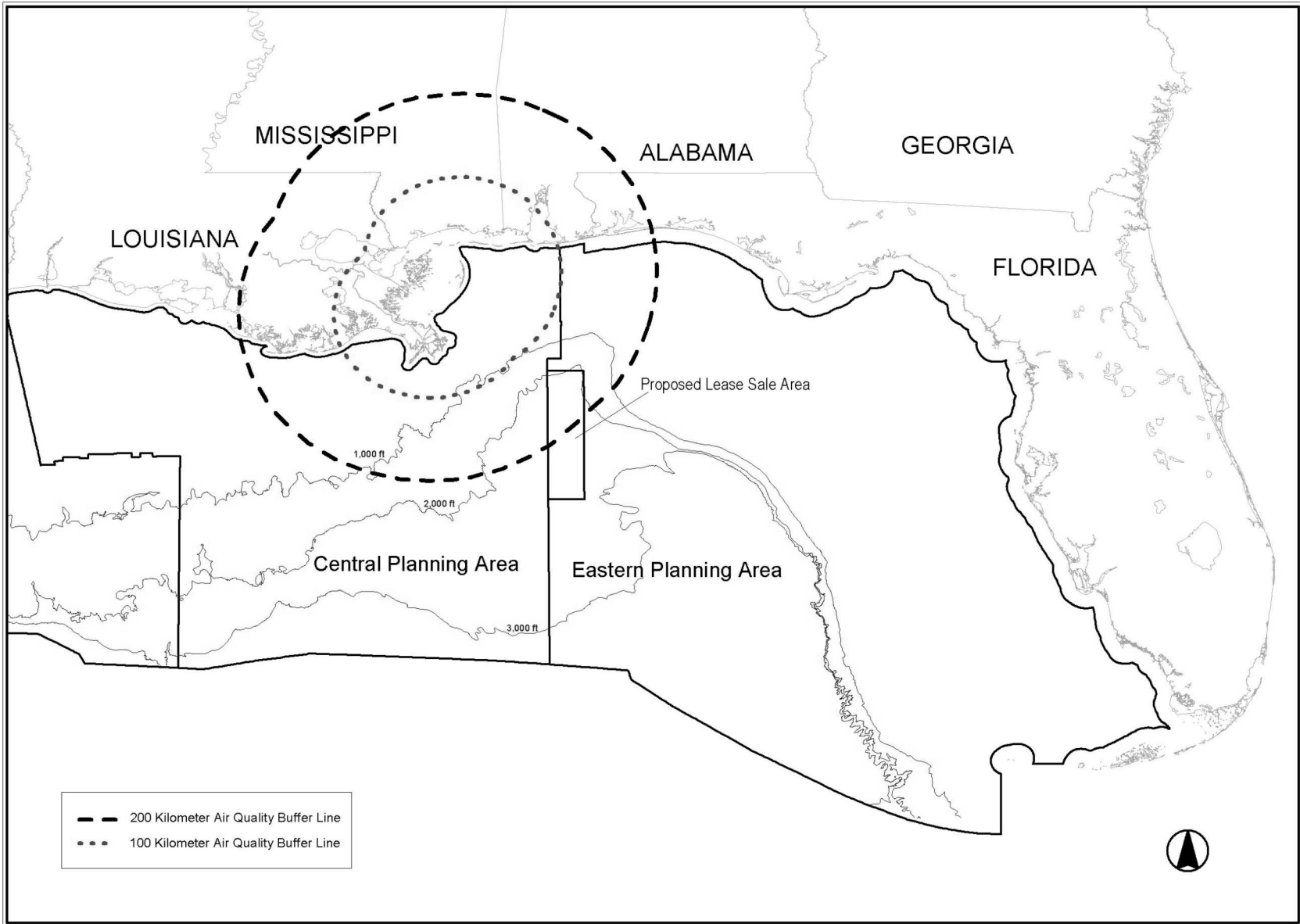
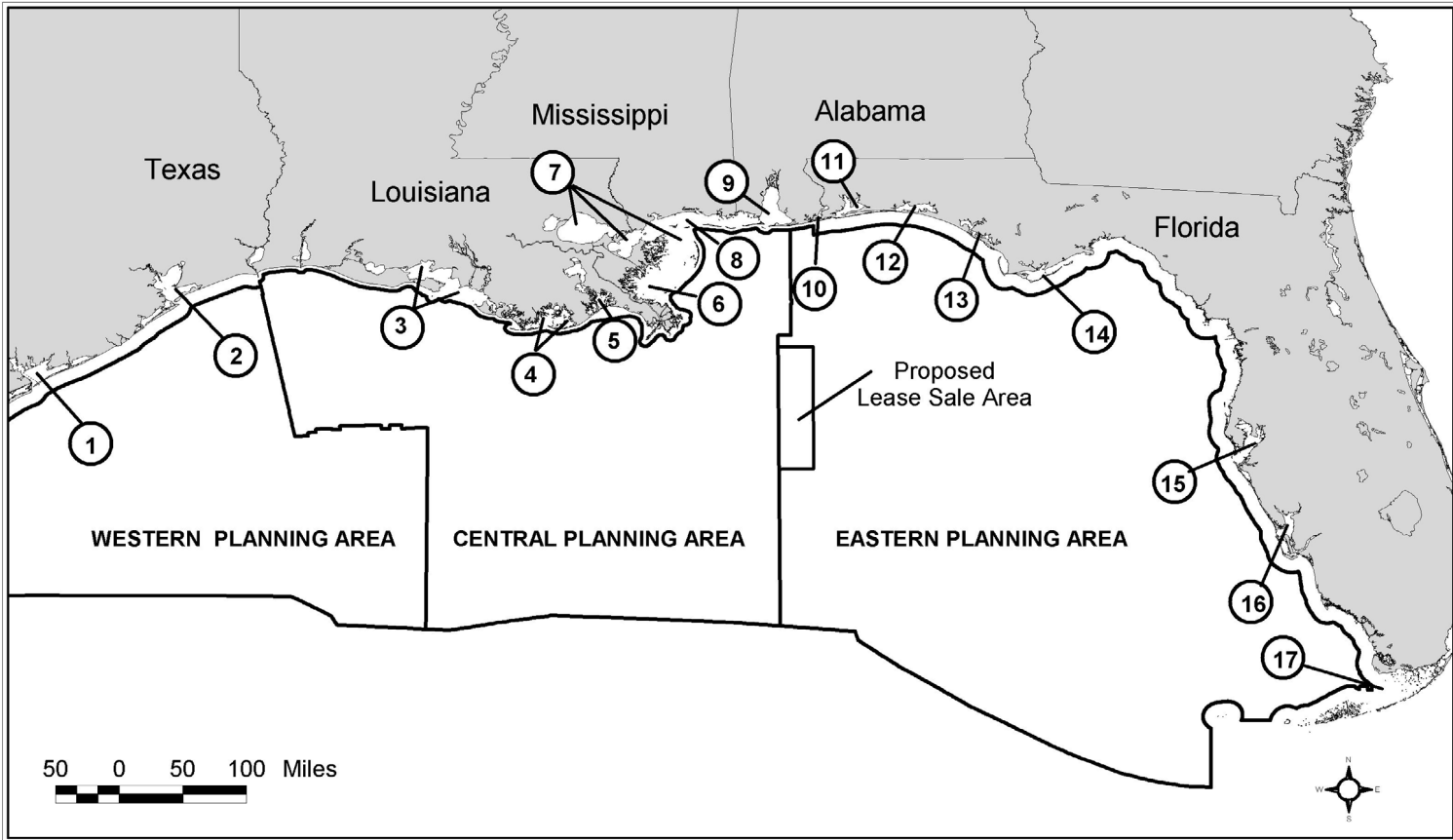


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- |                              |   |                      |
|------------------------------|---|----------------------|
| ① Corpus Christi Bay         | ⑦ Lakes Pontchartrain/Borgne and Chandeleur Sound | ⑫ Choctawhatchee Bay |
| ② Galveston Bay              | ⑧ Mississippi Sound                               | ⑬ St. Andrew Bay     |
| ③ Vermilion/Atchafalaya Bays | ⑨ Mobile Bay                                      | ⑭ Apalachicola Bay   |
| ④ Terrebonne/Timbalier Bays  | ⑩ Perdido Bay                                     | ⑮ Tampa Bay          |
| ⑤ Barataria Bay              | ⑪ Pensacola Bay                                   | ⑯ Charlotte Harbor   |
| ⑥ Breton Sound               |   | ⑰ Florida Bay        |

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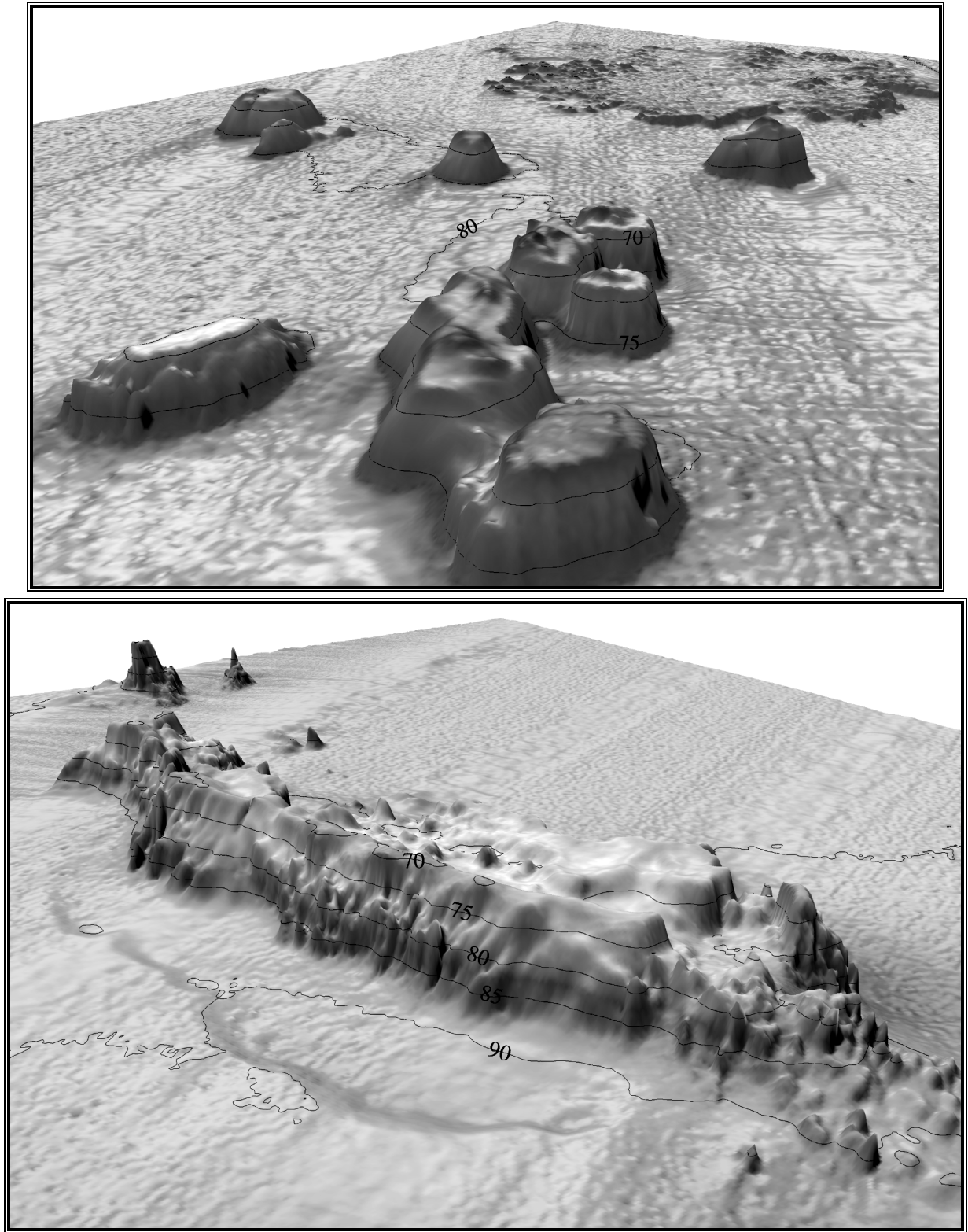


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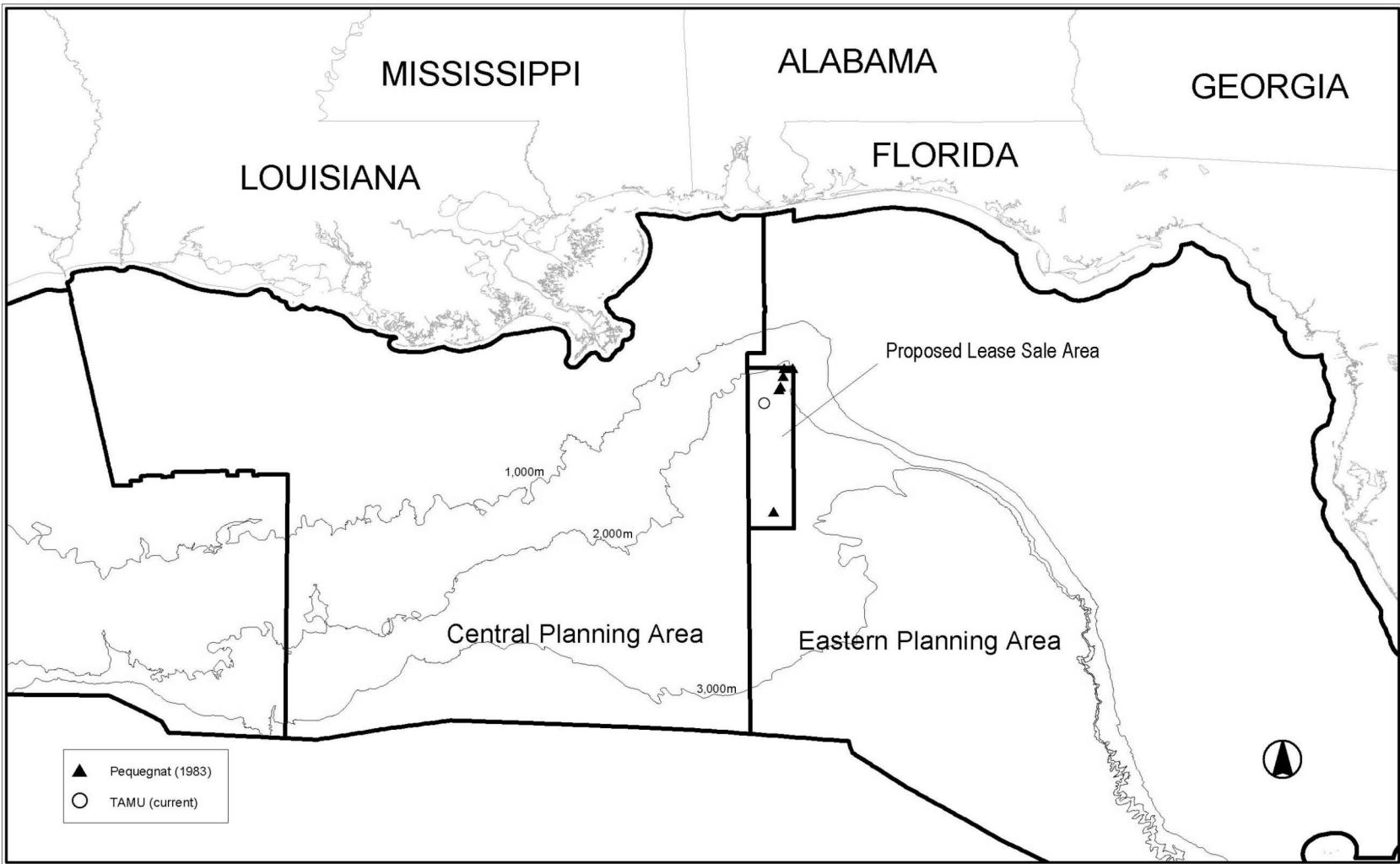


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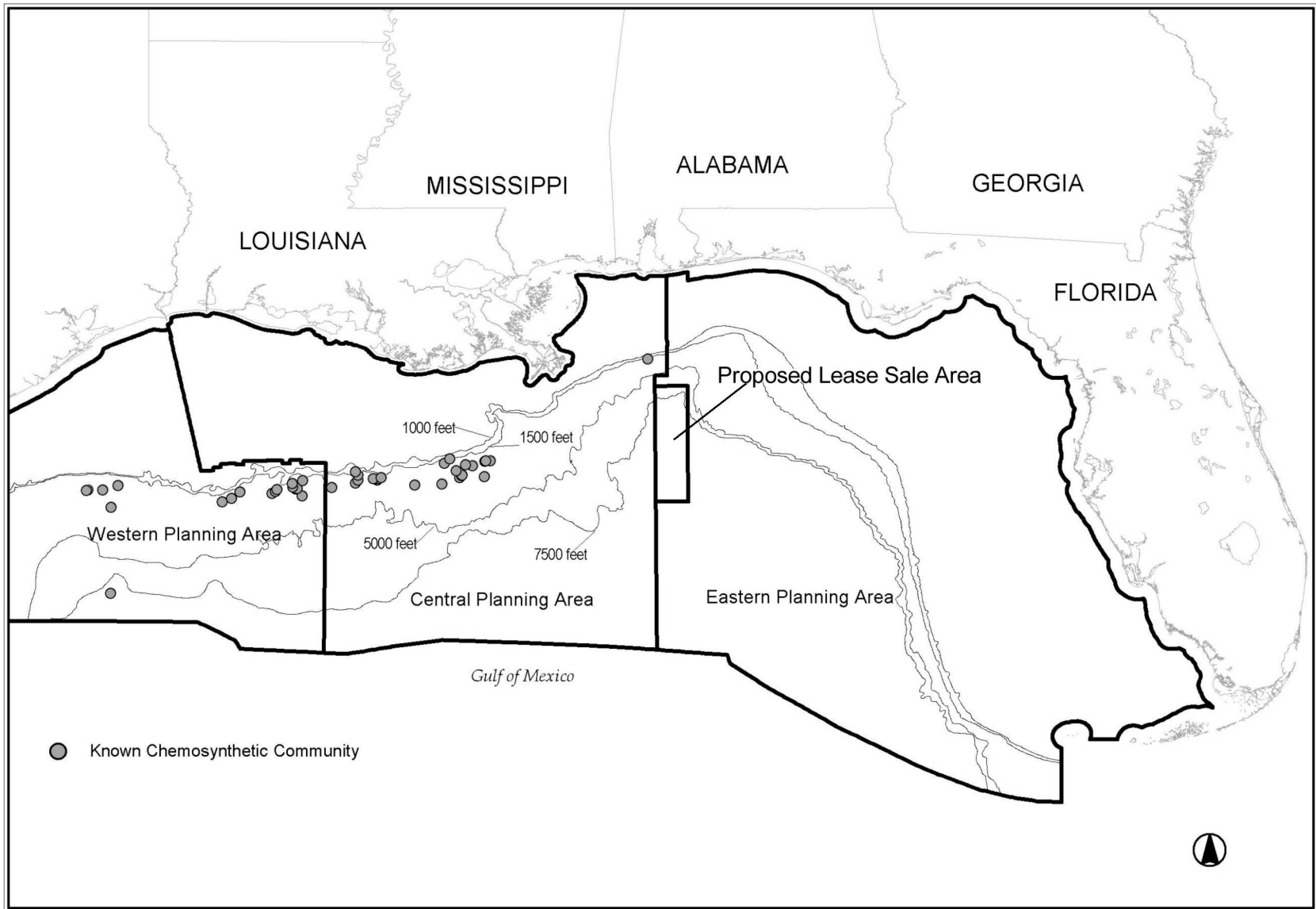


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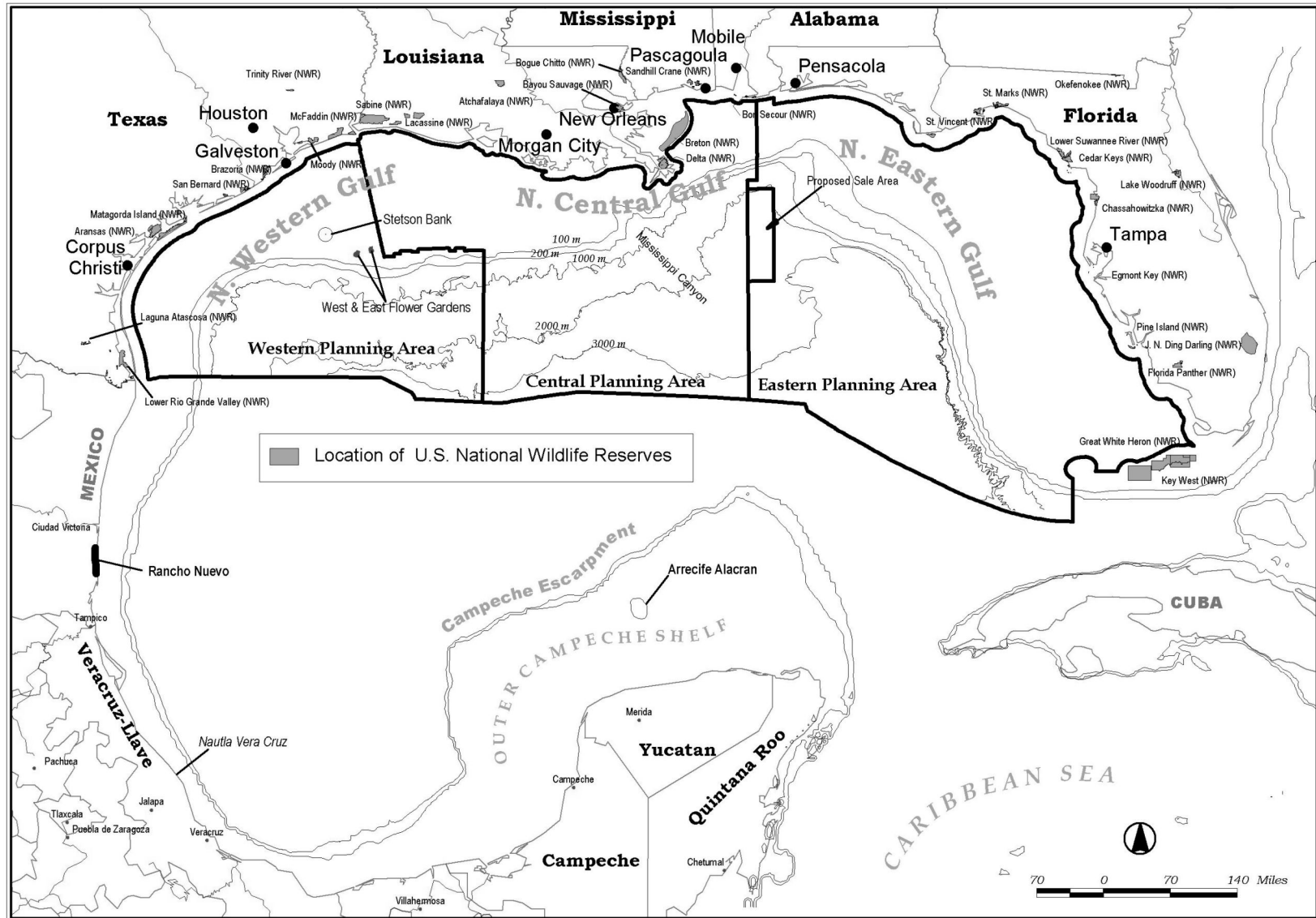


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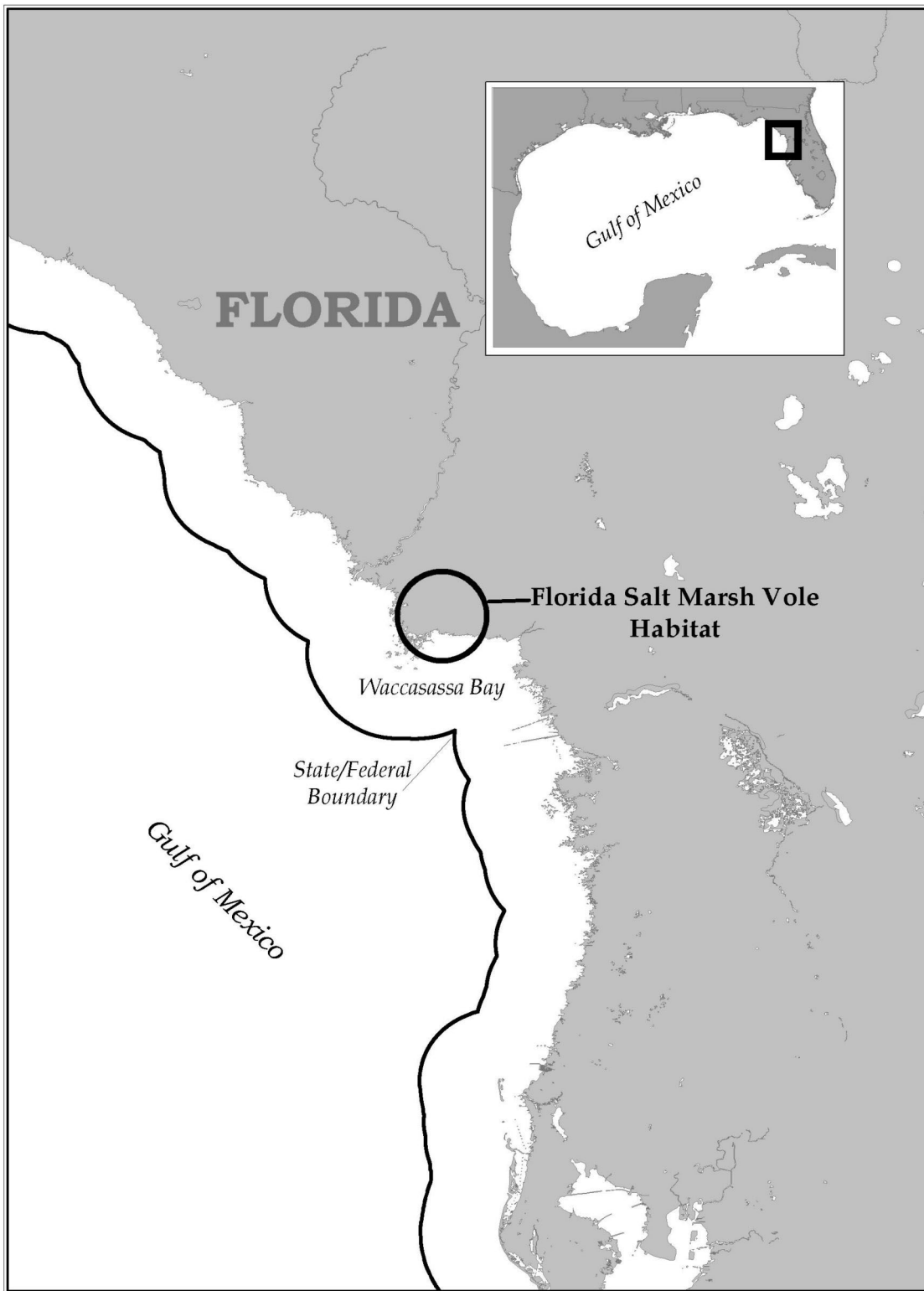


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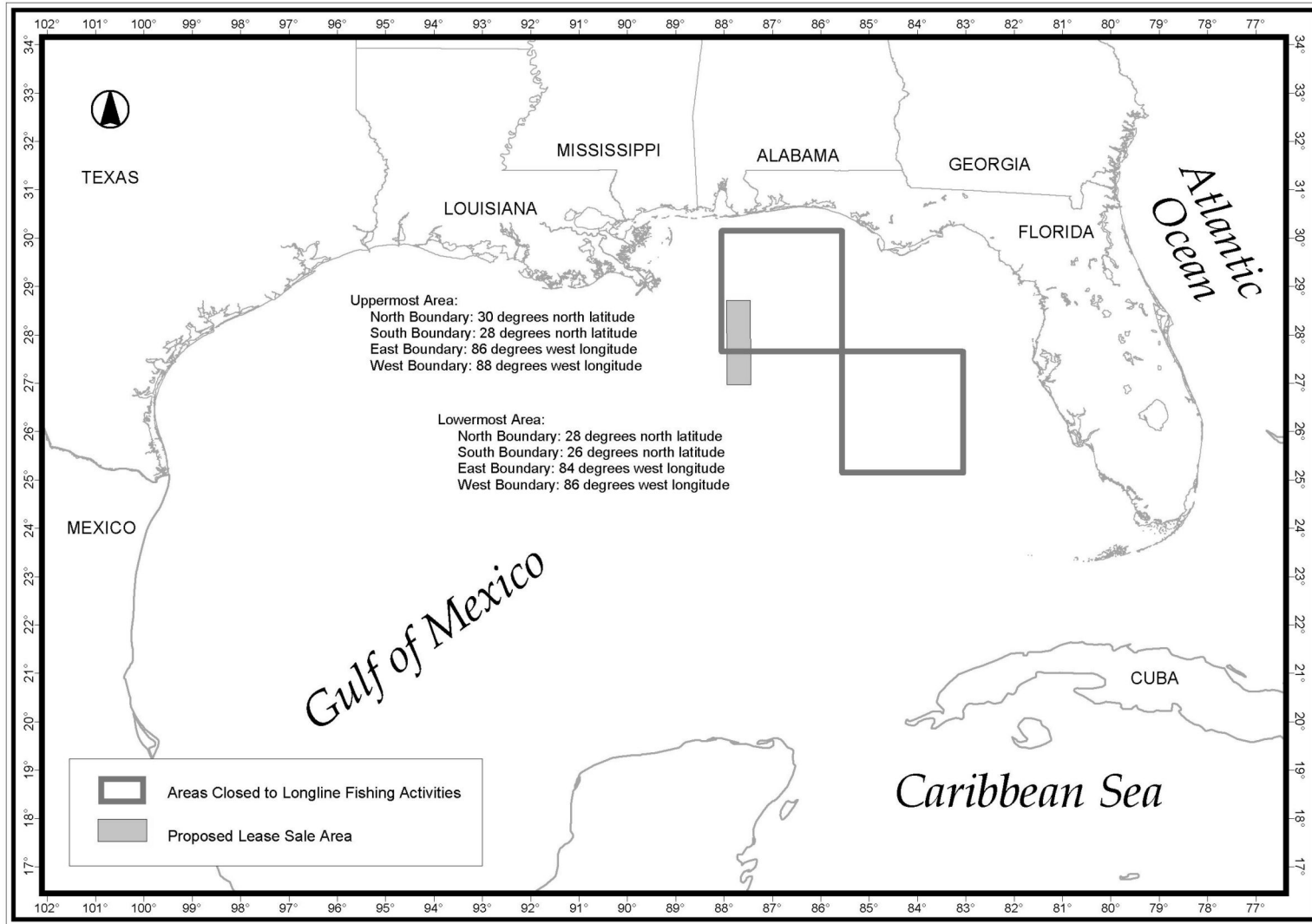


Figure 3-9. Areas Closed to Longline Fishing in the Gulf of Mexico.



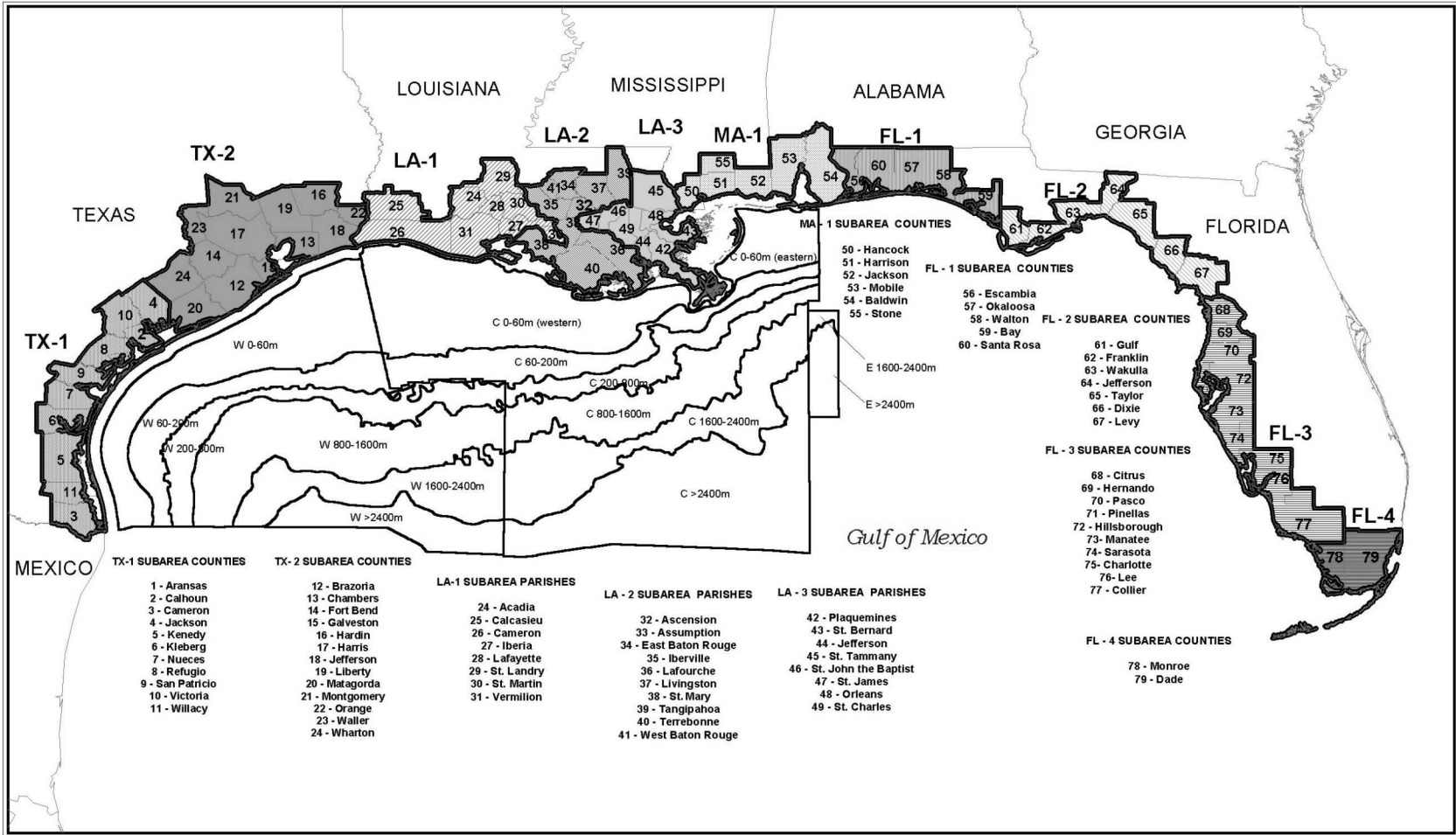


Figure 3-10. Gulf of Mexico Offshore and Coastal Subareas.

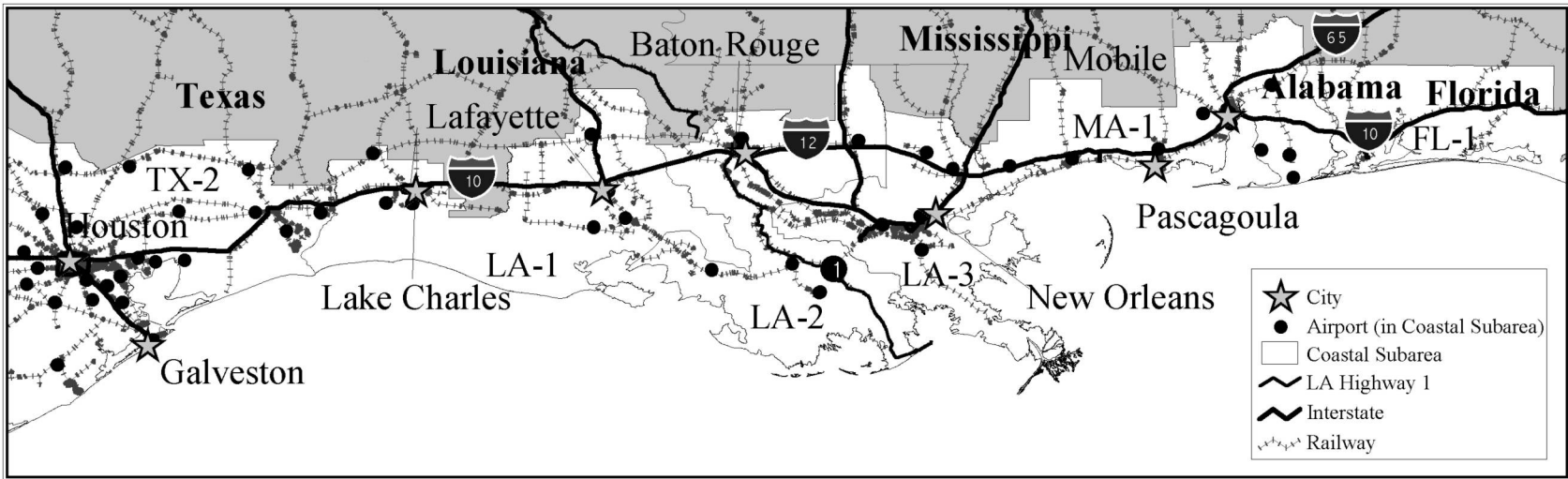


Figure 3-11. Interstates, Airports, and Railways in the Coastal Subareas.

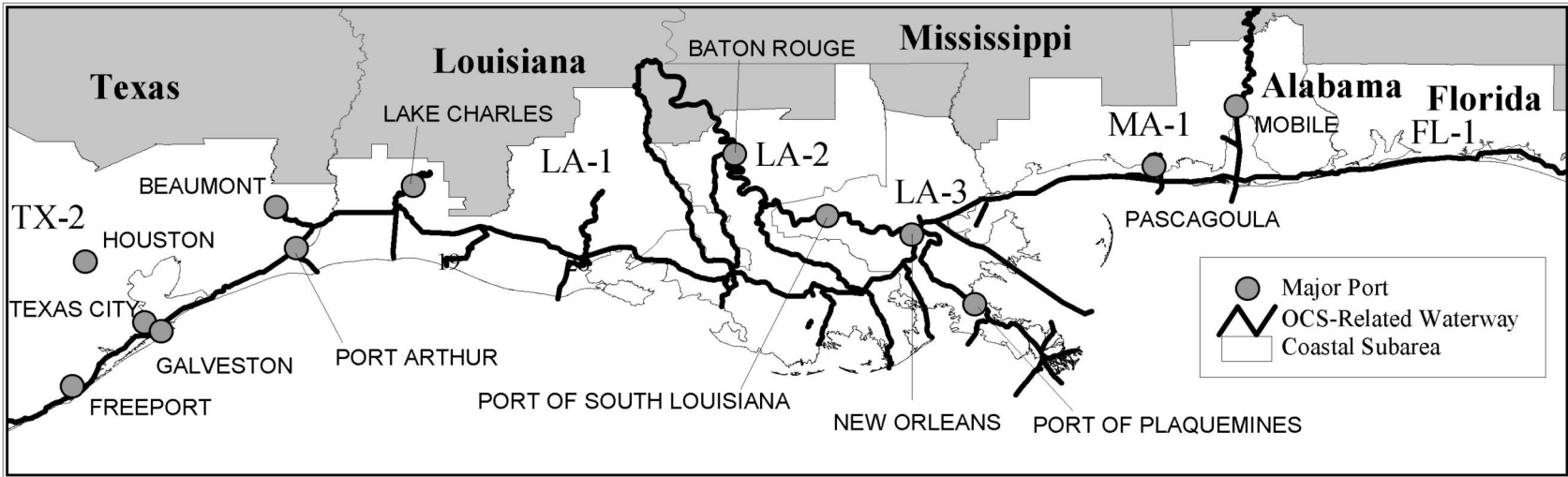


Figure 3-12. Major Ports and Domestic Waterways in the Coastal Subareas.

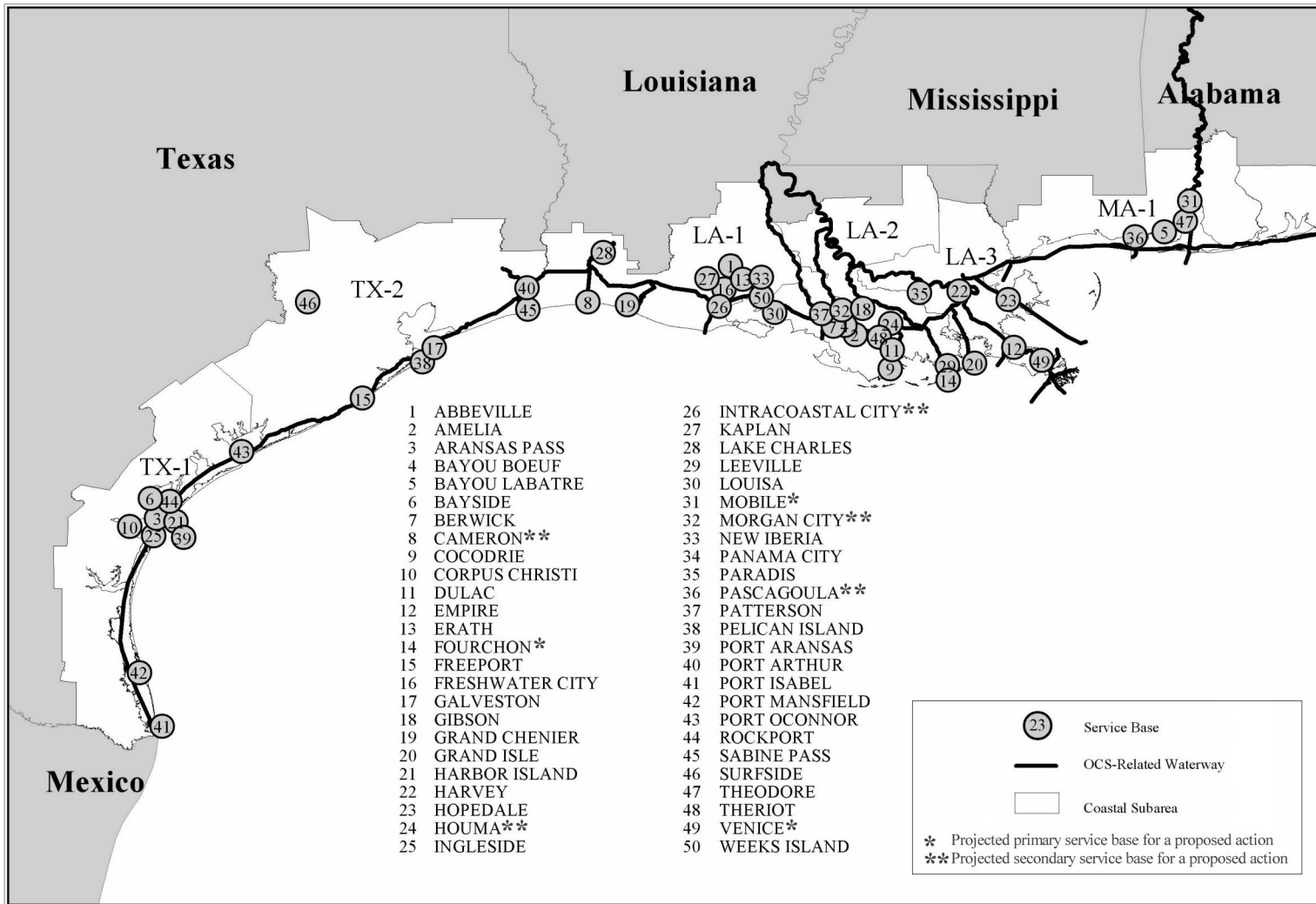


Figure 3-13. OCS-Related Service Bases in the Coastal Subareas.

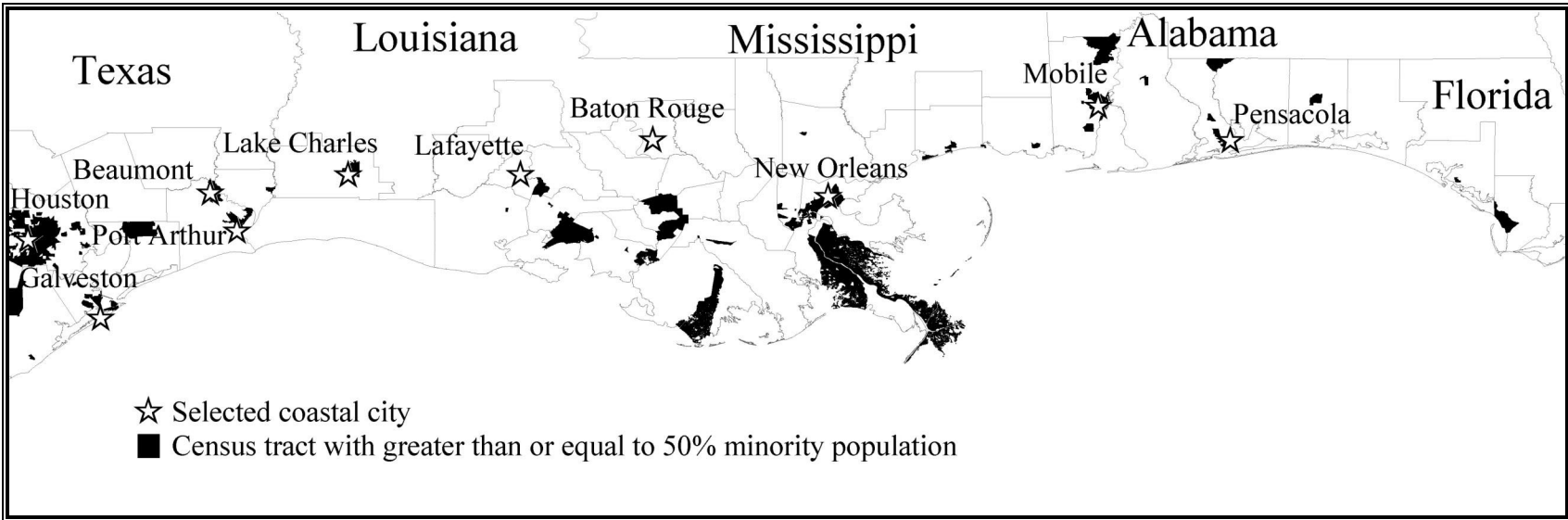


Figure 3-14. Areas with 50 Percent or Greater Minority Populations.

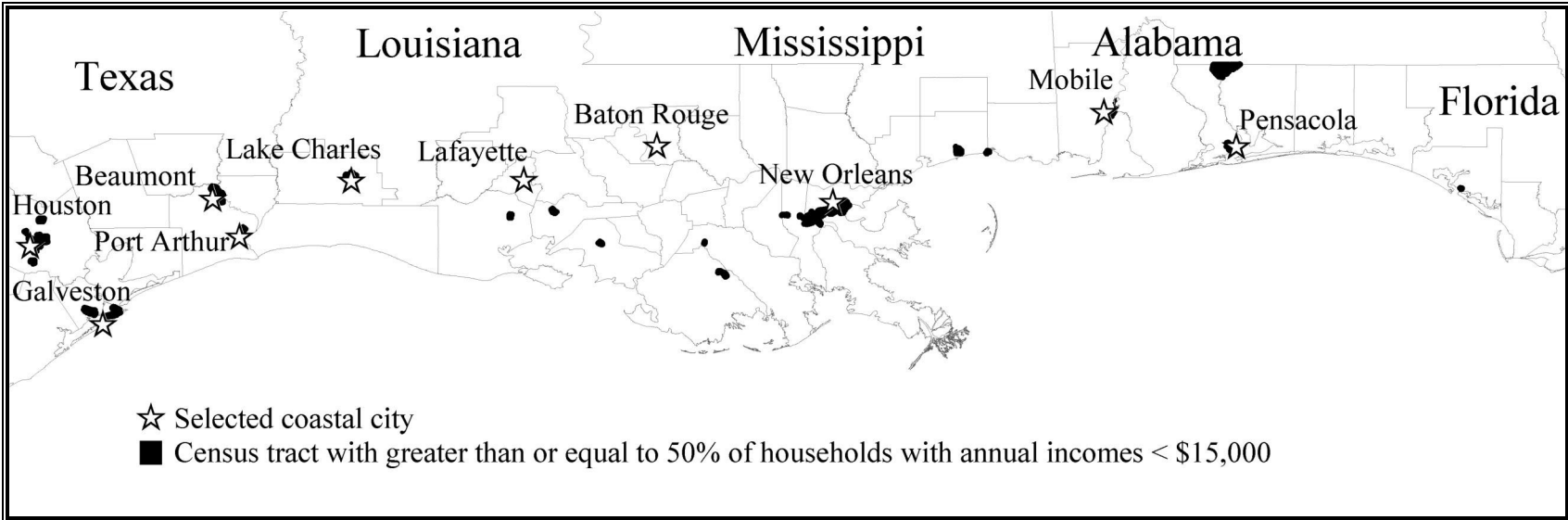


Figure 3-15. Areas with 50 Percent or More Households with Annual Incomes of Less Than \$15,000.

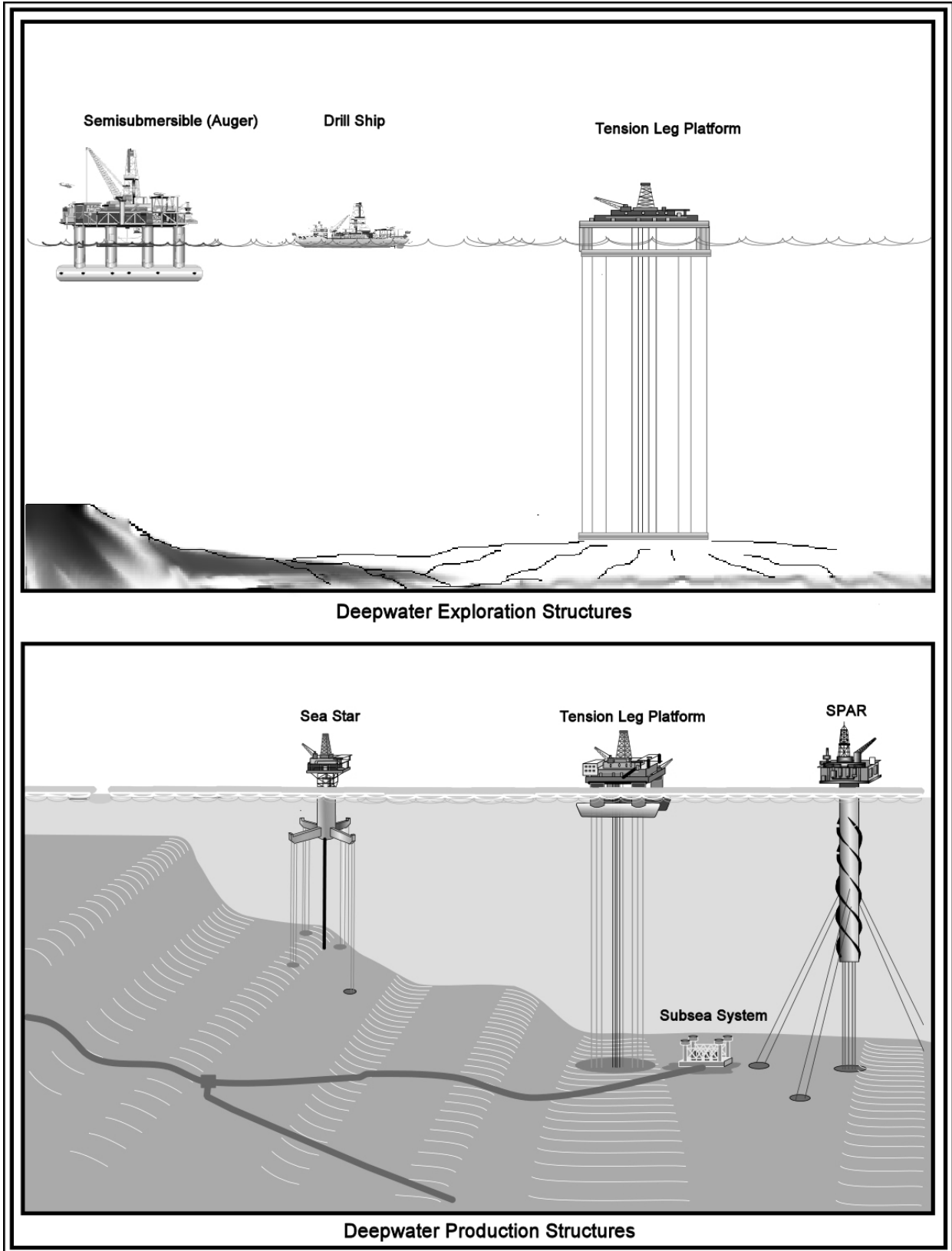


Figure 4-1. Deepwater Exploration and Production Structures.

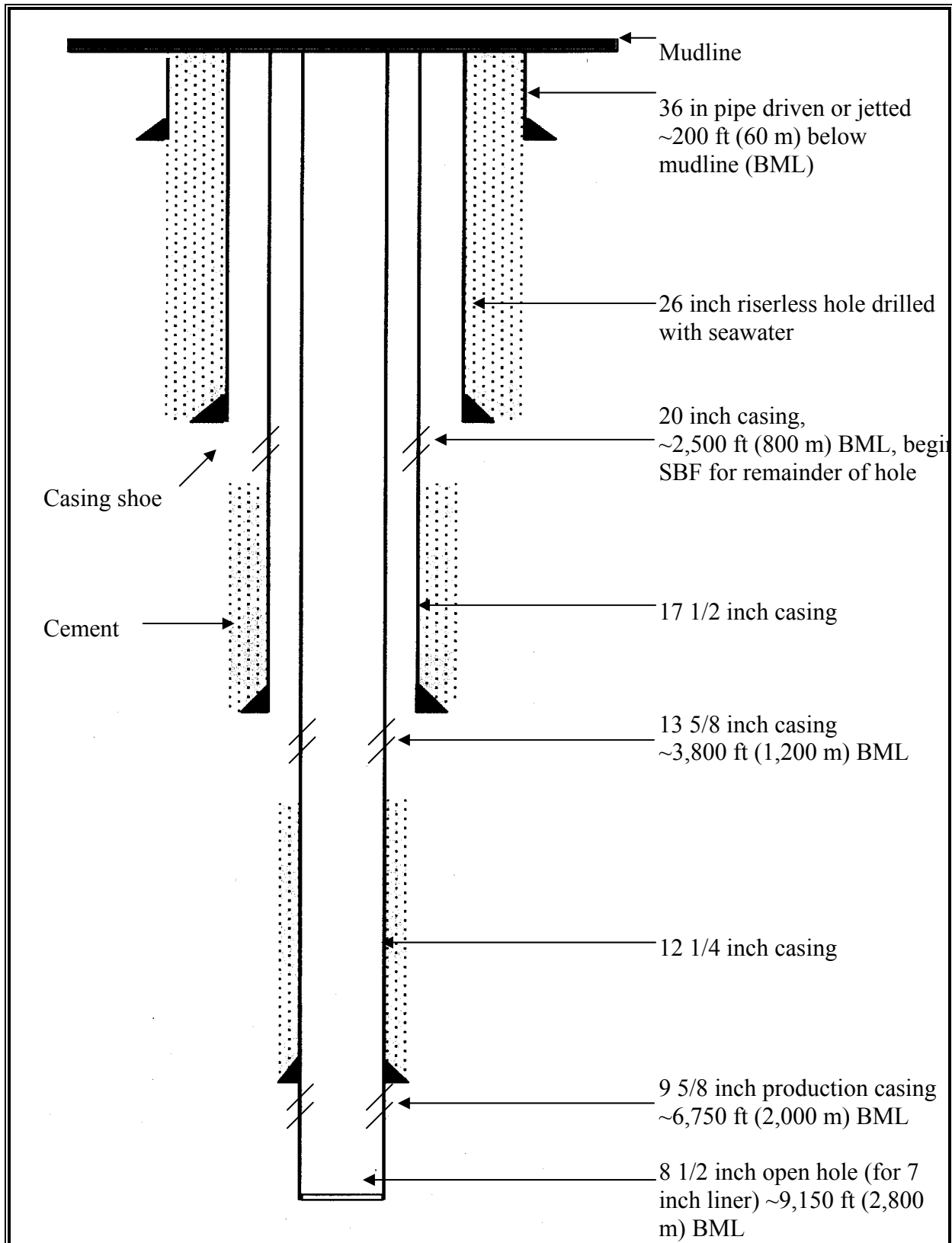


Figure 4-2. Generic Well Schematic for a Shallow Exploration Well in the Proposed Lease Sale Area, Composed from Nearby Industry Developments Projects.

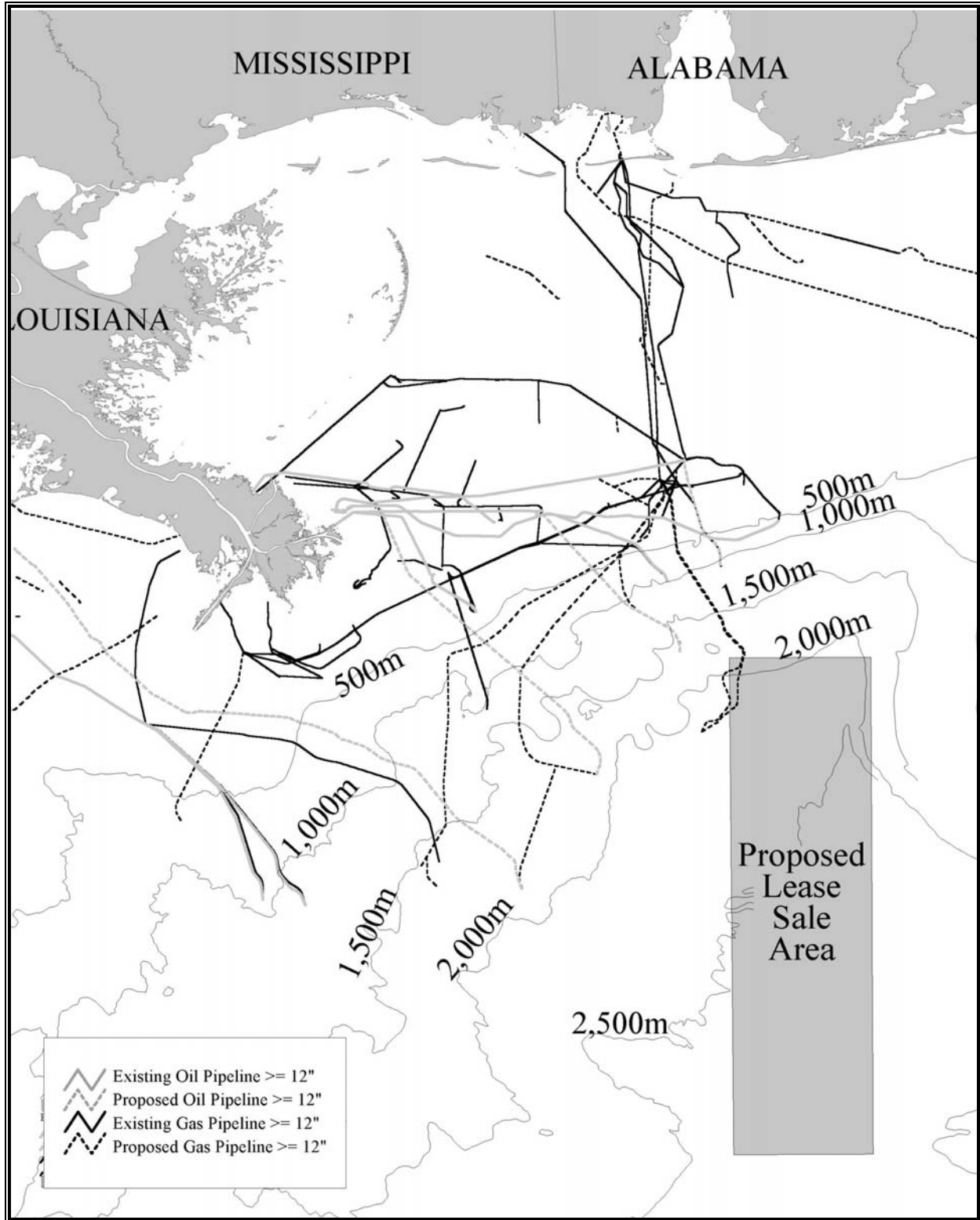


Figure 4-3. Existing and Proposed Pipelines Near the Proposed Lease Sale Area.

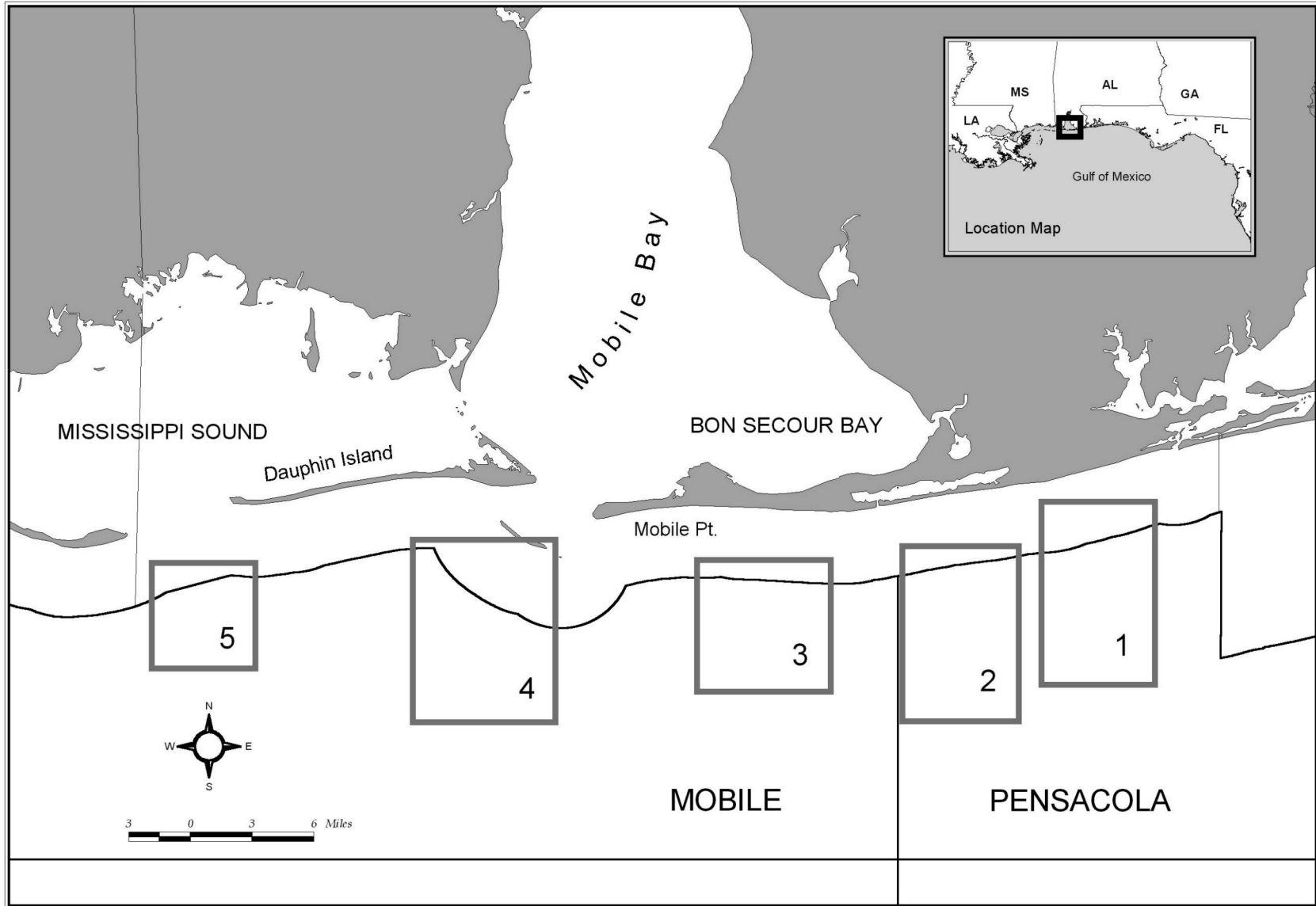


Figure 4-4. Location of Identified Sand Resource Sites Offshore Alabama.



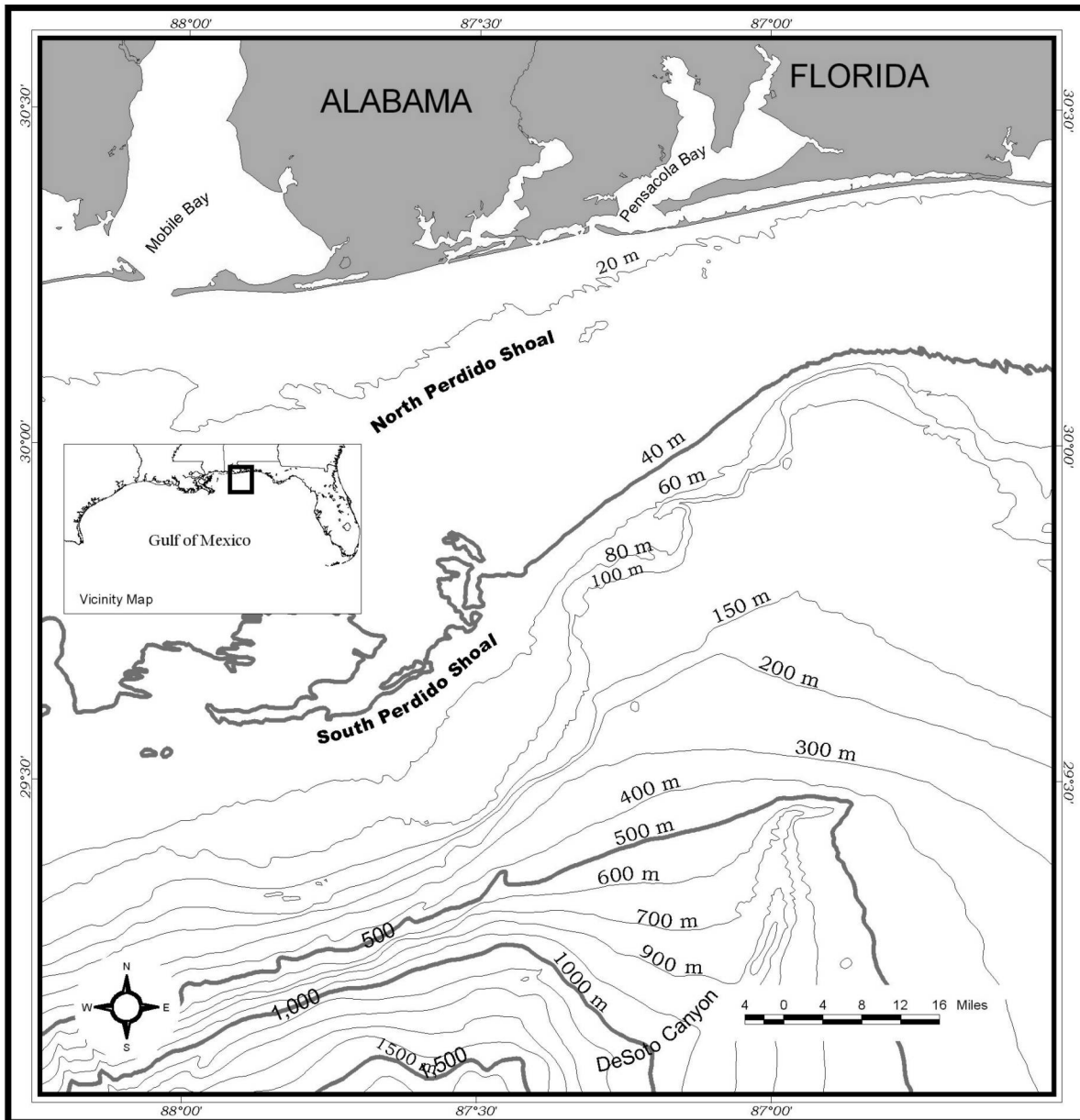
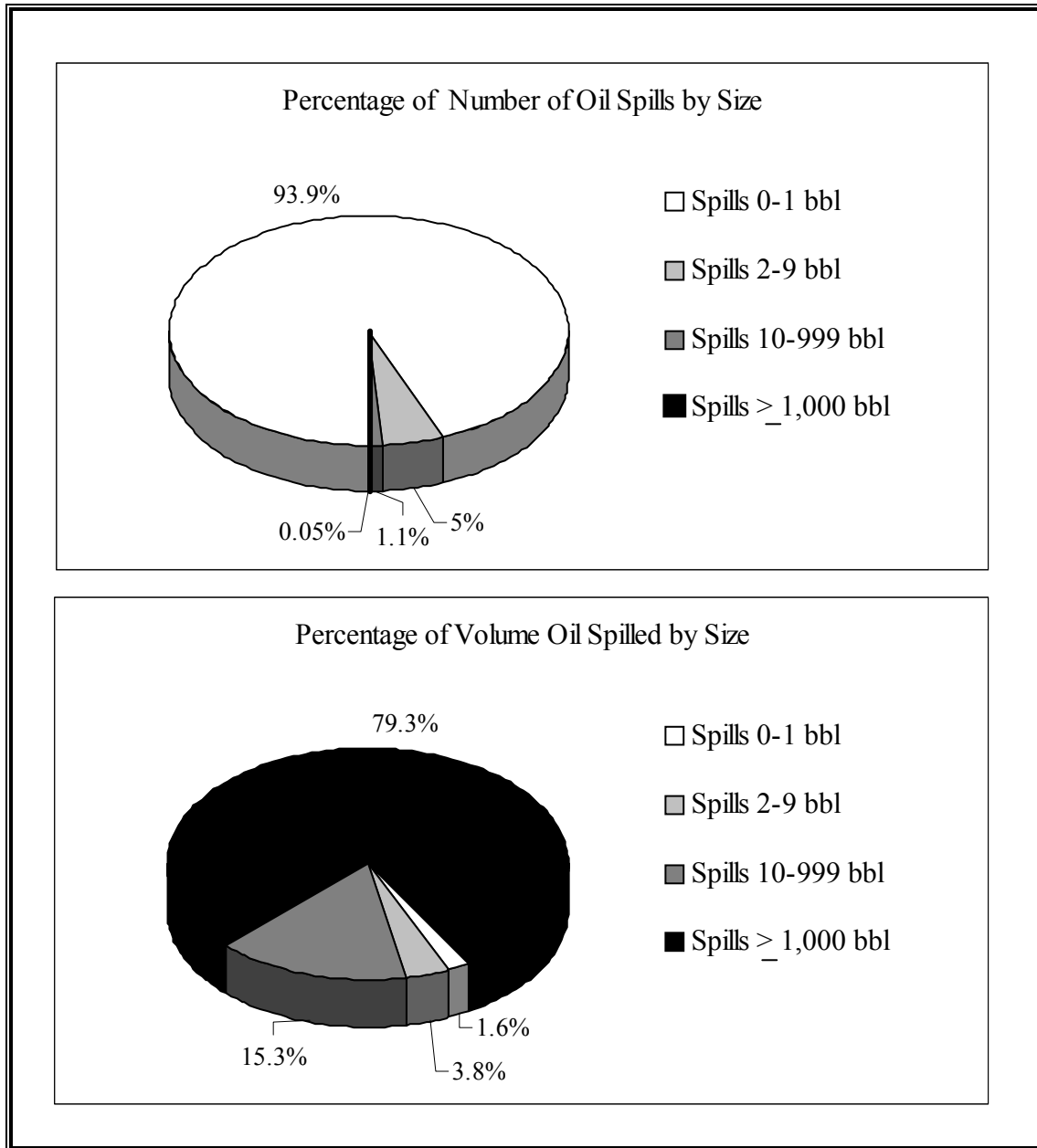


Figure 4-5. Study Area for Synthesis of Hard Mineral Resources on the Florida Panhandle Shelf.



Source: Anderson and LaBelle, 2000.

Figure 4-6. A Comparison of Spill Frequency and Spill Volume for Past OCS Spills by Size Category (1971-1999).

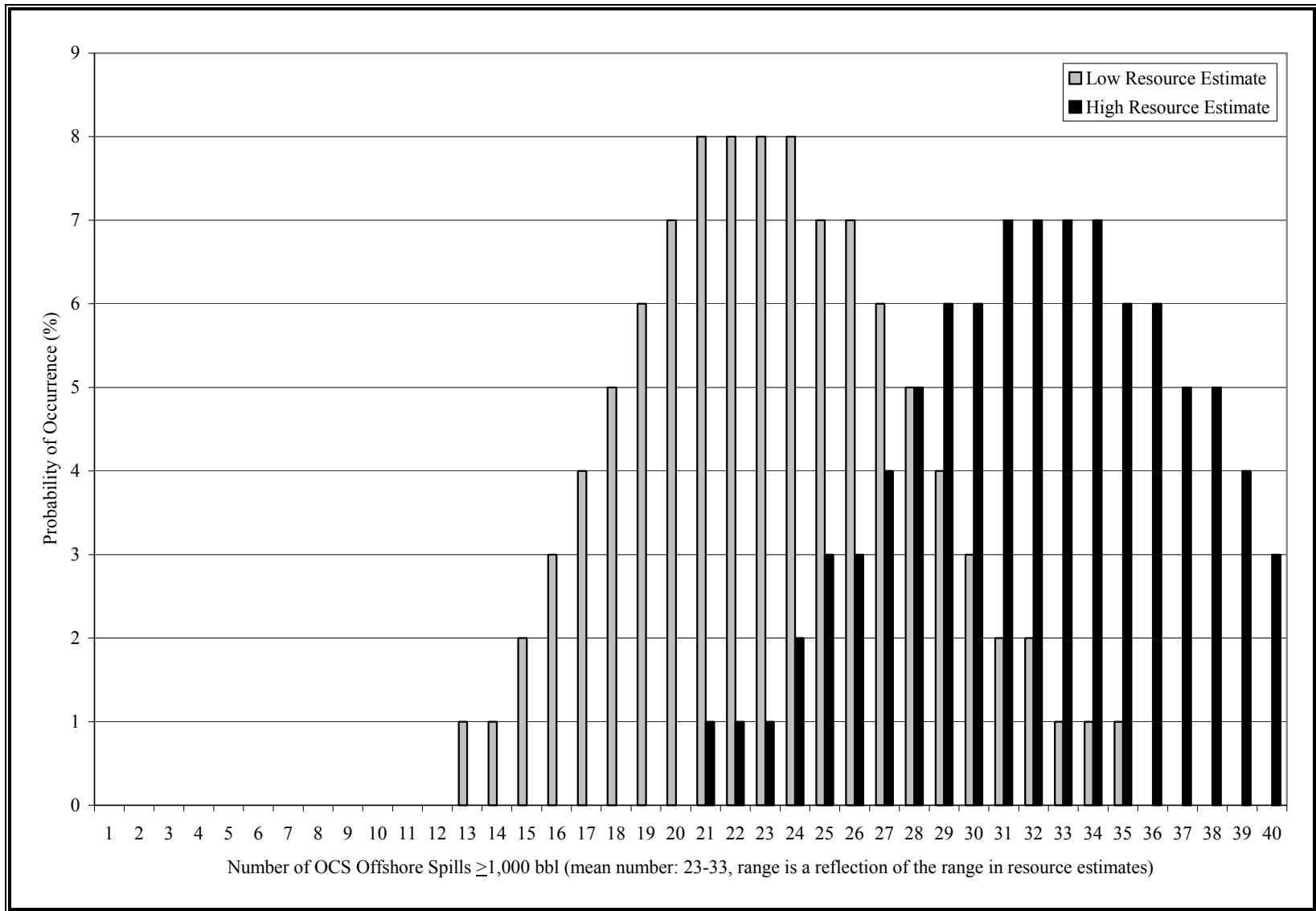


Figure 4-7. Probability of a Particular Number of Offshore Spills  $\geq 1,000$  bbl Occurring as a Result of OCS Program Operations Gulfwide during the Years 2003-2042.

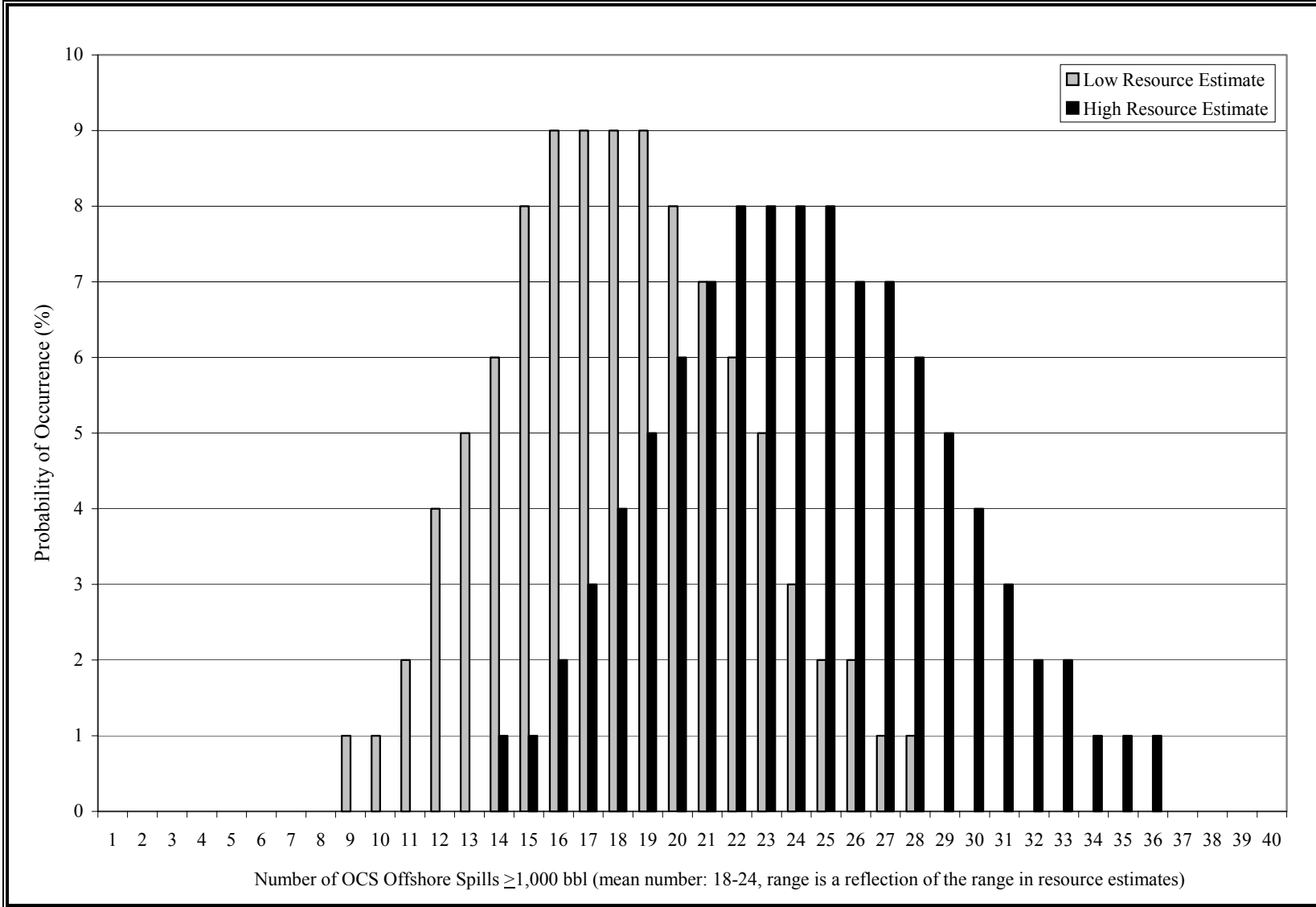


Figure 4-8. Probability of a Particular Number of Offshore Spills  $\geq 1,000$  bbl Occurring as a Result of OCS Program Operations in the Central Planning Area during the Years 2003-2042.

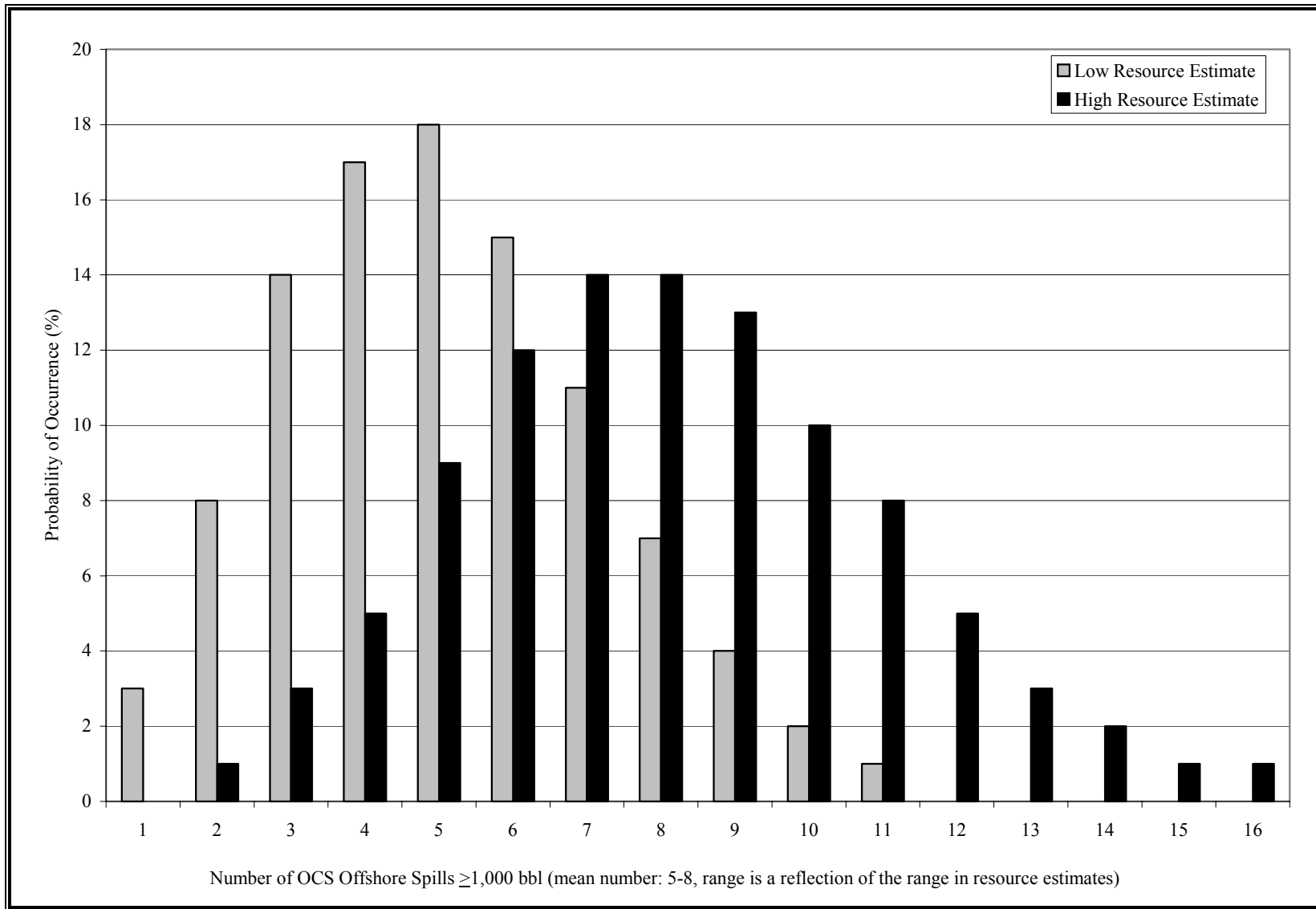


Figure 4-9. Probability of a Particular Number of Offshore Spills  $\geq 1,000$  bbl Occurring as a Result of OCS Program Operations in the Western Planning Area during the Years 2003-2042.

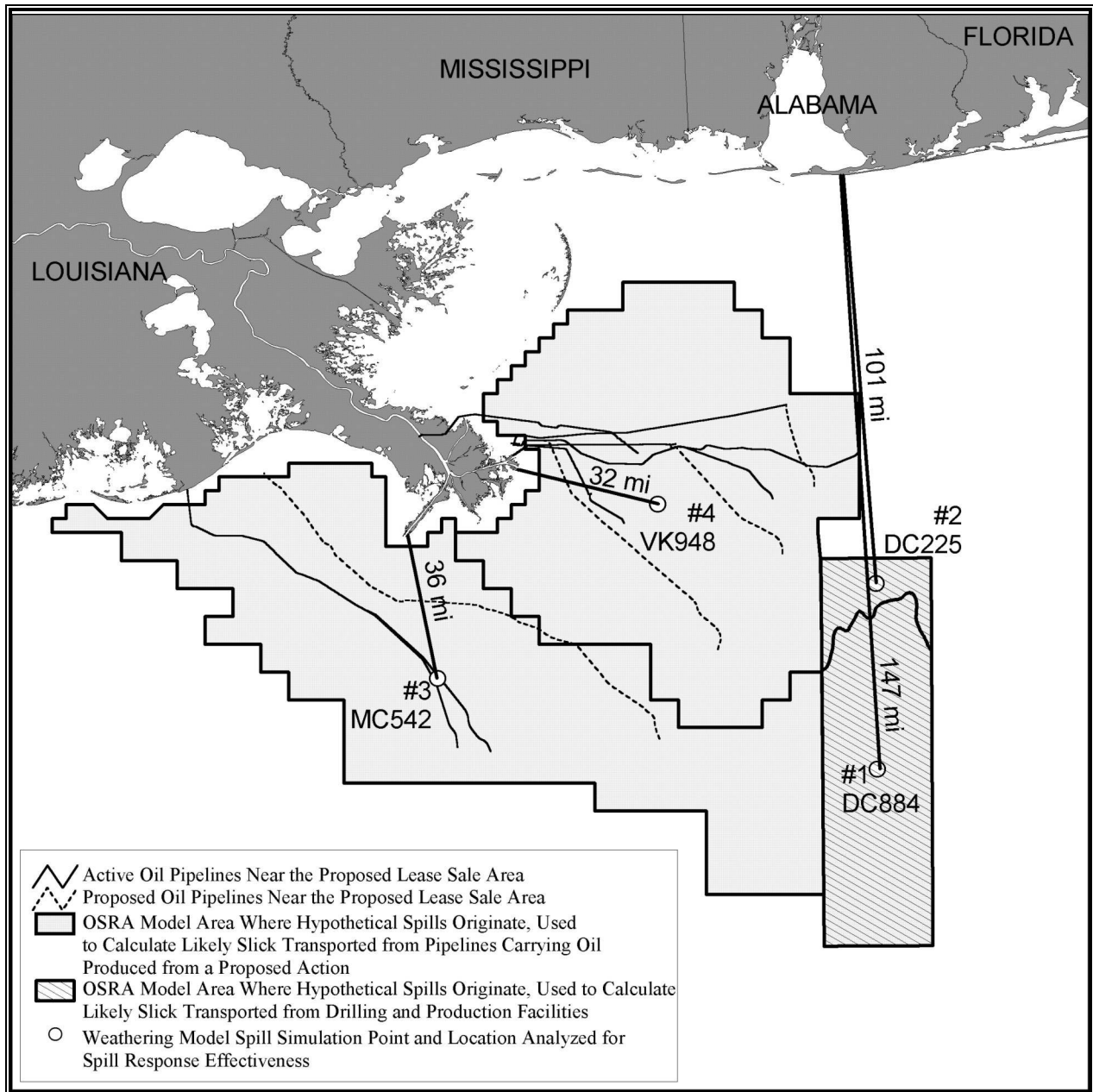


Figure 4-10. Study Area Used to Estimate Spill Risk Associated with a Proposed Action.

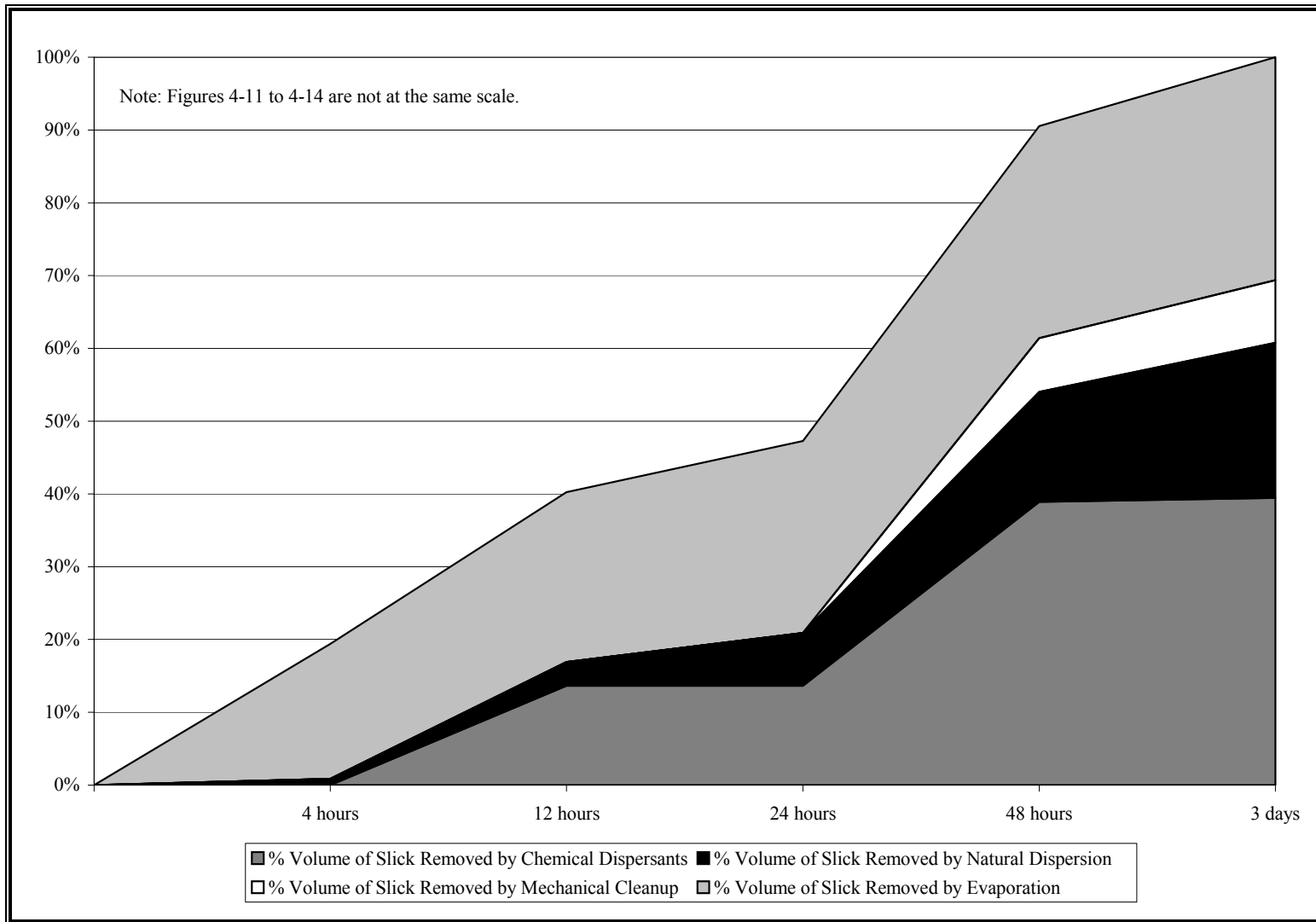


Figure 4-11. Mass Balance of a Hypothetical Spill of 4,600 bbl of a Likely Lighter Weight Crude Oil Spilled over 12 Hours from an OCS Pipeline Break at DeSoto Canyon Block 884 during Summer Conditions. (This scenario represents the minimum volume of oil remaining in a slick as a function of time for EPA conditions.)

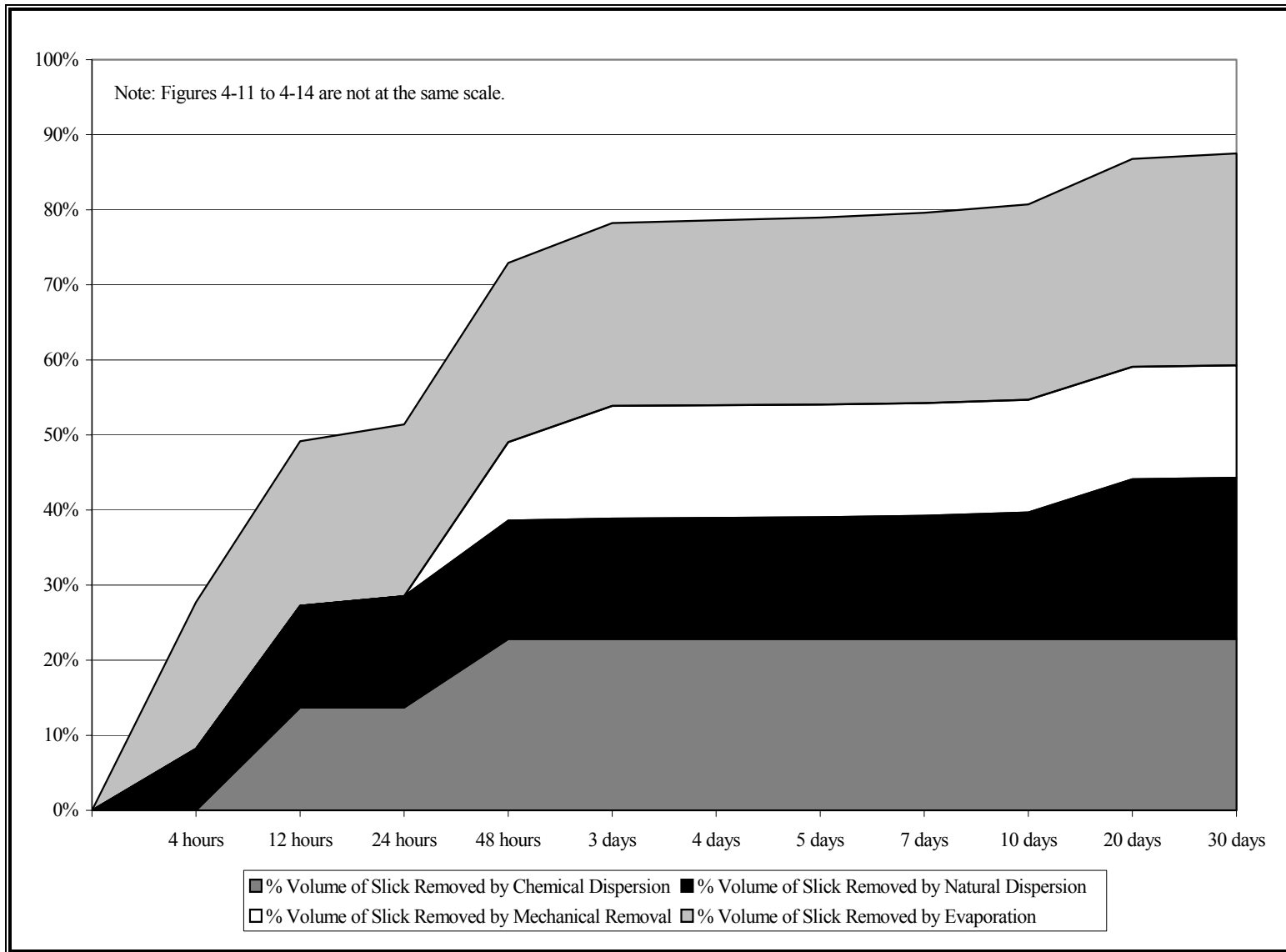


Figure 4-12. Mass Balance of a Hypothetical Spill of 4,600 bbl of a Likely Heavier Weight Crude Oil Spilled over 12 Hours from an OCS Pipeline Break at DeSoto Canyon Block 225 during Winter Conditions. (This scenario represents the maximum volume of oil remaining in slick as a function of time for EPA conditions.)



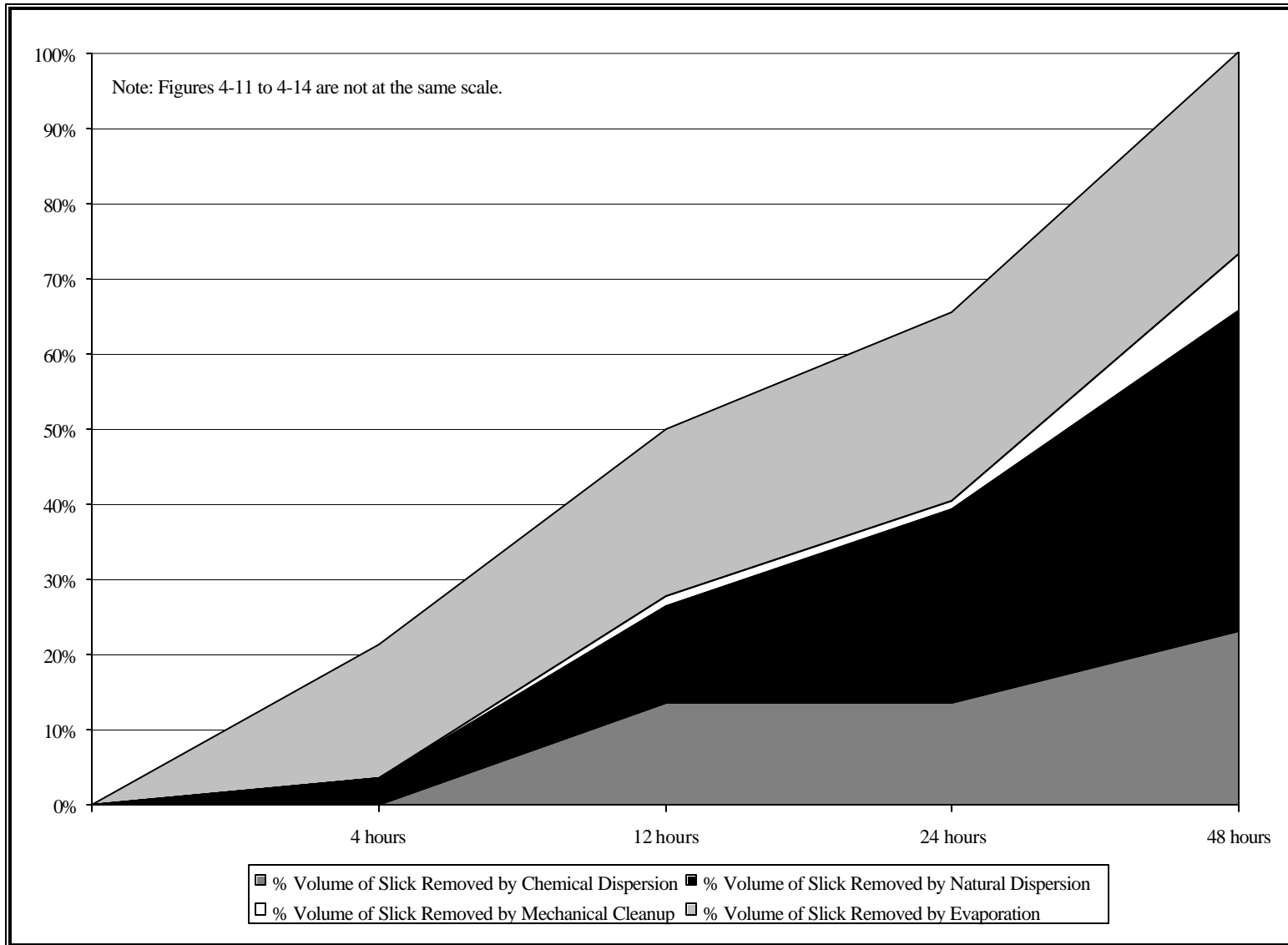


Figure 4-13. Mass Balance of a Hypothetical Spill of 4,600 bbl of a Likely Lighter Weight Crude Oil Spilled over 12 Hours from an OCS Pipeline Break at Mosca Knoll Block 948 during Winter Conditions. (This scenario represents the minimum volume of oil remaining in slick as a function of time for CPA conditions.)

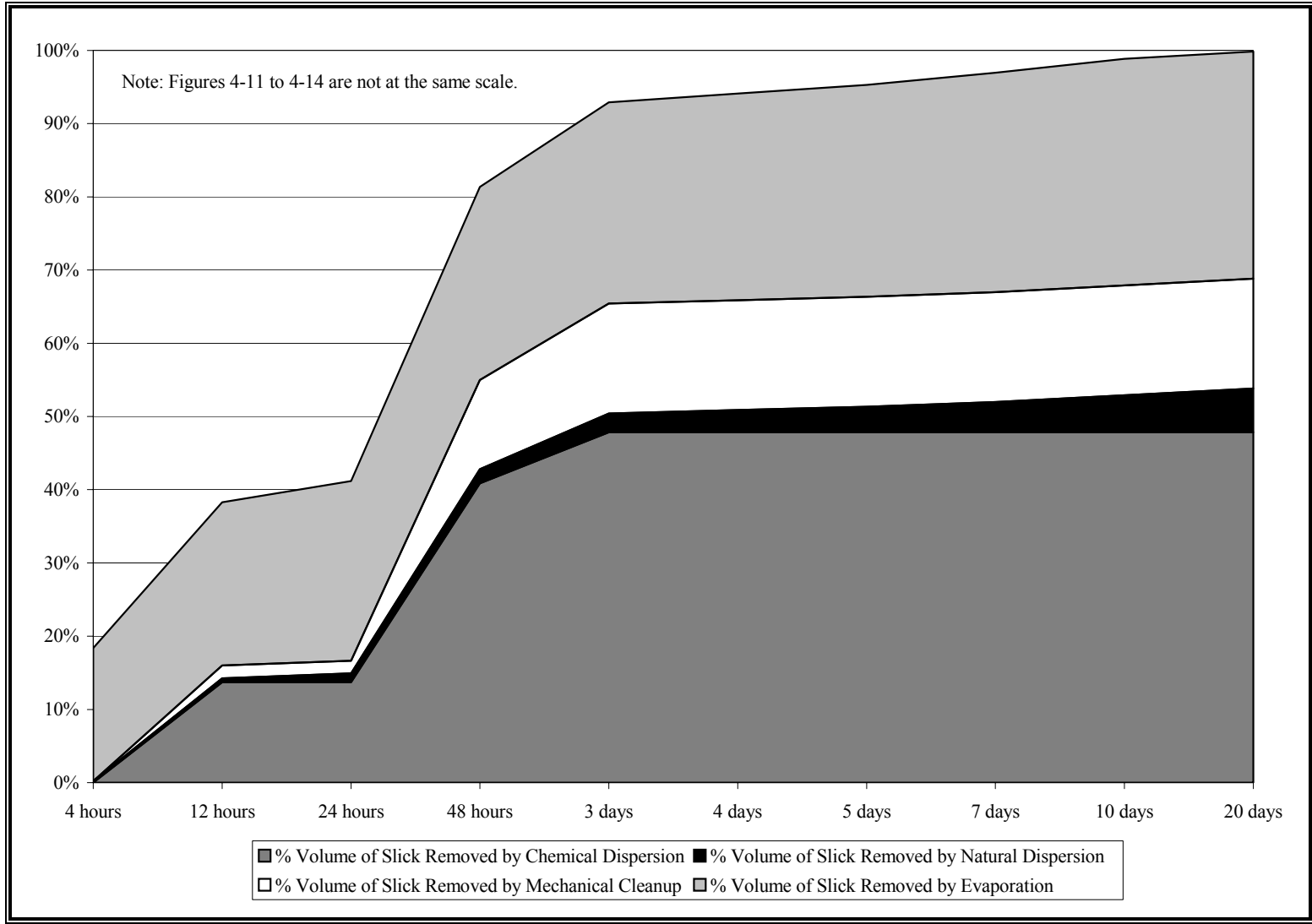


Figure 4-14. Mass Balance of a Hypothetical Spill of 4,600 bbl of a Likely Heavier Weight Crude Oil Spilled over 12 Hours from an OCS Pipeline Break at Mississippi Canyon Block 952 during Summer Conditions. (This scenario represents the maximum volume of oil remaining in slick as a function of time for CPA conditions.)

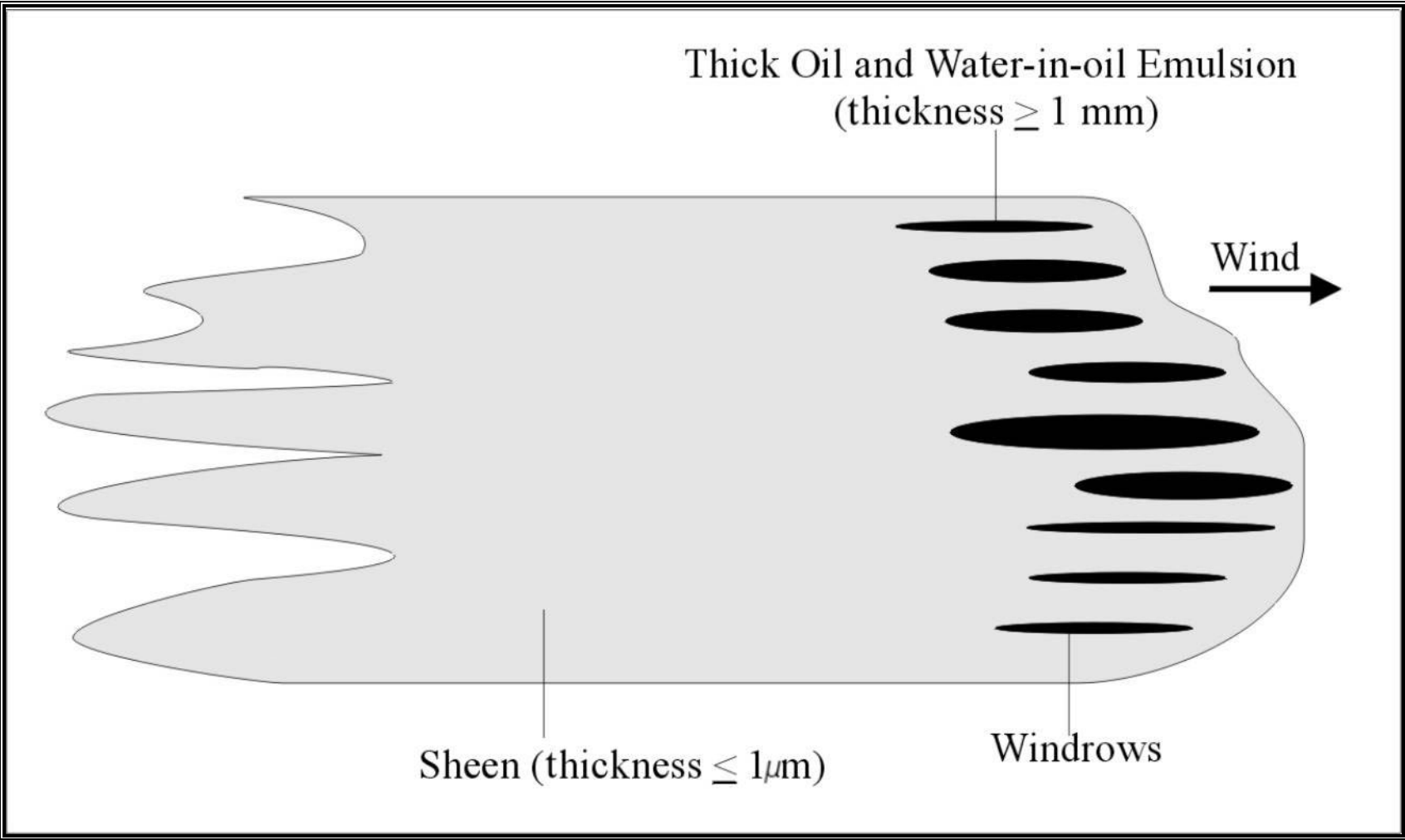


Figure 4-15. Typical Slick Shape.

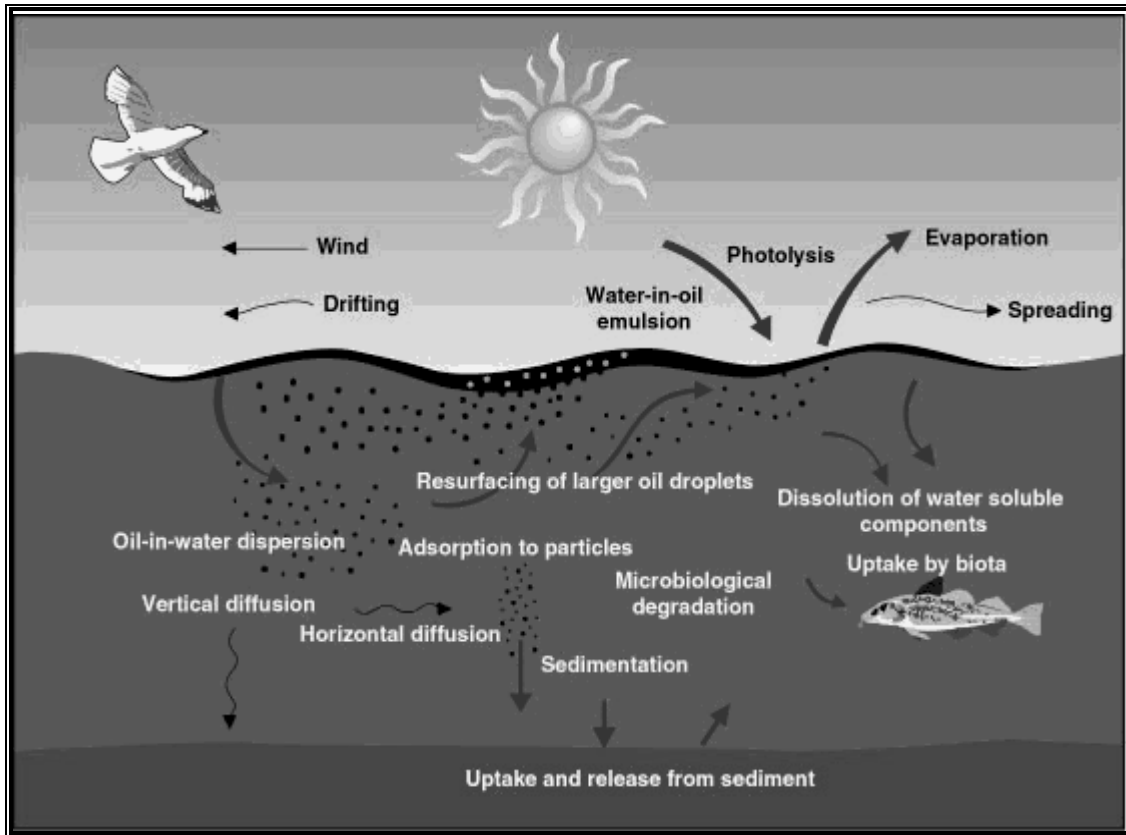


Figure 4-16. Oil Weathering at Sea.

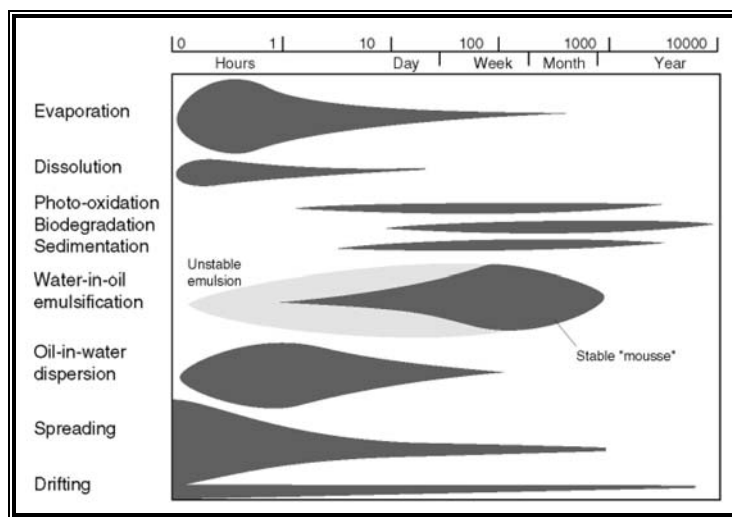


Figure 4-17. Relative Importance of Weathering Processes Over Time.

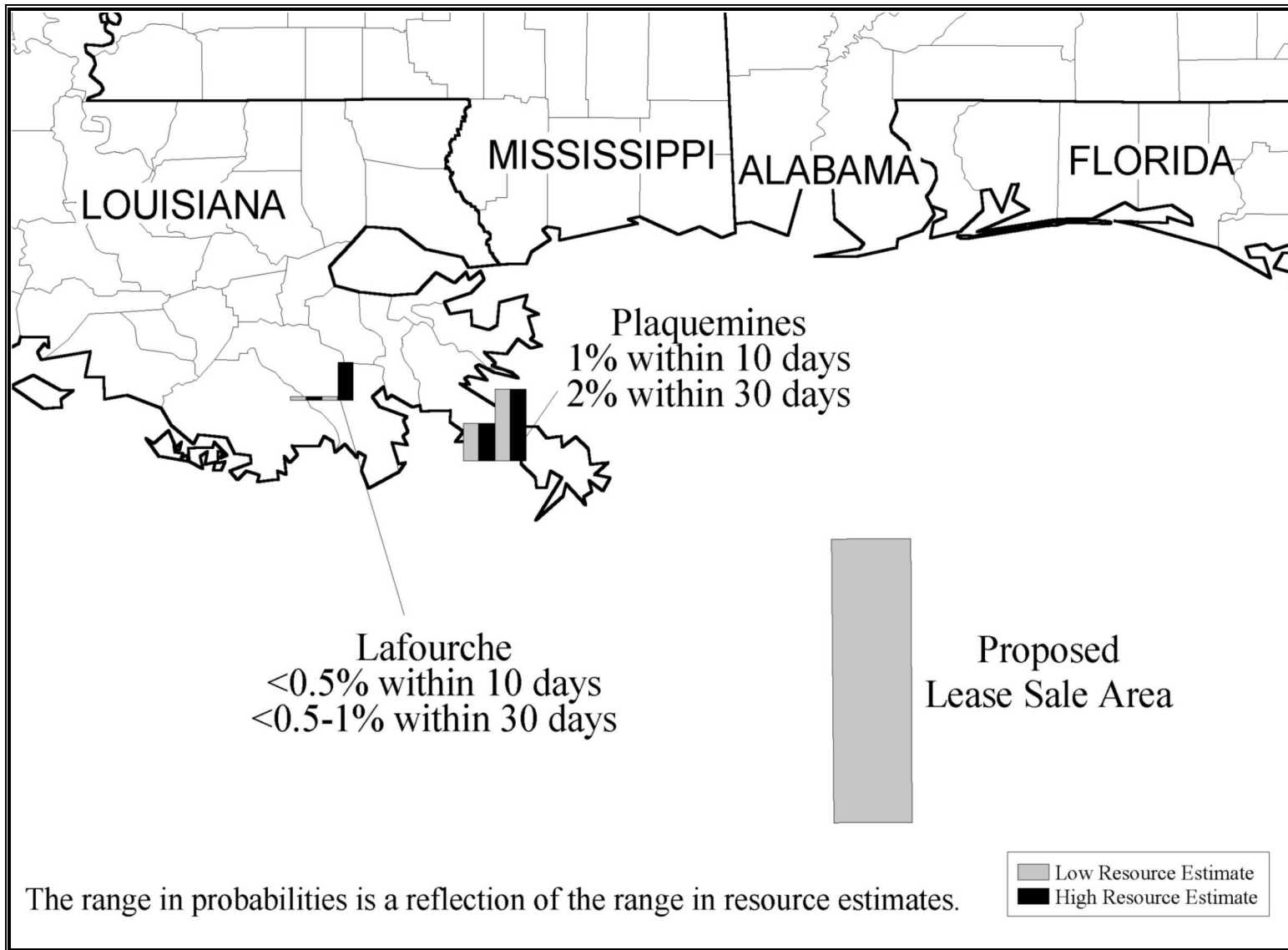


Figure 4-18. Probabilities of Offshore Spills ( $\geq 1,000$  bbl) Occurring over the Life of a Proposed Action and Contacting Gulf States' Shorelines (by County and Parish) within 10 or 30 Days as a Result of a Proposed Action (only counties and parishes with greater than a 0.5% risk of contact within 10 or 30 days are shown).

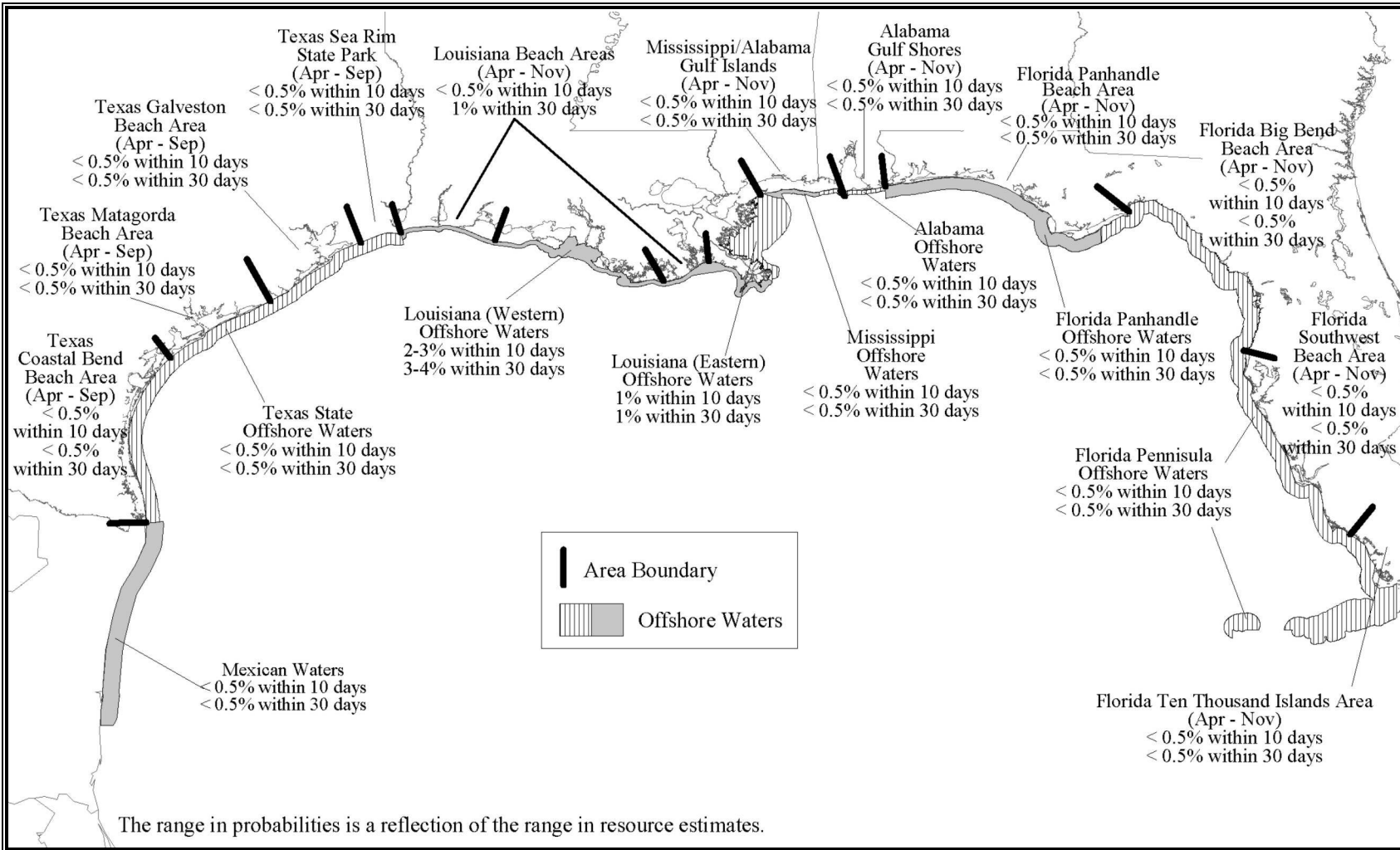


Figure 4-19. Probabilities of Offshore Spills ( $\geq 1,000$  bbl) Occurring over the Life of a Proposed Action and Contacting Gulf States' Offshore Waters or Recreational Beach Areas within 10 or 30 Days as a Result of a Proposed Action.

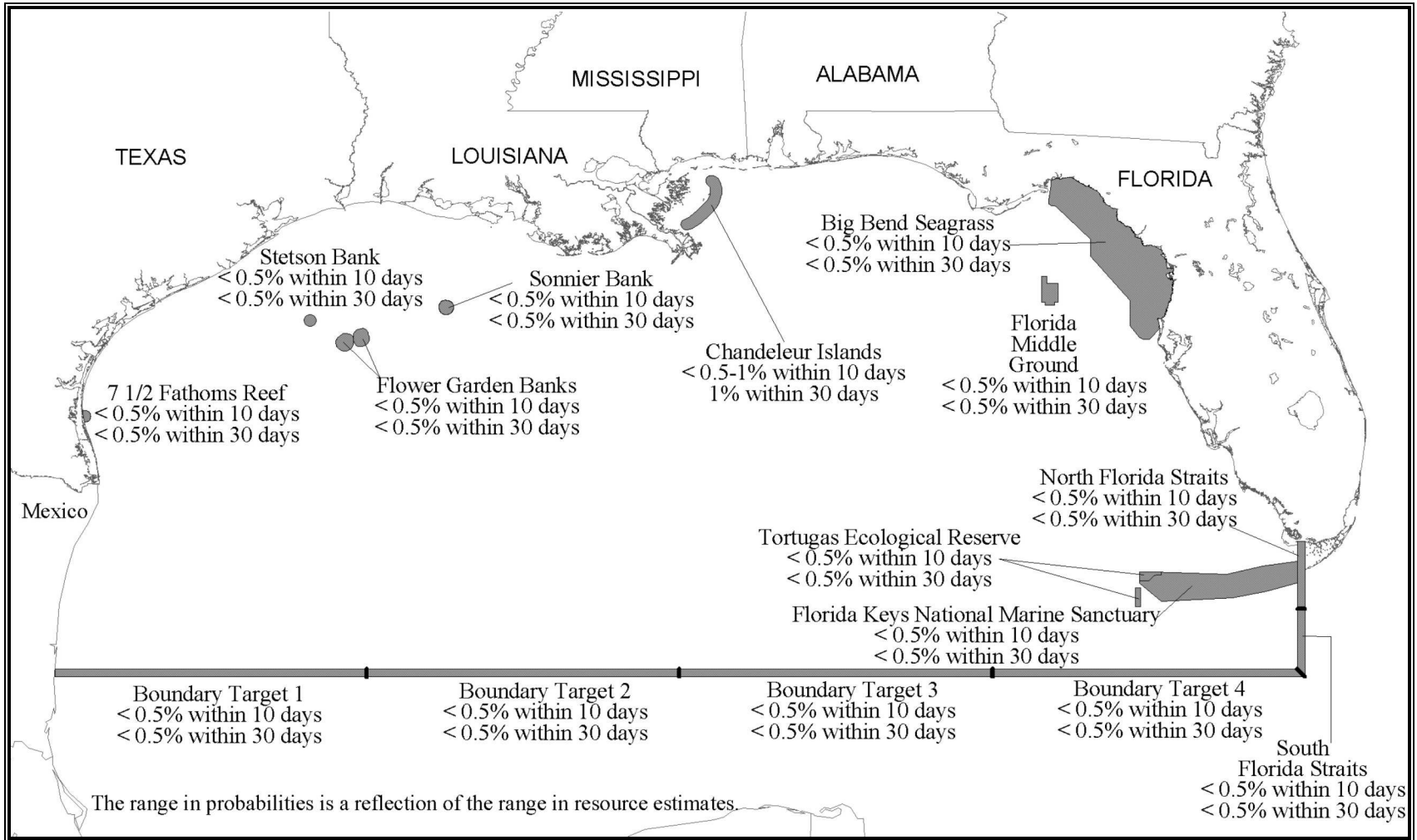


Figure 4-20. Probabilities of Offshore Spills (≥1,000 bbl) Occurring over the Life of a Proposed Action and Contacting the Surface Waters Overlying and Surrounding Offshore Environmental Features or Reaching Boundary Targets within 10 or 30 Days as a Result of a Proposed Action.

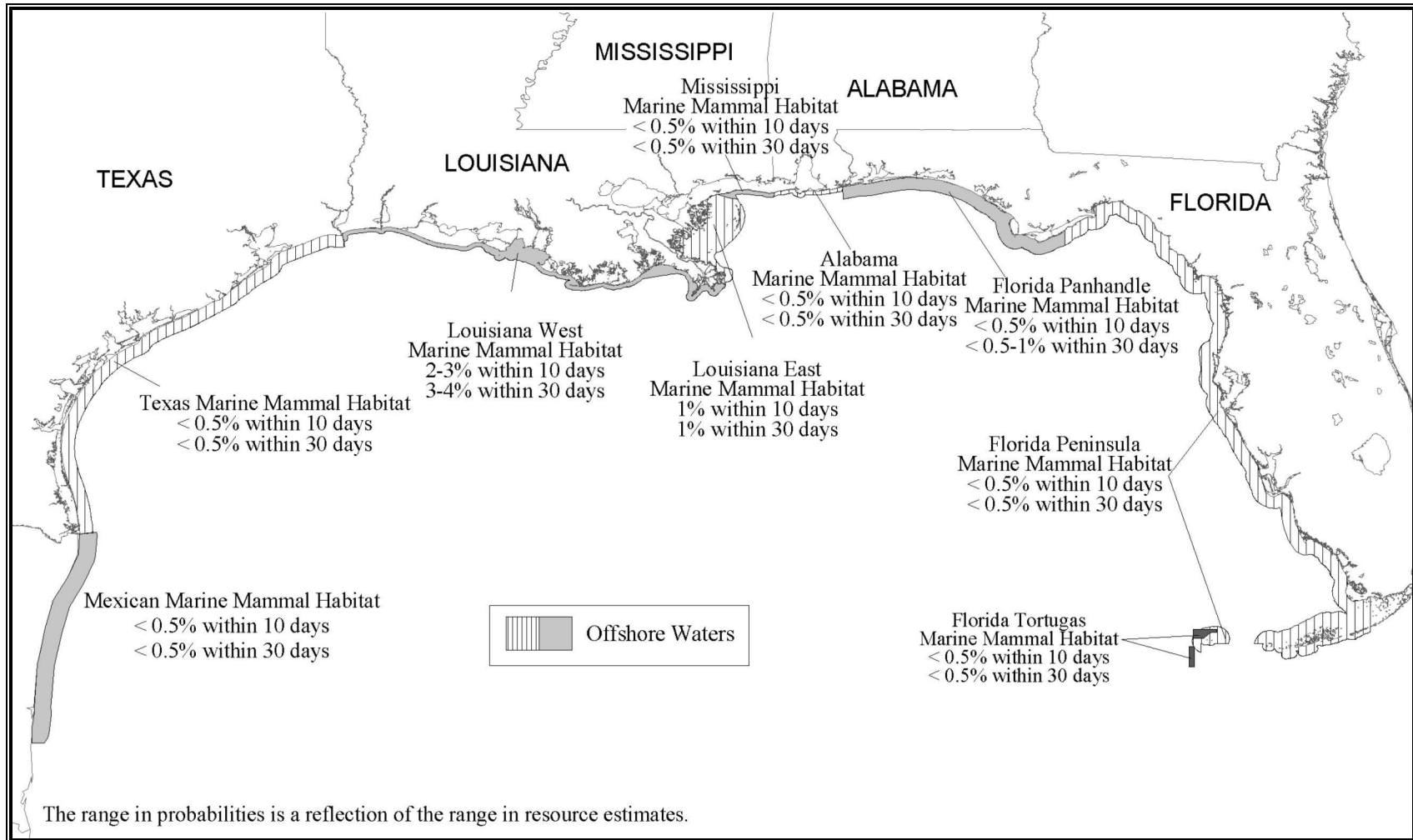


Figure 4-21. Probabilities of Offshore Spills (≥1,000 bbl) Occurring over the Life of a Proposed Action and Contacting Marine Mammal Habitats within 10 or 30 Days as a Result of a Proposed Action.



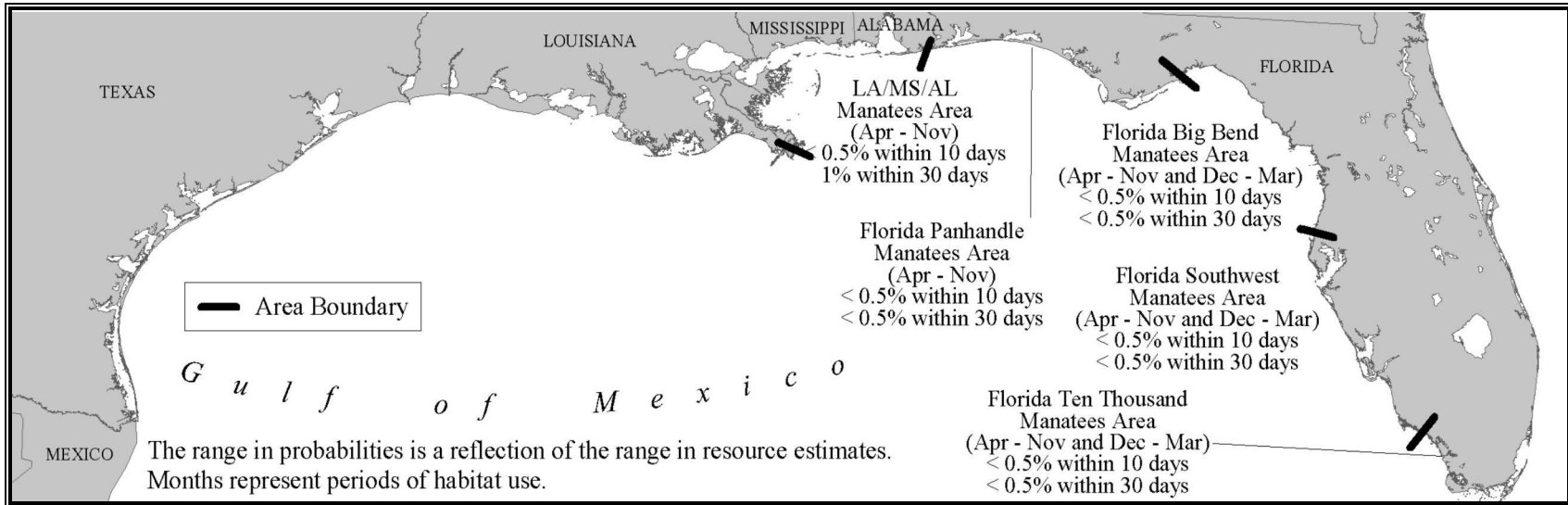


Figure 4-22. Probabilities of Offshore Spills ( $\geq 1,000$  bbl) Occurring over the Life of a Proposed Action and Contacting Manatee Habitats within 10 or 30 Days as a Result of a Proposed Action.

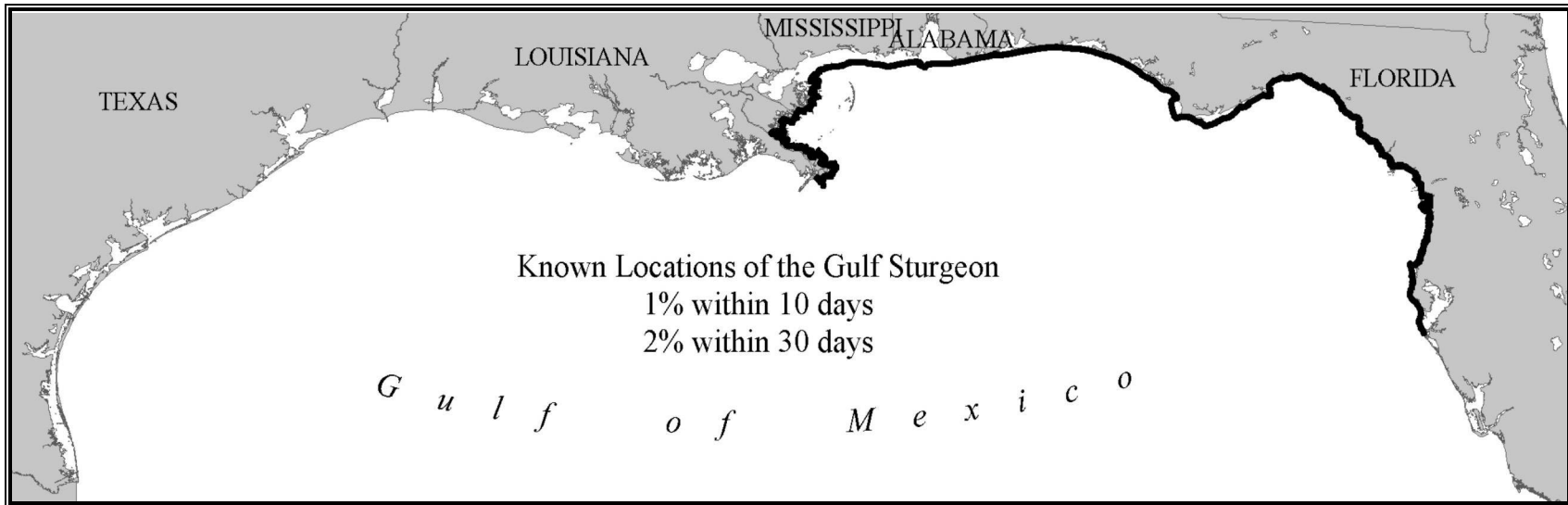


Figure 4-23. Probabilities of Offshore Spills ( $\geq 1,000$  bbl) Occurring over the Life of a Proposed Action and Contacting Known Locations of Gulf Sturgeon within 10 or 30 Days as a Result of a Proposed Action.

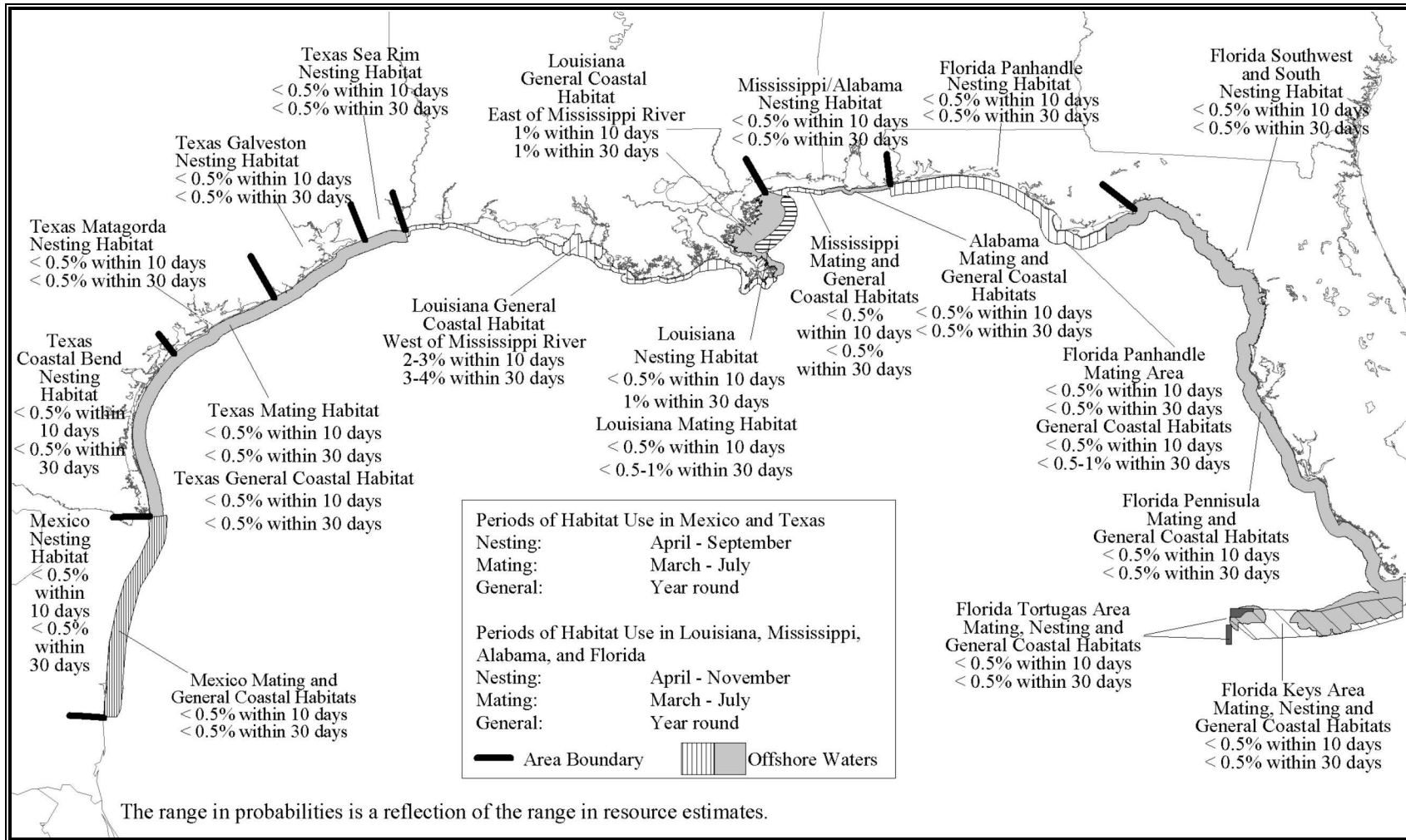


Figure 4-24. Probabilities of Offshore Spills ( $\geq 1,000$  bbl) Occurring over the Life of a Proposed Action and Contacting Sea Turtle Habitats within 10 or 30 Days as a Result of a Proposed Action.

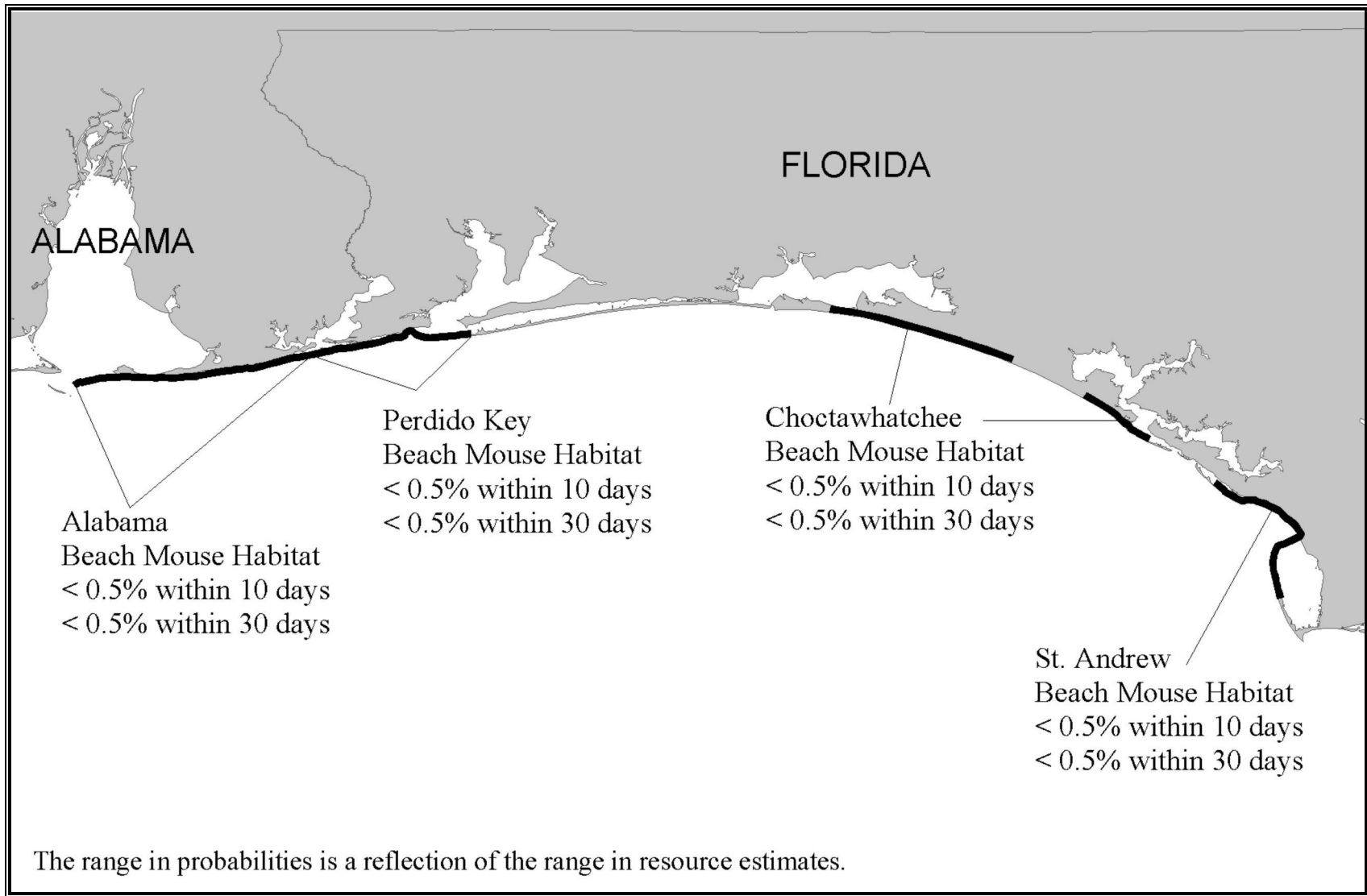


Figure 4-25. Probabilities of Offshore Spills ( $\geq 1,000$  bbl) Occurring over the Life of a Proposed Action and Contacting Endangered Beach Mice Habitats within 10 or 30 Days as a Result of a Proposed Action.

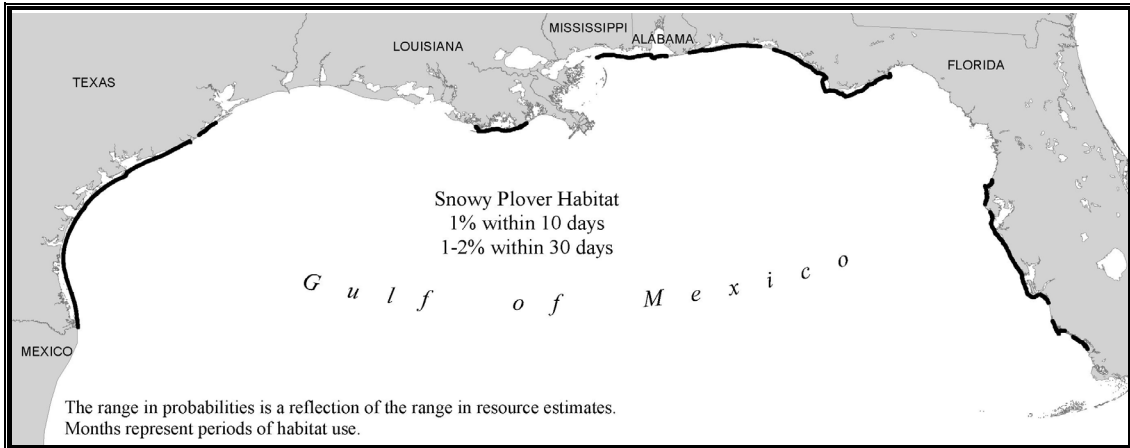


Figure 4-26. Probabilities of Offshore Spills (≥1,000 bbl) Occurring over the Life of a Proposed Action and Contacting Snowy Plover Habitat within 10 or 30 Days as a Result of a Proposed Action.

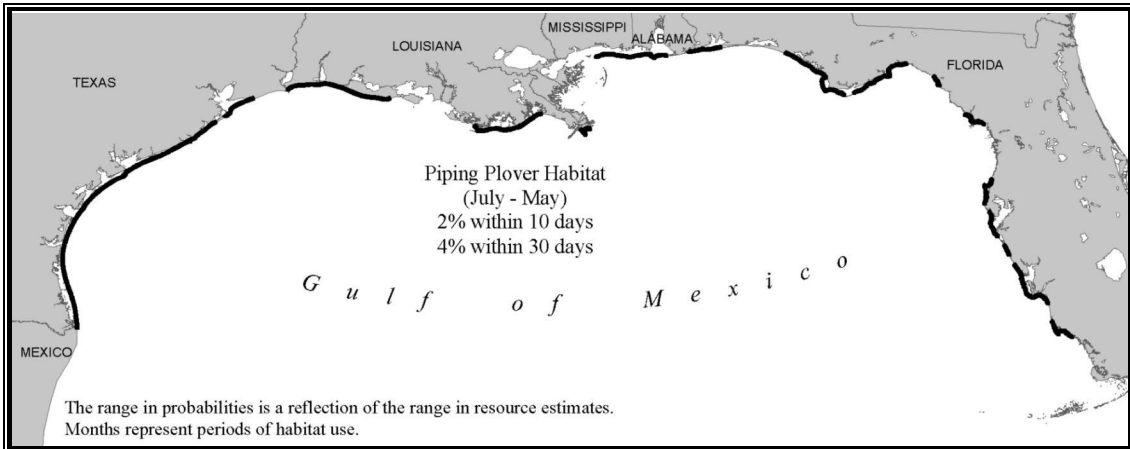


Figure 4-27. Probabilities of Offshore Spills (≥1,000 bbl) Occurring over the Life of a Proposed Action and Contacting Piping Plover Habitat within 10 or 30 Days as a Result of a Proposed Action.

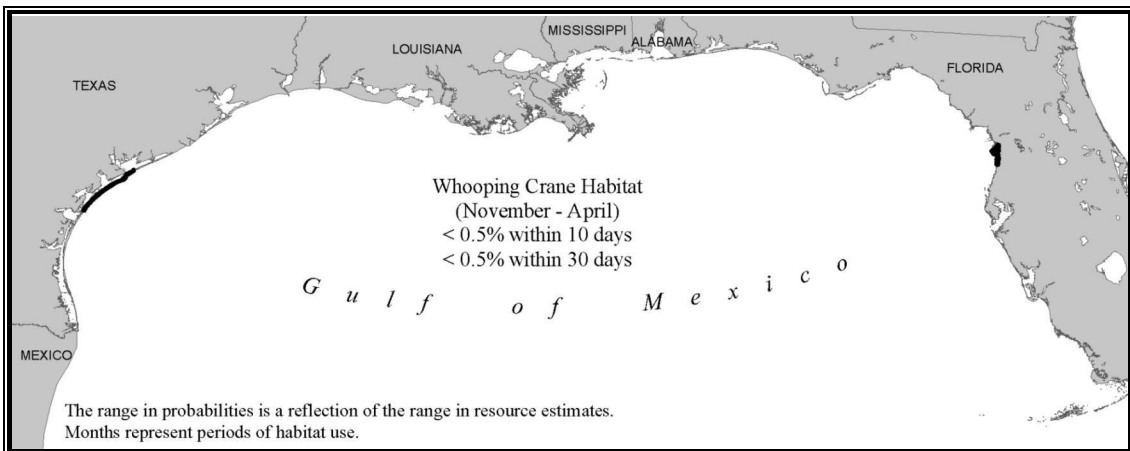


Figure 4-28. Probabilities of Offshore Spills (≥1,000 bbl) Occurring over the Life of a Proposed Action and Contacting Whooping Crane Habitat within 10 or 30 Days as a Result of a Proposed Action.

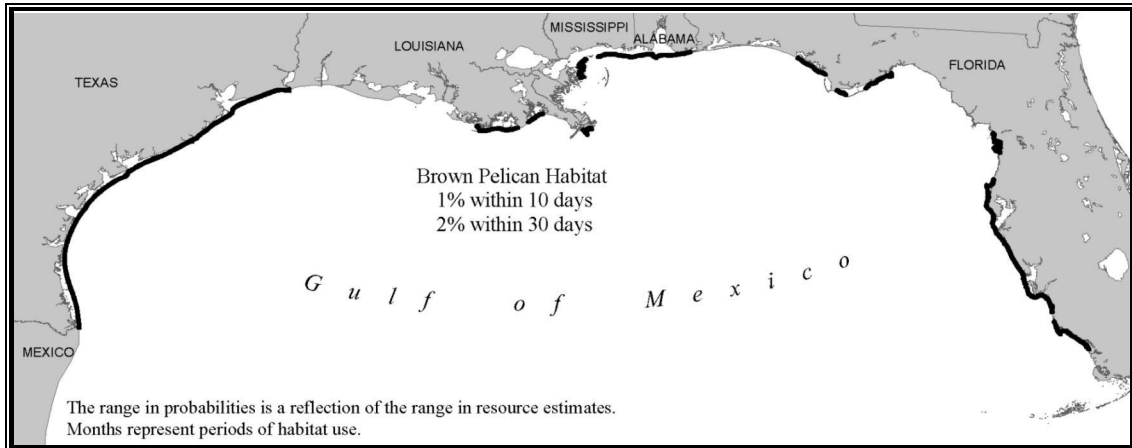


Figure 4-29. Probabilities of Offshore Spills ( $\geq 1,000$  bbl) Occurring over the Life of a Proposed Action and Contacting Brown Pelican Habitat within 10 or 30 Days as a Result of a Proposed Action.

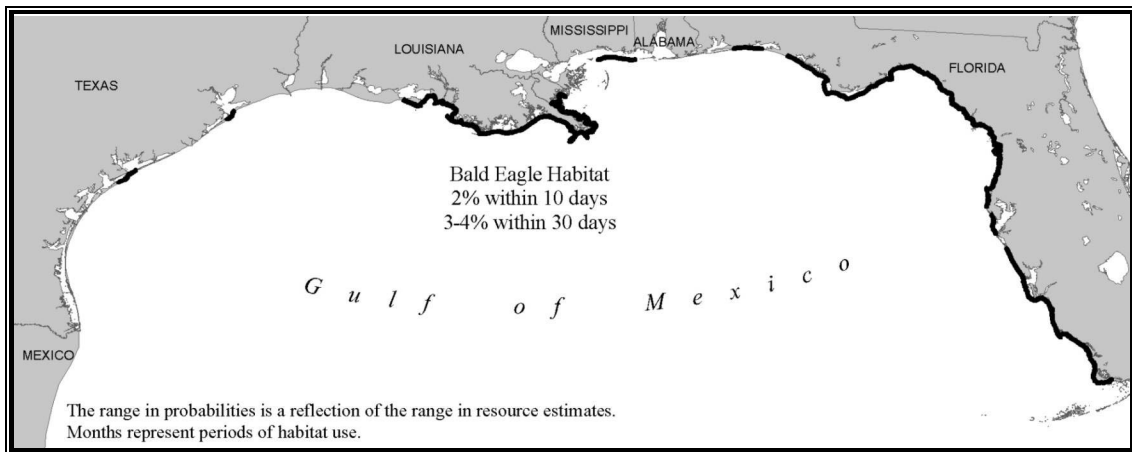


Figure 4-30. Probabilities of Offshore Spills ( $\geq 1,000$  bbl) Occurring over the Life of a Proposed Action and Contacting Bald Eagle Habitat within 10 or 30 Days as a Result of a Proposed Action.

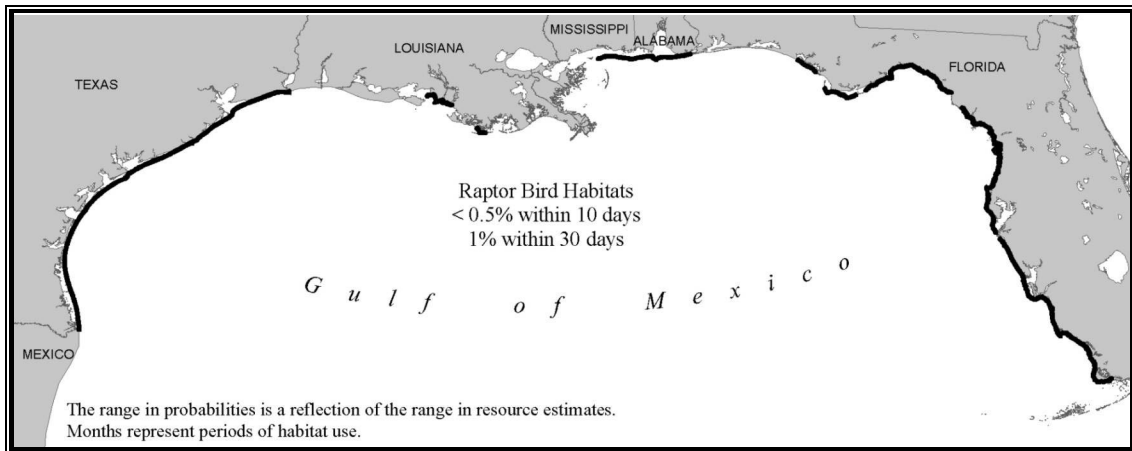


Figure 4-31. Probabilities of Offshore Spills ( $\geq 1,000$  bbl) Occurring over the Life of a Proposed Action and Contacting Raptor Bird Habitats within 10 or 30 Days as a Result of a Proposed Action.

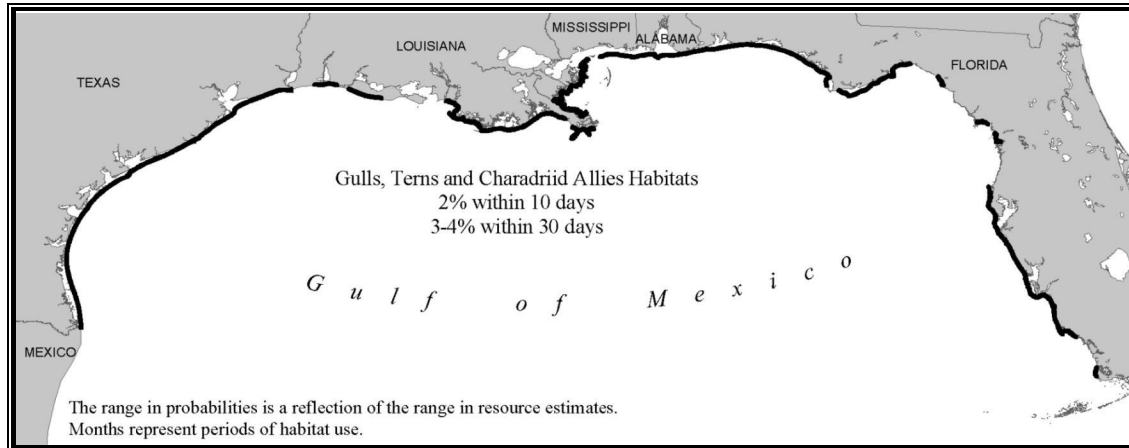


Figure 4-32. Probabilities of Offshore Spills ( $\geq 1,000$  bbl) Occurring over the Life of a Proposed Action and Contacting Gull, Terns and Charadriid Allies Habitats within 10 or 30 Days as a Result of a Proposed Action.

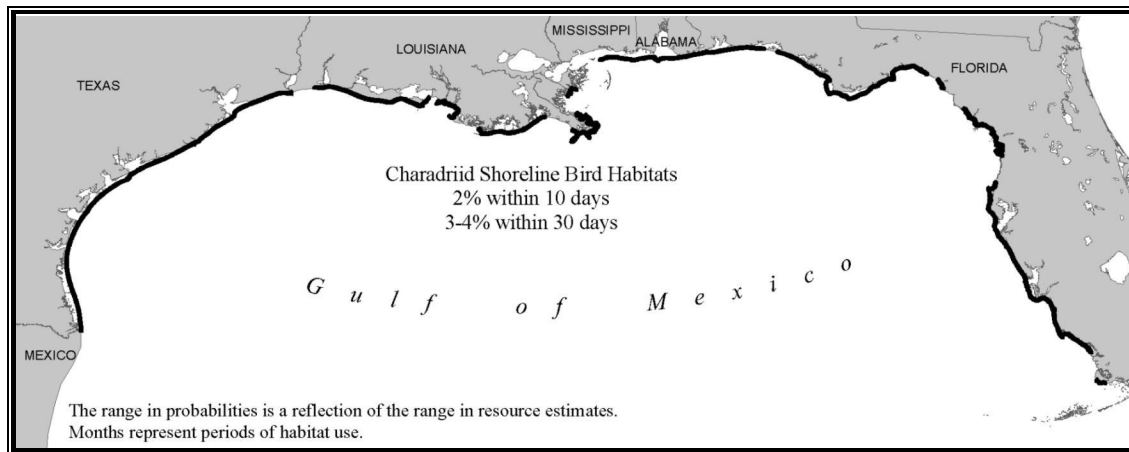


Figure 4-33. Probabilities of Offshore Spills ( $\geq 1,000$  bbl) Occurring over the Life of a Proposed Action and Contacting Charadriid Shoreline Bird Habitats within 10 or 30 Days as a Result of a Proposed Action.

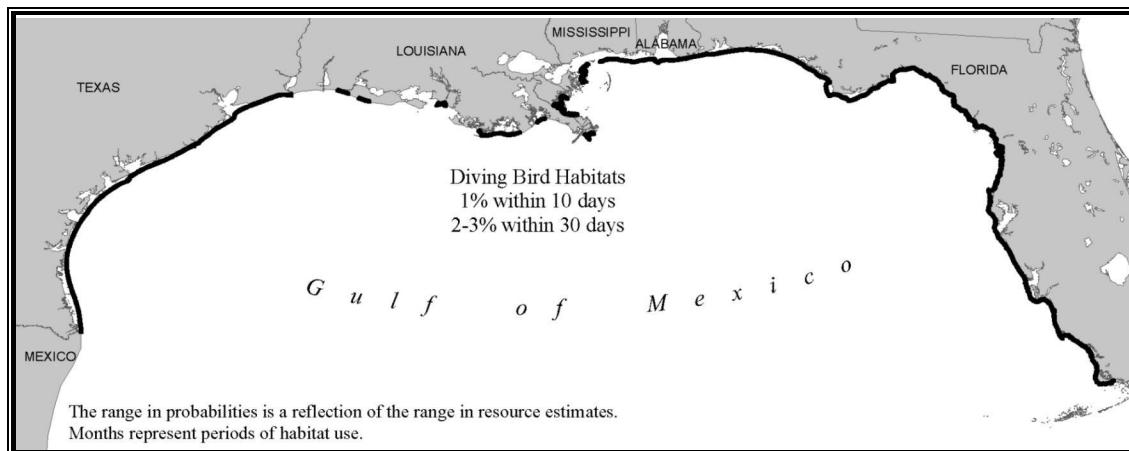


Figure 4-34. Probabilities of Offshore Spills ( $\geq 1,000$  bbl) Occurring over the Life of a Proposed Action and Contacting Diving Bird Habitats within 10 or 30 Days as a Result of a Proposed Action.

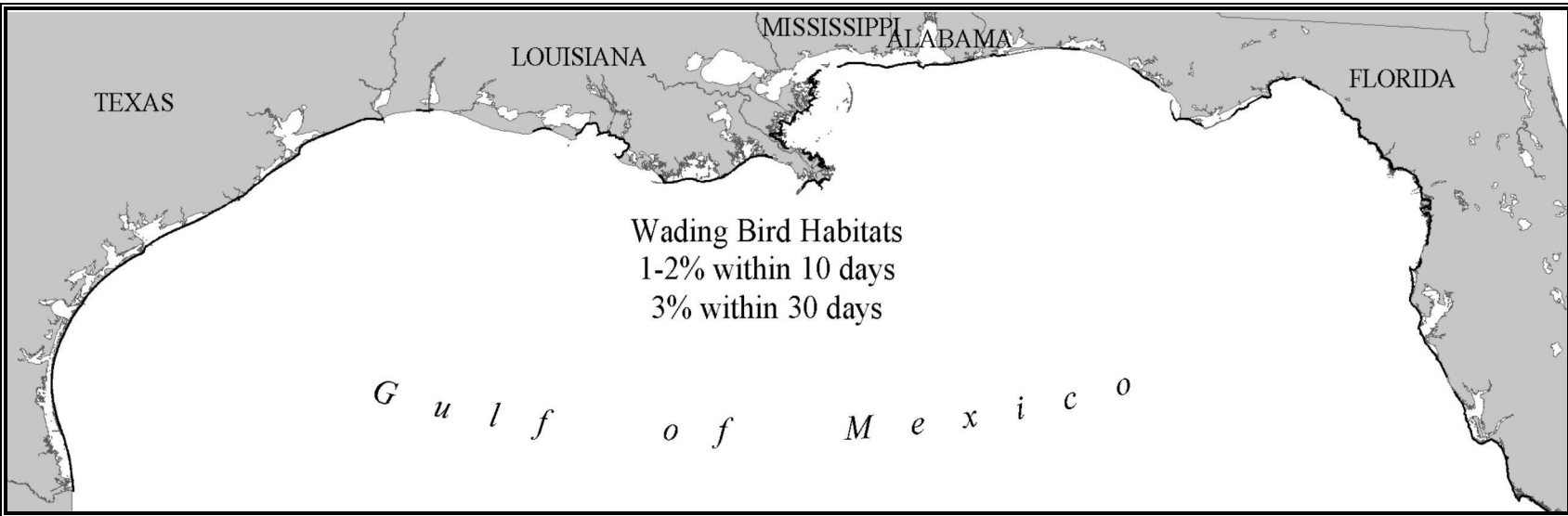


Figure 4-35. Probabilities of Offshore Spills ( $\geq 1,000$  bbl) Occurring over the Life of a Proposed Action and Contacting Wading Bird Habitats within 10 or 30 Days as a Result of a Proposed Action.

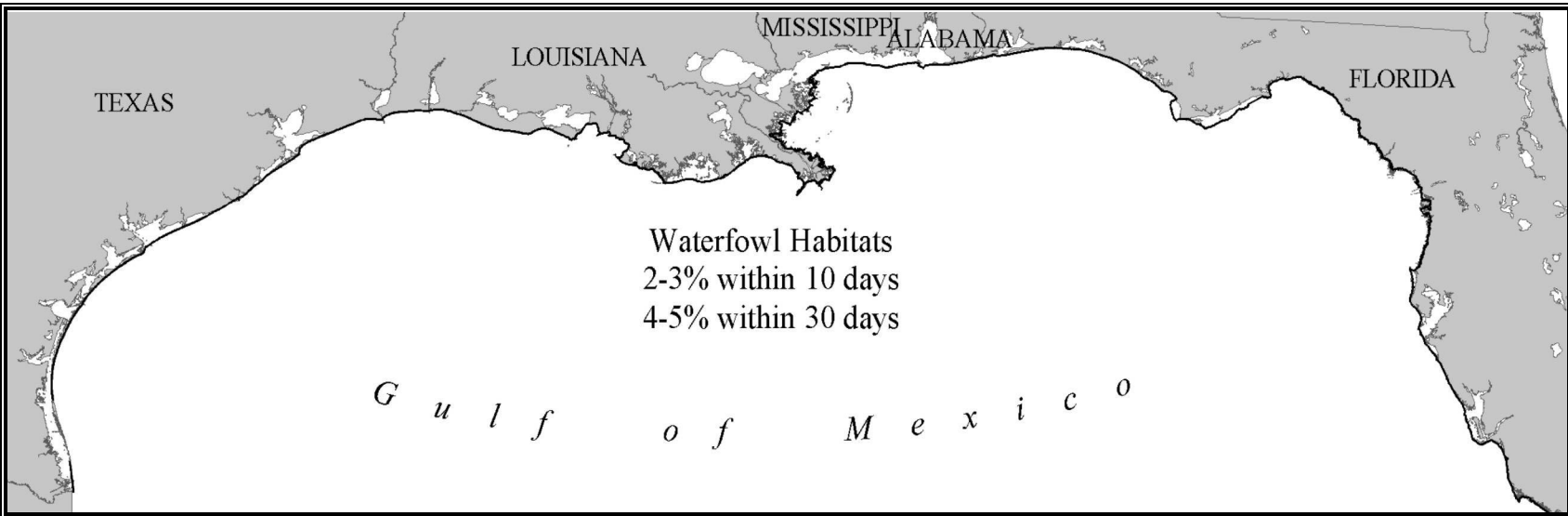


Figure 4-36. Probabilities of Offshore Spills ( $\geq 1,000$  bbl) Occurring over the Life of a Proposed Action and Contacting Waterfowl Habitats within 10 or 30 Days as a Result of a Proposed Action.

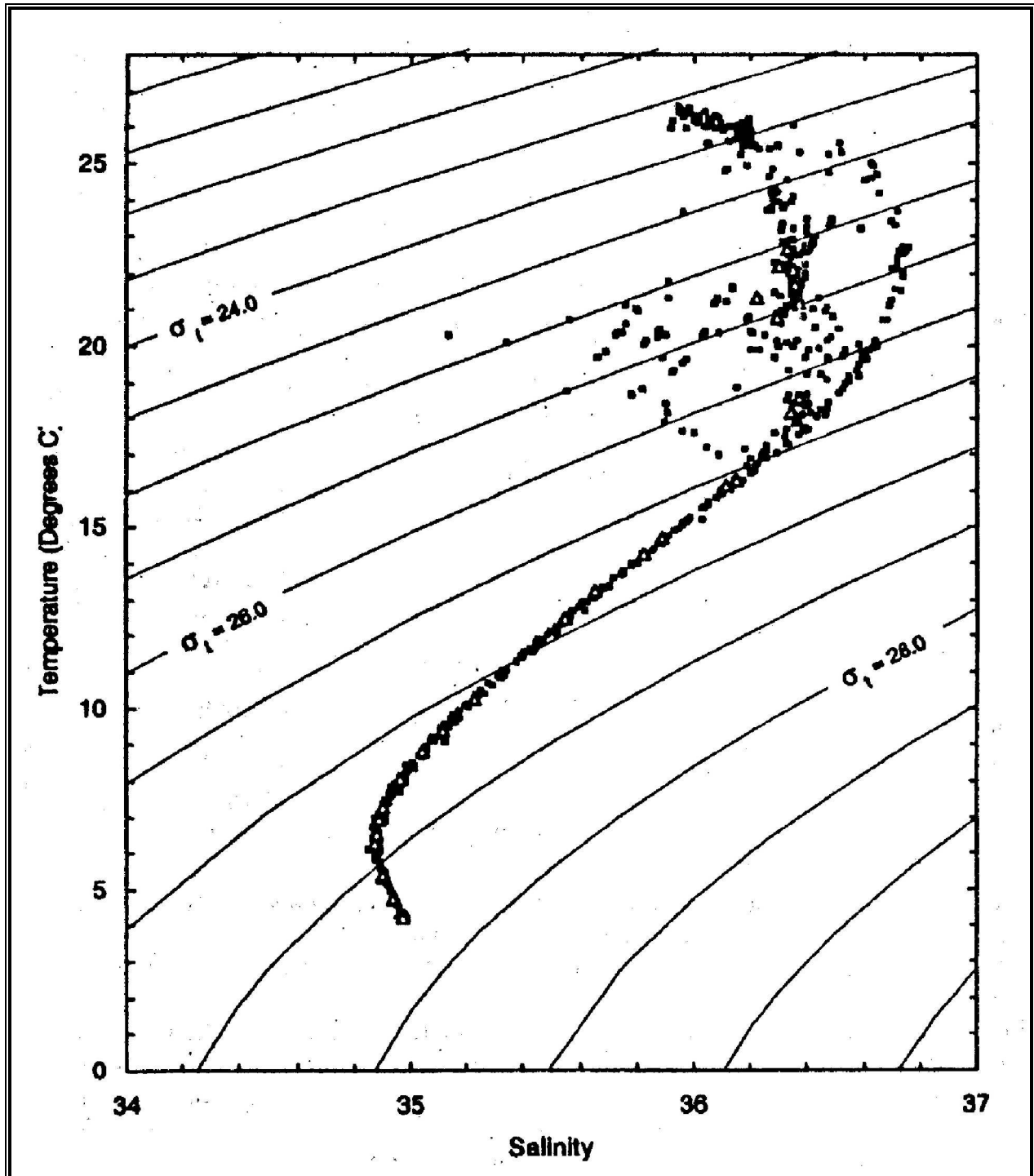


Figure A-1. Temperature vs. Salinity Based on Data Collected in the Eastern Gulf of Mexico during the Synoptic Gulfwide R/V Hidalgo Cruise 62-H-3, February-March 1962.



# TABLES

Table 2-1  
Military Contacts (as of August 2002)

Warning Areas	Command Headquarters	Telephone
W-59	Naval Air Station - JRB 400 Russel Avenue Box 27 New Orleans, Louisiana 70143-0027	(504) 391-8696/8687
W-92	Naval Air Station Air Operations Department Air Traffic Division/Code 52 New Orleans, Louisiana 70146-5000	(504) 393-3100/3101
W-147	147th Fighter Wing Operations Officer 14657 Sneider Street Houston, Texas 77034-5586	(281) 929-2716/2683
W-155 (for agreement)	Chief, Naval Air Training Naval Air Station, Office No. 206 Corpus Christi, Texas 78419-5100	(512) 939-3862/3902
W-155 (for filing plans)	Naval Air Training Command Attention: Training Wing Six, Operations Pensacola, Florida 32508	(850) 452-2305
W-155 (for operational control)	Fleet Area Control & Surveillance Facility (FACSFAC) Operations Naval Air Station Pensacola, Florida 32508	(850) 452-2735/4671
W-174	Naval Air Training Command Military Radar Unit/NAS Air Operations/Tarpon Key West, Florida 33040	(305) 293-2430
W-228	Chief, Naval Air Training Office No. 206 Naval Air Station Corpus Christi, Texas 78419-5100	(512) 939-3862/3902
W-453	Air National Guard - CRTG 4715 Hews Avenue Building 1 Gulfport, Mississippi 39507-4324	(601) 867-2432/2433
W-602	Headquarters ACC/DOR, Detachment 1 Operations Headquarters, Air Combat Command Offutt AFB, Nebraska 68113-5550	(402) 294-2334
W-151, W-168, W-470 and Eglin Water Test Areas	Air Armament Center Attention: Robert J. Arnold Encroachment Committee Chairman 101 West "D" Ave., Suite 222 Eglin AFB, Florida 32542-5492	(850) 882-3614
Navy Coastal Systems Center (NCSC)	Coastal System Station/Code WP Panama City, Florida 32407	(850) 234-4895

Table 3-1

## National Ambient Air Quality Standards (NAAQS)

Pollutant	Averaging Period	Primary Standards <sup>a</sup>	Secondary Standards <sup>b</sup>
Ozone	1-hour <sup>c</sup> 8-hour <sup>d,e</sup>	0.12 ppm (235 $\mu\text{g}/\text{m}^3$ ) 0.08 ppm (157 $\mu\text{g}/\text{m}^3$ )	(same as primary) (same as primary)
Sulphur Dioxide	Annual 24-hour 3-hour <sup>c</sup>	0.03 ppm (80 $\mu\text{g}/\text{m}^3$ ) 0.14 ppm (365 $\mu\text{g}/\text{m}^3$ ) NA	NA NA 1,300 $\mu\text{g}/\text{m}^3$
Carbon Monoxide	8-hour <sup>c</sup> 1-hour <sup>c</sup>	9.0 ppm (10 $\text{mg}/\text{m}^3$ ) 35 ppm (40 $\text{mg}/\text{m}^3$ )	NA NA
Nitrogen Dioxide	Annual	0.053 ppm (100 $\mu\text{g}/\text{m}^3$ )	(same as primary)
Suspended Particulate Matter (PM <sub>10</sub> )	Annual 24-hour	50 $\mu\text{g}/\text{m}^3$ 150 $\mu\text{g}/\text{m}^3$ <sup>f</sup>	(same as primary) (same as primary)
PM <sub>2.5</sub> <sup>d</sup>	Annual 24-hour	15 $\mu\text{g}/\text{m}^3$ <sup>g</sup> 65 $\mu\text{g}/\text{m}^3$ <sup>h</sup>	(same as primary) (same as primary)
Lead	Calendar Quarter	1.5 $\mu\text{g}/\text{m}^3$	(same as primary)

<sup>a</sup> The levels of air quality necessary, with an adequate margin of safety to protect the public health.

<sup>b</sup> The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

<sup>c</sup> Not to be exceeded more than once a year.

<sup>d</sup> New standard effective 9/16/97, upheld by the Supreme Court 2/27/01, but as of 4/01 has not yet been fully implemented.

<sup>e</sup> Three-year average of the annual fourth-highest daily maximum 8-hour average for each monitor.

<sup>f</sup> Based on the 99th percentile of 24-hour PM<sub>10</sub> concentration at each monitor.

<sup>g</sup> Based on 3-year average of annual arithmetic mean concentrations.

<sup>h</sup> Based on 3-year average of 98th percentile of 24-hour concentrations.

Notes:  $\text{mg}/\text{m}^3$  = milligrams per cubic meter = 1,000  $\mu\text{g}/\text{m}^3$ .

$\mu\text{g}/\text{m}^3$  = micrograms per cubic meter.

Source: 40 CFR 50, 1997.

Table 3-2

## Historical and Current Benthic Sampling Stations in the Proposed Lease Sale Area

Station # Type	N. Latitude	W. Longitude	Depth (m)	Sample
(1) 80	28° 39.9'	87° 38.7'	2,340-2,527	Trawl
81	28° 41.5'	87° 37.8'	2,367	Skimmer
98	27° 36'	87° 41.5'	2,743	Skimmer
114	28° 51'	87° 31.5'	2,103	Skimmer
117	28° 46.8'	87° 36.4'	2,140	Skimmer
183	28° 51'	87° 36'	2,105	Skimmer
(2) S37	28° 33'	87° 46.2'	2,300	BC, Trawl

(1) Pequegnat, 1983.

(2) Rowe and Kennicutt, 2002 (approximate depths and positions at the time of this writing).

\*All studies also used (will use) cameras for sampling.

Table 3-3

## Known Locations of Significant Chemosynthetic Communities in the Gulf of Mexico

Lease Area	Block Numbers
Alaminos Canyon	645
Ewing Bank	1001, 1010
East Breaks	376, 339, 375, 380, 602
Garden Banks	297, 300, 342, 376, 382, 386, 387, 416, 424, 425, 458, 476, 500, 535
Green Canyon	30, 40, 79, 81, 121, 140, 166, 185, 210, 216, 229, 232, 233, 234, 272, 287, 293, 310, 354
Mississippi Canyon	969
Viosca Knoll	826

Sources: USDOJ, MMS, 1996  
Boland, 2000.

Table 3-4

## Marine Mammal Taxa of the Northern Gulf of Mexico

	Relative Occurrence	ESA Status
Order Cetacea		
Suborder Mysticeti (baleen whales)		
Family Balaenidae (right whales)		
Northern right whale ( <i>Eubalaena glacialis</i> )	X	E
Family Balaenopteridae (rorquals)		
Minke whale ( <i>Balaenoptera acutorostrata</i> )	R	
Sei whale ( <i>Balaenoptera borealis</i> )	R	E
Bryde's whale ( <i>Balaenoptera edeni</i> )	U	
Blue whale ( <i>Balaenoptera musculus</i> )	X	E
Fin whale ( <i>Balaenoptera physalus</i> )	R	E
Humpback whale ( <i>Megaptera novaeangliae</i> )	R	E
Suborder Odontoceti (toothed whales and dolphins)		
Family Physeteridae (sperm whale)		
Sperm whale ( <i>Physeter macrocephalus</i> )	C	E
Family Kogiidae (pygmy and dwarf sperm whales)		
Pygmy sperm whale ( <i>Kogia breviceps</i> )	U	
Dwarf sperm whale ( <i>Kogia sima</i> )	U	
Family Ziphiidae (beaked whales)		
Sowerby's beaked whale ( <i>Mesoplodon bidens</i> )	X	
Blainville's beaked whale ( <i>Mesoplodon densirostris</i> )	R	
Gervais' beaked whale ( <i>Mesoplodon europaeus</i> )	U	
Cuvier's beaked whale ( <i>Ziphius cavirostris</i> )	R	
Family Delphinidae (dolphins)		
Pygmy killer whale ( <i>Feresa attenuata</i> )	U	
Short-finned pilot whale ( <i>Globicephala macrorhynchus</i> )	C	
Risso's dolphin ( <i>Grampus griseus</i> )	C	
Fraser's dolphin ( <i>Lagenodelphis hosei</i> )	C	
Killer whale ( <i>Orcinus orca</i> )	U	
Melon-headed whale ( <i>Peponocephala electra</i> )	C	
False killer whale ( <i>Pseudorca crassidens</i> )	U	
Pantropical spotted dolphin ( <i>Stenella attenuata</i> )	C	
Clymene dolphin ( <i>Stenella clymene</i> )	C	
Striped dolphin ( <i>Stenella coeruleoalba</i> )	C	
Atlantic spotted dolphin ( <i>Stenella frontalis</i> )	C	
Spinner dolphin ( <i>Stenella longirostris</i> )	C	
Rough-toothed dolphin ( <i>Steno bredanensis</i> )	C	
Bottlenose dolphin ( <i>Tursiops truncatus</i> )	C	
Order Sirenia (the dugong and manatees)		
Family Trichechidae (manatees)		
West Indian manatee ( <i>Trichechus manatus</i> )	C	E

Population status in the northern Gulf is summarized according to the following categories:

COMMON (C): A common species is one that is abundant wherever it occurs in the region (i.e., the northern Gulf). Most common species are widely distributed over the area.

UNCOMMON (U): An uncommon species may or may not be widely distributed but does not occur in large numbers. Uncommon species are not necessarily rare or endangered.

RARE (R): A rare species is one that is present in such small numbers throughout the region that it is seldom seen. Although not threatened with extinction, a rare species may become endangered if conditions in its environment change.

EXTRALIMITAL (X): An extralimital species is known on the basis of only a few records that probably resulted from unusual wanderings of animals into the region.

Endangered Species Act (ESA) status is summarized according to listing status under the following categories:

ENDANGERED (E): Species determined to be in imminent danger of extinction throughout all of a significant portion of their range.

Table 3-5

## Sea Turtle Taxa of the Northern Gulf of Mexico

	Relative Occurrence	ESA Status
Order Testudines (turtles)		
Family Cheloniidae (hardshell sea turtles)		
Loggerhead sea turtle ( <i>Caretta caretta</i> )	C	T/E
Green sea turtle ( <i>Chelonia mydas</i> )	C	E
Hawksbill sea turtle ( <i>Eretmochelys imbricata</i> )	R	E
Kemp's Ridley sea turtle ( <i>Lepidochelys kempi</i> )	C	E
Family Dermochelyidae (leatherback sea turtle)		
Leatherback sea turtle ( <i>Dermochelys coriacia</i> )	U	E

Population status in the northern Gulf is summarized according to the following categories:

COMMON (C): A common species is one that is abundant wherever it occurs in the region (i.e., the northern Gulf). Most common species are widely distributed over the area.

UNCOMMON (U): An uncommon species may or may not be widely distributed but does not occur in large numbers. Uncommon species are not necessarily rare or endangered.

RARE (R): A rare species is one that is present in such small numbers throughout the region that it is seldom seen. Although not threatened with extinction, a rare species may become endangered if conditions in its environment change.

Endangered Species Act (ESA) status is summarized according to listing status under the following categories:

ENDANGERED (E): Species determined to be in imminent danger of extinction throughout all of a significant portion of their range.

THREATENED (T): Species determined likely to become endangered in the foreseeable future.

Table 3-6

The 21 Most Abundant Families in Ichthyoplankton Samples from Quadrants of the Gulf of Mexico

Family	Rank				
	Northeast Quadrant	Southeast Quadrant	Northwest Quadrant	Southwest Quadrant	Overall
Myctophidae	1	1	1	1	1
Gonostomatidae	2	2	2	2	2
Bregmacerotidae	4	3	3	5	3
Scombridae	3	6	10	8	4
Paralepididae	6	18	7	7	5
Stromateidae	5	16	6	6	6
Gobiidae	15	8	4	9	7
Bothidae	8	5	11	4	8
Serranidae	11	15	8	10	9
Synodontidae	9	14	9	18	10
Scaridae	10	4	18	16	11
Clupeidae	21	21	5	21	12
Apogonidae	13	17	16	3	13
Carangidae	7	11	13	14	14
Labridae	14	7	17	15	15
Engraulidae	17	20	12	12	16
Gempylidae	12	10	15	11	17
Tetraodontidae	19	9	20	19	18
Anguilliformes	16	19	14	13	19
Ophidiidae	20	12	19	20	20
Scorpaenidae	18	13	21	17	21

Source: Sherman et al., 1983.

Table 3-7

Dominant Taxa taken in Collections from the DeSoto Canyon Area during Nine SEAMAP Spring Survey Cruises in April and May 1986-1993 (number in parentheses represents value for Gulfwide collections)

Taxa	% Abundance	% Frequency of Occurrence
	Bongo	
Diaphus	17 (11)	88 (75)
Bregmaceros	7 (8)	88 (72)
Myctophidae	14 (12)	88 (81)
Hygophum	6 (6)	77 (71)
Myctophum	4 (4)	72 (62)
Cyclothone	2 (3)	69 (70)
	Neuston	
Exocoetidae	10 (16)	79 (80)
Mullidae	34 (19)	56 (44)
Mugil curema	2 (2)	27 (18)
Myctophum	15 (16)	27 (31)
Balistidae/Monacanthidae	3 (1)	26 (21)

Table 3-8

Dominant Taxa taken in Collections from the DeSoto Canyon Area during Ten SEAMAP Fall Survey Cruises in September 1986-1994 (number in parentheses represents value for Gulfwide collections)

Taxa	% Abundance	% Frequency of Occurrence
	Bongo	
Gobiidae	7 (13)	94 (88)
Ophidiidae	4 (3)	85 (71)
Symphurus	5 (9)	85 (84)
Engraulidae	14 (12)	79 (76)
Unidentified Larvae	4 (4)	79 (76)
	Neuston	
Exocoetidae	9 (4)	80(76)
Engraulidae	39 (37)	69 (60)
Decapturus punctatus	6 (1)	54 (25)
Balistidae/Monacanthidae	2 (1)	40 (34)
Gobiidae	1 (2)	40 (37)



Table 3-9

Percent Occurrence and Mean Abundance of Tuna Larvae (number under 10 m<sup>2</sup>) in Collections from the DeSoto Canyon Area and Gulfwide during SEAMAP Spring and Fall Survey Cruises

	Bongo DeSoto	Bongo Gulfwide	Neuston DeSoto	Neuston Gulfwide
Spring <i>Thunnus spp.</i>	19% 2.9	26% 4.3	13% 0.3	29% 1.8
Fall <i>Thunnus spp.</i>	14% 1.0	16% 2.1	11% 0.7	19% 1.2
Spring <i>Thunnus thynnus</i>	6% 2.2	10% 2.0	5% 0.2	9% 0.4

Table 3-10

Percent Occurrence and Mean Abundance of Dolphin and Billfish Larvae (number under 10 m<sup>2</sup>) in Collections from the DeSoto Canyon Area and Gulfwide during SEAMAP Spring and Fall Survey Cruises

	Bongo DeSoto	Bongo Gulfwide	Neuston DeSoto	Neuston Gulfwide
Spring <i>Coryphaenidae</i>	9% 0.9	14% 1.2	43% 0.7	48% 0.9
Fall <i>Coryphaenidae</i>	2% 0.3	2% 0.1	27% 0.3	22% 0.4
Spring <i>Istiophoridae</i>	2% 0.1	4% 0.4	3% 0.1	8% 0.2
Fall <i>Istiophoridae</i>	1% 0.04	1% 0.1	4% 0.1	6% 0.1

Table 3-11  
 Gulf of Mexico Essential Fish Habitat Assessment  
 (species under Gulf of Mexico Fishery Management Plans in proposed lease sale area)

Species	Presence in Destin Dome Unit	Bay and Estuary Relationships	Adult Prey Species
<b>Invertebrates</b>			
Brown Shrimp	Adult present year-round	Major nursery area	Omnivorous
White Shrimp	Occurs; only most northern part	Nursery area	Omnivorous
Pink Shrimp	Not present	Nursery area	Carnivorous
Stone Crab	Uncommon; only most northern part	Nursery area	Opportunistic carnivore
Spiny Lobster	Occurs	None noted	Mollusks and arthropods
<b>Fish in Taxonomic Order</b>			
Gag Grouper	Occurs	Seagrass beds, nursery nearshore	Primarily fish
Red Grouper	Adult present year-round	None noted	Primarily fish
Scamp Grouper	Occurs	None noted	Primarily fish
Tilefish	Rare; only in deepest waters	None noted	Primarily crustaceans
Cobia	Adult present during summer	Nursery nearshore	Primarily crustaceans and some fish
Lesser Amberjack	Occurs	None noted	Cephalopods
Greater Amberjack	Occurs	None noted	Variety fish, crustaceans, and cephalopods
Dolphin Fish	Adult present year-round	None noted	Pelagic fish
Lane Snapper	Occurs	Nursery nearshore	Fish, crustaceans, mollusks, algae
Gray Snapper	Adult present year-round	Nursery nearshore	Fish, shrimp, and crabs
Red Snapper	Adult present year-round	Nursery nearshore	Fish, shrimp
Red Drum	Uncommon; only most northern part	Nursery nearshore	Crustaceans
Yellowtail Snapper	Occurs	None noted	Benthic fish and crustaceans
King Mackerel	Adult present year-round; spawning	None noted	Mostly fish, anchovies, and herrings
Spanish Mackerel	Uncommon; northern part only	Nursery nearshore	Mostly fish, anchovies, and herrings
Gray Triggerfish	Occurs	None noted	Mostly bivalves and barnacles; also polychaetes and echinoderms

Table 3-12

Gulf of Mexico Essential Fish Habitat Assessment  
(highly migratory species managed by NMFS in proposed lease sale area)

Species	Presence in or Near Destin Dome Unit	Known Prey Species
<b>Billfish</b>		
Blue marlin	Juvenile/subadult and adults occur in area beyond 100-m contour	Adults: fish at surface, and deepwater: scombrids, cephalopods
White marlin	Juvenile/subadult and adults occur in area beyond 50-m contour	Juveniles/fish; adults/squid and fish
Sailfish	Juvenile/subadult only occurs to south of area beyond 200-m contour	Pelagic schooling fish and squids
Swordfish	Spawning and eggs/larvae and adults occur in area beyond 100-m contour	Larvae: zooplankton, fish larvae Juveniles: fish, squid, pelagic crustaceans Adults: pelagic fish, squid, demersal fish
<b>Tunas</b>		
Bluefin tuna	Spawning and eggs/larvae occur in area no juvenile/subadult or adult noted	Juveniles: crustacea, larval, and small fish
Shipjack tuna	Spawning, eggs/larvae occurs to south of area beyond 200-m contour	Larvae: small fish
Yellowfin tuna	Spawning and eggs/larvae, subadult, and adult occurs to south of area beyond 200-m contour	Larvae: small fish Juveniles: fish Adults: crustacea and fish
<b>Sharks</b>		
Blacktip	Late juvenile/subadult only noted in area, nearshore	None noted (unknown)
Bull	Late juvenile/subadult only noted in area, nearshore	None noted (unknown)
Dusky	No life stage occurrence noted, but area designated as research area	None noted (unknown)
Silky	Neonate/early juvenile only noted south of area beyond 200-m contour	None noted (unknown)
Tiger	Neonate/early juvenile, late juvenile, subadult, and adult occurs in area	None noted (unknown)
Atlantic sharpnose	Adults only in area	None noted (unknown)
Longfin mako	Neonate/early juvenile, and juvenile/subadult occur to south of area beyond 200-m contour; adults occur in area beyond 100-m contour	None noted (unknown)

Table 3-13

## Marine Recreational Fishermen and Fishing Trips

	Number of Fishermen	Total All Fishing Trips	Number of Offshore Fishing Trips	Federal EEZ Fishing Trips <sup>1</sup>
West Florida	2,962,980	12,234,580	5,399,161	1,094,976
Alabama	257,161	968,485	639,800	204,607
Mississippi	174,523	827,536	173,597	151,409
Louisiana	581,207	2,672,764	440,528	73,808
Total	3,975,871	16,703,365	6,653,086	1,524,800

<sup>1</sup>Federal Exclusive Economic Zone: >3 mi off Louisiana, Mississippi, and Alabama; and >10 mi off northwest Florida.

Source: USDOC, NMFS, 1999.

Table 3-14

## Historic Shipwrecks within the Proposed Lease Sale Area

Vessel Name	Date of Wreck	Lease Area
<i>Marion N. Cobb</i>	1925	DeSoto Canyon
<i>Ontario</i>	1942	DeSoto Canyon
<i>Speedwell</i>	1920	Lloyd Ridge

Table 3-15

## Shipwrecks in Alabama State Waters

Name of Vessel	Description	Year Sunk
<i>Bellone</i>	French merchant ship	1725
<i>Brownhall</i>	English frigate	1780
<i>El Volante</i>	Spanish frigate-of-war	1780
Unknown	Spanish brigantine	1780
Unknown	Spanish settee (saetia)	1780
<i>HMS Hermes</i>	English ship-of-war	1814
<i>Mississippi</i>	American merchantman	1821
<i>Margaret Ann</i>	American merchantman	1822
<i>Napoleon</i>	Irish ship	1835
<i>St. Denis</i>	Ship, packet	1855
<i>Tejuca</i>	Ship, clipper	1855
<i>Josephine</i>	Sloop, blockade runner	1863
<i>Isabel</i>	Schooner, blockade runner	1863
<i>Alphonsine</i>	Schooner	1889
<i>Carrie G.</i>	Sloop	1893
<i>Agnes</i>	Schooner	1899
<i>Aline</i>	Schooner	1906
<i>Eline</i>	Bark, Norway	1906
<i>Falcon</i>	Schooner	1906
<i>Grace Ellena</i>	Schooner	1906
<i>Lila</i>	Sloop	1906
<i>Mary Gray</i>	Schooner	1906
<i>Oliva</i>	Schooner	1906
<i>Warrior</i>	Ship, 4th Class	1906
Names Unknown	40-60 oyster schooners and sloops	1906
<i>Almira</i>	Schooner	1913
<i>Indian Chief</i>	Sailing vessel	ca. 1916
<i>J. C. Smith</i>	Schooner	1916
<i>Joseph P. Cooper</i>	Schooner	1916
<i>Mischief</i>	Schooner	1916
<i>Pol Ros</i>	Sloop	1916
Name Unknown	Pleasure yacht	1916
<i>Blanche Marie</i>	Launch	1916
<i>Dean E. Brown</i>	Schooner	1917
<i>Florence Harvey</i>	Schooner	1921
<i>Rachel</i>	Schooner	1933
USCG <i>Magnolia</i>	Coast Guard lighthouse tender	1945

Table 3-16

## Onshore Expenditures Allocations by Coastal Subarea

IMPLAN Sector	Sector Definition	TX-1	TX-2	LA-1	LA-2	LA-3	MA-1	FL-1	FL-2	FL-3	FL-4	Gulf Other	U.S. Other
38	Oil & Gas Operations	0.00	0.34	0.09	0.06	0.15	0.00	0.00	0.00	0.00	0.00	0.23	0.12
50	New Gas Utility Facilities	0.07	0.38	0.05	0.10	0.10	0.10	0.00	0.00	0.00	0.00	0.11	0.07
53	Misc Natural Resource Facility Construction	0.03	0.21	0.23	0.15	0.30	0.02	0.00	0.00	0.00	0.00	0.01	0.03
56	Maintenance and Repair, Other Facilities	0.06	0.31	0.04	0.08	0.09	0.08	0.00	0.00	0.00	0.00	0.21	0.11
57	Other Oil & Gas Field Services	0.00	0.30	0.26	0.12	0.16	0.00	0.00	0.00	0.00	0.00	0.07	0.05
160	Office Furniture and Equipment	0.15	0.54	0.00	0.00	0.08	0.23	0.00	0.00	0.00	0.00	0.00	0.00
178	Maps and Charts (Misc. Publishing)	0.12	0.59	0.02	0.06	0.11	0.10	0.00	0.00	0.00	0.00	0.01	0.00
206	Explosives	0.50	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
209	Chemicals, NEC	0.03	0.64	0.04	0.10	0.04	0.04	0.00	0.00	0.00	0.00	0.04	0.04
210	Petroleum Fuels	0.11	0.50	0.09	0.16	0.09	0.05	0.00	0.00	0.00	0.00	0.00	0.00
232	Hydraulic Cement	0.00	0.10	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.50	0.30
258	Steel Pipe and Tubes	0.00	0.50	0.31	0.05	0.07	0.00	0.00	0.00	0.00	0.00	0.08	0.04
284	Fabricated Plate Work	0.04	0.63	0.06	0.09	0.05	0.14	0.00	0.00	0.00	0.00	0.00	0.00
290	Iron and Steel Forgings	0.00	0.81	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.14	0.00
307	Turbines	0.05	0.65	0.00	0.10	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
311	Construction Machinery & Equipment	0.06	0.42	0.00	0.06	0.19	0.11	0.00	0.00	0.00	0.00	0.11	0.06
313	Oil & Gas Field Machinery & Equipment	0.03	0.18	0.27	0.18	0.22	0.00	0.00	0.00	0.00	0.00	0.05	0.04
331	Special Industrial Machinery	0.00	0.00	0.00	0.38	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.03
332	Pumps & Compressors	0.04	0.30	0.17	0.22	0.09	0.00	0.00	0.00	0.00	0.00	0.12	0.06
354	Industrial Machines, NEC	0.05	0.66	0.06	0.10	0.06	0.06	0.00	0.00	0.00	0.00	0.00	0.00
356	Switchgear	0.00	0.63	0.00	0.07	0.11	0.07	0.00	0.00	0.00	0.00	0.11	0.00
374	Communication Equipment, NEC	0.13	0.50	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.13	0.00
392	Shipbuilding and Ship Repair	0.09	0.24	0.05	0.24	0.18	0.19	0.00	0.00	0.00	0.00	0.00	0.00
399	Transportation Equipment, NEC	0.00	0.78	0.06	0.11	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00
401	Lab Equipment	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
403	Instrumentation	0.01	0.13	0.39	0.27	0.08	0.00	0.00	0.00	0.00	0.00	0.08	0.04
435	Demurrage/Warehousing/Motor Freight	0.11	0.37	0.21	0.09	0.09	0.01	0.00	0.00	0.00	0.00	0.07	0.00
436	Water Transport	0.02	0.27	0.10	0.25	0.22	0.04	0.01	0.00	0.01	0.00	0.06	0.00
437	Air Transport	0.03	0.42	0.11	0.11	0.08	0.02	0.00	0.00	0.00	0.01	0.21	0.00
441	Communications	0.09	0.51	0.07	0.11	0.11	0.11	0.00	0.00	0.00	0.00	0.00	0.00
443	Electric Services	0.13	0.36	0.06	0.15	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00
444	Gas Production/Distribution	0.10	0.54	0.08	0.07	0.05	0.03	0.00	0.00	0.00	0.00	0.05	0.04
445	Water Supply	0.08	0.43	0.08	0.12	0.05	0.11	0.00	0.00	0.00	0.00	0.01	0.01
446	Waste Treatment/Disposal	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
454	Eating/Drinking	0.00	0.24	0.28	0.08	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
455	Misc. Retail	0.09	0.48	0.06	0.10	0.15	0.11	0.00	0.00	0.00	0.00	0.00	0.00
459	Insurance	0.04	0.47	0.07	0.12	0.09	0.00	0.00	0.00	0.00	0.00	0.17	0.03
462	Real Estate	0.09	0.47	0.04	0.08	0.11	0.08	0.00	0.00	0.00	0.00	0.11	0.01
469	Advertisement	0.06	0.45	0.06	0.08	0.15	0.08	0.00	0.00	0.00	0.00	0.12	0.01
470	Other Business Services	0.00	0.60	0.11	0.09	0.06	0.00	0.00	0.00	0.00	0.00	0.09	0.05
473	Misc. Equipment Rental and Leasing	0.09	0.26	0.22	0.10	0.10	0.01	0.00	0.00	0.00	0.00	0.18	0.03
490	Doctors & Veterinarian Services	0.09	0.53	0.06	0.09	0.14	0.08	0.00	0.00	0.00	0.00	0.00	0.00
494	Legal Services	0.07	0.48	0.07	0.11	0.19	0.08	0.00	0.00	0.00	0.00	0.00	0.00
506	Environmental/Engineering Services	0.06	0.38	0.11	0.08	0.08	0.03	0.01	0.00	0.02	0.00	0.20	0.01
507	Acct/Misc. Business Services	0.06	0.46	0.05	0.09	0.13	0.07	0.00	0.00	0.00	0.00	0.11	0.01
508	Management/Consulting Services	0.04	0.54	0.04	0.09	0.11	0.05	0.00	0.00	0.00	0.00	0.11	0.01
509	Testing/Research Facilities	0.00	0.38	0.14	0.14	0.05	0.00	0.00	0.00	0.00	0.00	0.21	0.11

Source: Dismukes et al., 2003

Table 3-17

## Demographic and Employment Baseline Projections for the United States

United States	1980	1990	1995	1996	1997	1998	1999	2000	2001	2002
Total Population (Thousands)	227,225.62	249,464.40	266,085.76	268,984.61	272,226.45	275,372.89	278,423.06	282,124.63	284,843.82	287,635.39
% White	N/A	0.76	0.73	0.73	0.72	0.72	0.71	0.70	0.70	0.70
% Black	N/A	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
% Other	N/A	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05
% Hispanic	0.06	0.09	0.11	0.11	0.11	0.12	0.12	0.13	0.13	0.13
% 0-18 Years	0.30	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27
% 19-64 Years	0.59	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.61	0.61
% 65 Years & Over	0.11	0.13	0.13	0.13	0.13	0.13	0.12	0.12	0.12	0.12
% Male	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49
% Female	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51
Median Age Of Population (Years)	30.04	32.83	34.14	34.40	34.63	34.86	35.07	35.30	35.50	35.67
Total Employment (Thousands)	114,231.18	139,426.91	149,358.80	152,607.19	156,230.20	160,241.20	163,757.89	166,168.42	168,348.17	170,422.45
% Farm	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
% Construction	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06
% Manufacturing	0.18	0.14	0.13	0.13	0.12	0.12	0.12	0.12	0.11	0.11
% Transport, Comm. & Public Util	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Wholesale Trade	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Retail Trade	0.16	0.16	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16
% Finance, Ins. & Real Estate	0.08	0.08	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08
% Services	0.22	0.28	0.30	0.30	0.31	0.31	0.32	0.32	0.32	0.32
% Federal Civilian Govt	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% Federal Military Govt	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% State and Local Govt	0.12	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
Total Earnings (Billions 1996 \$)	\$3,133.27	\$4,097.14	\$4,506.71	\$4,653.41	\$4,844.37	\$5,135.24	\$5,376.80	\$5,512.01	\$5,635.24	\$5,756.39
% Farm	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Agricultural Services	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Construction	0.06	0.06	0.05	0.06	0.05	0.06	0.06	0.06	0.06	0.06
% Manufacturing	0.24	0.19	0.18	0.17	0.17	0.17	0.16	0.16	0.16	0.16
% Transport, Comm. & Public Util	0.07	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
% Wholesale Trade	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
% Retail Trade	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
% Finance, Ins. & Real Estate	0.06	0.07	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09
% Services	0.18	0.25	0.27	0.28	0.28	0.28	0.29	0.29	0.29	0.30
% Federal Civilian Govt	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03
% Federal Military Govt	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
% State and Local Govt	0.11	0.12	0.12	0.12	0.12	0.12	0.11	0.11	0.11	0.11
Personal Income (Billions 1996 \$)	\$4,191.05	\$5,705.39	\$6,325.13	\$6,538.10	\$6,796.49	\$7,166.20	\$7,433.29	\$7,614.10	\$7,782.81	\$7,950.31
Income Per Capita (1996 \$)	\$18,444	\$22,871	\$23,771	\$24,307	\$24,966	\$26,024	\$26,698	\$26,988	\$27,323	\$27,640
W&P Wealth Index (U.S. = 100)	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Number Of Households (Thousands)	80,824.79	92,255.55	98,679.79	100,312.68	101,758.18	103,183.46	104,378.68	105,819.21	107,129.01	108,461.24
Persons Per Household (People)	2.74	2.63	2.62	2.61	2.60	2.60	2.60	2.59	2.59	2.58
Retail Sales Per Household (1996 \$)	\$21,453.00	\$22,651.00	\$23,776.00	\$24,308.00	\$24,542.00	\$25,181.00	\$26,713.00	\$27,528.00	\$27,738.00	\$27,919.00
Mean Household Income (1996 \$)	\$50,800.00	\$60,511.00	\$62,715.00	\$63,763.00	\$65,335.00	\$67,934.00	\$69,659.00	\$70,361.00	\$71,042.00	\$71,681.00
Households With Money Income (Thousands)	80,824.79	92,255.55	98,679.79	100,312.68	101,758.18	103,183.46	104,378.68	105,819.21	107,129.01	108,461.24
% Less Than \$10,000 (1990 \$)	N/A	0.15	0.14	0.14	0.13	0.13	0.12	0.12	0.12	0.11
% \$10,000 to 19,999	N/A	0.18	0.16	0.16	0.15	0.15	0.14	0.14	0.13	0.13
% \$20,000 to 29,999	N/A	0.17	0.16	0.16	0.15	0.15	0.14	0.14	0.14	0.14
% \$30,000 to 39,999	N/A	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
% \$40,000 to 49,999	N/A	0.11	0.12	0.12	0.13	0.13	0.13	0.13	0.14	0.14
% \$50,000 to 59,999	N/A	0.08	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10
% \$60,000 to 74,999	N/A	0.07	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.10
% \$75,000 to 99,999	N/A	0.05	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07
% \$100,000 to \$124,999	N/A	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03
% \$125,000 to \$149,999	N/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% \$150,000 or More	N/A	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Total Retail Sales (Billions 1996 \$)	\$1,733.91	\$2,089.72	\$2,346.20	\$2,438.42	\$2,497.36	\$2,598.28	\$2,788.25	\$2,913.00	\$2,971.56	\$3,028.09

Table 3-17. Demographic and Employment Baseline Projections for the United States (continued).

United States	2003	2004	2005	2010	2015	2020	2025	2030	2035	2040
Total Population (Thousands)	290,459.30	293,229.20	296,135.29	310,519.05	325,766.71	341,658.21	358,301.47	375,755.48	394,059.73	413,255.63
% White	0.69	0.69	0.68	0.66	0.64	0.63	0.61	0.59	0.57	0.56
% Black	0.12	0.12	0.12	0.12	0.13	0.13	0.13	0.13	0.13	0.13
% Other	0.05	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.08	0.08
% Hispanic	0.14	0.14	0.14	0.15	0.17	0.18	0.19	0.21	0.22	0.24
% 0-18 Years	0.27	0.27	0.26	0.26	0.25	0.25	0.26	0.26	0.26	0.26
% 19-64 Years	0.61	0.61	0.61	0.61	0.60	0.58	0.56	0.54	0.52	0.49
% 65 Years & Over	0.12	0.12	0.12	0.13	0.14	0.16	0.18	0.20	0.22	0.25
% Male	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49
% Female	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51
Median Age Of Population (Years)	35.81	35.94	36.08	36.61	36.73	37.07	37.33	37.58	37.84	38.09
Total Employment (Thousands)	172,497.63	174,536.19	176,601.68	187,343.42	198,812.64	211,061.98	224,148.26	238,045.90	252,805.24	268,479.68
% Farm	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Construction	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05
% Manufacturing	0.11	0.11	0.11	0.10	0.10	0.10	0.09	0.09	0.08	0.08
% Transport, Comm. & Public Util	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04
% Wholesale Trade	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04
% Retail Trade	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15
% Finance, Ins. & Real Estate	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.07
% Services	0.32	0.33	0.33	0.34	0.35	0.36	0.37	0.38	0.40	0.41
% Federal Civilian Govt	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
% Federal Military Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% State and Local Govt	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
Total Earnings (Billions 1996 \$)	\$5,878.85	\$6,000.90	\$6,125.48	\$6,787.98	\$7,521.84	\$8,334.94	\$9,236.09	\$10,234.66	\$11,341.20	\$12,567.37
% Farm	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Construction	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05
% Manufacturing	0.15	0.15	0.15	0.15	0.14	0.13	0.13	0.12	0.12	0.11
% Transport, Comm. & Public Util	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06
% Wholesale Trade	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05
% Retail Trade	0.09	0.09	0.09	0.08	0.08	0.08	0.08	0.07	0.07	0.07
% Finance, Ins. & Real Estate	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10
% Services	0.30	0.30	0.31	0.32	0.34	0.35	0.37	0.39	0.40	0.42
% Federal Civilian Govt	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02
% Federal Military Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% State and Local Govt	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.10
Personal Income (Billions 1996 \$)	\$8,120.00	\$8,290.19	\$8,463.82	\$9,386.12	\$10,405.81	\$11,533.60	\$12,781.62	\$14,164.69	\$15,697.41	\$17,395.98
Income Per Capita (1996 \$)	\$27,956	\$28,272	\$28,581	\$30,227	\$31,943	\$33,758	\$35,673	\$37,697	\$39,835	\$42,095
W&P Wealth Index (U.S. = 100)	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Number Of Households (Thousands)	109,800.69	111,112.84	112,465.59	118,879.25	124,948.46	130,209.35	134,777.33	139,505.57	144,399.69	149,465.49
Persons Per Household (People)	2.57	2.57	2.56	2.54	2.54	2.55	2.58	2.61	2.64	2.67
Retail Sales Per Household (1996 \$)	\$28,095.00	\$28,268.00	\$28,436.00	\$29,391.00	\$30,513.00	\$31,924.00	\$33,617.00	\$35,399.78	\$37,277.11	\$39,254.00
Mean Household Income (1996 \$)	\$72,319.00	\$72,964.00	\$73,598.00	\$77,235.00	\$81,498.00	\$86,676.00	\$92,709.00	\$99,161.92	\$106,063.99	\$113,446.47
Households With Money Income (Thousands)	109,800.69	111,112.84	112,465.59	118,879.25	124,948.46	130,209.35	134,777.33	139,505.57	144,399.69	149,465.49
% Less Than \$10,000 (1990 \$)	0.11	0.11	0.11	0.09	0.08	0.07	0.06	0.05	0.04	0.03
% \$10,000 to \$19,999	0.13	0.13	0.12	0.11	0.10	0.08	0.07	0.06	0.05	0.04
% \$20,000 to \$29,999	0.13	0.13	0.13	0.12	0.10	0.09	0.07	0.06	0.05	0.04
% \$30,000 to \$39,999	0.15	0.15	0.15	0.14	0.13	0.12	0.10	0.08	0.07	0.06
% \$40,000 to \$49,999	0.14	0.14	0.14	0.15	0.15	0.15	0.14	0.13	0.12	0.11
% \$50,000 to \$59,999	0.11	0.11	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18
% \$60,000 to \$74,999	0.10	0.10	0.10	0.11	0.13	0.15	0.17	0.20	0.23	0.27
% \$75,000 to \$99,999	0.07	0.07	0.07	0.08	0.10	0.11	0.13	0.16	0.19	0.23
% \$100,000 to \$124,999	0.03	0.03	0.03	0.03	0.04	0.04	0.05	0.06	0.07	0.09
% \$125,000 to \$149,999	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.04
% \$150,000 or More	0.02	0.02	0.02	0.02	0.03	0.03	0.04	0.05	0.06	0.07
Total Retail Sales (Billions 1996 \$)	\$3,084.87	\$3,140.98	\$3,198.06	\$3,494.02	\$3,812.58	\$4,156.80	\$4,530.85	\$4,938.55	\$5,382.94	\$5,867.32

N/A means that information is not available.  
Source: Woods & Poole Economics Inc., 2002.



Table 3-18

## Demographic and Employment Baseline Projections for Texas

Texas	1980	1990	1995	1996	1997	1998	1999	2000	2001	2002
Total Population (Thousands)	14,337.82	17,044.71	18,951.65	19,317.35	19,718.35	20,123.90	20,493.17	20,946.50	21,277.81	21,613.12
% White	N/A	0.61	0.57	0.56	0.56	0.55	0.54	0.53	0.53	0.52
% Black	N/A	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.11
% Other	N/A	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% Hispanic	0.21	0.26	0.29	0.29	0.30	0.31	0.31	0.32	0.32	0.33
% 0-18 Years	0.32	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.29
% 19-64 Years	0.58	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.61
% 65 Years & Over	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
% Male	0.49	0.49	0.49	0.49	0.50	0.50	0.50	0.50	0.50	0.50
% Female	0.51	0.51	0.51	0.51	0.50	0.50	0.50	0.50	0.50	0.50
Median Age Of Population (Years)	28.11	30.64	31.68	31.81	31.96	32.08	32.22	32.33	32.46	32.59
Total Employment (Thousands)	7,510.66	9,306.98	10,539.01	10,847.23	11,287.92	11,689.96	11,941.25	12,164.88	12,379.73	12,589.90
% Farm	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% Construction	0.07	0.05	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.06
% Manufacturing	0.14	0.11	0.10	0.10	0.10	0.10	0.09	0.09	0.09	0.09
% Transport, Comm. & Public Util	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Wholesale Trade	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Retail Trade	0.16	0.16	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16
% Finance, Ins. & Real Estate	0.08	0.08	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08
% Services	0.20	0.27	0.28	0.29	0.29	0.29	0.30	0.30	0.30	0.30
% Federal Civilian Govt	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
% Federal Military Govt	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
% State and Local Govt	0.11	0.11	0.12	0.12	0.11	0.11	0.11	0.11	0.11	0.11
Total Earnings (Millions 1996 \$)	\$207,443.63	\$262,314.27	\$310,655.14	\$324,925.73	\$350,517.09	\$379,968.67	\$399,428.84	\$407,589.11	\$418,583.71	\$429,605.15
% Farm	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Agricultural Services	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.06	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.04
% Construction	0.09	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
% Manufacturing	0.19	0.15	0.15	0.14	0.14	0.14	0.13	0.13	0.13	0.13
% Transport, Comm. & Public Util	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
% Wholesale Trade	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
% Retail Trade	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
% Finance, Ins. & Real Estate	0.06	0.06	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08
% Services	0.17	0.24	0.25	0.26	0.26	0.26	0.27	0.27	0.28	0.28
% Federal Civilian Govt	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% Federal Military Govt	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
% State and Local Govt	0.09	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.11	0.11
Personal Income (Millions 1996 \$)	\$258,593.60	\$347,506.05	\$410,726.10	\$428,726.36	\$460,011.83	\$493,475.52	\$513,614.44	\$527,571.63	\$542,244.03	\$557,022.49
Income Per Capita (1996 \$)	\$18,036	\$20,388	\$21,672	\$22,194	\$23,329	\$24,522	\$25,063	\$25,187	\$25,484	\$25,772
W&P Wealth Index (U.S. = 100)	100.79	91.93	92.50	92.48	94.23	94.99	94.67	94.20	94.16	94.13
Number Of Households (Thousands)	4,981.68	6,099.97	6,724.75	6,872.98	7,018.60	7,164.93	7,293.93	7,426.52	7,564.53	7,704.45
Persons Per Household (People)	2.81	2.73	2.75	2.74	2.73	2.73	2.73	2.74	2.74	2.73
Retail Sales Per Household (1996 \$)	\$25,366.00	\$22,848.00	\$24,692.00	\$25,316.00	\$25,615.00	\$26,335.00	\$27,957.00	\$28,929.00	\$29,145.00	\$29,328.00
Mean Household Income (1996 \$)	\$50,916.00	\$55,911.00	\$59,816.00	\$61,079.00	\$64,150.00	\$67,409.00	\$68,918.00	\$69,505.00	\$70,138.00	\$70,744.00
Households With Money Income (Thousands)	4,981.68	6,099.97	6,724.75	6,872.98	7,018.60	7,164.93	7,293.93	7,426.52	7,564.53	7,704.45
% Less Than \$10,000 (1990 \$)	N/A	0.18	0.16	0.15	0.15	0.14	0.14	0.13	0.13	0.13
% \$10,000 to 19,999	N/A	0.19	0.17	0.17	0.16	0.15	0.15	0.15	0.14	0.14
% \$20,000 to 29,999	N/A	0.17	0.17	0.16	0.16	0.15	0.15	0.15	0.14	0.14
% \$30,000 to 39,999	N/A	0.14	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
% \$40,000 to 49,999	N/A	0.10	0.11	0.12	0.12	0.13	0.13	0.13	0.13	0.14
% \$50,000 to 59,999	N/A	0.07	0.08	0.08	0.09	0.09	0.09	0.09	0.10	0.10
% \$60,000 to 74,999	N/A	0.06	0.07	0.07	0.08	0.08	0.08	0.09	0.09	0.09
% \$75,000 to 99,999	N/A	0.04	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06
% \$100,000 to 124,999	N/A	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% \$125,000 to 149,999	N/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% \$150,000 or More	N/A	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Total Retail Sales (Millions 1996 \$)	\$126,364.72	\$139,372.27	\$166,045.71	\$173,997.67	\$179,780.98	\$188,686.51	\$203,913.38	\$214,844.76	\$220,466.07	\$225,959.11

Table 3-18. Demographic and Employment Baseline Projections for Texas (continued).

Texas	2003	2004	2005	2010	2015	2020	2025	2030	2035	2040
Total Population (Thousands)	21,950.69	22,283.93	22,627.69	24,332.79	26,106.40	27,932.24	29,823.29	31,842.36	33,998.13	36,299.85
% White	0.52	0.51	0.51	0.48	0.46	0.44	0.43	0.41	0.39	0.37
% Black	0.11	0.11	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.10
% Other	0.03	0.03	0.04	0.04	0.05	0.05	0.06	0.06	0.06	0.06
% Hispanic	0.34	0.34	0.34	0.36	0.38	0.40	0.42	0.43	0.45	0.47
% 0-18 Years	0.29	0.29	0.29	0.28	0.28	0.28	0.28	0.28	0.28	0.28
% 19-64 Years	0.61	0.61	0.61	0.61	0.60	0.58	0.57	0.55	0.52	0.50
% 65 Years & Over	0.10	0.10	0.10	0.11	0.12	0.13	0.15	0.17	0.19	0.22
% Male	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.49	0.49	0.49
% Female	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.51	0.51	0.51
Median Age Of Population (Years)	32.73	32.87	32.97	33.25	33.57	33.97	34.21	34.45	34.69	34.93
Total Employment (Thousands)	12,802.16	13,012.82	13,226.10	14,322.65	15,467.66	16,667.46	17,930.31	19,288.84	20,750.31	22,322.51
% Farm	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01
% Construction	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
% Manufacturing	0.09	0.09	0.09	0.08	0.08	0.08	0.07	0.07	0.07	0.06
% Transport, Comm. & Public Util	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Wholesale Trade	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Retail Trade	0.16	0.16	0.16	0.17	0.17	0.17	0.16	0.16	0.16	0.16
% Finance, Ins. & Real Estate	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.07
% Services	0.31	0.31	0.31	0.32	0.33	0.34	0.35	0.36	0.37	0.38
% Federal Civilian Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Federal Military Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% State and Local Govt	0.11	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.12
Total Earnings (Millions 1996 \$)	\$440,866.04	\$452,201.25	\$463,803.86	\$525,583.82	\$593,819.32	\$669,222.68	\$752,700.60	\$846,591.45	\$952,194.11	\$1,070,969.51
% Farm	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.02
% Construction	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05
% Manufacturing	0.13	0.13	0.13	0.12	0.12	0.11	0.11	0.10	0.10	0.09
% Transport, Comm. & Public Util	0.09	0.09	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.08
% Wholesale Trade	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06
% Retail Trade	0.09	0.09	0.09	0.09	0.09	0.09	0.08	0.08	0.08	0.08
% Finance, Ins. & Real Estate	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
% Services	0.28	0.29	0.29	0.31	0.32	0.34	0.35	0.37	0.39	0.41
% Federal Civilian Govt	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% Federal Military Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% State and Local Govt	0.11	0.11	0.11	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Personal Income (Millions 1996 \$)	\$572,114.55	\$587,361.51	\$602,956.06	\$685,933.03	\$777,475.66	\$878,347.40	\$989,509.82	\$1,114,740.80	\$1,255,820.85	\$1,414,755.78
Income Per Capita (1996 \$)	\$26,064	\$26,358	\$26,647	\$28,190	\$29,781	\$31,446	\$33,179	\$35,008	\$36,937	\$38,972
W&P Wealth Index (U.S. = 100)	94.12	94.12	94.12	94.13	94.10	94.01	93.88	93.75	93.62	93.49
Number Of Households (Thousands)	7,845.01	7,983.76	8,125.54	8,810.25	9,470.32	10,068.92	10,612.41	11,185.24	11,788.99	12,425.32
Persons Per Household (People)	2.72	2.72	2.71	2.69	2.69	2.70	2.73	2.76	2.79	2.82
Retail Sales Per Household (1996 \$)	\$29,508.00	\$29,684.00	\$29,855.00	\$30,834.00	\$31,991.00	\$33,451.00	\$35,204.00	\$37,048.87	\$38,990.41	\$41,033.71
Mean Household Income (1996 \$)	\$71,361.00	\$71,992.00	\$72,616.00	\$76,209.00	\$80,384.00	\$85,405.00	\$91,197.00	\$97,381.80	\$103,986.05	\$111,038.18
Households With Money Income (Thousands)	7,845.01	7,983.76	8,125.54	8,810.25	9,470.32	10,068.92	10,612.41	11,185.24	11,788.99	12,425.32
% Less Than \$10,000 (1990 \$)	0.12	0.12	0.12	0.11	0.09	0.08	0.07	0.06	0.05	0.04
% \$10,000 to 19,999	0.14	0.13	0.13	0.12	0.11	0.09	0.07	0.06	0.05	0.04
% \$20,000 to 29,999	0.14	0.14	0.13	0.12	0.11	0.09	0.08	0.06	0.05	0.04
% \$30,000 to 39,999	0.15	0.15	0.15	0.15	0.14	0.12	0.10	0.09	0.07	0.06
% \$40,000 to 49,999	0.14	0.14	0.14	0.15	0.15	0.15	0.14	0.13	0.12	0.12
% \$50,000 to 59,999	0.10	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18
% \$60,000 to 74,999	0.09	0.09	0.10	0.11	0.12	0.14	0.17	0.20	0.23	0.27
% \$75,000 to 99,999	0.06	0.06	0.07	0.07	0.08	0.10	0.12	0.15	0.17	0.21
% \$100,000 to 124,999	0.02	0.02	0.03	0.03	0.03	0.04	0.05	0.05	0.07	0.08
% \$125,000 to 149,999	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03
% \$150,000 or More	0.02	0.02	0.02	0.02	0.03	0.03	0.04	0.05	0.05	0.07
Total Retail Sales (Millions 1996 \$)	\$231,490.68	\$236,992.57	\$242,586.84	\$271,654.25	\$302,965.72	\$336,814.51	\$373,595.64	\$414,393.37	\$459,646.34	\$509,841.06

N/A means that information is not available.  
 Source: Woods & Poole Economics Inc., 2002.

Table 3-19

## Demographic and Employment Baseline Projections for Coastal Subarea TX-1

Coastal Subarea TX-1	1980	1990	1995	1996	1997	1998	1999	2000	2001	2002
Total Population (Thousands)	717.97	792.86	873.02	884.53	895.03	903.04	906.55	920.58	930.98	941.65
% White	N/A	0.37	0.35	0.34	0.34	0.33	0.33	0.33	0.32	0.32
% Black	N/A	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% Other	N/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Hispanic	0.55	0.60	0.62	0.62	0.63	0.63	0.64	0.63	0.64	0.64
% 0-18 Years	0.36	0.34	0.33	0.33	0.33	0.33	0.33	0.32	0.32	0.32
% 19-64 Years	0.54	0.55	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.57
% 65 Years & Over	0.09	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.12	0.12
% Male	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49
% Female	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51
Median Age Of Population (Years)	28.14	31.53	32.83	32.88	33.18	33.56	33.77	34.18	34.35	34.44
Total Employment (Thousands)	324.61	358.05	406.50	419.67	430.69	441.72	447.33	454.25	460.67	466.67
% Farm	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% Agricultural Services	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% Mining	0.05	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% Construction	0.08	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
% Manufacturing	0.11	0.09	0.09	0.09	0.09	0.08	0.08	0.08	0.08	0.08
% Transport, Comm. & Public Util	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
% Wholesale Trade	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% Retail Trade	0.17	0.18	0.18	0.18	0.18	0.17	0.18	0.18	0.18	0.18
% Finance, Ins. & Real Estate	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
% Services	0.19	0.26	0.28	0.28	0.29	0.30	0.30	0.30	0.31	0.31
% Federal Civilian Govt	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% Federal Military Govt	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% State and Local Govt	0.13	0.14	0.15	0.14	0.14	0.14	0.14	0.14	0.14	0.14
Total Earnings (Millions 1996 \$)	\$8,351.98	\$8,475.43	\$9,824.51	\$10,193.26	\$10,574.17	\$11,198.67	\$11,432.71	\$11,593.71	\$11,849.45	\$12,099.66
% Farm	(0.00)	0.01	0.02	0.00	0.01	0.01	0.02	0.01	0.01	0.01
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.08	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% Construction	0.10	0.07	0.07	0.08	0.07	0.07	0.08	0.08	0.08	0.08
% Manufacturing	0.16	0.14	0.14	0.14	0.13	0.13	0.13	0.13	0.12	0.12
% Transport, Comm. & Public Util	0.10	0.06	0.06	0.07	0.06	0.06	0.06	0.06	0.06	0.06
% Wholesale Trade	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
% Retail Trade	0.12	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.12
% Finance, Ins. & Real Estate	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Services	0.16	0.23	0.24	0.24	0.25	0.25	0.25	0.25	0.26	0.26
% Federal Civilian Govt	0.04	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.04
% Federal Military Govt	0.03	0.03	0.03	0.03	0.04	0.04	0.03	0.03	0.03	0.03
% State and Local Govt	0.11	0.16	0.16	0.16	0.16	0.15	0.15	0.16	0.16	0.16
Personal Income (Millions 1996 \$)	\$10,642.89	\$12,341.68	\$14,581.30	\$15,100.39	\$15,727.44	\$16,474.80	\$16,778.26	\$17,071.90	\$17,466.89	\$17,859.74
Income Per Capita (1996 \$)	\$14,824	\$15,566	\$16,702	\$17,072	\$17,572	\$18,244	\$18,508	\$18,545	\$18,762	\$18,966
W&P Wealth Index (U.S. = 100)	87.89	76.52	77.61	76.40	76.93	76.34	79.66	77.98	77.78	77.64
Number Of Households (Thousands)	222.99	255.98	283.21	288.30	292.80	296.26	298.28	302.47	306.77	311.11
Persons Per Household (People)	3.10	2.93	2.96	2.91	2.91	2.89	2.83	2.86	2.85	2.85
Retail Sales Per Household (1996 \$)	\$22,076.18	\$17,532.64	\$17,195.82	\$17,085.36	\$16,738.36	\$17,139.00	\$18,098.09	\$18,663.82	\$18,793.36	\$18,905.82
Mean Household Income (1996 \$)	\$46,392.45	\$46,953.45	\$50,489.18	\$49,911.36	\$52,161.55	\$53,773.73	\$57,323.91	\$56,992.55	\$57,420.18	\$57,879.00
Households With Money Income (Thousands)	222.99	255.98	283.21	288.30	292.80	296.26	298.28	302.47	306.77	311.11
% Less Than \$10,000 (1990 \$)	N/A	0.24	0.22	0.21	0.20	0.19	0.19	0.19	0.18	0.18
% \$10,000 to \$19,999	N/A	0.22	0.20	0.20	0.19	0.18	0.18	0.17	0.17	0.17
% \$20,000 to \$29,999	N/A	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.16	0.16
% \$30,000 to \$39,999	N/A	0.13	0.14	0.15	0.15	0.16	0.16	0.16	0.17	0.17
% \$40,000 to \$49,999	N/A	0.09	0.10	0.10	0.11	0.11	0.11	0.12	0.12	0.12
% \$50,000 to \$59,999	N/A	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.08
% \$60,000 to \$74,999	N/A	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06
% \$75,000 to \$99,999	N/A	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04
% \$100,000 to \$124,999	N/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% \$125,000 to \$149,999	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
% \$150,000 or More	N/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total Retail Sales (Millions 1996 \$)	\$5,871.12	\$5,718.29	\$6,431.20	\$6,536.16	\$6,532.90	\$6,764.03	\$7,189.83	\$7,511.81	\$7,671.19	\$7,825.79

Table 3-19. Demographic and Employment Baseline Projections for Coastal Subarea TX-1 (continued).

Coastal Subarea TX-1	2003	2004	2005	2010	2015	2020	2025	2030	2035	2040
Total Population (Thousands)	952.44	963.06	974.23	1,029.64	1,088.63	1,150.11	1,214.41	1,282.30	1,353.99	1,429.69
% White	0.31	0.31	0.30	0.28	0.27	0.25	0.24	0.23	0.21	0.20
% Black	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% Other	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
% Hispanic	0.65	0.65	0.66	0.68	0.69	0.70	0.72	0.73	0.74	0.76
% 0-18 Years	0.32	0.32	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
% 19-64 Years	0.57	0.57	0.57	0.57	0.56	0.54	0.53	0.51	0.50	0.49
% 65 Years & Over	0.12	0.12	0.12	0.12	0.13	0.15	0.16	0.18	0.20	0.22
% Male	0.49	0.49	0.49	0.49	0.48	0.48	0.48	0.48	0.48	0.48
% Female	0.51	0.51	0.51	0.51	0.52	0.52	0.52	0.52	0.52	0.52
Median Age Of Population (Years)	34.51	34.53	34.60	34.19	34.34	34.79	34.90	35.00	35.10	35.21
Total Employment (Thousands)	472.69	478.59	484.58	515.60	548.75	584.60	623.71	665.44	709.96	757.47
% Farm	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
% Agricultural Services	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
% Mining	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
% Construction	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06
% Manufacturing	0.08	0.08	0.08	0.07	0.07	0.07	0.07	0.06	0.06	0.06
% Transport, Comm. & Public Util	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03
% Wholesale Trade	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% Retail Trade	0.18	0.18	0.18	0.17	0.17	0.17	0.17	0.17	0.16	0.16
% Finance, Ins. & Real Estate	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05
% Services	0.31	0.31	0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.40
% Federal Civilian Govt	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01
% Federal Military Govt	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
% State and Local Govt	0.14	0.14	0.14	0.15	0.15	0.15	0.15	0.15	0.16	0.16
Total Earnings (Millions 1996 \$)	\$12,354.25	\$12,608.83	\$12,869.43	\$14,260.60	\$15,807.48	\$17,534.32	\$19,472.76	\$21,625.49	\$24,016.21	\$26,671.22
% Farm	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02
% Construction	0.08	0.08	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06
% Manufacturing	0.12	0.12	0.12	0.12	0.12	0.11	0.11	0.10	0.10	0.10
% Transport, Comm. & Public Util	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04
% Wholesale Trade	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% Retail Trade	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.10	0.10	0.10
% Finance, Ins. & Real Estate	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Services	0.26	0.27	0.27	0.28	0.30	0.31	0.33	0.35	0.36	0.38
% Federal Civilian Govt	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03
% Federal Military Govt	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02
% State and Local Govt	0.16	0.16	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17
Personal Income (Millions 1996 \$)	\$18,260.11	\$18,664.06	\$19,077.61	\$21,292.08	\$23,770.93	\$26,553.79	\$29,689.87	\$33,196.32	\$37,116.90	\$41,500.51
Income Per Capita (1996 \$)	\$19,172	\$19,380	\$19,582	\$20,679	\$21,836	\$23,088	\$24,448	\$25,888	\$27,413	\$29,028
W&P Wealth Index (U.S. = 100)	77.59	77.57	77.50	77.95	77.90	77.94	78.10	78.26	78.43	78.59
Number Of Households (Thousands)	315.49	319.80	324.23	345.51	365.90	384.08	400.42	417.46	435.22	453.74
Persons Per Household (People)	2.84	2.84	2.83	2.79	2.79	2.80	2.83	2.86	2.89	2.92
Retail Sales Per Household (1996 \$)	\$19,015.64	\$19,123.73	\$19,227.82	\$19,832.45	\$20,554.82	\$21,475.45	\$22,590.55	\$23,763.54	\$24,997.43	\$26,295.40
Mean Household Income (1996 \$)	\$58,360.73	\$58,867.64	\$59,377.73	\$62,355.64	\$65,886.27	\$70,083.73	\$75,104.45	\$80,484.86	\$86,250.72	\$92,429.63
Households With Money Income (Thousands)	315.49	319.80	324.23	345.51	365.90	384.08	400.42	417.46	435.22	453.74
% Less Than \$10,000 (1990 \$)	0.18	0.17	0.17	0.15	0.14	0.11	0.09	0.08	0.06	0.05
% \$10,000 to 19,999	0.16	0.16	0.16	0.14	0.13	0.11	0.09	0.07	0.06	0.05
% \$20,000 to 29,999	0.16	0.16	0.16	0.15	0.13	0.11	0.09	0.07	0.06	0.05
% \$30,000 to 39,999	0.17	0.17	0.17	0.18	0.18	0.17	0.15	0.12	0.11	0.09
% \$40,000 to 49,999	0.12	0.12	0.13	0.14	0.16	0.18	0.19	0.20	0.22	0.23
% \$50,000 to 59,999	0.08	0.08	0.08	0.09	0.10	0.12	0.14	0.18	0.22	0.27
% \$60,000 to 74,999	0.07	0.07	0.07	0.08	0.08	0.10	0.12	0.15	0.19	0.23
% \$75,000 to 99,999	0.04	0.04	0.04	0.04	0.05	0.06	0.07	0.08	0.10	0.13
% \$100,000 to 124,999	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.04	0.04
% \$125,000 to 149,999	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02
% \$150,000 or More	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.04	0.04
Total Retail Sales (Millions 1996 \$)	\$7,981.40	\$8,135.70	\$8,292.86	\$9,111.16	\$9,996.14	\$10,955.47	\$12,000.22	\$13,144.61	\$14,398.13	\$15,771.19

N/A means that information is not available.  
Source: Woods & Poole Economics Inc., 2002.

Table 3-20

## Demographic and Employment Baseline Projections for Coastal Subarea TX-2

Coastal Subarea TX-2	1980	1990	1995	1996	1997	1998	1999	2000	2001	2002
Total Population (Thousands)	3,606.67	4,191.08	4,655.72	4,740.88	4,835.86	4,941.97	5,048.12	5,158.08	5,238.54	5,320.26
% White	N/A	0.59	0.55	0.54	0.53	0.52	0.51	0.50	0.49	0.49
% Black	N/A	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.17	0.17
% Other	N/A	0.03	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05
% Hispanic	0.13	0.19	0.23	0.24	0.25	0.25	0.26	0.27	0.28	0.29
% 0-18 Years	0.32	0.31	0.30	0.31	0.30	0.31	0.30	0.30	0.30	0.30
% 19-64 Years	0.61	0.62	0.61	0.61	0.61	0.61	0.61	0.61	0.62	0.62
% 65 Years & Over	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
% Male	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
% Female	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Median Age Of Population (Years)	28.26	31.72	33.14	33.30	33.56	33.77	33.99	34.26	34.47	34.65
Total Employment (Thousands)	2,029.61	2,386.43	2,636.37	2,707.66	2,826.87	2,950.81	2,996.70	3,046.85	3,095.53	3,143.66
% Farm	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.05	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% Construction	0.10	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
% Manufacturing	0.15	0.10	0.09	0.10	0.10	0.10	0.09	0.09	0.09	0.09
% Transport, Comm. & Public Util	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
% Wholesale Trade	0.07	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Retail Trade	0.15	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
% Finance, Ins. & Real Estate	0.08	0.08	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08
% Services	0.22	0.30	0.31	0.31	0.31	0.32	0.32	0.32	0.32	0.32
% Federal Civilian Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Federal Military Govt	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
% State and Local Govt	0.09	0.10	0.11	0.11	0.10	0.10	0.10	0.10	0.10	0.10
Total Earnings (Millions 1996 \$)	\$68,219.14	\$78,813.08	\$92,989.99	\$97,885.80	\$106,437.48	\$115,504.13	\$119,435.34	\$121,383.51	\$124,276.66	\$127,211.32
% Farm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Agricultural Services	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Mining	0.08	0.08	0.08	0.08	0.08	0.09	0.08	0.07	0.07	0.07
% Construction	0.11	0.08	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08
% Manufacturing	0.21	0.14	0.15	0.14	0.14	0.14	0.13	0.13	0.13	0.12
% Transport, Comm. & Public Util	0.09	0.09	0.10	0.10	0.10	0.09	0.10	0.10	0.10	0.10
% Wholesale Trade	0.09	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
% Retail Trade	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
% Finance, Ins. & Real Estate	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07
% Services	0.18	0.27	0.27	0.27	0.28	0.28	0.29	0.29	0.30	0.30
% Federal Civilian Govt	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% Federal Military Govt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% State and Local Govt	0.07	0.09	0.09	0.09	0.09	0.08	0.08	0.09	0.09	0.09
Personal Income (Millions 1996 \$)	\$78,601.32	\$97,383.01	\$115,648.67	\$121,173.62	\$130,850.35	\$141,111.80	\$145,377.80	\$148,513.52	\$152,262.54	\$156,071.76
Income Per Capita (1996 \$)	\$21,793	\$23,236	\$24,840	\$25,559	\$27,058	\$28,554	\$28,798	\$28,792	\$29,066	\$29,335
W&P Wealth Index (U.S. = 100)	104.13	86.60	86.53	85.73	87.46	87.85	86.26	85.80	85.68	85.59
Number Of Households (Thousands)	1,274.90	1,507.57	1,654.33	1,685.79	1,718.45	1,754.02	1,787.58	1,818.19	1,851.24	1,884.81
Persons Per Household (People)	2.91	2.79	2.78	2.77	2.76	2.76	2.75	2.76	2.75	2.74
Retail Sales Per Household (1996 \$)	\$23,753.54	\$19,893.38	\$21,728.69	\$22,269.85	\$22,492.38	\$23,069.00	\$24,429.69	\$25,243.62	\$25,413.69	\$25,558.23
Mean Household Income (1996 \$)	\$54,012.00	\$53,732.08	\$56,669.15	\$57,122.08	\$59,943.23	\$62,694.00	\$62,927.08	\$63,335.38	\$63,828.31	\$64,291.92
Households With Money Income (Thousands)	1,274.90	1,507.57	1,654.33	1,685.79	1,718.45	1,754.02	1,787.58	1,818.19	1,851.24	1,884.81
% Less Than \$10,000 (1990 \$)	N/A	0.15	0.13	0.13	0.12	0.12	0.12	0.11	0.11	0.11
% \$10,000 to 19,999	N/A	0.17	0.15	0.15	0.14	0.14	0.13	0.13	0.13	0.13
% \$20,000 to 29,999	N/A	0.17	0.15	0.15	0.14	0.14	0.13	0.13	0.13	0.13
% \$30,000 to 39,999	N/A	0.14	0.15	0.15	0.15	0.14	0.14	0.14	0.14	0.13
% \$40,000 to 49,999	N/A	0.11	0.12	0.12	0.13	0.14	0.14	0.14	0.14	0.14
% \$50,000 to 59,999	N/A	0.08	0.09	0.09	0.10	0.10	0.10	0.11	0.11	0.11
% \$60,000 to 74,999	N/A	0.08	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.11
% \$75,000 to 99,999	N/A	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.08	0.08
% \$100,000 to 124,999	N/A	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% \$125,000 to 149,999	N/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% \$150,000 or More	N/A	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Total Retail Sales (Millions 1996 \$)	\$35,471.52	\$35,639.69	\$41,039.45	\$42,496.15	\$43,445.73	\$45,602.84	\$49,353.84	\$51,929.00	\$53,233.80	\$54,506.64

Table 3-20. Demographic and Employment Baseline Projections for Coastal Subarea TX-2 (continued).

Coastal Subarea TX-2	2003	2004	2005	2010	2015	2020	2025	2030	2035	2040
Total Population (Thousands)	5,402.61	5,483.79	5,567.43	5,983.33	6,416.17	6,862.28	7,324.63	7,818.12	8,344.87	8,907.10
% White	0.48	0.47	0.47	0.44	0.41	0.38	0.36	0.33	0.31	0.29
% Black	0.17	0.17	0.17	0.16	0.16	0.15	0.15	0.14	0.14	0.13
% Other	0.05	0.05	0.06	0.06	0.07	0.08	0.08	0.09	0.10	0.11
% Hispanic	0.29	0.30	0.31	0.34	0.36	0.39	0.41	0.44	0.46	0.49
% 0-18 Years	0.30	0.30	0.30	0.29	0.29	0.29	0.29	0.29	0.29	0.29
% 19-64 Years	0.62	0.62	0.62	0.62	0.61	0.59	0.57	0.55	0.54	0.52
% 65 Years & Over	0.08	0.08	0.08	0.09	0.10	0.12	0.14	0.16	0.18	0.21
% Male	0.50	0.50	0.50	0.50	0.50	0.50	0.49	0.49	0.49	0.49
% Female	0.50	0.50	0.50	0.50	0.50	0.50	0.51	0.51	0.51	0.51
Median Age Of Population (Years)	34.80	34.94	35.08	35.44	35.50	36.16	36.68	37.22	37.75	38.30
Total Employment (Thousands)	3,192.70	3,241.53	3,291.14	3,548.60	3,823.42	4,119.61	4,440.89	4,787.24	5,160.59	5,563.07
% Farm	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02
% Construction	0.08	0.08	0.08	0.08	0.07	0.07	0.07	0.07	0.07	0.07
% Manufacturing	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.00	0.00	0.00
% Transport, Comm. & Public Util	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05
% Wholesale Trade	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Retail Trade	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
% Finance, Ins. & Real Estate	0.08	0.08	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.06
% Services	0.32	0.32	0.33	0.33	0.34	0.34	0.35	0.36	0.37	0.38
% Federal Civilian Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Federal Military Govt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% State and Local Govt	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
Total Earnings (Millions 1996 \$)	\$130,233.09	\$133,285.71	\$136,414.84	\$153,099.06	\$171,622.12	\$192,314.50	\$215,554.43	\$241,602.76	\$270,798.85	\$303,523.10
% Farm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Agricultural Services	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Mining	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.05	0.05	0.05
% Construction	0.08	0.08	0.08	0.07	0.07	0.07	0.07	0.06	0.06	0.06
% Manufacturing	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.11	0.11	0.11
% Transport, Comm. & Public Util	0.10	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.09
% Wholesale Trade	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06
% Retail Trade	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.07
% Finance, Ins. & Real Estate	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
% Services	0.30	0.30	0.31	0.32	0.33	0.34	0.36	0.37	0.39	0.40
% Federal Civilian Govt	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Federal Military Govt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% State and Local Govt	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Personal Income (Millions 1996 \$)	\$159,984.32	\$163,944.42	\$167,999.86	\$189,600.38	\$213,508.19	\$240,044.43	\$269,583.25	\$302,757.00	\$340,012.96	\$381,853.48
Income Per Capita (1996 \$)	\$29,612	\$29,896	\$30,175	\$31,688	\$33,277	\$34,980	\$36,805	\$38,725	\$40,745	\$42,871
W&P Wealth Index (U.S. = 100)	85.50	85.42	85.36	85.01	84.67	84.32	83.95	83.59	83.23	82.87
Number Of Households (Thousands)	1,918.53	1,951.82	1,985.84	2,149.94	2,307.97	2,451.23	2,581.50	2,718.71	2,863.20	3,015.37
Persons Per Household (People)	2.73	2.72	2.72	2.69	2.68	2.69	2.72	2.75	2.78	2.81
Retail Sales Per Household (1996 \$)	\$25,699.92	\$25,838.92	\$25,972.69	\$26,752.77	\$27,688.08	\$28,897.15	\$30,385.15	\$31,949.78	\$33,594.96	\$35,324.87
Mean Household Income (1996 \$)	\$64,764.23	\$65,251.08	\$65,730.23	\$68,556.08	\$71,909.00	\$76,012.85	\$80,787.62	\$85,862.31	\$91,255.78	\$96,988.04
Households With Money Income (Thousands)	1,918.53	1,951.82	1,985.84	2,149.94	2,307.97	2,451.23	2,581.50	2,718.71	2,863.20	3,015.37
% Less Than \$10,000 (1990 \$)	0.11	0.11	0.10	0.10	0.09	0.07	0.06	0.05	0.04	0.04
% \$10,000 to 19,999	0.12	0.12	0.12	0.11	0.10	0.08	0.07	0.06	0.05	0.04
% \$20,000 to 29,999	0.12	0.12	0.12	0.11	0.10	0.08	0.07	0.06	0.05	0.04
% \$30,000 to 39,999	0.13	0.13	0.13	0.12	0.11	0.09	0.08	0.07	0.05	0.05
% \$40,000 to 49,999	0.15	0.15	0.15	0.15	0.15	0.13	0.11	0.10	0.08	0.07
% \$50,000 to 59,999	0.11	0.11	0.12	0.13	0.14	0.15	0.16	0.16	0.16	0.16
% \$60,000 to 74,999	0.11	0.11	0.11	0.12	0.13	0.16	0.19	0.22	0.26	0.31
% \$75,000 to 99,999	0.08	0.08	0.08	0.09	0.10	0.12	0.14	0.17	0.20	0.24
% \$100,000 to 124,999	0.03	0.03	0.03	0.03	0.04	0.05	0.05	0.07	0.08	0.09
% \$125,000 to 149,999	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.04
% \$150,000 or More	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.05	0.06	0.08
Total Retail Sales (Millions 1996 \$)	\$55,787.89	\$57,061.14	\$58,355.78	\$65,080.47	\$72,323.35	\$80,152.78	\$88,660.78	\$98,071.87	\$108,481.92	\$119,996.96

N/A means that information is not available.

Source: Woods &amp; Poole Economics Inc., 2002.

Table 3-21

## Demographic and Employment Baseline Projections for Louisiana

Louisiana	1980	1990	1995	1996	1997	1998	1999	2000	2001	2002
Total Population (Thousands)	4,221.59	4,219.18	4,371.42	4,387.30	4,408.75	4,428.54	4,444.91	4,469.97	4,496.52	4,524.25
% White	N/A	0.66	0.64	0.64	0.64	0.64	0.64	0.63	0.63	0.63
% Black	N/A	0.31	0.32	0.32	0.32	0.32	0.32	0.33	0.33	0.33
% Other	N/A	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% Hispanic	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% 0-18 Years	0.34	0.30	0.30	0.30	0.29	0.29	0.29	0.29	0.29	0.28
% 19-64 Years	0.57	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.60	0.60
% 65 Years & Over	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.12	0.12
% Male	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48
% Female	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52
Median Age Of Population (Years)	27.35	31.22	32.56	32.90	33.20	33.49	33.78	34.04	34.22	34.38
Total Employment (Thousands)	1,967.78	2,019.91	2,217.10	2,264.98	2,318.80	2,371.43	2,388.52	2,416.49	2,442.35	2,467.23
% Farm	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.05	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02
% Construction	0.08	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07
% Manufacturing	0.11	0.09	0.09	0.09	0.09	0.08	0.08	0.08	0.08	0.08
% Transport, Comm. & Public Util	0.07	0.06	0.05	0.06	0.06	0.06	0.06	0.06	0.05	0.05
% Wholesale Trade	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
% Retail Trade	0.15	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
% Finance, Ins. & Real Estate	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
% Services	0.20	0.26	0.29	0.29	0.29	0.29	0.30	0.30	0.30	0.30
% Federal Civilian Govt	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
% Federal Military Govt	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% State and Local Govt	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
Total Earnings (Millions 1996 \$)	\$53,596.79	\$52,905.25	\$59,363.68	\$60,434.11	\$62,410.23	\$65,428.80	\$65,676.54	\$67,509.07	\$68,804.39	\$70,081.19
% Farm	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Agricultural Services	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.08	0.06	0.04	0.05	0.05	0.05	0.04	0.05	0.05	0.05
% Construction	0.11	0.07	0.07	0.07	0.07	0.07	0.08	0.07	0.07	0.07
% Manufacturing	0.16	0.15	0.15	0.14	0.13	0.13	0.13	0.13	0.13	0.13
% Transport, Comm. & Public Util	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.07
% Wholesale Trade	0.07	0.05	0.05	0.05	0.05	0.06	0.05	0.05	0.05	0.05
% Retail Trade	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
% Finance, Ins. & Real Estate	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Services	0.17	0.25	0.26	0.26	0.26	0.26	0.27	0.27	0.27	0.28
% Federal Civilian Govt	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% Federal Military Govt	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% State and Local Govt	0.12	0.14	0.15	0.14	0.14	0.14	0.14	0.14	0.14	0.14
Personal Income (Millions 1996 \$)	\$67,561.20	\$75,007.67	\$86,387.68	\$87,878.77	\$90,527.38	\$94,642.88	\$95,353.82	\$97,376.90	\$99,254.29	\$101,121.48
Income Per Capita (1996 \$)	\$16,004	\$17,778	\$19,762	\$20,030	\$20,534	\$21,371	\$21,452	\$21,785	\$22,074	\$22,351
W&P Wealth Index (U.S. = 100)	88.13	79.09	82.80	82.37	82.25	82.32	81.03	81.31	81.36	81.42
Number Of Households (Thousands)	1,421.54	1,503.59	1,578.47	1,598.91	1,615.53	1,631.86	1,639.49	1,659.96	1,674.18	1,688.67
Persons Per Household (People)	2.90	2.73	2.69	2.66	2.65	2.63	2.63	2.61	2.60	2.60
Retail Sales Per Household (1996 \$)	\$22,271.00	\$19,919.00	\$21,828.00	\$22,347.00	\$22,602.00	\$23,114.00	\$24,505.00	\$25,089.00	\$25,278.00	\$25,442.00
Mean Household Income (1996 \$)	\$46,656.00	\$48,817.00	\$53,472.00	\$53,684.00	\$54,714.00	\$56,620.00	\$56,768.00	\$57,229.00	\$57,830.00	\$58,407.00
Households With Money Income (Thousands)	1,421.54	1,503.59	1,578.47	1,598.91	1,615.53	1,631.86	1,639.49	1,659.96	1,674.18	1,688.67
% Less Than \$10,000 (1990 \$)	N/A	0.25	0.22	0.22	0.21	0.20	0.20	0.19	0.19	0.19
% \$10,000 to 19,999	N/A	0.21	0.19	0.18	0.18	0.17	0.17	0.17	0.16	0.16
% \$20,000 to 29,999	N/A	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.16	0.16
% \$30,000 to 39,999	N/A	0.13	0.14	0.15	0.15	0.15	0.16	0.16	0.16	0.16
% \$40,000 to 49,999	N/A	0.09	0.10	0.10	0.11	0.11	0.11	0.12	0.12	0.12
% \$50,000 to 59,999	N/A	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.08	0.08
% \$60,000 to 74,999	N/A	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06
% \$75,000 to 99,999	N/A	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04
% \$100,000 to 124,999	N/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% \$125,000 to 149,999	N/A	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01
% \$150,000 or More	N/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total Retail Sales (Millions 1996 \$)	\$31,658.67	\$29,950.42	\$34,455.49	\$35,730.10	\$36,513.40	\$37,718.36	\$40,175.68	\$41,646.78	\$42,320.69	\$42,962.93

Table 3-21. Demographic and Employment Baseline Projections for Louisiana (continued).

Louisiana	2003	2004	2005	2010	2015	2020	2025	2030	2035	2040
Total Population (Thousands)	4,552.24	4,579.41	4,608.88	4,753.86	4,912.14	5,079.92	5,258.53	5,443.43	5,634.82	5,832.94
% White	0.63	0.62	0.62	0.61	0.60	0.59	0.58	0.57	0.56	0.55
% Black	0.33	0.33	0.33	0.34	0.35	0.36	0.37	0.37	0.38	0.39
% Other	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03
% Hispanic	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% 0-18 Years	0.28	0.28	0.28	0.27	0.27	0.27	0.27	0.27	0.27	0.27
% 19-64 Years	0.60	0.61	0.61	0.61	0.60	0.58	0.56	0.54	0.51	0.49
% 65 Years & Over	0.12	0.12	0.12	0.12	0.14	0.15	0.17	0.19	0.22	0.25
% Male	0.48	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49
% Female	0.52	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51
Median Age Of Population (Years)	34.54	34.69	34.85	35.32	35.90	36.76	37.36	37.97	38.59	39.23
Total Employment (Thousands)	2,492.40	2,517.27	2,542.77	2,678.46	2,827.57	2,990.34	3,167.70	3,355.59	3,554.63	3,765.47
% Farm	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% Construction	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06
% Manufacturing	0.08	0.08	0.08	0.08	0.07	0.07	0.07	0.06	0.06	0.06
% Transport, Comm. & Public Util	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.04
% Wholesale Trade	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
% Retail Trade	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.15	0.15	0.15
% Finance, Ins. & Real Estate	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05
% Services	0.31	0.31	0.31	0.32	0.34	0.35	0.36	0.37	0.38	0.40
% Federal Civilian Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Federal Military Govt	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
% State and Local Govt	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
Total Earnings (Millions 1996 \$)	\$71,376.08	\$72,668.08	\$73,991.07	\$81,075.94	\$88,985.72	\$97,805.78	\$107,647.65	\$118,479.89	\$130,402.13	\$143,524.07
% Farm	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04
% Construction	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.05
% Manufacturing	0.13	0.13	0.13	0.12	0.12	0.12	0.11	0.11	0.10	0.10
% Transport, Comm. & Public Util	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06
% Wholesale Trade	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.04
% Retail Trade	0.09	0.09	0.09	0.09	0.08	0.08	0.08	0.08	0.07	0.07
% Finance, Ins. & Real Estate	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Services	0.28	0.28	0.29	0.30	0.32	0.34	0.35	0.37	0.39	0.41
% Federal Civilian Govt	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02
% Federal Military Govt	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
% State and Local Govt	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
Personal Income (Millions 1996 \$)	\$103,013.55	\$104,911.81	\$106,850.58	\$117,188.06	\$128,686.06	\$141,477.22	\$155,719.73	\$171,396.03	\$188,650.47	\$207,641.91
Income Per Capita (1996 \$)	\$22,629	\$22,909	\$23,184	\$24,651	\$26,198	\$27,850	\$29,613	\$31,488	\$33,481	\$35,600
W&P Wealth Index (U.S. = 100)	81.48	81.55	81.61	81.94	82.29	82.66	83.05	83.44	83.84	84.23
Number Of Households (Thousands)	1,703.24	1,717.36	1,732.10	1,800.18	1,862.89	1,913.42	1,953.60	1,994.62	2,036.51	2,079.27
Persons Per Household (People)	2.59	2.58	2.58	2.56	2.55	2.57	2.60	2.63	2.66	2.69
Retail Sales Per Household (1996 \$)	\$25,602.00	\$25,759.00	\$25,911.00	\$26,777.00	\$27,794.00	\$29,077.00	\$30,627.00	\$32,259.63	\$33,979.28	\$35,790.61
Mean Household Income (1996 \$)	\$58,985.00	\$59,572.00	\$60,151.00	\$63,458.00	\$67,333.00	\$72,030.00	\$77,523.00	\$83,434.90	\$89,797.63	\$96,645.59
Households With Money Income (Thousands)	1,703.24	1,717.36	1,732.10	1,800.18	1,862.89	1,913.42	1,953.60	1,994.62	2,036.51	2,079.27
% Less Than \$10,000 (1990 \$)	0.18	0.18	0.17	0.16	0.14	0.12	0.10	0.08	0.06	0.05
% \$10,000 to 19,999	0.16	0.15	0.15	0.13	0.12	0.10	0.08	0.07	0.05	0.04
% \$20,000 to 29,999	0.16	0.16	0.16	0.14	0.13	0.11	0.09	0.07	0.06	0.05
% \$30,000 to 39,999	0.17	0.17	0.17	0.17	0.17	0.16	0.14	0.12	0.11	0.09
% \$40,000 to 49,999	0.12	0.13	0.13	0.14	0.16	0.17	0.18	0.18	0.19	0.20
% \$50,000 to 59,999	0.08	0.08	0.08	0.09	0.11	0.13	0.15	0.18	0.22	0.26
% \$60,000 to 74,999	0.06	0.06	0.07	0.07	0.08	0.10	0.13	0.16	0.20	0.25
% \$75,000 to 99,999	0.04	0.04	0.04	0.04	0.05	0.06	0.07	0.09	0.12	0.14
% \$100,000 to 124,999	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.04	0.05
% \$125,000 to 149,999	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02
% \$150,000 or More	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.04	0.05
Total Retail Sales (Millions 1996 \$)	\$43,606.03	\$44,237.32	\$44,879.74	\$48,203.15	\$51,777.38	\$55,637.43	\$59,832.17	\$64,343.16	\$69,194.27	\$74,411.11

N/A means that information is not available.  
Source: Woods & Poole Economics Inc., 2002.



Table 3-22

## Demographic and Employment Baseline Projections for Coastal Subarea LA-1

Coastal Subarea LA-1	1980	1990	1995	1996	1997	1998	1999	2000	2001	2002
Total Population (Thousands)	623.26	640.83	676.41	683.14	690.61	696.84	700.50	707.12	712.51	718.02
% White	N/A	0.73	0.72	0.72	0.72	0.72	0.72	0.71	0.71	0.71
% Black	N/A	0.25	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
% Other	N/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Hispanic	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% 0-18 Years	0.35	0.31	0.31	0.31	0.31	0.30	0.30	0.30	0.30	0.29
% 19-64 Years	0.56	0.58	0.58	0.58	0.58	0.58	0.59	0.59	0.59	0.59
% 65 Years & Over	0.09	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
% Male	0.49	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.49	0.49
% Female	0.51	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.51	0.51
Median Age Of Population (Years)	26.57	30.73	32.19	32.57	32.94	33.27	33.63	33.99	34.20	34.36
Total Employment (Thousands)	296.35	302.47	337.76	351.67	367.11	378.55	373.74	377.47	381.65	386.15
% Farm	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.11	0.08	0.06	0.06	0.06	0.07	0.06	0.06	0.06	0.06
% Construction	0.09	0.06	0.07	0.07	0.08	0.08	0.08	0.08	0.07	0.07
% Manufacturing	0.10	0.11	0.11	0.10	0.10	0.09	0.09	0.09	0.09	0.09
% Transport, Comm. & Public Util	0.06	0.06	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06
% Wholesale Trade	0.06	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.04
% Retail Trade	0.16	0.17	0.18	0.17	0.17	0.17	0.18	0.18	0.18	0.18
% Finance, Ins. & Real Estate	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Services	0.19	0.26	0.27	0.28	0.28	0.28	0.29	0.29	0.29	0.29
% Federal Civilian Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Federal Military Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% State and Local Govt	0.12	0.12	0.12	0.12	0.11	0.11	0.12	0.12	0.12	0.12
Total Earnings (Millions 1996 \$)	\$8,214.29	\$7,495.65	\$8,443.45	\$8,963.96	\$9,633.15	\$10,112.15	\$9,778.80	\$10,147.41	\$10,348.52	\$10,559.02
% Farm	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Agricultural Services	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01
% Mining	0.16	0.13	0.11	0.11	0.12	0.12	0.11	0.12	0.13	0.13
% Construction	0.12	0.06	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08
% Manufacturing	0.15	0.16	0.16	0.16	0.15	0.15	0.14	0.14	0.14	0.14
% Transport, Comm. & Public Util	0.08	0.08	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08
% Wholesale Trade	0.07	0.06	0.05	0.05	0.05	0.06	0.05	0.05	0.05	0.05
% Retail Trade	0.10	0.09	0.10	0.09	0.09	0.09	0.10	0.09	0.09	0.09
% Finance, Ins. & Real Estate	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03
% Services	0.17	0.24	0.24	0.24	0.24	0.24	0.25	0.25	0.25	0.25
% Federal Civilian Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Federal Military Govt	0.00	0.01	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.00
% State and Local Govt	0.10	0.13	0.13	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Personal Income (Millions 1996 \$)	\$10,124.47	\$10,678.76	\$12,386.27	\$12,945.57	\$13,710.27	\$14,407.78	\$14,198.40	\$14,619.49	\$14,898.08	\$15,187.25
Income Per Capita (1996 \$)	\$16,244	\$16,664	\$18,312	\$18,950	\$19,852	\$20,676	\$20,269	\$20,675	\$20,909	\$21,152
W&P Wealth Index (U.S. = 100)	85.98	70.86	72.58	73.31	74.66	74.75	72.05	72.33	72.26	72.24
Number Of Households (Thousands)	204.35	226.55	242.89	247.88	252.15	256.04	257.86	261.29	263.93	266.59
Persons Per Household (People)	3.07	2.84	2.79	2.76	2.74	2.72	2.71	2.70	2.69	2.68
Retail Sales Per Household (1996 \$)	\$21,516.00	\$16,089.38	\$18,025.63	\$18,475.38	\$18,706.63	\$19,120.25	\$20,249.63	\$20,789.13	\$20,931.13	\$21,052.88
Mean Household Income (1996 \$)	\$46,515.63	\$43,569.38	\$46,827.75	\$47,860.63	\$49,965.38	\$51,657.13	\$50,282.75	\$50,855.63	\$51,305.50	\$51,772.38
Households With Money Income (Thousands)	204.35	226.55	242.89	247.88	252.15	256.04	257.86	261.29	263.93	266.59
% Less Than \$10,000 (1990 \$)	N/A	0.27	0.24	0.23	0.22	0.22	0.22	0.21	0.20	0.20
% \$10,000 to 19,999	N/A	0.21	0.19	0.19	0.18	0.18	0.18	0.17	0.17	0.16
% \$20,000 to 29,999	N/A	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.16
% \$30,000 to 39,999	N/A	0.13	0.14	0.15	0.15	0.16	0.16	0.16	0.16	0.17
% \$40,000 to 49,999	N/A	0.09	0.10	0.10	0.11	0.11	0.11	0.11	0.12	0.12
% \$50,000 to 59,999	N/A	0.05	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07
% \$60,000 to 74,999	N/A	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% \$75,000 to 99,999	N/A	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% \$100,000 to 124,999	N/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% \$125,000 to 149,999	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% \$150,000 or More	N/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total Retail Sales (Millions 1996 \$)	\$5,189.64	\$4,495.56	\$5,528.81	\$5,815.85	\$6,021.94	\$6,251.60	\$6,671.96	\$6,946.83	\$7,073.69	\$7,195.50

Table 3-22. Demographic and Employment Baseline Projections for Coastal Subarea LA-1 (continued).

Coastal Subarea LA-1	2003	2004	2005	2010	2015	2020	2025	2030	2035	2040
Total Population (Thousands)	723.62	729.10	734.91	763.59	794.51	827.01	861.32	897.07	934.29	973.06
% White	0.71	0.71	0.71	0.70	0.69	0.68	0.67	0.66	0.65	0.65
% Black	0.26	0.26	0.27	0.27	0.28	0.28	0.29	0.30	0.30	0.31
% Other	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.03	0.03
% Hispanic	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% 0-18 Years	0.29	0.29	0.28	0.27	0.27	0.27	0.27	0.27	0.27	0.27
% 19-64 Years	0.60	0.60	0.60	0.60	0.59	0.58	0.56	0.53	0.51	0.50
% 65 Years & Over	0.12	0.12	0.12	0.12	0.13	0.15	0.17	0.20	0.23	0.26
% Male	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49
% Female	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51
Median Age Of Population (Years)	34.51	34.67	34.78	35.04	35.53	36.43	37.18	37.94	38.72	39.52
Total Employment (Thousands)	390.98	395.95	401.12	428.46	457.17	486.90	517.67	550.38	585.17	622.15
% Farm	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
% Construction	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06
% Manufacturing	0.09	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.07	0.07
% Transport, Comm. & Public Util	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05
% Wholesale Trade	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
% Retail Trade	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.16
% Finance, Ins. & Real Estate	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
% Services	0.30	0.30	0.30	0.31	0.32	0.33	0.34	0.35	0.36	0.37
% Federal Civilian Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Federal Military Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% State and Local Govt	0.12	0.12	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.11
Total Earnings (Millions 1996 \$)	\$10,780.11	\$11,005.67	\$11,238.21	\$12,474.12	\$13,807.69	\$15,235.81	\$16,764.12	\$18,445.73	\$20,296.02	\$22,331.92
% Farm	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.13	0.13	0.13	0.13	0.13	0.12	0.12	0.12	0.11	0.11
% Construction	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06
% Manufacturing	0.14	0.14	0.14	0.14	0.13	0.13	0.13	0.13	0.12	0.12
% Transport, Comm. & Public Util	0.08	0.08	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.06
% Wholesale Trade	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04
% Retail Trade	0.09	0.09	0.09	0.09	0.09	0.08	0.08	0.08	0.08	0.08
% Finance, Ins. & Real Estate	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% Services	0.26	0.26	0.26	0.28	0.29	0.30	0.32	0.33	0.35	0.36
% Federal Civilian Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Federal Military Govt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% State and Local Govt	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.11
Personal Income (Millions 1996 \$)	\$15,488.20	\$15,795.21	\$16,110.83	\$17,790.80	\$19,622.97	\$21,613.55	\$23,779.14	\$26,161.71	\$28,783.00	\$31,666.94
Income Per Capita (1996 \$)	\$21,404	\$21,664	\$21,922	\$23,299	\$24,698	\$26,135	\$27,608	\$29,164	\$30,807	\$32,544
W&P Wealth Index (U.S. = 100)	72.25	72.28	72.30	72.45	72.53	72.51	72.43	72.35	72.27	72.19
Number Of Households (Thousands)	269.27	271.88	274.58	287.20	298.93	308.70	316.81	325.13	333.66	342.42
Persons Per Household (People)	2.68	2.67	2.66	2.64	2.64	2.66	2.69	2.73	2.76	2.80
Retail Sales Per Household (1996 \$)	\$21,172.38	\$21,289.38	\$21,402.38	\$22,061.38	\$22,851.00	\$23,862.50	\$25,095.88	\$26,393.00	\$27,757.17	\$29,191.85
Mean Household Income (1996 \$)	\$52,262.75	\$52,775.88	\$53,288.88	\$56,206.63	\$59,529.50	\$63,446.63	\$67,918.63	\$72,705.83	\$77,830.46	\$83,316.30
Households With Money Income (Thousands)	269.27	271.88	274.58	287.20	298.93	308.70	316.81	325.13	333.66	342.42
% Less Than \$10,000 (1990 \$)	0.20	0.19	0.19	0.17	0.15	0.13	0.11	0.09	0.07	0.06
% \$10,000 to 19,999	0.16	0.16	0.15	0.14	0.12	0.11	0.09	0.07	0.06	0.05
% \$20,000 to 29,999	0.16	0.16	0.16	0.15	0.13	0.12	0.10	0.08	0.06	0.05
% \$30,000 to 39,999	0.17	0.17	0.17	0.18	0.19	0.18	0.16	0.14	0.12	0.11
% \$40,000 to 49,999	0.12	0.12	0.13	0.14	0.16	0.18	0.20	0.23	0.26	0.29
% \$50,000 to 59,999	0.07	0.07	0.07	0.08	0.09	0.10	0.13	0.16	0.19	0.24
% \$60,000 to 74,999	0.06	0.06	0.06	0.06	0.07	0.08	0.10	0.12	0.15	0.19
% \$75,000 to 99,999	0.03	0.03	0.03	0.04	0.04	0.05	0.06	0.07	0.09	0.11
% \$100,000 to 124,999	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.03	0.04	0.04
% \$125,000 to 149,999	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02
% \$150,000 or More	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.03	0.04	0.04
Total Retail Sales (Millions 1996 \$)	\$7,317.70	\$7,438.14	\$7,560.66	\$8,195.47	\$8,878.62	\$9,616.71	\$10,418.89	\$11,287.99	\$12,229.59	\$13,249.73

N/A means that information is not available.

Source: Woods &amp; Poole Economics Inc., 2002.

Table 3-23

## Demographic and Employment Baseline Projections for Coastal Subarea LA-2

Coastal Subarea LA-2	1980	1990	1995	1996	1997	1998	1999	2000	2001	2002
Total Population (Thousands)	875.28	909.61	962.68	969.93	980.18	990.82	999.16	1,009.54	1,020.72	1,032.14
% White	N/A	0.70	0.68	0.68	0.68	0.67	0.67	0.67	0.67	0.67
% Black	N/A	0.27	0.28	0.29	0.29	0.29	0.29	0.29	0.29	0.29
% Other	N/A	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% Hispanic	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% 0-18 Years	0.35	0.31	0.31	0.30	0.30	0.30	0.30	0.29	0.29	0.29
% 19-64 Years	0.58	0.60	0.60	0.60	0.60	0.60	0.60	0.61	0.61	0.61
% 65 Years & Over	0.07	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
% Male	0.49	0.48	0.48	0.48	0.48	0.48	0.48	0.49	0.49	0.49
% Female	0.51	0.52	0.52	0.52	0.52	0.52	0.52	0.51	0.51	0.51
Median Age Of Population (Years)	25.63	30.09	31.43	31.80	32.14	32.48	32.86	33.26	33.52	33.77
Total Employment (Thousands)	417.89	445.36	508.39	523.94	537.73	557.41	563.31	571.95	580.15	588.08
% Farm	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.05	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% Construction	0.11	0.09	0.09	0.10	0.09	0.10	0.10	0.10	0.10	0.10
% Manufacturing	0.12	0.09	0.09	0.08	0.09	0.09	0.08	0.08	0.08	0.08
% Transport, Comm. & Public Util	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
% Wholesale Trade	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
% Retail Trade	0.15	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
% Finance, Ins. & Real Estate	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
% Services	0.18	0.24	0.26	0.26	0.26	0.26	0.26	0.27	0.27	0.27
% Federal Civilian Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Federal Military Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% State and Local Govt	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16
Total Earnings (Millions 1996 \$)	\$12,127.94	\$11,710.72	\$13,458.19	\$13,893.76	\$14,477.00	\$15,518.30	\$15,570.81	\$16,047.64	\$16,410.67	\$16,769.87
% Farm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Agricultural Services	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01
% Mining	0.08	0.04	0.03	0.03	0.04	0.04	0.03	0.04	0.04	0.04
% Construction	0.13	0.11	0.10	0.11	0.11	0.12	0.12	0.11	0.11	0.11
% Manufacturing	0.19	0.17	0.16	0.16	0.16	0.15	0.15	0.15	0.15	0.14
% Transport, Comm. & Public Util	0.08	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08
% Wholesale Trade	0.06	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
% Retail Trade	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
% Finance, Ins. & Real Estate	0.04	0.04	0.05	0.06	0.06	0.06	0.05	0.05	0.05	0.05
% Services	0.15	0.22	0.23	0.23	0.23	0.23	0.23	0.23	0.24	0.24
% Federal Civilian Govt	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Federal Military Govt	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
% State and Local Govt	0.15	0.17	0.17	0.17	0.17	0.16	0.17	0.17	0.17	0.17
Personal Income (Millions 1996 \$)	\$14,828.50	\$16,171.02	\$18,968.66	\$19,483.46	\$20,162.82	\$21,448.71	\$21,580.32	\$22,134.50	\$22,663.52	\$23,190.61
Income Per Capita (1996 \$)	\$16,941	\$17,778	\$19,704	\$20,087	\$20,571	\$21,648	\$21,599	\$21,925	\$22,203	\$22,469
W&P Wealth Index (U.S. = 100)	86.05	72.03	76.30	76.60	77.48	78.10	76.46	76.67	76.67	76.67
Number Of Households (Thousands)	282.84	316.35	340.10	345.94	351.45	357.16	360.48	367.47	372.66	377.89
Persons Per Household (People)	3.16	2.91	2.86	2.82	2.80	2.78	2.77	2.75	2.74	2.73
Retail Sales Per Household (1996 \$)	\$21,390.40	\$17,789.80	\$19,701.90	\$20,146.90	\$20,347.60	\$20,803.00	\$22,031.60	\$22,551.40	\$22,690.30	\$22,806.70
Mean Household Income (1996 \$)	\$48,960.00	\$46,775.90	\$51,956.70	\$52,643.10	\$54,390.70	\$56,597.20	\$56,211.50	\$56,592.60	\$57,117.20	\$57,621.00
Households With Money Income (Thousands)	282.84	316.35	340.10	345.94	351.45	357.16	360.48	367.47	372.66	377.89
% Less Than \$10,000 (1990 \$)	N/A	0.23	0.20	0.20	0.19	0.18	0.18	0.18	0.17	0.17
% \$10,000 to 19,999	N/A	0.20	0.18	0.18	0.17	0.16	0.16	0.16	0.15	0.15
% \$20,000 to 29,999	N/A	0.17	0.17	0.16	0.16	0.16	0.15	0.15	0.15	0.15
% \$30,000 to 39,999	N/A	0.14	0.15	0.15	0.16	0.17	0.17	0.17	0.17	0.17
% \$40,000 to 49,999	N/A	0.10	0.11	0.11	0.11	0.12	0.12	0.13	0.13	0.13
% \$50,000 to 59,999	N/A	0.06	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08
% \$60,000 to 74,999	N/A	0.05	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07
% \$75,000 to 99,999	N/A	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04
% \$100,000 to 124,999	N/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% \$125,000 to 149,999	N/A	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01
% \$150,000 or More	N/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total Retail Sales (Millions 1996 \$)	\$7,127.24	\$6,821.17	\$8,149.28	\$8,519.27	\$8,781.89	\$9,119.37	\$9,750.78	\$10,147.26	\$10,355.09	\$10,555.79

Table 3-23. Demographic and Employment Baseline Projections for Coastal Subarea LA-2 (continued).

Coastal Subarea LA-2	2003	2004	2005	2010	2015	2020	2025	2030	2035	2040
Total Population (Thousands)	1,043.70	1,054.97	1,066.73	1,125.14	1,186.60	1,250.28	1,316.73	1,386.72	1,460.42	1,538.04
% White	0.66	0.66	0.66	0.64	0.63	0.62	0.61	0.59	0.58	0.57
% Black	0.30	0.30	0.30	0.31	0.32	0.33	0.34	0.35	0.36	0.37
% Other	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.04	0.04	0.04
% Hispanic	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03
% 0-18 Years	0.28	0.28	0.28	0.27	0.27	0.27	0.27	0.27	0.27	0.27
% 19-64 Years	0.62	0.62	0.62	0.62	0.61	0.59	0.57	0.55	0.53	0.52
% 65 Years & Over	0.10	0.10	0.10	0.11	0.12	0.14	0.16	0.18	0.21	0.24
% Male	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49
% Female	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51
Median Age Of Population (Years)	33.99	34.18	34.37	34.90	35.50	36.55	37.25	37.95	38.67	39.40
Total Employment (Thousands)	596.10	604.02	612.06	653.79	697.71	743.91	792.71	844.72	900.15	959.21
% Farm	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% Construction	0.10	0.09	0.09	0.09	0.09	0.08	0.08	0.08	0.07	0.07
% Manufacturing	0.08	0.08	0.08	0.07	0.07	0.07	0.07	0.06	0.06	0.06
% Transport, Comm. & Public Util	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05
% Wholesale Trade	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
% Retail Trade	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.15	0.15
% Finance, Ins. & Real Estate	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05
% Services	0.28	0.28	0.28	0.30	0.32	0.33	0.34	0.36	0.37	0.39
% Federal Civilian Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
% Federal Military Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% State and Local Govt	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.15	0.15	0.15
Total Earnings (Millions 1996 \$)	\$17,135.35	\$17,501.08	\$17,874.86	\$19,855.50	\$22,021.24	\$24,387.15	\$26,976.57	\$29,840.94	\$33,009.44	\$36,514.38
% Farm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03
% Construction	0.11	0.11	0.11	0.10	0.09	0.09	0.09	0.08	0.08	0.07
% Manufacturing	0.14	0.14	0.14	0.14	0.13	0.13	0.12	0.12	0.11	0.11
% Transport, Comm. & Public Util	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06
% Wholesale Trade	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04
% Retail Trade	0.09	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.07	0.07
% Finance, Ins. & Real Estate	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Services	0.25	0.25	0.26	0.28	0.30	0.31	0.33	0.35	0.38	0.40
% Federal Civilian Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Federal Military Govt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% State and Local Govt	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.15	0.15
Personal Income (Millions 1996 \$)	\$23,724.54	\$24,260.93	\$24,807.54	\$27,704.01	\$30,895.69	\$34,417.03	\$38,308.18	\$42,639.25	\$47,459.98	\$52,825.74
Income Per Capita (1996 \$)	\$22,731	\$22,997	\$23,256	\$24,623	\$26,037	\$27,527	\$29,093	\$30,748	\$32,498	\$34,346
W&P Wealth Index (U.S. = 100)	76.67	76.68	76.69	76.69	76.65	76.58	76.49	76.39	76.29	76.20
Number Of Households (Thousands)	383.15	388.32	393.62	418.93	443.03	464.26	483.04	502.57	522.89	544.04
Persons Per Household (People)	2.72	2.72	2.71	2.69	2.68	2.69	2.72	2.75	2.78	2.81
Retail Sales Per Household (1996 \$)	\$22,920.20	\$23,031.40	\$23,138.00	\$23,769.90	\$24,539.10	\$25,535.40	\$26,745.30	\$28,012.53	\$29,339.80	\$30,729.95
Mean Household Income (1996 \$)	\$58,126.60	\$58,641.40	\$59,146.00	\$62,020.40	\$65,346.30	\$69,353.90	\$73,997.60	\$78,952.23	\$84,238.60	\$89,878.93
Households With Money Income (Thousands)	383.15	388.32	393.62	418.93	443.03	464.26	483.04	502.57	522.89	544.04
% Less Than \$10,000 (1990 \$)	0.17	0.16	0.16	0.14	0.13	0.11	0.09	0.07	0.06	0.05
% \$10,000 to \$19,999	0.15	0.15	0.14	0.13	0.12	0.10	0.08	0.07	0.05	0.04
% \$20,000 to \$29,999	0.15	0.14	0.14	0.13	0.11	0.10	0.08	0.06	0.05	0.04
% \$30,000 to \$39,999	0.17	0.18	0.18	0.18	0.17	0.15	0.13	0.11	0.09	0.07
% \$40,000 to \$49,999	0.13	0.14	0.14	0.16	0.17	0.19	0.18	0.18	0.17	0.17
% \$50,000 to \$59,999	0.09	0.09	0.09	0.10	0.11	0.13	0.16	0.20	0.25	0.32
% \$60,000 to \$74,999	0.07	0.07	0.08	0.08	0.09	0.11	0.14	0.17	0.22	0.27
% \$75,000 to \$99,999	0.04	0.04	0.04	0.05	0.05	0.06	0.08	0.10	0.12	0.15
% \$100,000 to \$124,999	0.01	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.04	0.05
% \$125,000 to \$149,999	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02
% \$150,000 or More	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.04
Total Retail Sales (Millions 1996 \$)	\$10,757.31	\$10,956.50	\$11,158.97	\$12,207.51	\$13,333.85	\$14,548.70	\$15,866.81	\$17,304.34	\$18,872.11	\$20,581.91

N/A means that information is not available.  
Source: Woods & Poole Economics Inc., 2002.

Table 3-24

## Demographic and Employment Baseline Projections for Coastal Subarea LA-3

Coastal Subarea LA-3	1980	1990	1995	1996	1997	1998	1999	2000	2001	2002
Total Population (Thousands)	1,307.66	1,284.10	1,324.57	1,325.23	1,327.51	1,330.07	1,332.22	1,337.60	1,343.62	1,350.07
% White	N/A	0.59	0.58	0.57	0.57	0.56	0.56	0.55	0.55	0.55
% Black	N/A	0.34	0.36	0.36	0.36	0.37	0.37	0.38	0.38	0.38
% Other	N/A	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03
% Hispanic	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
% 0-18 Years	0.32	0.29	0.29	0.29	0.29	0.28	0.28	0.28	0.28	0.28
% 19-64 Years	0.59	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.61	0.61
% 65 Years & Over	0.09	0.11	0.11	0.12	0.12	0.11	0.11	0.11	0.11	0.11
% Male	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48
% Female	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52
Median Age Of Population (Years)	26.84	31.07	32.64	33.04	33.39	33.70	34.05	34.48	34.75	34.98
Total Employment (Thousands)	680.30	687.33	733.14	743.12	758.56	769.41	773.92	781.67	787.95	793.66
% Farm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Agricultural Services	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% Construction	0.08	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06
% Manufacturing	0.10	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06
% Transport, Comm. & Public Util	0.09	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06
% Wholesale Trade	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Retail Trade	0.16	0.17	0.17	0.18	0.17	0.17	0.17	0.17	0.17	0.17
% Finance, Ins. & Real Estate	0.07	0.07	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07
% Services	0.23	0.31	0.33	0.33	0.33	0.33	0.34	0.34	0.35	0.35
% Federal Civilian Govt	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% Federal Military Govt	0.01	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
% State and Local Govt	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Total Earnings (Millions 1996 \$)	\$19,932.13	\$19,753.90	\$21,685.44	\$21,773.37	\$22,483.82	\$23,594.30	\$23,602.68	\$24,244.37	\$24,653.71	\$25,048.12
% Farm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Agricultural Services	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
% Mining	0.07	0.06	0.05	0.04	0.05	0.05	0.04	0.05	0.05	0.05
% Construction	0.10	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06
% Manufacturing	0.14	0.11	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
% Transport, Comm. & Public Util	0.12	0.10	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.07
% Wholesale Trade	0.08	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
% Retail Trade	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
% Finance, Ins. & Real Estate	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
% Services	0.19	0.29	0.31	0.32	0.32	0.32	0.33	0.33	0.33	0.33
% Federal Civilian Govt	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
% Federal Military Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% State and Local Govt	0.09	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Personal Income (Millions 1996 \$)	\$23,598.78	\$26,297.88	\$29,691.45	\$29,928.01	\$30,862.57	\$32,199.11	\$32,362.48	\$33,003.83	\$33,603.58	\$34,191.73
Income Per Capita (1996 \$)	\$18,047	\$20,480	\$22,416	\$22,583	\$23,248	\$24,209	\$24,292	\$24,674	\$25,010	\$25,326
W&P Wealth Index (U.S. = 100)	94.37	83.05	85.16	84.28	85.25	84.86	83.56	83.90	83.89	83.86
Number Of Households (Thousands)	456.13	471.18	490.73	494.79	497.78	500.93	501.59	506.46	510.08	513.76
Persons Per Household (People)	3.14	2.90	2.85	2.82	2.80	2.78	2.78	2.77	2.76	2.75
Retail Sales Per Household (1996 \$)	\$19,000.88	\$17,619.75	\$17,675.50	\$17,731.25	\$17,582.88	\$17,981.75	\$19,054.88	\$19,544.38	\$19,666.63	\$19,768.25
Mean Household Income (1996 \$)	\$54,068.63	\$54,525.38	\$58,190.13	\$58,059.25	\$60,038.63	\$61,799.13	\$61,893.88	\$62,633.38	\$63,215.88	\$63,766.38
Households With Money Income (Thousands)	456.13	471.18	490.73	494.79	497.78	500.93	501.59	506.46	510.08	513.76
% Less Than \$10,000 (1990 \$)	N/A	0.22	0.20	0.20	0.19	0.18	0.18	0.18	0.17	0.17
% \$10,000 to 19,999	N/A	0.20	0.18	0.17	0.17	0.16	0.16	0.16	0.15	0.15
% \$20,000 to 29,999	N/A	0.17	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.15
% \$30,000 to 39,999	N/A	0.13	0.14	0.15	0.15	0.15	0.15	0.15	0.15	0.16
% \$40,000 to 49,999	N/A	0.10	0.11	0.11	0.11	0.12	0.12	0.12	0.13	0.13
% \$50,000 to 59,999	N/A	0.06	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.09
% \$60,000 to 74,999	N/A	0.05	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07
% \$75,000 to 99,999	N/A	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05
% \$100,000 to 124,999	N/A	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% \$125,000 to 149,999	N/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% \$150,000 or More	N/A	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02
Total Retail Sales (Millions 1996 \$)	\$10,336.47	\$10,140.10	\$11,171.33	\$11,462.79	\$11,593.33	\$11,945.29	\$12,694.07	\$13,134.12	\$13,332.52	\$13,520.74

Table 3-24. Demographic and Employment Baseline Projections for Coastal Subarea LA-3 (continued).

Coastal Subarea LA-3	2003	2004	2005	2010	2015	2020	2025	2030	2035	2040
Total Population (Thousands)	1,356.48	1,362.63	1,369.47	1,403.21	1,440.99	1,481.58	1,525.25	1,570.22	1,616.51	1,664.17
% White	0.55	0.54	0.54	0.53	0.51	0.50	0.49	0.48	0.47	0.46
% Black	0.38	0.38	0.39	0.40	0.41	0.42	0.43	0.43	0.44	0.45
% Other	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04
% Hispanic	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% 0-18 Years	0.28	0.27	0.27	0.26	0.26	0.26	0.26	0.26	0.26	0.26
% 19-64 Years	0.61	0.61	0.61	0.62	0.60	0.58	0.56	0.54	0.52	0.50
% 65 Years & Over	0.11	0.11	0.11	0.12	0.14	0.16	0.18	0.20	0.23	0.25
% Male	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48
% Female	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52
Median Age Of Population (Years)	35.19	35.38	35.51	35.67	35.83	36.50	37.25	38.01	38.79	39.59
Total Employment (Thousands)	799.27	804.68	810.28	841.92	880.71	927.09	981.53	1,039.16	1,100.18	1,164.78
% Farm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% Construction	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05
% Manufacturing	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05
% Transport, Comm. & Public Util	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.04	0.04
% Wholesale Trade	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Retail Trade	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.15	0.15	0.15
% Finance, Ins. & Real Estate	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05
% Services	0.35	0.35	0.35	0.36	0.38	0.39	0.40	0.41	0.43	0.44
% Federal Civilian Govt	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% Federal Military Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% State and Local Govt	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.13	0.13	0.13
Total Earnings (Millions 1996 \$)	\$25,441.73	\$25,830.48	\$26,229.26	\$28,416.02	\$30,985.60	\$33,999.59	\$37,524.96	\$41,415.87	\$45,710.23	\$50,449.86
% Farm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04
% Construction	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04
% Manufacturing	0.10	0.10	0.10	0.09	0.09	0.09	0.08	0.08	0.08	0.07
% Transport, Comm. & Public Util	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.05	0.05	0.05
% Wholesale Trade	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05
% Retail Trade	0.09	0.09	0.09	0.09	0.08	0.08	0.08	0.07	0.07	0.07
% Finance, Ins. & Real Estate	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05
% Services	0.34	0.34	0.34	0.36	0.38	0.40	0.42	0.44	0.46	0.48
% Federal Civilian Govt	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03
% Federal Military Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% State and Local Govt	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.11
Personal Income (Millions 1996 \$)	\$34,781.59	\$35,369.22	\$35,969.85	\$39,215.30	\$42,932.29	\$47,189.20	\$52,059.37	\$57,432.16	\$63,359.46	\$69,898.49
Income Per Capita (1996 \$)	\$25,641	\$25,957	\$26,265	\$27,947	\$29,794	\$31,851	\$34,132	\$36,576	\$39,195	\$42,002
W&P Wealth Index (U.S. = 100)	83.86	83.85	83.84	83.74	83.69	83.71	83.82	83.94	84.06	84.18
Number Of Households (Thousands)	517.47	521.04	524.80	541.82	557.19	569.05	578.15	587.40	596.79	606.33
Persons Per Household (People)	2.74	2.73	2.73	2.70	2.69	2.71	2.74	2.77	2.80	2.84
Retail Sales Per Household (1996 \$)	\$19,867.50	\$19,964.50	\$20,057.63	\$20,612.25	\$21,288.88	\$22,165.88	\$23,232.25	\$24,349.93	\$25,521.37	\$26,749.18
Mean Household Income (1996 \$)	\$64,307.25	\$64,851.63	\$65,381.25	\$68,442.13	\$72,096.38	\$76,639.63	\$82,054.38	\$87,851.69	\$94,058.59	\$100,704.03
Households With Money Income (Thousands)	517.47	521.04	524.80	541.82	557.19	569.05	578.15	587.40	596.79	606.33
% Less Than \$10,000 (1990 \$)	0.16	0.16	0.16	0.14	0.12	0.10	0.08	0.07	0.05	0.04
% \$10,000 to 19,999	0.15	0.14	0.14	0.13	0.11	0.09	0.08	0.06	0.05	0.04
% \$20,000 to 29,999	0.15	0.15	0.14	0.13	0.11	0.10	0.08	0.06	0.05	0.04
% \$30,000 to 39,999	0.16	0.16	0.16	0.15	0.14	0.13	0.11	0.09	0.08	0.06
% \$40,000 to 49,999	0.13	0.13	0.14	0.15	0.16	0.16	0.15	0.14	0.13	0.12
% \$50,000 to 59,999	0.09	0.09	0.09	0.10	0.12	0.15	0.17	0.19	0.21	0.24
% \$60,000 to 74,999	0.08	0.08	0.08	0.09	0.10	0.13	0.16	0.20	0.25	0.31
% \$75,000 to 99,999	0.05	0.05	0.05	0.06	0.07	0.08	0.10	0.12	0.15	0.19
% \$100,000 to 124,999	0.02	0.02	0.02	0.02	0.02	0.03	0.04	0.05	0.06	0.07
% \$125,000 to 149,999	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03
% \$150,000 or More	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.04	0.05	0.06
Total Retail Sales (Millions 1996 \$)	\$13,709.00	\$13,893.35	\$14,081.01	\$15,051.14	\$16,094.46	\$17,221.27	\$18,446.07	\$19,757.99	\$21,163.20	\$22,668.36

N/A means that information is not available.

Source: Woods &amp; Poole Economics Inc., 2002.

Table 3-25

## Demographic and Employment Baseline Projections for Mississippi

Mississippi	1980	1990	1995	1996	1997	1998	1999	2000	2001	2002
Total Population (Thousands)	2,524.03	2,577.43	2,724.25	2,745.20	2,772.47	2,797.74	2,818.03	2,849.10	2,870.85	2,893.59
% White	N/A	0.63	0.62	0.62	0.62	0.62	0.61	0.61	0.61	0.61
% Black	N/A	0.35	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
% Other	N/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Hispanic	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% 0-18 Years	0.34	0.30	0.30	0.30	0.30	0.29	0.29	0.29	0.29	0.28
% 19-64 Years	0.54	0.57	0.58	0.58	0.58	0.58	0.59	0.59	0.59	0.60
% 65 Years & Over	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
% Male	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48
% Female	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52
Median Age Of Population (Years)	27.69	31.42	32.53	32.80	33.01	33.28	33.56	33.81	33.97	34.12
Total Employment (Thousands)	1,114.28	1,210.14	1,378.66	1,403.81	1,431.70	1,464.80	1,493.44	1,512.02	1,529.72	1,546.78
% Farm	0.08	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Construction	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06
% Manufacturing	0.21	0.21	0.19	0.18	0.17	0.17	0.17	0.17	0.16	0.16
% Transport, Comm. & Public Util	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05
% Wholesale Trade	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% Retail Trade	0.14	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
% Finance, Ins. & Real Estate	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Services	0.17	0.20	0.23	0.24	0.25	0.25	0.25	0.25	0.25	0.26
% Federal Civilian Govt	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% Federal Military Govt	0.04	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02
% State and Local Govt	0.14	0.14	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.14
Total Earnings (Millions 1996 \$)	\$23,197.81	\$26,567.52	\$31,836.23	\$32,752.36	\$33,715.67	\$35,603.39	\$36,509.42	\$37,169.03	\$37,946.34	\$38,716.12
% Farm	0.02	0.01	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Construction	0.07	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06
% Manufacturing	0.25	0.25	0.23	0.21	0.21	0.20	0.20	0.20	0.20	0.20
% Transport, Comm. & Public Util	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
% Wholesale Trade	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Retail Trade	0.11	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
% Finance, Ins. & Real Estate	0.04	0.04	0.04	0.04	0.04	0.05	0.04	0.05	0.05	0.05
% Services	0.15	0.18	0.22	0.22	0.23	0.23	0.23	0.24	0.24	0.24
% Federal Civilian Govt	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
% Federal Military Govt	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% State and Local Govt	0.13	0.15	0.14	0.14	0.15	0.15	0.15	0.15	0.15	0.15
Personal Income (Millions 1996 \$)	\$32,363.81	\$39,621.92	\$47,234.33	\$48,897.97	\$50,614.15	\$53,360.25	\$54,690.82	\$55,806.85	\$56,964.07	\$58,118.88
Income Per Capita (1996 \$)	\$12,822	\$15,373	\$17,338	\$17,812	\$18,256	\$19,073	\$19,407	\$19,588	\$19,842	\$20,085
W&P Wealth Index (U.S. = 100)	71.16	69.25	73.76	73.94	73.81	74.21	73.93	73.84	73.87	73.91
Number Of Households (Thousands)	831.37	914.50	980.37	997.62	1,011.95	1,025.98	1,035.96	1,049.82	1,060.75	1,071.81
Persons Per Household (People)	2.96	2.74	2.69	2.67	2.65	2.64	2.63	2.62	2.61	2.61
Retail Sales Per Household (1996 \$)	\$17,740.00	\$17,470.00	\$19,357.00	\$19,931.00	\$20,283.00	\$20,761.00	\$21,978.00	\$22,602.00	\$22,773.00	\$22,922.00
Mean Household Income (1996 \$)	\$38,117.00	\$42,357.00	\$46,994.00	\$47,792.00	\$48,734.00	\$50,657.00	\$51,403.00	\$51,725.00	\$52,242.00	\$52,739.00
Households With Money Income (Thousands)	831.37	914.50	980.37	997.62	1,011.95	1,025.98	1,035.96	1,049.82	1,060.75	1,071.81
% Less Than \$10,000 (1990 \$)	N/A	0.27	0.24	0.23	0.22	0.21	0.20	0.20	0.19	0.19
% \$10,000 to 19,999	N/A	0.22	0.20	0.19	0.19	0.18	0.17	0.17	0.17	0.16
% \$20,000 to 29,999	N/A	0.17	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
% \$30,000 to 39,999	N/A	0.12	0.14	0.15	0.15	0.16	0.16	0.16	0.16	0.17
% \$40,000 to 49,999	N/A	0.08	0.10	0.10	0.10	0.11	0.11	0.11	0.12	0.12
% \$50,000 to 59,999	N/A	0.05	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07
% \$60,000 to 74,999	N/A	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.06
% \$75,000 to 99,999	N/A	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% \$100,000 to 124,999	N/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% \$125,000 to 149,999	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% \$150,000 or More	N/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total Retail Sales (Millions 1996 \$)	\$14,748.13	\$15,976.53	\$18,976.69	\$19,883.30	\$20,525.07	\$21,300.06	\$22,768.16	\$23,728.26	\$24,156.51	\$24,567.43

Table 3-25. Demographic and Employment Baseline Projections for Mississippi (continued).

Mississippi	2003	2004	2005	2010	2015	2020	2025	2030	2035	2040
Total Population (Thousands)	2,916.94	2,939.71	2,963.90	3,082.45	3,209.60	3,343.14	3,483.70	3,630.17	3,782.79	3,941.84
% White	0.61	0.61	0.60	0.59	0.59	0.58	0.57	0.56	0.55	0.55
% Black	0.37	0.37	0.37	0.37	0.38	0.38	0.39	0.39	0.40	0.40
% Other	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
% Hispanic	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03
% 0-18 Years	0.28	0.28	0.28	0.27	0.27	0.27	0.27	0.27	0.27	0.27
% 19-64 Years	0.60	0.60	0.60	0.60	0.59	0.58	0.56	0.54	0.52	0.50
% 65 Years & Over	0.12	0.12	0.12	0.13	0.14	0.15	0.17	0.19	0.21	0.23
% Male	0.48	0.48	0.48	0.49	0.49	0.49	0.49	0.49	0.49	0.49
% Female	0.52	0.52	0.52	0.51	0.51	0.51	0.51	0.51	0.51	0.51
Median Age Of Population (Years)	34.27	34.43	34.61	35.26	35.93	36.82	37.22	37.62	38.02	38.43
Total Employment (Thousands)	1,564.04	1,581.13	1,598.53	1,690.38	1,790.39	1,899.52	2,019.00	2,145.99	2,280.96	2,424.43
% Farm	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
% Construction	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05
% Manufacturing	0.16	0.16	0.16	0.15	0.15	0.14	0.13	0.13	0.12	0.12
% Transport, Comm. & Public Util	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04
% Wholesale Trade	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% Retail Trade	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
% Finance, Ins. & Real Estate	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Services	0.26	0.26	0.27	0.28	0.30	0.31	0.32	0.34	0.36	0.37
% Federal Civilian Govt	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
% Federal Military Govt	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% State and Local Govt	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
Total Earnings (Millions 1996 \$)	\$39,498.68	\$40,281.71	\$41,082.47	\$45,354.47	\$50,108.09	\$55,411.79	\$61,350.74	\$67,926.22	\$75,206.44	\$83,266.95
% Farm	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Construction	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05
% Manufacturing	0.20	0.20	0.20	0.19	0.18	0.18	0.17	0.16	0.16	0.15
% Transport, Comm. & Public Util	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05
% Wholesale Trade	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03
% Retail Trade	0.10	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.08
% Finance, Ins. & Real Estate	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.04
% Services	0.25	0.25	0.25	0.27	0.29	0.31	0.33	0.35	0.37	0.39
% Federal Civilian Govt	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% Federal Military Govt	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02
% State and Local Govt	0.15	0.15	0.15	0.15	0.14	0.14	0.14	0.14	0.14	0.14
Personal Income (Millions 1996 \$)	\$59,294.82	\$60,479.39	\$61,690.47	\$68,150.28	\$75,333.38	\$83,333.86	\$92,268.05	\$102,160.07	\$113,112.62	\$125,239.38
Income Per Capita (1996 \$)	\$20,328	\$20,573	\$20,814	\$22,109	\$23,471	\$24,927	\$26,486	\$28,143	\$29,903	\$31,773
W&P Wealth Index (U.S. = 100)	73.94	73.98	74.02	74.26	74.52	74.79	75.10	75.41	75.72	76.04
Number Of Households (Thousands)	1,082.92	1,093.75	1,104.97	1,157.58	1,206.78	1,247.85	1,281.54	1,316.14	1,351.68	1,388.17
Persons Per Household (People)	2.60	2.59	2.59	2.57	2.56	2.58	2.60	2.62	2.64	2.66
Retail Sales Per Household (1996 \$)	\$23,067.00	\$23,210.00	\$23,348.00	\$24,136.00	\$25,060.00	\$26,230.00	\$27,650.00	\$29,146.87	\$30,724.78	\$32,388.11
Mean Household Income (1996 \$)	\$53,241.00	\$53,754.00	\$54,262.00	\$57,165.00	\$60,568.00	\$64,707.00	\$69,569.00	\$74,796.32	\$80,416.42	\$86,458.81
Households With Money Income (Thousands)	1,082.92	1,093.75	1,104.97	1,157.58	1,206.78	1,247.85	1,281.54	1,316.14	1,351.68	1,388.17
% Less Than \$10,000 (1990 \$)	0.19	0.18	0.18	0.15	0.13	0.11	0.09	0.08	0.06	0.05
% \$10,000 to 19,999	0.16	0.16	0.15	0.13	0.12	0.10	0.08	0.07	0.05	0.04
% \$20,000 to 29,999	0.18	0.17	0.17	0.16	0.14	0.12	0.10	0.08	0.07	0.05
% \$30,000 to 39,999	0.17	0.17	0.17	0.18	0.19	0.18	0.16	0.14	0.13	0.11
% \$40,000 to 49,999	0.12	0.13	0.13	0.14	0.16	0.17	0.18	0.20	0.21	0.23
% \$50,000 to 59,999	0.07	0.08	0.08	0.09	0.10	0.12	0.14	0.17	0.20	0.23
% \$60,000 to 74,999	0.06	0.06	0.06	0.07	0.08	0.10	0.12	0.15	0.19	0.23
% \$75,000 to 99,999	0.03	0.03	0.03	0.04	0.04	0.05	0.07	0.08	0.11	0.13
% \$100,000 to 124,999	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.04
% \$125,000 to 149,999	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.02
% \$150,000 or More	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.04
Total Retail Sales (Millions 1996 \$)	\$24,979.61	\$25,385.69	\$25,798.89	\$27,939.19	\$30,242.38	\$32,730.70	\$35,435.09	\$38,362.92	\$41,532.66	\$44,964.31

N/A means that information is not available.  
Source: Woods & Poole Economics Inc., 2002.



Table 3-26

## Demographic and Employment Baseline Projections for Alabama

Alabama	1980	1990	1995	1996	1997	1998	1999	2000	2001	2002
Total Population (Thousands)	3,899.67	4,048.51	4,286.99	4,315.88	4,350.78	4,387.18	4,409.97	4,451.49	4,487.36	4,524.40
% White	N/A	0.73	0.72	0.72	0.72	0.72	0.71	0.71	0.71	0.71
% Black	N/A	0.25	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
% Other	N/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Hispanic	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02
% 0-18 Years	0.32	0.28	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.26
% 19-64 Years	0.57	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.61
% 65 Years & Over	0.11	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
% Male	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48
% Female	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52
Median Age Of Population (Years)	29.32	33.14	34.48	34.80	35.00	35.30	35.59	35.85	36.08	36.27
Total Employment (Thousands)	1,736.00	2,061.91	2,262.68	2,297.70	2,346.01	2,388.42	2,409.61	2,441.44	2,470.83	2,498.52
% Farm	0.05	0.03	0.03	0.02	0.03	0.02	0.02	0.02	0.02	0.02
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
% Construction	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07
% Manufacturing	0.22	0.19	0.18	0.17	0.17	0.16	0.16	0.16	0.15	0.15
% Transport, Comm. & Public Util	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Wholesale Trade	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
% Retail Trade	0.14	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
% Finance, Ins. & Real Estate	0.06	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06
% Services	0.17	0.22	0.24	0.25	0.25	0.26	0.26	0.26	0.26	0.26
% Federal Civilian Govt	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% Federal Military Govt	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% State and Local Govt	0.13	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Total Earnings (Millions 1996 \$)	\$41,781.35	\$52,915.01	\$59,568.02	\$60,577.04	\$61,980.67	\$64,472.90	\$66,465.85	\$67,681.47	\$69,070.94	\$70,430.50
% Farm	0.01	0.02	0.01	0.01	0.01	0.02	0.02	0.01	0.01	0.01
% Agricultural Services	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Construction	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
% Manufacturing	0.27	0.23	0.22	0.21	0.21	0.20	0.20	0.19	0.19	0.19
% Transport, Comm. & Public Util	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06
% Wholesale Trade	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
% Retail Trade	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
% Finance, Ins. & Real Estate	0.04	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06
% Services	0.14	0.20	0.22	0.22	0.23	0.23	0.23	0.24	0.24	0.24
% Federal Civilian Govt	0.08	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Federal Military Govt	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% State and Local Govt	0.12	0.13	0.13	0.13	0.13	0.13	0.14	0.14	0.14	0.14
Personal Income (Millions 1996 \$)	\$55,750.97	\$74,851.05	\$85,703.91	\$87,221.38	\$89,543.81	\$93,403.27	\$95,860.74	\$97,725.84	\$99,786.66	\$101,833.73
Income Per Capita (1996 \$)	\$14,296	\$18,489	\$19,992	\$20,209	\$20,581	\$21,290	\$21,737	\$21,953	\$22,237	\$22,508
W&P Wealth Index (U.S. = 100)	78.34	82.17	85.05	83.88	83.06	82.68	82.46	82.39	82.42	82.45
Number Of Households (Thousands)	1,348.32	1,513.54	1,639.79	1,664.15	1,685.29	1,705.79	1,718.44	1,742.81	1,761.64	1,780.78
Persons Per Household (People)	2.83	2.61	2.55	2.53	2.52	2.51	2.50	2.49	2.48	2.47
Retail Sales Per Household (1996 \$)	\$17,957.00	\$19,834.00	\$21,144.00	\$21,653.00	\$21,894.00	\$22,431.00	\$23,752.00	\$24,368.00	\$24,550.00	\$24,707.00
Mean Household Income (1996 \$)	\$40,681.00	\$48,551.00	\$51,259.00	\$51,394.00	\$52,089.00	\$53,663.00	\$54,654.00	\$54,912.00	\$55,467.00	\$55,994.00
Households With Money Income (Thousands)	1,348.32	1,513.54	1,639.79	1,664.15	1,685.29	1,705.79	1,718.44	1,742.81	1,761.64	1,780.78
% Less Than \$10,000 (1990 \$)	N/A	0.22	0.20	0.20	0.19	0.18	0.18	0.18	0.17	0.17
% \$10,000 to 19,999	N/A	0.21	0.19	0.18	0.18	0.17	0.17	0.16	0.16	0.16
% \$20,000 to 29,999	N/A	0.17	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.16
% \$30,000 to 39,999	N/A	0.14	0.15	0.15	0.16	0.16	0.16	0.17	0.17	0.17
% \$40,000 to 49,999	N/A	0.09	0.11	0.11	0.11	0.11	0.12	0.12	0.12	0.12
% \$50,000 to 59,999	N/A	0.06	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08
% \$60,000 to 74,999	N/A	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07
% \$75,000 to 99,999	N/A	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04
% \$100,000 to 124,999	N/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% \$125,000 to 149,999	N/A	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
% \$150,000 or More	N/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total Retail Sales (Millions 1996 \$)	\$24,212.07	\$30,019.93	\$34,672.43	\$36,033.88	\$36,897.45	\$38,262.30	\$40,815.85	\$42,469.32	\$43,248.70	\$43,997.31

Table 3-26. Demographic and Employment Baseline Projections for Alabama (continued).

Alabama	2003	2004	2005	2010	2015	2020	2025	2030	2035	2040
Total Population (Thousands)	4,562.00	4,598.74	4,637.55	4,829.46	5,034.94	5,250.37	5,477.23	5,713.90	5,960.79	6,218.35
% White	0.70	0.70	0.70	0.69	0.68	0.67	0.66	0.65	0.64	0.63
% Black	0.26	0.26	0.26	0.27	0.27	0.28	0.28	0.28	0.29	0.29
% Other	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02
% Hispanic	0.02	0.02	0.02	0.03	0.03	0.04	0.04	0.05	0.05	0.06
% 0-18 Years	0.26	0.26	0.26	0.25	0.25	0.25	0.25	0.25	0.26	0.26
% 19-64 Years	0.61	0.61	0.61	0.61	0.60	0.58	0.56	0.54	0.52	0.49
% 65 Years & Over	0.13	0.13	0.13	0.14	0.15	0.17	0.18	0.20	0.23	0.25
% Male	0.48	0.48	0.48	0.49	0.49	0.49	0.49	0.49	0.49	0.49
% Female	0.52	0.52	0.52	0.51	0.51	0.51	0.51	0.51	0.51	0.51
Median Age Of Population (Years)	36.44	36.57	36.70	37.51	37.91	38.49	38.80	39.10	39.41	39.72
Total Employment (Thousands)	2,526.09	2,552.94	2,580.03	2,719.95	2,870.01	3,032.95	3,211.06	3,399.64	3,599.29	3,810.66
% Farm	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Construction	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06
% Manufacturing	0.15	0.15	0.15	0.14	0.13	0.13	0.12	0.11	0.11	0.10
% Transport, Comm. & Public Util	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.04
% Wholesale Trade	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05
% Retail Trade	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
% Finance, Ins. & Real Estate	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
% Services	0.27	0.27	0.27	0.28	0.29	0.30	0.32	0.33	0.34	0.36
% Federal Civilian Govt	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01
% Federal Military Govt	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
% State and Local Govt	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Total Earnings (Millions 1996 \$)	\$71,800.00	\$73,158.63	\$74,540.65	\$81,842.66	\$89,900.35	\$98,858.08	\$108,871.12	\$119,898.34	\$132,042.48	\$145,416.66
% Farm	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Construction	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05
% Manufacturing	0.19	0.19	0.19	0.18	0.17	0.17	0.16	0.15	0.15	0.14
% Transport, Comm. & Public Util	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05
% Wholesale Trade	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05
% Retail Trade	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.08	0.08
% Finance, Ins. & Real Estate	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07
% Services	0.25	0.25	0.25	0.27	0.28	0.30	0.32	0.34	0.35	0.38
% Federal Civilian Govt	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03
% Federal Military Govt	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
% State and Local Govt	0.14	0.14	0.14	0.13	0.13	0.13	0.13	0.12	0.12	0.12
Personal Income (Millions 1996 \$)	\$103,909.63	\$105,991.97	\$108,114.84	\$119,368.92	\$131,788.25	\$145,527.70	\$160,760.96	\$177,588.77	\$196,178.04	\$216,713.17
Income Per Capita (1996 \$)	\$22,777	\$23,048	\$23,313	\$24,717	\$26,175	\$27,718	\$29,351	\$31,080	\$32,911	\$34,850
W&P Wealth Index (U.S. = 100)	82.49	82.52	82.55	82.69	82.82	82.93	83.05	83.17	83.29	83.41
Number Of Households (Thousands)	1,800.04	1,818.84	1,838.29	1,929.71	2,015.44	2,088.19	2,150.01	2,213.67	2,279.20	2,346.68
Persons Per Household (People)	2.47	2.46	2.46	2.44	2.43	2.45	2.48	2.51	2.54	2.57
Retail Sales Per Household (1996 \$)	\$24,860.00	\$25,010.00	\$25,155.00	\$25,986.00	\$26,965.00	\$28,199.00	\$29,682.00	\$31,242.99	\$32,886.08	\$34,615.57
Mean Household Income (1996 \$)	\$56,521.00	\$57,055.00	\$57,579.00	\$60,555.00	\$64,015.00	\$68,202.00	\$73,082.00	\$78,311.17	\$83,914.51	\$89,918.77
Households With Money Income (Thousands)	1,800.04	1,818.84	1,838.29	1,929.71	2,015.44	2,088.19	2,150.01	2,213.67	2,279.20	2,346.68
% Less Than \$10,000 (1990 \$)	0.17	0.16	0.16	0.14	0.12	0.11	0.09	0.07	0.06	0.05
% \$10,000 to 19,999	0.15	0.15	0.15	0.13	0.12	0.10	0.08	0.07	0.06	0.05
% \$20,000 to 29,999	0.16	0.15	0.15	0.14	0.12	0.11	0.09	0.07	0.06	0.05
% \$30,000 to 39,999	0.17	0.17	0.18	0.18	0.18	0.16	0.14	0.12	0.10	0.08
% \$40,000 to 49,999	0.13	0.13	0.13	0.15	0.16	0.17	0.18	0.19	0.19	0.20
% \$50,000 to 59,999	0.09	0.09	0.09	0.10	0.11	0.13	0.15	0.18	0.22	0.25
% \$60,000 to 74,999	0.07	0.07	0.07	0.08	0.09	0.11	0.13	0.16	0.20	0.24
% \$75,000 to 99,999	0.04	0.04	0.04	0.05	0.05	0.06	0.08	0.10	0.12	0.15
% \$100,000 to 124,999	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.04	0.05
% \$125,000 to 149,999	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02
% \$150,000 or More	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.04
Total Retail Sales (Millions 1996 \$)	\$44,748.34	\$45,488.68	\$46,241.92	\$50,144.91	\$54,345.48	\$58,884.25	\$63,817.16	\$69,163.32	\$74,957.33	\$81,236.73

N/A means that information is not available.  
Source: Woods & Poole Economics Inc., 2002.

Table 3-27

## Demographic and Employment Baseline Projections for Coastal Subarea MA-1

Coastal Subarea MA-1	1980	1990	1995	1996	1997	1998	1999	2000	2001	2002
Total Population (Thousands)	755.95	801.11	872.90	878.53	888.89	898.17	907.36	920.12	930.79	941.63
% White	N/A	0.73	0.73	0.73	0.72	0.72	0.72	0.72	0.72	0.72
% Black	N/A	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24
% Other	N/A	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% Hispanic	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02
% 0-18 Years	0.34	0.29	0.29	0.29	0.29	0.29	0.28	0.28	0.28	0.28
% 19-64 Years	0.57	0.59	0.59	0.59	0.59	0.59	0.60	0.60	0.60	0.60
% 65 Years & Over	0.09	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
% Male	0.49	0.48	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49
% Female	0.51	0.52	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51
Median Age Of Population (Years)	28.18	32.73	33.97	34.35	34.58	34.91	35.26	35.67	35.88	36.09
Total Employment (Thousands)	342.96	383.28	453.71	462.88	478.52	496.06	507.25	515.20	522.71	529.89
% Farm	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Construction	0.07	0.06	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08
% Manufacturing	0.17	0.15	0.12	0.12	0.11	0.12	0.11	0.11	0.11	0.11
% Transport, Comm. & Public Util	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04
% Wholesale Trade	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
% Retail Trade	0.15	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
% Finance, Ins. & Real Estate	0.06	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06
% Services	0.19	0.24	0.28	0.28	0.29	0.29	0.29	0.30	0.30	0.30
% Federal Civilian Govt	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02
% Federal Military Govt	0.07	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04
% State and Local Govt	0.12	0.12	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
Total Earnings (Millions 1996 \$)	\$8,411.34	\$9,572.47	\$11,530.87	\$11,749.28	\$12,170.71	\$13,040.05	\$13,374.45	\$13,698.20	\$14,004.99	\$14,307.23
% Farm	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Agricultural Services	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
% Mining	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Construction	0.08	0.06	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08
% Manufacturing	0.25	0.22	0.18	0.17	0.17	0.17	0.17	0.17	0.16	0.16
% Transport, Comm. & Public Util	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
% Wholesale Trade	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
% Retail Trade	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
% Finance, Ins. & Real Estate	0.04	0.04	0.04	0.05	0.05	0.04	0.05	0.05	0.05	0.05
% Services	0.15	0.21	0.25	0.25	0.26	0.26	0.27	0.27	0.27	0.28
% Federal Civilian Govt	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Federal Military Govt	0.07	0.07	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05
% State and Local Govt	0.10	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Personal Income (Millions 1996 \$)	\$10,859.44	\$13,635.22	\$16,518.71	\$16,955.39	\$17,500.11	\$18,605.20	\$19,023.76	\$19,476.91	\$19,928.82	\$20,379.19
Income Per Capita (1996 \$)	\$14,365	\$17,020	\$18,924	\$19,300	\$19,688	\$20,715	\$20,966	\$21,168	\$21,411	\$21,642
W&P Wealth Index (U.S. = 100)	77.82	74.36	78.17	77.67	77.44	78.41	77.90	77.62	77.50	77.40
Number Of Households (Thousands)	252.28	290.64	322.54	328.02	333.12	338.02	342.19	347.80	352.86	357.93
Persons Per Household (People)	2.96	2.70	2.65	2.63	2.62	2.60	2.60	2.60	2.59	2.58
Retail Sales Per Household (1996 \$)	\$18,806.33	\$18,014.00	\$19,508.33	\$19,873.67	\$20,076.33	\$20,572.83	\$21,782.00	\$22,468.50	\$22,627.17	\$22,767.17
Mean Household Income (1996 \$)	\$41,319.17	\$44,413.83	\$48,140.50	\$48,565.67	\$49,711.50	\$52,127.17	\$52,745.17	\$53,115.67	\$53,520.67	\$53,914.00
Households With Money Income (Thousands)	252.28	290.64	322.54	328.02	333.12	338.02	342.19	347.80	352.86	357.93
% Less Than \$10,000 (1990 \$)	N/A	0.21	0.19	0.19	0.18	0.17	0.17	0.16	0.16	0.16
% \$10,000 to 19,999	N/A	0.21	0.19	0.19	0.18	0.17	0.17	0.17	0.16	0.16
% \$20,000 to 29,999	N/A	0.18	0.18	0.18	0.18	0.17	0.17	0.16	0.16	0.16
% \$30,000 to 39,999	N/A	0.14	0.16	0.16	0.16	0.17	0.17	0.18	0.18	0.18
% \$40,000 to 49,999	N/A	0.09	0.11	0.11	0.11	0.12	0.12	0.12	0.13	0.13
% \$50,000 to 59,999	N/A	0.06	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08
% \$60,000 to 74,999	N/A	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06
% \$75,000 to 99,999	N/A	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04
% \$100,000 to 124,999	N/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% \$125,000 to 149,999	N/A	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01
% \$150,000 or More	N/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total Retail Sales (Millions 1996 \$)	\$5,161.17	\$5,920.76	\$7,073.48	\$7,345.73	\$7,550.67	\$7,850.30	\$8,419.65	\$8,805.28	\$8,999.37	\$9,187.65

Table 3-27. Demographic and Employment Baseline Projections for Coastal Subarea MA-1 (continued).

Coastal Subarea MA-1	2003	2004	2005	2010	2015	2020	2025	2030	2035	2040
Total Population (Thousands)	952.60	963.39	974.61	1,030.25	1,088.74	1,149.44	1,212.71	1,279.47	1,349.90	1,424.21
% White	0.72	0.72	0.71	0.71	0.70	0.69	0.69	0.68	0.68	0.67
% Black	0.24	0.24	0.24	0.25	0.25	0.25	0.26	0.26	0.26	0.26
% Other	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.04	0.04
% Hispanic	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03
% 0-18 Years	0.27	0.27	0.27	0.26	0.26	0.26	0.26	0.26	0.26	0.26
% 19-64 Years	0.60	0.60	0.60	0.61	0.59	0.58	0.56	0.54	0.52	0.50
% 65 Years & Over	0.12	0.12	0.12	0.13	0.15	0.16	0.18	0.21	0.23	0.26
% Male	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49
% Female	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51
Median Age Of Population (Years)	36.27	36.46	36.65	37.25	38.02	38.31	38.53	38.75	38.97	39.19
Total Employment (Thousands)	537.22	544.48	551.90	590.56	631.38	674.27	719.41	767.56	818.94	873.76
% Farm	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Construction	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
% Manufacturing	0.11	0.11	0.10	0.10	0.09	0.09	0.08	0.08	0.07	0.07
% Transport, Comm. & Public Util	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03
% Wholesale Trade	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% Retail Trade	0.18	0.18	0.18	0.18	0.18	0.17	0.17	0.17	0.17	0.17
% Finance, Ins. & Real Estate	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
% Services	0.31	0.31	0.31	0.33	0.34	0.36	0.37	0.38	0.40	0.41
% Federal Civilian Govt	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
% Federal Military Govt	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.02	0.02
% State and Local Govt	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.10	0.10
Total Earnings (Millions 1996 \$)	\$14,616.73	\$14,927.03	\$15,245.74	\$16,949.65	\$18,828.74	\$20,892.57	\$23,159.95	\$25,673.40	\$28,459.62	\$31,548.22
% Farm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
% Mining	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Construction	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.07	0.07	0.07
% Manufacturing	0.16	0.16	0.16	0.15	0.15	0.14	0.13	0.13	0.12	0.12
% Transport, Comm. & Public Util	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.04	0.04
% Wholesale Trade	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03
% Retail Trade	0.10	0.10	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09
% Finance, Ins. & Real Estate	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Services	0.28	0.29	0.29	0.31	0.33	0.35	0.37	0.39	0.41	0.43
% Federal Civilian Govt	0.05	0.05	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03
% Federal Military Govt	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.03	0.03
% State and Local Govt	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.11	0.11
Personal Income (Millions 1996 \$)	\$20,839.58	\$21,303.75	\$21,779.23	\$24,313.41	\$27,107.01	\$30,178.86	\$33,557.83	\$37,315.11	\$41,493.08	\$46,138.84
Income Per Capita (1996 \$)	\$21,877	\$22,113	\$22,347	\$23,600	\$24,898	\$26,255	\$27,672	\$29,165	\$30,738	\$32,396
W&P Wealth Index (U.S. = 100)	77.30	77.20	77.12	76.72	76.32	75.92	75.53	75.14	74.76	74.37
Number Of Households (Thousands)	363.03	368.04	373.19	397.78	421.25	442.05	460.56	479.86	499.96	520.90
Persons Per Household (People)	2.58	2.57	2.56	2.54	2.54	2.55	2.59	2.62	2.65	2.68
Retail Sales Per Household (1996 \$)	\$22,903.50	\$23,038.17	\$23,167.33	\$23,912.00	\$24,794.17	\$25,910.33	\$27,255.83	\$28,671.20	\$30,160.07	\$31,726.26
Mean Household Income (1996 \$)	\$54,311.67	\$54,722.67	\$55,127.33	\$57,499.00	\$60,302.17	\$63,734.17	\$67,742.83	\$72,003.63	\$76,532.42	\$81,346.05
Households With Money Income (Thousands)	363.03	368.04	373.19	397.78	421.25	442.05	460.56	479.86	499.96	520.90
% Less Than \$10,000 (1990 \$)	0.15	0.15	0.15	0.13	0.12	0.10	0.08	0.07	0.05	0.04
% \$10,000 to 19,999	0.16	0.15	0.15	0.13	0.12	0.10	0.08	0.07	0.06	0.05
% \$20,000 to 29,999	0.16	0.15	0.15	0.13	0.12	0.10	0.08	0.07	0.06	0.05
% \$30,000 to 39,999	0.18	0.19	0.19	0.19	0.18	0.16	0.13	0.11	0.09	0.07
% \$40,000 to 49,999	0.13	0.14	0.14	0.16	0.17	0.19	0.20	0.21	0.21	0.22
% \$50,000 to 59,999	0.09	0.09	0.09	0.10	0.11	0.13	0.16	0.20	0.25	0.31
% \$60,000 to 74,999	0.07	0.07	0.07	0.08	0.09	0.10	0.13	0.16	0.19	0.24
% \$75,000 to 99,999	0.04	0.04	0.04	0.04	0.05	0.06	0.07	0.09	0.11	0.14
% \$100,000 to 124,999	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.04	0.05
% \$125,000 to 149,999	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02
% \$150,000 or More	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.04
Total Retail Sales (Millions 1996 \$)	\$9,376.92	\$9,564.44	\$9,755.16	\$10,744.95	\$11,810.72	\$12,962.57	\$14,214.31	\$15,586.92	\$17,092.09	\$18,742.59

N/A means that information is not available.  
Source: Woods & Poole Economics Inc., 2002.

Table 3-28

## Demographic and Employment Baseline Projections for Florida

Florida	1980	1990	1995	1996	1997	1998	1999	2000	2001	2002
Total Population (Thousands)	9,841.13	13,018.37	14,522.19	14,826.66	15,151.18	15,442.55	15,710.57	16,054.33	16,325.16	16,600.13
% White	N/A	0.73	0.70	0.69	0.69	0.68	0.67	0.67	0.66	0.66
% Black	N/A	0.13	0.14	0.14	0.14	0.14	0.14	0.15	0.15	0.15
% Other	N/A	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% Hispanic	0.09	0.12	0.14	0.15	0.15	0.16	0.16	0.17	0.17	0.18
% 0-18 Years	0.26	0.24	0.25	0.24	0.24	0.24	0.24	0.24	0.24	0.24
% 19-64 Years	0.57	0.58	0.57	0.57	0.58	0.58	0.58	0.58	0.59	0.59
% 65 Years & Over	0.17	0.18	0.18	0.18	0.18	0.18	0.17	0.18	0.18	0.17
% Male	0.48	0.48	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49
% Female	0.52	0.52	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51
Median Age Of Population (Years)	34.67	36.00	37.13	37.42	37.67	37.96	38.34	38.70	39.02	39.33
Total Employment (Thousands)	4,695.17	6,802.38	7,576.19	7,830.65	8,102.98	8,351.49	8,640.00	8,828.34	9,004.34	9,174.73
% Farm	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Agricultural Services	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% Mining	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Construction	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
% Manufacturing	0.10	0.08	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06
% Transport, Comm. & Public Util	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Wholesale Trade	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Retail Trade	0.18	0.19	0.19	0.19	0.18	0.18	0.18	0.18	0.18	0.18
% Finance, Ins. & Real Estate	0.10	0.09	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09
% Services	0.25	0.31	0.35	0.35	0.35	0.36	0.37	0.37	0.37	0.37
% Federal Civilian Govt	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
% Federal Military Govt	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% State and Local Govt	0.11	0.11	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Total Earnings (Millions 1996 \$)	\$114,860.72	\$181,748.75	\$207,076.56	\$215,167.23	\$223,339.50	\$238,681.33	\$249,442.20	\$256,962.53	\$264,816.46	\$272,598.11
% Farm	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Construction	0.08	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
% Manufacturing	0.12	0.10	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.08
% Transport, Comm. & Public Util	0.08	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
% Wholesale Trade	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07
% Retail Trade	0.13	0.12	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
% Finance, Ins. & Real Estate	0.08	0.08	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10
% Services	0.22	0.29	0.32	0.32	0.32	0.33	0.33	0.34	0.34	0.35
% Federal Civilian Govt	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% Federal Military Govt	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% State and Local Govt	0.11	0.13	0.13	0.13	0.13	0.12	0.12	0.12	0.12	0.12
Personal Income (Millions 1996 \$)	\$179,098.09	\$301,855.71	\$340,683.10	\$355,135.85	\$370,474.83	\$389,673.64	\$400,878.97	\$413,583.13	\$426,101.64	\$438,639.25
Income Per Capita (1996 \$)	\$18,199	\$23,187	\$23,459	\$23,953	\$24,452	\$25,234	\$25,517	\$25,761	\$26,101	\$26,424
W&P Wealth Index (U.S. = 100)	103.32	104.94	101.73	101.65	101.15	99.96	98.91	98.83	98.89	98.95
Number Of Households (Thousands)	3,795.27	5,160.20	5,702.18	5,847.86	5,983.91	6,119.85	6,232.05	6,368.13	6,494.49	6,622.09
Persons Per Household (People)	2.54	2.46	2.49	2.47	2.47	2.46	2.46	2.46	2.45	2.45
Retail Sales Per Household (1996 \$)	\$22,551.00	\$25,051.00	\$25,636.00	\$25,971.00	\$26,015.00	\$26,662.00	\$28,267.00	\$29,139.00	\$29,351.00	\$29,533.00
Mean Household Income (1996 \$)	\$46,426.00	\$57,390.00	\$58,630.00	\$59,569.00	\$60,723.00	\$62,445.00	\$63,086.00	\$63,680.00	\$64,338.00	\$64,962.00
Households With Money Income (Thousands)	3,795.27	5,160.20	5,702.18	5,847.86	5,983.91	6,119.85	6,232.05	6,368.13	6,494.49	6,622.09
% Less Than \$10,000 (1990 \$)	N/A	0.15	0.14	0.13	0.13	0.12	0.12	0.12	0.12	0.11
% \$10,000 to 19,999	N/A	0.20	0.18	0.18	0.17	0.17	0.16	0.16	0.16	0.15
% \$20,000 to 29,999	N/A	0.19	0.18	0.17	0.17	0.16	0.16	0.16	0.15	0.15
% \$30,000 to 39,999	N/A	0.15	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17
% \$40,000 to 49,999	N/A	0.10	0.12	0.12	0.12	0.13	0.13	0.13	0.14	0.14
% \$50,000 to 59,999	N/A	0.07	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09
% \$60,000 to 74,999	N/A	0.06	0.06	0.07	0.07	0.07	0.07	0.08	0.08	0.08
% \$75,000 to 99,999	N/A	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% \$100,000 to 124,999	N/A	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% \$125,000 to 149,999	N/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% \$150,000 or More	N/A	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Total Retail Sales (Millions 1996 \$)	\$85,587.32	\$129,269.93	\$146,182.51	\$151,876.90	\$155,669.28	\$163,166.50	\$176,161.82	\$185,561.79	\$190,619.79	\$195,570.31

Table 3-28. Demographic and Employment Baseline Projections for Florida (continued).

Florida	2003	2004	2005	2010	2015	2020	2025	2030	2035	2040
Total Population (Thousands)	16,876.57	17,149.68	17,430.37	18,824.45	20,269.80	21,756.58	23,294.49	24,941.12	26,704.14	28,591.78
% White	0.65	0.65	0.64	0.62	0.60	0.58	0.56	0.54	0.52	0.50
% Black	0.15	0.15	0.15	0.15	0.16	0.16	0.17	0.17	0.17	0.18
% Other	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.04	0.04	0.03
% Hispanic	0.18	0.18	0.19	0.20	0.22	0.23	0.24	0.26	0.27	0.29
% 0-18 Years	0.24	0.24	0.23	0.22	0.22	0.22	0.22	0.23	0.23	0.23
% 19-64 Years	0.59	0.59	0.59	0.60	0.59	0.57	0.55	0.52	0.49	0.46
% 65 Years & Over	0.17	0.17	0.17	0.18	0.19	0.21	0.23	0.25	0.28	0.31
% Male	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49
% Female	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51
Median Age Of Population (Years)	39.63	39.91	40.16	40.98	41.43	41.39	41.73	42.08	42.42	42.77
Total Employment (Thousands)	9,345.15	9,513.73	9,683.47	10,551.12	11,454.10	12,395.60	13,377.34	14,436.85	15,580.27	16,814.24
% Farm	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
% Agricultural Services	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% Mining	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Construction	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.04
% Manufacturing	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.04
% Transport, Comm. & Public Util	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04
% Wholesale Trade	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Retail Trade	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.15	0.15
% Finance, Ins. & Real Estate	0.09	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.07
% Services	0.38	0.38	0.38	0.40	0.41	0.43	0.44	0.45	0.46	0.48
% Federal Civilian Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Federal Military Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% State and Local Govt	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Total Earnings (Millions 1996 \$)	\$280,467.75	\$288,350.41	\$296,384.78	\$339,029.14	\$386,239.70	\$438,559.48	\$496,497.55	\$562,089.83	\$636,347.49	\$720,415.33
% Farm	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Construction	0.06	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.04	0.04
% Manufacturing	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.05	0.05
% Transport, Comm. & Public Util	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05
% Wholesale Trade	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05
% Retail Trade	0.11	0.11	0.10	0.10	0.10	0.09	0.09	0.09	0.08	0.08
% Finance, Ins. & Real Estate	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
% Services	0.35	0.35	0.36	0.38	0.40	0.42	0.43	0.45	0.47	0.49
% Federal Civilian Govt	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02
% Federal Military Govt	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% State and Local Govt	0.12	0.12	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.11
Personal Income (Millions 1996 \$)	\$451,358.04	\$464,181.95	\$477,254.65	\$546,609.34	\$623,260.86	\$708,102.27	\$802,093.40	\$908,560.59	\$1,029,159.88	\$1,165,767.11
Income Per Capita (1996 \$)	\$26,745	\$27,067	\$27,381	\$29,037	\$30,748	\$32,547	\$34,433	\$36,428	\$38,539	\$40,772
W&P Wealth Index (U.S. = 100)	99.01	99.07	99.13	99.36	99.55	99.71	99.84	99.97	100.10	100.23
Number Of Households (Thousands)	6,750.28	6,876.94	7,006.22	7,632.06	8,236.80	8,788.34	9,292.48	9,825.53	10,389.17	10,985.15
Persons Per Household (People)	2.44	2.43	2.43	2.41	2.41	2.42	2.45	2.48	2.51	2.54
Retail Sales Per Household (1996 \$)	\$29,711.00	\$29,886.00	\$30,055.00	\$31,027.00	\$32,180.00	\$33,636.00	\$35,384.00	\$37,222.84	\$39,157.24	\$41,192.17
Mean Household Income (1996 \$)	\$65,582.00	\$66,210.00	\$66,825.00	\$70,298.00	\$74,313.00	\$79,142.00	\$84,731.00	\$90,714.69	\$97,120.96	\$103,979.63
Households With Money Income (Thousands)	6,750.28	6,876.94	7,006.22	7,632.06	8,236.80	8,788.34	9,292.48	9,825.53	10,389.17	10,985.15
% Less Than \$10,000 (1990 \$)	0.11	0.11	0.11	0.10	0.09	0.07	0.06	0.05	0.04	0.03
% \$10,000 to \$19,999	0.15	0.15	0.14	0.13	0.11	0.10	0.08	0.07	0.05	0.04
% \$20,000 to \$29,999	0.15	0.15	0.14	0.13	0.11	0.10	0.08	0.07	0.05	0.04
% \$30,000 to \$39,999	0.17	0.17	0.17	0.16	0.15	0.13	0.11	0.09	0.07	0.06
% \$40,000 to \$49,999	0.14	0.14	0.15	0.16	0.17	0.17	0.16	0.14	0.13	0.12
% \$50,000 to \$59,999	0.09	0.10	0.10	0.11	0.12	0.14	0.16	0.18	0.21	0.24
% \$60,000 to \$74,999	0.08	0.08	0.09	0.10	0.11	0.14	0.17	0.20	0.23	0.28
% \$75,000 to \$99,999	0.05	0.06	0.06	0.06	0.07	0.09	0.10	0.13	0.15	0.19
% \$100,000 to \$124,999	0.02	0.02	0.02	0.02	0.03	0.03	0.04	0.05	0.06	0.07
% \$125,000 to \$149,999	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03
% \$150,000 or More	0.02	0.02	0.02	0.02	0.03	0.03	0.04	0.05	0.06	0.07
Total Retail Sales (Millions 1996 \$)	\$200,557.34	\$205,521.55	\$210,568.78	\$236,800.10	\$265,058.20	\$295,606.99	\$328,801.25	\$365,722.96	\$406,790.68	\$452,469.98

N/A means that information is not available.  
Source: Woods & Poole Economics Inc., 2002

Table 3-29

## Demographic and Employment Baseline Projections for Coastal Subarea FL-1

Coastal Subarea FL-1	1980	1990	1995	1996	1997	1998	1999	2000	2001	2002
Total Population (Thousands)	522.28	645.06	716.56	730.48	746.22	755.89	760.14	774.39	787.39	800.68
% White	N/A	0.82	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
% Black	N/A	0.13	0.13	0.13	0.13	0.13	0.14	0.13	0.13	0.13
% Other	N/A	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% Hispanic	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% 0-18 Years	0.31	0.28	0.28	0.28	0.28	0.27	0.27	0.26	0.25	0.25
% 19-64 Years	0.60	0.61	0.60	0.60	0.60	0.60	0.61	0.61	0.62	0.62
% 65 Years & Over	0.09	0.11	0.12	0.12	0.12	0.12	0.13	0.13	0.13	0.13
% Male	0.49	0.49	0.49	0.50	0.50	0.50	0.50	0.50	0.50	0.50
% Female	0.50	0.49	0.49	0.49	0.49	0.49	0.48	0.48	0.48	0.48
Median Age Of Population (Years)	29.77	33.13	34.73	35.14	35.59	36.07	36.63	37.23	37.69	38.11
Total Employment (Thousands)	238.81	330.22	373.96	388.20	403.41	410.57	418.75	427.04	435.03	442.85
% Farm	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Construction	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
% Manufacturing	0.09	0.07	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04
% Transport, Comm. & Public Util	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
% Wholesale Trade	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% Retail Trade	0.17	0.20	0.20	0.21	0.20	0.20	0.19	0.19	0.19	0.19
% Finance, Ins. & Real Estate	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07
% Services	0.20	0.26	0.30	0.29	0.29	0.31	0.32	0.32	0.33	0.33
% Federal Civilian Govt	0.08	0.07	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04
% Federal Military Govt	0.14	0.11	0.09	0.09	0.09	0.09	0.08	0.08	0.08	0.08
% State and Local Govt	0.11	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.09
Total Earnings (Millions 1996 \$)	\$5,967.42	\$8,546.66	\$9,528.28	\$10,069.85	\$10,451.52	\$10,876.87	\$11,042.28	\$11,358.97	\$11,648.29	\$11,936.22
% Farm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Agricultural Services	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Construction	0.06	0.06	0.07	0.08	0.06	0.07	0.07	0.07	0.07	0.07
% Manufacturing	0.12	0.09	0.08	0.07	0.07	0.07	0.06	0.06	0.06	0.06
% Transport, Comm. & Public Util	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Wholesale Trade	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04
% Retail Trade	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
% Finance, Ins. & Real Estate	0.03	0.03	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Services	0.16	0.21	0.25	0.24	0.24	0.26	0.27	0.27	0.28	0.29
% Federal Civilian Govt	0.14	0.12	0.09	0.08	0.09	0.08	0.08	0.08	0.08	0.08
% Federal Military Govt	0.20	0.18	0.16	0.17	0.17	0.16	0.16	0.16	0.15	0.15
% State and Local Govt	0.10	0.12	0.12	0.11	0.11	0.11	0.11	0.11	0.11	0.11
Personal Income (Millions 1996 \$)	\$7,657.65	\$12,155.29	\$13,815.30	\$14,878.31	\$15,592.19	\$16,240.49	\$16,506.58	\$17,056.38	\$17,534.61	\$18,013.58
Income Per Capita (1996 \$)	\$14,662	\$18,844	\$19,280	\$20,368	\$20,895	\$21,485	\$21,715	\$22,026	\$22,269	\$22,498
W&P Wealth Index (U.S. = 100)	79.21	81.88	80.39	84.16	84.21	83.19	82.30	82.54	82.36	82.19
Number Of Households (Thousands)	182.45	243.25	271.43	278.35	285.42	289.63	292.47	298.64	304.56	310.58
Persons Per Household (People)	2.78	2.56	2.54	2.52	2.51	2.49	2.47	2.47	2.46	2.45
Retail Sales Per Household (1996 \$)	\$19,548.00	\$20,962.00	\$22,602.00	\$23,105.20	\$23,315.20	\$23,867.00	\$25,207.60	\$25,919.00	\$26,101.40	\$26,253.20
Mean Household Income (1996 \$)	\$39,073.20	\$46,413.60	\$47,461.00	\$49,936.00	\$51,084.00	\$52,317.00	\$52,715.00	\$53,325.40	\$53,686.40	\$54,028.80
Households With Money Income (Thousands)	182.45	243.25	271.43	278.35	285.42	289.63	292.47	298.64	304.56	310.58
% Less Than \$10,000 (1990 \$)	N/A	0.16	0.15	0.14	0.14	0.13	0.13	0.13	0.12	0.12
% \$10,000 to 19,999	N/A	0.21	0.19	0.18	0.18	0.17	0.17	0.16	0.16	0.16
% \$20,000 to 29,999	N/A	0.20	0.19	0.18	0.18	0.17	0.17	0.17	0.16	0.16
% \$30,000 to 39,999	N/A	0.15	0.17	0.17	0.18	0.18	0.18	0.19	0.19	0.19
% \$40,000 to 49,999	N/A	0.10	0.12	0.12	0.13	0.13	0.13	0.14	0.14	0.14
% \$50,000 to 59,999	N/A	0.06	0.07	0.07	0.08	0.08	0.08	0.08	0.09	0.09
% \$60,000 to 74,999	N/A	0.05	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07
% \$75,000 to 99,999	N/A	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04
% \$100,000 to 124,999	N/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% \$125,000 to 149,999	N/A	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
% \$150,000 or More	N/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total Retail Sales (Millions 1996 \$)	\$4,030.10	\$5,704.00	\$6,718.44	\$7,023.53	\$7,249.11	\$7,537.24	\$8,031.36	\$8,419.57	\$8,634.44	\$8,844.42

Table 3-29. Demographic and Employment Baseline Projections for Coastal Subarea FL-1 (continued).

Coastal Subarea FL-1	2003	2004	2005	2010	2015	2020	2025	2030	2035	2040
Total Population (Thousands)	814.02	827.12	840.64	907.72	977.37	1,048.94	1,123.09	1,202.47	1,287.46	1,378.47
% White	0.80	0.80	0.80	0.80	0.79	0.78	0.78	0.77	0.76	0.76
% Black	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.15	0.15	0.15
% Other	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% Hispanic	0.03	0.03	0.03	0.04	0.04	0.04	0.05	0.05	0.06	0.06
% 0-18 Years	0.25	0.24	0.24	0.23	0.22	0.22	0.22	0.22	0.22	0.22
% 19-64 Years	0.62	0.62	0.62	0.63	0.62	0.60	0.57	0.55	0.52	0.50
% 65 Years & Over	0.13	0.14	0.14	0.14	0.16	0.18	0.20	0.24	0.27	0.31
% Male	0.50	0.50	0.50	0.50	0.51	0.51	0.51	0.51	0.51	0.51
% Female	0.48	0.48	0.48	0.47	0.47	0.47	0.48	0.48	0.49	0.49
Median Age Of Population (Years)	38.51	38.86	39.20	40.66	41.69	42.39	43.15	43.92	44.71	45.51
Total Employment (Thousands)	450.72	458.56	466.47	506.92	548.75	591.98	636.71	684.83	736.59	792.25
% Farm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Construction	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06
% Manufacturing	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03
% Transport, Comm. & Public Util	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03
% Wholesale Trade	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% Retail Trade	0.19	0.19	0.19	0.19	0.19	0.18	0.18	0.18	0.18	0.18
% Finance, Ins. & Real Estate	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06
% Services	0.34	0.34	0.34	0.37	0.38	0.40	0.41	0.43	0.45	0.46
% Federal Civilian Govt	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.02	0.02	0.02
% Federal Military Govt	0.08	0.08	0.08	0.07	0.07	0.06	0.06	0.05	0.05	0.05
% State and Local Govt	0.09	0.09	0.09	0.09	0.09	0.08	0.08	0.08	0.08	0.08
Total Earnings (Millions 1996 \$)	\$12,228.35	\$12,521.74	\$12,820.95	\$14,404.99	\$16,140.30	\$18,038.21	\$20,113.30	\$22,427.10	\$25,007.08	\$27,883.86
% Farm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Construction	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05
% Manufacturing	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.04
% Transport, Comm. & Public Util	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.04
% Wholesale Trade	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% Retail Trade	0.11	0.11	0.11	0.10	0.10	0.10	0.10	0.09	0.09	0.09
% Finance, Ins. & Real Estate	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Services	0.29	0.30	0.30	0.33	0.35	0.38	0.40	0.42	0.45	0.47
% Federal Civilian Govt	0.07	0.07	0.07	0.07	0.06	0.06	0.05	0.05	0.05	0.04
% Federal Military Govt	0.15	0.15	0.15	0.14	0.13	0.12	0.11	0.11	0.10	0.09
% State and Local Govt	0.11	0.11	0.11	0.10	0.10	0.10	0.10	0.09	0.09	0.09
Personal Income (Millions 1996 \$)	\$18,500.94	\$18,993.30	\$19,496.07	\$22,172.56	\$25,134.08	\$28,404.93	\$32,013.49	\$36,080.50	\$40,664.17	\$45,830.16
Income Per Capita (1996 \$)	\$22,728	\$22,963	\$23,192	\$24,427	\$25,716	\$27,080	\$28,505	\$30,005	\$31,585	\$33,247
W&P Wealth Index (U.S. = 100)	82.05	81.93	81.83	81.41	81.09	80.80	80.49	80.18	79.88	79.57
Number Of Households (Thousands)	316.63	322.61	328.72	358.37	387.11	413.22	436.73	461.59	487.86	515.62
Persons Per Household (People)	2.45	2.44	2.43	2.42	2.41	2.43	2.46	2.48	2.51	2.54
Retail Sales Per Household (1996 \$)	\$26,401.80	\$26,548.00	\$26,689.20	\$27,508.60	\$28,488.40	\$29,749.20	\$31,290.20	\$32,911.02	\$34,615.80	\$36,408.89
Mean Household Income (1996 \$)	\$54,388.20	\$54,767.80	\$55,148.80	\$57,492.80	\$60,362.40	\$63,904.80	\$68,032.60	\$72,427.03	\$77,105.30	\$82,085.76
Households With Money Income (Thousands)	316.63	322.61	328.72	358.37	387.11	413.22	436.73	461.59	487.86	515.62
% Less Than \$10,000 (1990 \$)	0.12	0.12	0.11	0.10	0.09	0.08	0.06	0.05	0.04	0.04
% \$10,000 to \$19,999	0.15	0.15	0.15	0.13	0.12	0.10	0.08	0.07	0.06	0.05
% \$20,000 to \$29,999	0.15	0.15	0.15	0.13	0.12	0.10	0.08	0.07	0.06	0.05
% \$30,000 to \$39,999	0.19	0.19	0.19	0.18	0.17	0.15	0.13	0.10	0.09	0.07
% \$40,000 to \$49,999	0.15	0.15	0.15	0.17	0.19	0.20	0.19	0.19	0.18	0.17
% \$50,000 to \$59,999	0.09	0.09	0.09	0.11	0.12	0.14	0.17	0.20	0.24	0.29
% \$60,000 to \$74,999	0.07	0.08	0.08	0.09	0.10	0.11	0.14	0.17	0.21	0.26
% \$75,000 to \$99,999	0.04	0.04	0.05	0.05	0.06	0.07	0.08	0.10	0.13	0.16
% \$100,000 to \$124,999	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.04	0.05
% \$125,000 to \$149,999	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02
% \$150,000 or More	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.04
Total Retail Sales (Millions 1996 \$)	\$9,056.01	\$9,266.55	\$9,480.80	\$10,596.16	\$11,800.76	\$13,105.47	\$14,525.21	\$16,098.75	\$17,842.75	\$19,775.69

N/A means that information is not available.  
Source: Woods & Poole Economics Inc., 2002



Table 3-30

## Demographic and Employment Baseline Projections for Coastal Subarea FL-2

Coastal Subarea FL-2	1980	1990	1995	1996	1997	1998	1999	2000	2001	2002
Total Population (Thousands)	84.40	100.11	116.91	119.25	121.60	123.29	124.79	128.07	129.53	131.07
% White	N/A	0.81	0.80	0.80	0.80	0.80	0.81	0.81	0.81	0.81
% Black	N/A	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.16
% Other	N/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Hispanic	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03
% 0-18 Years	0.32	0.28	0.26	0.26	0.26	0.25	0.25	0.24	0.24	0.24
% 19-64 Years	0.55	0.56	0.58	0.59	0.59	0.59	0.60	0.60	0.61	0.61
% 65 Years & Over	0.13	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.16
% Male	0.49	0.49	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51
% Female	0.51	0.51	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49
Median Age Of Population (Years)	31.31	35.56	36.99	37.42	37.94	38.45	38.91	39.57	40.00	40.42
Total Employment (Thousands)	28.57	36.15	41.01	42.04	43.42	43.57	44.40	44.99	45.55	46.10
% Farm	0.07	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Agricultural Services	0.05	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Mining	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
% Construction	0.05	0.06	0.07	0.08	0.08	0.08	0.07	0.07	0.07	0.08
% Manufacturing	0.21	0.16	0.12	0.12	0.12	0.11	0.10	0.10	0.10	0.09
% Transport, Comm. & Public Util	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
% Wholesale Trade	0.03	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03
% Retail Trade	0.15	0.17	0.18	0.18	0.17	0.17	0.17	0.17	0.17	0.17
% Finance, Ins. & Real Estate	0.04	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06
% Services	0.15	0.19	0.21	0.20	0.21	0.22	0.22	0.22	0.22	0.23
% Federal Civilian Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Federal Military Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% State and Local Govt	0.18	0.17	0.18	0.19	0.19	0.19	0.19	0.19	0.19	0.19
Total Earnings (Millions 1996 \$)	\$592.10	\$767.28	\$857.33	\$888.54	\$926.54	\$965.72	\$983.00	\$978.06	\$998.28	\$1,018.22
% Farm	0.05	0.04	0.04	0.04	0.05	0.05	0.05	0.04	0.04	0.04
% Agricultural Services	0.02	0.03	0.03	0.02	0.03	0.03	0.03	0.03	0.03	0.03
% Mining	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01
% Construction	0.07	0.08	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.08
% Manufacturing	0.33	0.27	0.20	0.20	0.20	0.19	0.17	0.16	0.16	0.16
% Transport, Comm. & Public Util	0.06	0.05	0.06	0.05	0.06	0.06	0.06	0.06	0.06	0.06
% Wholesale Trade	0.03	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03
% Retail Trade	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
% Finance, Ins. & Real Estate	0.02	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
% Services	0.11	0.13	0.15	0.15	0.15	0.16	0.17	0.17	0.17	0.17
% Federal Civilian Govt	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Federal Military Govt	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% State and Local Govt	0.17	0.22	0.24	0.24	0.25	0.25	0.26	0.26	0.26	0.26
Personal Income (Millions 1996 \$)	\$1,015.18	\$1,531.84	\$1,850.64	\$1,945.42	\$2,053.57	\$2,163.15	\$2,226.79	\$2,247.70	\$2,298.37	\$2,348.65
Income Per Capita (1996 \$)	\$12,029	\$15,301	\$15,830	\$16,313	\$16,888	\$17,545	\$17,845	\$17,550	\$17,744	\$17,919
W&P Wealth Index (U.S. = 100)	67.31	69.11	68.36	68.94	69.39	69.15	68.86	67.64	67.55	67.45
Number Of Households (Thousands)	29.82	37.73	43.18	44.45	45.61	46.62	47.51	48.70	49.39	50.08
Persons Per Household (People)	2.80	2.59	2.56	2.52	2.50	2.48	2.45	2.44	2.44	2.43
Retail Sales Per Household (1996 \$)	\$91,798.00	\$87,784.00	\$89,139.00	\$91,577.00	\$92,412.00	\$94,264.00	\$99,388.00	\$102,420.00	\$103,210.00	\$103,905.00
Mean Household Income (1996 \$)	\$33,311.00	\$39,992.57	\$41,271.57	\$41,786.43	\$42,807.57	\$44,042.86	\$44,442.57	\$43,793.57	\$44,136.86	\$44,457.86
Households With Money Income (Thousands)	29.82	37.73	43.18	44.45	45.61	46.62	47.51	48.70	49.39	50.08
% Less Than \$10,000 (1990 \$)	N/A	0.26	0.23	0.22	0.21	0.21	0.20	0.20	0.19	0.19
% \$10,000 to 19,999	N/A	0.24	0.21	0.21	0.20	0.19	0.19	0.19	0.18	0.18
% \$20,000 to 29,999	N/A	0.18	0.19	0.20	0.20	0.20	0.20	0.20	0.20	0.19
% \$30,000 to 39,999	N/A	0.13	0.15	0.16	0.16	0.17	0.17	0.18	0.18	0.18
% \$40,000 to 49,999	N/A	0.08	0.09	0.09	0.10	0.10	0.10	0.10	0.11	0.11
% \$50,000 to 59,999	N/A	0.04	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06
% \$60,000 to 74,999	N/A	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
% \$75,000 to 99,999	N/A	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% \$100,000 to 124,999	N/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% \$125,000 to 149,999	N/A	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01
% \$150,000 or More	N/A	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total Retail Sales (Millions 1996 \$)	\$405.10	\$498.95	\$584.10	\$619.46	\$642.85	\$670.25	\$719.87	\$760.30	\$776.46	\$792.12

Table 3-30. Demographic and Employment Baseline Projections for Coastal Subarea FL-2 (continued).

Coastal Subarea FL-2	2003	2004	2005	2010	2015	2020	2025	2030	2035	2040
Total Population (Thousands)	132.57	134.09	135.65	143.54	151.69	160.14	169.14	178.63	188.67	199.26
% White	0.81	0.81	0.81	0.80	0.80	0.79	0.79	0.78	0.77	0.77
% Black	0.16	0.16	0.16	0.16	0.16	0.16	0.17	0.17	0.17	0.17
% Other	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Hispanic	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.05	0.05
% 0-18 Years	0.23	0.23	0.23	0.22	0.21	0.22	0.22	0.23	0.23	0.24
% 19-64 Years	0.61	0.61	0.61	0.61	0.59	0.57	0.54	0.51	0.49	0.46
% 65 Years & Over	0.16	0.16	0.16	0.18	0.19	0.21	0.24	0.26	0.29	0.33
% Male	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.50	0.50	0.50
% Female	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.50	0.50	0.50
Median Age Of Population (Years)	40.82	41.19	41.54	42.96	43.81	44.04	43.90	43.76	43.63	43.49
Total Employment (Thousands)	46.64	47.16	47.69	50.41	53.20	56.06	58.98	62.06	65.30	68.71
% Farm	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03
% Agricultural Services	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Mining	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Construction	0.08	0.08	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.07
% Manufacturing	0.09	0.09	0.09	0.09	0.08	0.08	0.08	0.07	0.07	0.07
% Transport, Comm. & Public Util	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
% Wholesale Trade	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% Retail Trade	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
% Finance, Ins. & Real Estate	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08
% Services	0.23	0.23	0.23	0.24	0.24	0.25	0.25	0.26	0.26	0.27
% Federal Civilian Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Federal Military Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
% State and Local Govt	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
Total Earnings (Millions 1996 \$)	\$1,038.37	\$1,058.32	\$1,078.64	\$1,185.28	\$1,299.62	\$1,421.59	\$1,551.56	\$1,693.41	\$1,848.23	\$2,017.20
% Farm	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
% Agricultural Services	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% Mining	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Construction	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.07
% Manufacturing	0.16	0.15	0.15	0.15	0.14	0.14	0.13	0.13	0.13	0.12
% Transport, Comm. & Public Util	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05
% Wholesale Trade	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% Retail Trade	0.10	0.10	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09
% Finance, Ins. & Real Estate	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06
% Services	0.18	0.18	0.18	0.19	0.20	0.21	0.22	0.22	0.23	0.24
% Federal Civilian Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Federal Military Govt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% State and Local Govt	0.26	0.26	0.26	0.26	0.26	0.25	0.25	0.25	0.25	0.25
Personal Income (Millions 1996 \$)	\$2,399.63	\$2,450.73	\$2,502.79	\$2,777.25	\$3,075.76	\$3,400.16	\$3,753.10	\$4,142.68	\$4,572.69	\$5,047.34
Income Per Capita (1996 \$)	\$18,102	\$18,277	\$18,450	\$19,348	\$20,277	\$21,232	\$22,190	\$23,191	\$24,237	\$25,330
W&P Wealth Index (U.S. = 100)	67.36	67.26	67.16	66.64	66.20	65.75	65.25	64.75	64.25	63.76
Number Of Households (Thousands)	50.78	51.46	52.17	55.53	58.74	61.54	63.92	66.39	68.95	71.61
Persons Per Household (People)	2.42	2.42	2.41	2.40	2.38	2.39	2.42	2.45	2.48	2.50
Retail Sales Per Household (1996 \$)	\$104,592.00	\$105,265.00	\$105,908.00	\$109,619.00	\$113,967.00	\$119,498.00	\$126,357.00	\$133,609.70	\$141,278.69	\$149,387.86
Mean Household Income (1996 \$)	\$44,780.86	\$45,107.43	\$45,423.14	\$47,294.29	\$49,485.29	\$52,178.57	\$55,353.86	\$58,722.37	\$62,295.88	\$66,086.84
Households With Money Income (Thousands)	50.78	51.46	52.17	55.53	58.74	61.54	63.92	66.39	68.95	71.61
% Less Than \$10,000 (1990 \$)	0.18	0.18	0.17	0.15	0.13	0.12	0.10	0.08	0.07	0.06
% \$10,000 to 19,999	0.17	0.17	0.16	0.15	0.13	0.11	0.09	0.08	0.07	0.06
% \$20,000 to 29,999	0.19	0.19	0.19	0.17	0.15	0.13	0.11	0.09	0.08	0.07
% \$30,000 to 39,999	0.19	0.19	0.20	0.21	0.22	0.22	0.21	0.19	0.18	0.17
% \$40,000 to 49,999	0.11	0.12	0.12	0.13	0.15	0.18	0.20	0.23	0.26	0.30
% \$50,000 to 59,999	0.06	0.06	0.06	0.07	0.08	0.10	0.12	0.14	0.17	0.20
% \$60,000 to 74,999	0.04	0.05	0.05	0.05	0.06	0.07	0.08	0.10	0.12	0.15
% \$75,000 to 99,999	0.02	0.03	0.03	0.03	0.03	0.04	0.05	0.05	0.06	0.07
% \$100,000 to 124,999	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03
% \$125,000 to 149,999	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02
% \$150,000 or More	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02
Total Retail Sales (Millions 1996 \$)	\$807.87	\$823.45	\$839.30	\$921.57	\$1,010.18	\$1,105.98	\$1,210.11	\$1,324.04	\$1,448.70	\$1,585.10

N/A means that information is not available.

Source: Woods &amp; Poole Economics Inc., 2002.

Table 3-31

## Demographic and Employment Baseline Projections for Coastal Subarea FL-3

Coastal Subarea FL-3	1980	1990	1995	1996	1997	1998	1999	2000	2001	2002
Total Population (Thousands)	2,393.31	3,267.90	3,591.70	3,651.49	3,726.39	3,803.78	3,875.87	3,954.32	4,022.21	4,091.10
% White	N/A	0.85	0.83	0.82	0.82	0.81	0.81	0.80	0.80	0.79
% Black	N/A	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
% Other	N/A	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% Hispanic	0.04	0.06	0.08	0.08	0.09	0.09	0.09	0.10	0.10	0.11
% 0-18 Years	0.23	0.21	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
% 19-64 Years	0.54	0.55	0.55	0.55	0.55	0.55	0.56	0.56	0.56	0.56
% 65 Years & Over	0.23	0.24	0.23	0.23	0.23	0.23	0.22	0.23	0.22	0.22
% Male	0.47	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48
% Female	0.53	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52
Median Age Of Population (Years)	46.14	44.78	44.99	45.23	45.42	45.60	45.83	46.29	46.46	46.63
Total Employment (Thousands)	1,058.32	1,661.70	1,879.68	1,944.73	2,017.21	2,094.80	2,194.61	2,248.28	2,298.83	2,347.94
% Farm	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Agricultural Services	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% Mining	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Construction	0.08	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
% Manufacturing	0.09	0.08	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06
% Transport, Comm. & Public Util	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
% Wholesale Trade	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
% Retail Trade	0.20	0.20	0.19	0.19	0.18	0.18	0.18	0.17	0.17	0.17
% Finance, Ins. & Real Estate	0.12	0.09	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09
% Services	0.25	0.32	0.38	0.38	0.39	0.39	0.40	0.41	0.41	0.41
% Federal Civilian Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Federal Military Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% State and Local Govt	0.10	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Total Earnings (Millions 1996 \$)	\$24,649.23	\$41,439.73	\$48,810.00	\$50,773.92	\$53,161.66	\$57,262.02	\$60,802.08	\$62,838.40	\$64,944.02	\$67,034.97
% Farm	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Construction	0.10	0.08	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07
% Manufacturing	0.12	0.10	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.07
% Transport, Comm. & Public Util	0.07	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
% Wholesale Trade	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
% Retail Trade	0.14	0.13	0.12	0.12	0.12	0.12	0.12	0.11	0.11	0.11
% Finance, Ins. & Real Estate	0.10	0.08	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10
% Services	0.22	0.31	0.36	0.36	0.36	0.36	0.37	0.37	0.38	0.38
% Federal Civilian Govt	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02
% Federal Military Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% State and Local Govt	0.10	0.12	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.10
Personal Income (Millions 1996 \$)	\$43,798.00	\$77,534.88	\$88,036.18	\$91,561.45	\$96,618.39	\$101,606.54	\$104,955.62	\$108,452.73	\$112,011.05	\$115,583.16
Income Per Capita (1996 \$)	\$18,300	\$23,726	\$24,511	\$25,075	\$25,928	\$26,712	\$27,079	\$27,426	\$27,848	\$28,252
W&P Wealth Index (U.S. = 100)	104.77	108.59	106.16	106.11	107.26	105.63	104.32	104.42	104.71	105.00
Number Of Households (Thousands)	985.92	1,383.66	1,512.22	1,545.95	1,580.32	1,619.03	1,651.17	1,687.38	1,721.63	1,756.13
Persons Per Household (People)	2.39	2.31	2.32	2.30	2.30	2.29	2.28	2.28	2.27	2.27
Retail Sales Per Household (1996 \$)	\$20,535.10	\$21,826.60	\$22,138.00	\$22,473.30	\$22,562.30	\$23,089.90	\$24,454.50	\$25,181.00	\$25,356.60	\$25,507.40
Mean Household Income (1996 \$)	\$42,638.10	\$54,635.50	\$55,981.90	\$56,880.00	\$58,889.10	\$60,265.20	\$60,656.30	\$61,293.80	\$62,084.10	\$62,845.00
Households With Money Income (Thousands)	985.92	1,383.66	1,512.22	1,545.95	1,580.32	1,619.03	1,651.17	1,687.38	1,721.63	1,756.13
% Less Than \$10,000 (1990 \$)	N/A	N/A	N/A	N/A	0.12	0.11	0.11	0.11	0.10	0.10
% \$10,000 to 19,999	N/A	N/A	N/A	N/A	0.18	0.17	0.17	0.16	0.16	0.16
% \$20,000 to 29,999	N/A	N/A	N/A	N/A	0.18	0.17	0.17	0.16	0.16	0.16
% \$30,000 to 39,999	N/A	N/A	N/A	N/A	0.18	0.18	0.18	0.18	0.18	0.18
% \$40,000 to 49,999	N/A	N/A	N/A	N/A	0.12	0.13	0.13	0.14	0.14	0.14
% \$50,000 to 59,999	N/A	N/A	N/A	N/A	0.08	0.08	0.08	0.08	0.09	0.09
% \$60,000 to 74,999	N/A	N/A	N/A	N/A	0.06	0.07	0.07	0.07	0.07	0.07
% \$75,000 to 99,999	N/A	N/A	N/A	N/A	0.04	0.04	0.05	0.05	0.05	0.05
% \$100,000 to 124,999	N/A	N/A	N/A	N/A	0.02	0.02	0.02	0.02	0.02	0.02
% \$125,000 to 149,999	N/A	N/A	N/A	N/A	0.01	0.01	0.01	0.01	0.01	0.01
% \$150,000 or More	N/A	N/A	N/A	N/A	0.02	0.02	0.02	0.02	0.02	0.02
Total Retail Sales (Millions 1996 \$)	\$20,905.55	\$32,627.00	\$36,914.04	\$38,411.72	\$39,533.95	\$41,487.05	\$44,858.10	\$47,171.60	\$48,435.85	\$49,672.54

Table 3-31. Demographic and Employment Baseline Projections for Coastal Subarea FL-3 (continued).

Coastal Subarea FL-3	2003	2004	2005	2010	2015	2020	2025	2030	2035	2040
Total Population (Thousands)	4,160.25	4,228.59	4,298.86	4,647.77	5,009.36	5,381.16	5,765.56	6,177.42	6,618.71	7,091.52
% White	0.79	0.78	0.78	0.75	0.73	0.71	0.69	0.66	0.64	0.62
% Black	0.08	0.08	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10
% Other	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.05
% Hispanic	0.11	0.11	0.12	0.13	0.15	0.17	0.18	0.20	0.22	0.24
% 0-18 Years	0.22	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.22	0.22
% 19-64 Years	0.56	0.57	0.57	0.57	0.56	0.55	0.52	0.50	0.47	0.45
% 65 Years & Over	0.22	0.22	0.22	0.22	0.23	0.25	0.27	0.29	0.32	0.35
% Male	0.48	0.48	0.49	0.49	0.49	0.49	0.49	0.50	0.50	0.50
% Female	0.52	0.52	0.51	0.51	0.51	0.51	0.51	0.50	0.50	0.50
Median Age Of Population (Years)	46.81	46.99	47.18	48.19	48.97	49.37	49.09	48.81	48.53	48.25
Total Employment (Thousands)	2,396.97	2,445.50	2,494.20	2,740.96	2,995.06	3,259.01	3,535.04	3,834.45	4,159.22	4,511.50
% Farm	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
% Agricultural Services	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01
% Mining	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Construction	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05
% Manufacturing	0.06	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.03
% Transport, Comm. & Public Util	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03
% Wholesale Trade	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
% Retail Trade	0.17	0.17	0.17	0.16	0.15	0.15	0.15	0.14	0.14	0.13
% Finance, Ins. & Real Estate	0.09	0.09	0.09	0.09	0.08	0.08	0.08	0.08	0.07	0.07
% Services	0.42	0.42	0.43	0.44	0.46	0.48	0.49	0.51	0.52	0.54
% Federal Civilian Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Federal Military Govt	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
% State and Local Govt	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Total Earnings (Millions 1996 \$)	\$69,150.96	\$71,275.43	\$73,440.00	\$84,916.82	\$97,613.40	\$111,715.41	\$127,420.67	\$145,333.83	\$165,765.27	\$189,069.01
% Farm	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Construction	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.04	0.04
% Manufacturing	0.07	0.07	0.07	0.07	0.06	0.06	0.05	0.05	0.05	0.05
% Transport, Comm. & Public Util	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.04
% Wholesale Trade	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05
% Retail Trade	0.11	0.11	0.11	0.10	0.09	0.09	0.09	0.08	0.08	0.07
% Finance, Ins. & Real Estate	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.09	0.09
% Services	0.39	0.39	0.40	0.42	0.44	0.47	0.49	0.51	0.53	0.55
% Federal Civilian Govt	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
% Federal Military Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
% State and Local Govt	0.10	0.10	0.10	0.10	0.10	0.10	0.09	0.09	0.09	0.09
Personal Income (Millions 1996 \$)	\$119,210.85	\$122,878.39	\$126,620.39	\$146,534.89	\$168,674.32	\$193,345.49	\$220,882.64	\$252,341.77	\$288,281.46	\$329,339.84
Income Per Capita (1996 \$)	\$28,655	\$29,059	\$29,454	\$31,528	\$33,672	\$35,930	\$38,311	\$40,849	\$43,556	\$46,441
W&P Wealth Index (U.S. = 100)	105.28	105.57	105.84	107.14	108.32	109.42	110.44	111.48	112.53	113.58
Number Of Households (Thousands)	1,790.80	1,825.06	1,860.03	2,029.40	2,193.19	2,343.06	2,480.85	2,626.73	2,781.20	2,944.76
Persons Per Household (People)	2.26	2.25	2.25	2.23	2.23	2.24	2.26	2.29	2.32	2.34
Retail Sales Per Household (1996 \$)	\$25,654.50	\$25,799.40	\$25,939.70	\$26,753.20	\$27,726.10	\$28,960.00	\$30,439.70	\$31,995.00	\$33,629.78	\$35,348.08
Mean Household Income (1996 \$)	\$63,604.40	\$64,374.50	\$65,133.20	\$69,322.10	\$74,068.50	\$79,667.90	\$86,090.60	\$93,031.09	\$100,531.11	\$108,635.77
Households With Money Income (Thousands)	1,790.80	1,825.06	1,860.03	2,029.40	2,193.19	2,343.06	2,480.85	2,626.73	2,781.20	2,944.76
% Less Than \$10,000 (1990 \$)	0.10	0.10	0.09	0.08	0.07	0.06	0.05	0.04	0.03	0.03
% \$10,000 to \$19,999	0.15	0.15	0.15	0.13	0.11	0.09	0.07	0.06	0.05	0.04
% \$20,000 to \$29,999	0.15	0.15	0.15	0.13	0.11	0.09	0.07	0.06	0.05	0.04
% \$30,000 to \$39,999	0.18	0.18	0.18	0.17	0.15	0.13	0.10	0.08	0.07	0.05
% \$40,000 to \$49,999	0.15	0.15	0.15	0.17	0.18	0.18	0.16	0.15	0.13	0.12
% \$50,000 to \$59,999	0.09	0.09	0.10	0.11	0.13	0.15	0.17	0.19	0.22	0.25
% \$60,000 to \$74,999	0.08	0.08	0.08	0.09	0.11	0.13	0.16	0.19	0.24	0.29
% \$75,000 to \$99,999	0.05	0.05	0.05	0.06	0.07	0.09	0.11	0.13	0.16	0.20
% \$100,000 to \$124,999	0.02	0.02	0.02	0.02	0.03	0.04	0.04	0.05	0.06	0.08
% \$125,000 to \$149,999	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.04
% \$150,000 or More	0.02	0.02	0.02	0.03	0.03	0.04	0.04	0.05	0.06	0.08
Total Retail Sales (Millions 1996 \$)	\$50,918.32	\$52,158.09	\$53,418.78	\$59,971.46	\$67,032.37	\$74,667.19	\$82,964.62	\$92,184.10	\$102,428.11	\$113,810.49

N/A means that information is not available.

Source: Woods &amp; Poole Economics Inc., 2002.

Table 3-32

## Demographic and Employment Baseline Projections for Coastal Subarea FL-4

Coastal Subarea FL-4	1980	1990	1995	1996	1997	1998	1999	2000	2001	2002
Total Population (Thousands)	1,706.78	2,021.02	2,175.60	2,222.20	2,252.34	2,276.83	2,306.09	2,340.67	2,362.41	2,384.86
% White	N/A	0.32	0.28	0.27	0.26	0.25	0.24	0.23	0.23	0.22
% Black	N/A	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
% Other	N/A	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% Hispanic	0.35	0.48	0.52	0.53	0.54	0.55	0.55	0.56	0.56	0.57
% 0-18 Years	0.25	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
% 19-64 Years	0.59	0.60	0.60	0.60	0.60	0.60	0.60	0.61	0.61	0.61
% 65 Years & Over	0.16	0.14	0.14	0.14	0.14	0.14	0.13	0.13	0.13	0.14
% Male	0.47	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48
% Female	0.53	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52
Median Age Of Population (Years)	35.11	36.22	37.34	37.72	38.03	38.34	38.71	39.14	39.50	39.85
Total Employment (Thousands)	942.95	1,117.16	1,177.11	1,205.71	1,234.93	1,255.67	1,286.63	1,306.73	1,324.75	1,341.81
% Farm	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Construction	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04
% Manufacturing	0.11	0.08	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06
% Transport, Comm. & Public Util	0.08	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
% Wholesale Trade	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
% Retail Trade	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16
% Finance, Ins. & Real Estate	0.10	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
% Services	0.28	0.32	0.35	0.35	0.36	0.36	0.36	0.37	0.37	0.37
% Federal Civilian Govt	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01
% Federal Military Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% State and Local Govt	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Total Earnings (Millions 1996 \$)	\$24,740.98	\$32,685.74	\$35,430.81	\$36,414.61	\$37,400.18	\$39,315.46	\$40,941.70	\$42,027.42	\$43,034.78	\$44,020.05
% Farm	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00
% Agricultural Services	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Mining	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Construction	0.06	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
% Manufacturing	0.11	0.08	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06
% Transport, Comm. & Public Util	0.14	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
% Wholesale Trade	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
% Retail Trade	0.12	0.11	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
% Finance, Ins. & Real Estate	0.08	0.09	0.09	0.10	0.11	0.11	0.11	0.11	0.11	0.11
% Services	0.25	0.30	0.32	0.32	0.32	0.33	0.33	0.33	0.33	0.34
% Federal Civilian Govt	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
% Federal Military Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% State and Local Govt	0.09	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Personal Income (Millions 1996 \$)	\$32,389.09	\$44,335.70	\$47,821.61	\$49,281.61	\$50,588.30	\$52,643.15	\$54,015.71	\$55,330.38	\$56,547.09	\$57,756.23
Income Per Capita (1996 \$)	\$18,977	\$21,937	\$21,981	\$22,177	\$22,460	\$23,121	\$23,423	\$23,639	\$23,936	\$24,218
W&P Wealth Index (U.S. = 100)	104.12	113.63	110.64	109.88	110.19	110.69	110.48	110.71	110.67	110.65
Number Of Households (Thousands)	644.84	729.52	762.59	779.76	788.55	796.93	804.94	813.97	822.68	831.83
Persons Per Household (People)	2.48	2.49	2.56	2.55	2.55	2.55	2.55	2.54	2.53	2.53
Retail Sales Per Household (1996 \$)	\$22,898.00	\$27,072.50	\$28,798.00	\$29,358.50	\$29,538.50	\$30,322.00	\$32,181.50	\$32,967.50	\$33,223.50	\$33,439.50
Mean Household Income (1996 \$)	\$44,543.00	\$60,215.00	\$63,175.50	\$64,077.50	\$65,948.50	\$69,007.50	\$70,409.50	\$70,924.00	\$71,655.00	\$72,349.00
Households With Money Income (Thousands)	644.84	729.52	762.59	779.76	788.55	796.93	804.94	813.97	822.68	831.83
% Less Than \$10,000 (1990 \$)	N/A	0.19	0.18	0.17	0.17	0.16	0.16	0.16	0.16	0.15
% \$10,000 to 19,999	N/A	0.19	0.17	0.17	0.17	0.16	0.16	0.16	0.15	0.15
% \$20,000 to 29,999	N/A	0.17	0.15	0.15	0.15	0.14	0.14	0.14	0.14	0.13
% \$30,000 to 39,999	N/A	0.13	0.14	0.14	0.15	0.15	0.15	0.15	0.15	0.15
% \$40,000 to 49,999	N/A	0.10	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.12
% \$50,000 to 59,999	N/A	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.09
% \$60,000 to 74,999	N/A	0.06	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08
% \$75,000 to 99,999	N/A	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06
% \$100,000 to 124,999	N/A	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% \$125,000 to 149,999	N/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% \$150,000 or More	N/A	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03
Total Retail Sales (Millions 1996 \$)	\$15,279.49	\$19,980.12	\$21,599.00	\$22,252.62	\$22,423.28	\$23,299.80	\$25,031.01	\$26,186.92	\$26,696.94	\$27,190.90

Table 3-32. Demographic and Employment Baseline Projections for Coastal Subarea FL-4 (continued).

Coastal Subarea FL-4	2003	2004	2005	2010	2015	2020	2025	2030	2035	2040
Total Population (Thousands)	2,407.79	2,430.44	2,454.36	2,575.09	2,706.02	2,844.53	2,991.12	3,145.26	3,307.35	3,477.79
% White	0.22	0.22	0.21	0.20	0.18	0.17	0.17	0.16	0.15	0.14
% Black	0.19	0.19	0.19	0.19	0.19	0.19	0.20	0.20	0.20	0.20
% Other	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
% Hispanic	0.57	0.58	0.58	0.60	0.61	0.61	0.62	0.63	0.64	0.64
% 0-18 Years	0.26	0.25	0.25	0.24	0.23	0.23	0.24	0.24	0.24	0.24
% 19-64 Years	0.61	0.61	0.61	0.61	0.60	0.59	0.57	0.55	0.53	0.51
% 65 Years & Over	0.14	0.14	0.14	0.15	0.16	0.18	0.20	0.22	0.24	0.27
% Male	0.48	0.48	0.48	0.48	0.47	0.47	0.47	0.46	0.46	0.46
% Female	0.52	0.52	0.52	0.52	0.53	0.53	0.53	0.54	0.54	0.55
Median Age Of Population (Years)	40.20	40.51	40.82	42.11	43.03	43.58	43.80	44.02	44.24	44.47
Total Employment (Thousands)	1,358.68	1,375.14	1,391.66	1,476.14	1,565.76	1,662.71	1,768.97	1,882.02	2,002.30	2,130.27
% Farm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Agricultural Services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Mining	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Construction	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03
% Manufacturing	0.06	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.03
% Transport, Comm. & Public Util	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
% Wholesale Trade	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.05	0.05	0.05
% Retail Trade	0.16	0.16	0.16	0.15	0.15	0.14	0.14	0.14	0.13	0.13
% Finance, Ins. & Real Estate	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.07	0.07
% Services	0.37	0.37	0.38	0.39	0.40	0.41	0.42	0.43	0.45	0.46
% Federal Civilian Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
% Federal Military Govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
% State and Local Govt	0.10	0.10	0.10	0.10	0.11	0.11	0.11	0.12	0.12	0.12
Total Earnings (Millions 1996 \$)	\$45,005.53	\$45,981.67	\$46,970.44	\$52,159.31	\$57,873.87	\$64,256.90	\$71,454.67	\$79,458.71	\$88,359.32	\$98,256.93
% Farm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Agricultural Services	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Mining	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Construction	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02
% Manufacturing	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.04
% Transport, Comm. & Public Util	0.10	0.10	0.10	0.10	0.10	0.10	0.09	0.09	0.09	0.09
% Wholesale Trade	0.09	0.09	0.09	0.08	0.08	0.07	0.07	0.06	0.06	0.05
% Retail Trade	0.09	0.09	0.09	0.09	0.08	0.08	0.08	0.07	0.07	0.07
% Finance, Ins. & Real Estate	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.10	0.10
% Services	0.34	0.34	0.35	0.36	0.38	0.39	0.41	0.42	0.44	0.46
% Federal Civilian Govt	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02
% Federal Military Govt	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
% State and Local Govt	0.13	0.13	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.14
Personal Income (Millions 1996 \$)	\$58,975.46	\$60,196.08	\$61,437.54	\$68,006.60	\$75,288.25	\$83,425.08	\$92,569.73	\$102,716.76	\$113,976.06	\$126,469.55
Income Per Capita (1996 \$)	\$24,494	\$24,768	\$25,032	\$26,409	\$27,822	\$29,328	\$30,948	\$32,658	\$34,461	\$36,365
W&P Wealth Index (U.S. = 100)	110.61	110.60	110.58	110.45	110.28	110.14	110.07	110.01	109.94	109.88
Number Of Households (Thousands)	841.09	850.21	859.68	905.01	948.55	986.56	1,019.70	1,053.94	1,089.34	1,125.93
Persons Per Household (People)	2.52	2.52	2.51	2.50	2.50	2.52	2.56	2.59	2.63	2.66
Retail Sales Per Household (1996 \$)	\$33,651.50	\$33,859.50	\$34,062.00	\$35,218.50	\$36,583.00	\$38,293.50	\$40,332.00	\$42,479.02	\$44,740.33	\$47,122.01
Mean Household Income (1996 \$)	\$73,041.00	\$73,745.00	\$74,432.50	\$78,273.00	\$82,696.50	\$88,061.00	\$94,352.00	\$101,092.42	\$108,314.38	\$116,052.26
Households With Money Income (Thousands)	841.09	850.21	859.68	905.01	948.55	986.56	1,019.70	1,053.94	1,089.34	1,125.93
% Less Than \$10,000 (1990 \$)	0.15	0.15	0.15	0.13	0.12	0.11	0.09	0.08	0.06	0.05
% \$10,000 to 19,999	0.15	0.15	0.14	0.13	0.12	0.11	0.09	0.08	0.06	0.05
% \$20,000 to 29,999	0.13	0.13	0.13	0.12	0.11	0.09	0.08	0.07	0.06	0.05
% \$30,000 to 39,999	0.15	0.15	0.15	0.15	0.14	0.12	0.10	0.09	0.07	0.06
% \$40,000 to 49,999	0.13	0.13	0.13	0.14	0.15	0.16	0.15	0.14	0.13	0.12
% \$50,000 to 59,999	0.09	0.09	0.09	0.10	0.11	0.12	0.15	0.17	0.20	0.24
% \$60,000 to 74,999	0.08	0.08	0.08	0.09	0.10	0.11	0.13	0.16	0.19	0.23
% \$75,000 to 99,999	0.06	0.06	0.06	0.07	0.07	0.08	0.10	0.12	0.14	0.17
% \$100,000 to 124,999	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.05	0.06	0.07
% \$125,000 to 149,999	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03
% \$150,000 or More	0.03	0.03	0.03	0.03	0.03	0.04	0.05	0.06	0.07	0.08
Total Retail Sales (Millions 1996 \$)	\$27,689.07	\$28,183.26	\$28,688.01	\$31,331.82	\$34,215.18	\$37,360.43	\$40,802.11	\$44,560.85	\$48,665.84	\$53,148.99

N/A means that information is not available.

Source: Woods &amp; Poole Economics Inc., 2002.

Table 3-33

Depth and Number of Trips (1999) for OCS-Related Waterways

Waterway	Project Depth (ft)	Total Trips						Foreign Trips						Domestic Trips					
		Upbound			Downbound			Upbound			Downbound			Upbound			Downbound		
		Total	Tanker	Other	Total	Tanker	Other	Total	Tanker	Other	Total	Tanker	Other	Total	Tanker	Other	Total	Tanker	Other
<b>Gulf Intracoastal Waterway (GIWW)</b>																			
Pensacola Bay, FL to Mobile Bay, AL	12	5,825	1,323	4,502	5,499	1,347	4,152	0	0	0	0	0	0	5,825	1,323	4,502	5,499	1,347	4,152
* Mobile Bay, AL to New Orleans, LA	12	24,456	4,004	20,452	24,199	4,115	20,084	0	0	0	0	0	0	24,456	4,004	20,452	24,199	4,115	20,084
* Mississippi River, LA to Sabine River, TX	12	63,374	19,445	43,929	62,664	19,219	43,445	0	0	0	0	0	0	63,374	19,445	43,929	62,664	19,219	43,445
Sabine River, TX to Galveston, TX	12	31,151	15,012	16,139	30,922	14,984	15,938	0	0	0	0	0	0	31,151	15,012	16,139	30,922	14,984	15,938
Galveston, TX to Corpus Christi, TX	12	22,995	9,353	13,642	23,243	9,276	13,967	0	0	0	0	0	0	22,995	9,353	13,642	23,243	9,276	13,967
Corpus Christi, TX to Mexican Border, TX	12	1,615	622	993	1,664	627	1,037	0	0	0	0	0	0	1,615	622	993	1,664	627	1,037
<b>Texas Harbors, Channels, and Waterways</b>																			
Beaumont (Neches River)	40, 34, 30	11,737	5,434	6,303	11,818	5,555	6,263	1,180	1,009	171	1,147	985	162	10,557	4,425	6,132	10,671	4,570	6,101
Port Arthur	40	6,193	2,396	3,797	6,203	2,400	3,803	352	110	242	308	96	212	5,841	2,286	3,555	5,895	2,304	3,591
Sabine Pass Harbor	40, 42	3,249	371	2,878	3,063	337	2,726	95	3	92	83	2	81	3,154	368	2,786	2,980	335	2,645
Sabine-Neches Waterway	40, 42, 34, 30, 25, 12, 13	39,022	17,642	21,380	32,039	15,163	16,876	1,633	1,123	510	1,544	1,084	460	37,389	16,519	20,870	30,495	14,079	16,416
<b>Louisiana Harbors, Channels, and Waterways</b>																			
Atchafalaya River	12	12,659	3,039	9,620	12,753	2,993	9,760	0	0	0	0	0	0	12,659	3,039	9,620	12,753	2,993	9,760
* Atchafalaya River, Morgan City to Gulf of Mexico	20	9,573	1,067	8,506	9,147	1,015	8,132	452	0	452	170	2	168	9,121	1,067	8,054	8,977	1,013	7,964
Barataria Bay Waterway	15, 12	4,190	119	4,071	4,271	119	4,152	0	0	0	0	0	0	4,190	119	4,071	4,271	119	4,152
* Bayou Lafourche and Lafourche-Jump Waterway	24, 9, 6, 12	23,869	1,203	22,666	23,230	1,132	22,098	1,020	2	1,018	292	0	292	22,849	1,201	21,648	22,938	1,132	21,806
Bayou Little Caillou	5	3,382	109	3,273	3,608	162	3,446	0	0	0	0	0	0	3,382	109	3,273	3,608	162	3,446
Bayou Teche and Vermilion River	9, 8	5,985	171	5,814	5,745	188	5,557	0	0	0	0	0	0	5,985	171	5,814	5,745	188	5,557
Calcasieu River and Pass (Lake Charles)	35, 40, 12, 42	25,279	5,558	19,721	25,361	5,752	19,609	992	445	547	957	450	507	24,287	5,113	19,174	24,404	5,302	19,102
Freshwater Bayou	12	7,734	107	7,627	7,910	117	7,793	0	0	0	0	0	0	7,734	107	7,627	7,910	117	7,793
* GIWW, Morgan City-Port Allen Route	12	14,894	6,723	8,171	14,914	6,755	8,159	0	0	0	0	0	0	14,894	6,723	8,171	14,914	6,755	8,159
Innerharbor Navigation Canal	32	13,629	3,428	10,201	13,248	3,467	9,781	442	1	441	510	0	510	13,187	3,427	9,760	12,738	3,467	9,271
Mermentau River	6, 5, 15	3,516	631	2,885	3,462	631	2,831	0	0	0	0	0	0	3,516	631	2,885	3,462	631	2,831
* Mississippi River Gulf Outlet via Venice Vicinity	16, 14	17,984	847	17,137	17,754	820	16,934	1	0	1	61	2	59	17,983	847	17,136	17,693	818	16,875
Port of Baton Rouge	45	35,149	10,275	24,874	35,409	10,434	24,975	418	220	198	745	378	367	34,731	10,055	24,676	34,664	10,056	24,608
Port of New Orleans	45	53,942	6,970	46,972	52,359	6,866	45,493	3,627	460	3,167	2,551	314	2,237	50,315	6,510	43,805	49,808	6,552	43,256
* Port of Plaquemines	45	28,444	2,229	26,215	28,334	2,255	26,079	635	133	502	454	86	368	27,809	2,096	25,713	27,880	2,169	25,711
Port of South Louisiana	45	72,179	13,083	59,096	73,354	13,275	60,079	1,292	530	762	2,326	584	1,742	70,887	12,553	58,334	71,028	12,691	58,337
Waterway from Empire to Gulf of Mexico	9	17,967	104	17,863	18,093	95	17,998	0	0	0	0	0	0	17,967	104	17,863	18,093	95	17,998
Waterway from GIWW to Bayou Dulac	10, 5	4,156	183	3,973	4,226	186	4,040	0	0	0	0	0	0	4,156	183	3,973	4,226	186	4,040
<b>Mississippi Harbors, Channels, and Waterways</b>																			
Bayou Casotte	38	4,741	1,952	2,789	4,662	1,926	2,736	546	285	261	497	287	210	4,195	1,667	2,528	4,165	1,639	2,526
* Pascagoula Harbor	40, 38, 22, 12	5,909	1,955	3,954	5,878	1,961	3,917	619	286	333	574	287	287	5,290	1,669	3,621	5,304	1,674	3,630
<b>Alabama Harbors, Channels, and Waterways</b>																			
Black Warrior and Tombigbee Rivers	9	1,499	927	572	14,996	924	14,072	0	0	0	0	0	0	1,499	927	572	14,996	924	14,072
Chickasaw Creek	25	1,504	596	908	1,503	597	906	25	0	25	24	0	24	1,479	596	883	14,979	597	882
Dauphin Island Bay	NA	7,774	0	7,774	7,777	0	7,777	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
* Mobile Harbor	40	25,340	3,968	21,372	25,514	3,965	21,549	1,103	117	986	1,118	115	1,003	24,237	3,851	20,386	24,396	3,850	20,546
Tennessee Tombigbee Waterway	9	6,148	246	5,902	6,181	231	5,950	0	0	0	0	0	0	6,148	246	5,902	6,181	231	5,950
* Theodore Ship Channel	40	5,315	35	5,280	5,322	34	5,288	78	0	78	79	0	79	5,237	35	5,202	5,243	34	5,209

Table 3-34

Freight Traffic (1999) for OCS-Related Waterways  
(thousand short tons)

Waterway	All Commodities Total	Crude Petroleum					Petroleum Products					Coal Total	Chemicals Total	Crude Materials Total	Primary Mfg Goods Total	Food & Farm Production Total	Mfg Equip Machinery & Prod Total	Other Total
		Total	Total	Foreign Imports	Exports	Domestic Total	Total	Total	Foreign Imports	Exports	Domestic Total							
<b>Gulf Intracoastal Waterway (GIWW)</b>																		
Pensacola Bay, FL to Mobile Bay, AL	7,975	13	0	0	0	13	2,640	0	0	0	2,640	3,394	819	1,012	90	4	3	0
* Mobile Bay, AL to New Orleans, LA	21,856	1,328	0	0	0	1,328	5,839	0	0	0	5,839	4,974	3,605	4,656	1,256	162	36	0
* Mississippi River, LA to Sabine River, TX	61,084	10,497	0	0	0	10,497	17,953	0	0	0	17,953	247	12,478	14,081	2,631	1,517	1,064	616
Sabine River, TX to Galveston, TX	45,094	3,163	0	0	0	3,163	20,149	0	0	0	20,149	136	14,807	3,632	1,867	761	579	0
Galveston, TX to Corpus Christi, TX	27,373	945	0	0	0	945	11,441	0	0	0	11,441	20	10,424	3,801	277	377	57	31
Corpus Christi, TX to Mexican Border, TX	2,278	129	0	0	0	129	1,522	0	0	0	1,522	3	100	149	261	114	0	0
<b>Texas Harbors, Channels, and Waterways</b>																		
Beaumont (Neches River)	69,404	47,017	45,857	45,857	0	1,160	12,897	5,193	3,023	2,170	7,704	2	5,994	1,781	595	1,103	15	0
Port Arthur	18,309	8,011	7,977	7,977	0	34	6,812	1,740	604	1,136	5,072	64	1,374	670	734	36	32	576
Sabine Pass Harbor	949	837	0	0	0	837	49	0	0	0	49	0	9	6	5	9	34	0
Sabine-Neches Waterway	114,383	57,111	53,834	53,834	0	3,277	29,223	6,934	3,627	3,307	22,289	152	17,418	4,795	3,064	1,871	170	579
<b>Louisiana Harbors, Channels, and Waterways</b>																		
Atchafalaya River	13,995	3,292	0	0	0	3,292	3,420	0	0	0	3,420	5	1,220	5,109	113	596	240	0
* Atchafalaya River, Morgan City to Gulf of Mexico	2,101	828	0	0	0	828	131	61	61	0	70	0	2	182	172	412	367	7
Barataria Bay Waterway	283	49	0	0	0	49	10	0	0	0	10	0	0	69	1	37	117	0
* Bayou Lafourche and Lafourche-Jump Waterway	194	57	57	57	0	0	91	4	4	0	87	0	2	3	2	36	3	0
Bayou Little Caillou	374	305	0	0	0	305	0	0	0	0	0	0	0	4	1	1	63	0
Bayou Teche and Vermilion River	1,489	206	0	0	0	206	82	0	0	0	82	0	6	598	14	97	485	1
Calcasieu River and Pass (Lake Charles)	50,741	25,510	22,553	22,552	1	2,957	15,276	4,367	2,269	2,098	10,909	118	3,302	2,799	620	1,274	1,738	104
Freshwater Bayou	1,322	45	0	0	0	45	75	0	0	0	75	0	2	45	19	121	1,012	3
* GIWW, Morgan City-Port Allen Route	23,202	1,060	0	0	0	1,060	6,115	0	0	0	6,115	169	7,635	6,538	1,151	504	23	7
Innerharbor Navigation Canal	20,481	1,313	0	0	0	1,313	4,496	104	72	32	4,392	3,313	4,243	4,264	1,509	827	501	15
Mermentau River	749	716	0	0	0	716	14	0	0	0	14	0	0	8	0	1	10	0
* Mississippi River Gulf Outlet via Venice Vicinity	2,790	211	0	0	0	211	1,026	0	0	0	1,026	0	26	195	73	216	923	120
Port of Baton Rouge	63,729	5,918	4,730	4,730	0	1,188	16,558	3,015	2,236	779	13,543	1,385	14,159	9,067	8,304	8,321	9	8
Port of New Orleans	87,510	12,640	10,856	10,856	0	1,784	18,839	4,593	2,412	2,181	14,246	671	4,650	7,347	15,817	26,411	1,078	57
* Port of Plaquemines	62,462	7,964	6,193	6,193	0	1,771	6,006	1,445	474	971	4,561	23,143	5,923	5,799	3,779	9,837	7	4
Port of South Louisiana	214,197	22,074	15,902	15,902	0	6,172	35,196	6,188	3,392	2,796	29,008	368	13,158	12,038	10,405	120,936	21	1
Waterway from Empire to Gulf of Mexico	1,548	198	0	0	0	198	73	0	0	0	73	6	4	90	58	236	880	3
Waterway from GIWW to Bayou Dulac	421	69	0	0	0	69	45	0	0	0	45	0	0	23	7	163	114	0
<b>Mississippi Harbors, Channels, and Waterways</b>																		
Bayou Casotte	25,821	13,225	13,193	13,193	0	32	8,837	923	20	903	7,914	0	2,509	1,080	42	18	105	5
* Pascagoula Harbor	28,097	14,107	14,075	14,075	0	32	9,061	1,146	122	1,024	7,915	0	2,591	1,677	93	447	116	5
<b>Alabama Harbors, Channels, and Waterways</b>																		
Black Warrior and Tombigbee Rivers	20,034	1,010	0	0	0	1,010	1,140	0	0	0	1,140	9,053	585	6,722	1,474	46	4	0
Chickasaw Creek	2,359	0	0	0	0	0	1,054	0	0	0	1,054	80	428	774	17	4	2	0
Dauphin Island Bay	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
* Mobile Harbor	45,439	7,921	5,885	5,885	0	2,036	3,378	139	115	24	3,239	10,344	1,071	17,586	3,340	1,394	397	8
Tennessee Tombigbee Waterway	8,023	69	0	0	0	69	401	0	0	0	401	2,282	267	4,071	878	53	2	0
* Theodore Ship Channel	7,655	0	0	0	0	0	13	0	0	0	13	108	52	6,220	1,052	28	182	0



Table 3-35

## Typical Gulf of Mexico Vessel Specifications

Length (ft)	180	200	220	240	260
Width (ft)	38-40	56	56	57	60
Liquid Mud Capacity (bbl)	1,000-1,600	3,000	4,000	6,000	8,000
Drybulf Storage (cubic ft)	3,000	4,000	6,000	8,000	12,000
Speed (kn)	12-14	12-14	12-14	12-14	12-15
Dynamic Positioning (DP)	No	Yes	Yes	Yes	Yes

Table 3-36

## OCS-Related Service Bases

Planning Area	Coastal Subarea	Service Base	County	Planning Area	Coastal Subarea	Service Base	County or Parish					
WPA	TX-1	Aransas Pass	Nueces	CPA	LA-1	Abbeville	Vermilion					
		Bayside	Aransas			Cameron**	Cameron					
		Corpus Christi	Nueces			Erath	Vermilion					
		Harbor Island	Nueces			Freshwater City	Vermilion					
		Ingleside	San Patricio			Grand Chenier	Cameron					
		Port Aransas	Nueces			Intracoastal City**	Vermilion					
		Port Isabel	Cameron			Kaplan	Vermilion					
		Port Mansfield	Willacy			Lake Charles	Calcasieu					
		Port O'Connor	Calhoun			New Iberia	Iberia					
		Rockport	Aransas			Weeks Island	Iberia					
	TX-2	Freeport	Brazoria		LA-2	Amelia	St. Mary					
		Galveston	Galveston			Bayou Boeuf	St. Mary					
		Pelican Island	Galveston			Berwick	St. Mary					
		Port Arthur	Jefferson			Cocodrie	Terrebonne					
		Sabine Pass	Jefferson			Dulac	Terrebonne					
		Surfside	Harris			Fourchon*	Lafourche					
						Gibson	Terrebonne					
						Houma**	Terrebonne					
						Leeville	Lafourche					
						Louisa	St. Mary					
EPA	FL-1	Panama City	Bay	LA-3	Morgan City**	St. Mary						
	FL-2	NA			Patterson	St. Mary						
	FL-3	NA			Theriot	Terrebonne						
	FL-4	NA					Empire	Plaquemines				
							Grand Isle	Jefferson				
							Harvey	Jefferson				
							Hopedale	St. Bernard				
							Paradis	St. Charles				
							Venice*	Plaquemines				
							MA-1				Pascagoula**	Jackson
											Bayou Labatre	Mobile
	Mobile*	Mobile										
Theodore	Mobile											

\* Primary proposed action service base.

\*\* Secondary proposed action service base.

NA means that information is not available.

Source: USDOJ, MMS, 2001.

Table 3-37

Existing Coastal Infrastructure Related to OCS Program Activities in the Gulf of Mexico by Coastal Subarea

Infrastructure	Coastal Subareas*										Total
	TX-1	TX-2	LA-1	LA-2	LA-3	MA-1	FL-1	FL-2	FL-3	FL-4	
Pipeline Landfalls	2	11	38	33	35	7	0	0	0	0	126
Service Bases	10	6	10	13	6	4	1	0	0	0	50
Helicopter Hubs	7	32	29	28	27	5	0	0	0	0	128
Platform Yards	3	4	11	12	8	5	0	0	0	0	43
Shipyards	2	25	3	15	20	20	4	1	4	0	94
Pipecoating Plants	0	7	5	0	2	2	2	0	1	0	19
Refineries	5	14	4	1	9	4	0	0	0	0	37
Petrochemical Plants	4	16	3	4	2	0	0	0	0	0	29
Gas Processing Plants	0	1	13	8	7	6	0	0	0	0	35
Pipeline Shore Facilities	6	7	18	10	9	0	0	0	0	0	50
Barge Terminals	1	3	1	2	1	0	0	0	0	0	8
Tanker Ports	1	3	1	1	4	0	0	0	0	0	10
Waste Disposal Plants	4	5	10	8	3	4	0	0	0	0	34

\* See Figure 3-10.

Table 4-1

## Projected Oil and Gas Production in the Gulf of Mexico OCS

	Proposed Action	OCS Program (2003-2042)
Western Planning Area Reserve/Resource Production		
Oil (BBO)		3.349-5.533
Gas (Tcf)		42.661-58.174
Central Planning Area Reserve/Resource Production		
Oil (BBO)		12.005-16.525
Gas (Tcf)		108.271-146.271
Eastern Planning Area Reserve/Resource Production		
Oil (BBO)	0.065-0.085	0.139-0.370
Gas (Tcf)	0.265-0.340	2.488-3.538

Table 4-2

## Offshore Scenario Information Related to a Proposed Action in the Eastern Planning Area

	Offshore Subareas*		Total EPA**
	E1600-2400m	E>2400m	
Wells Drilled			
Exploration and Delineation Wells	4 - 5	7 - 8	11 - 13
Development Wells	7 - 10	12 - 17	19 - 27
Oil Wells	5 - 6	9 - 12	14 - 18
Gas Wells	2 - 4	3 - 5	5 - 9
Workovers and Other Well Activities	29 - 42	50 - 71	80 - 111
Production Structures			
Installed	1	1	2
Removed Using Explosives	0	0	0
Total Removed	1	1	2
Method of Oil Transportation			
Percent Piped	100%	100%	100%
Percent Barged	0%	0%	0%
Percent Tankered	0%	0%	0%
Length of Installed Pipelines (km)	NA	NA	50 - 800
Blowouts	0 - 1	0 - 1	0 - 1
Service-Vessel Trips (1,000 trips)	4 - 4	4 - 5	8 - 9
Helicopter Trips (1,000 trips)	4 - 4	4 - 5	7 - 9

\* See Figure 3-10.

\*\* Subarea totals may not add up to the planning area total because of rounding.

NA means that information is not available.

Table 4-3

## Offshore Scenario Information Related to OCS Program Activities in the Gulf of Mexico for the Years 2003-2042

	Water Depths*						Total OCS**
	0-60m	60-200m	200-800m	800-1600m	1600-2400m	>2400m	
<b>Wells Drilled</b>							
Exploration and Delineation Wells	3,409 - 3,977	1,217 - 1,420	1,162 - 1,262	1,989 - 2,782	1,003 - 1,458	216 - 434	8,996 - 11,333
Development Wells	7,390 - 8,181	3,599 - 3,990	2,057 - 2,232	2,727 - 3,619	1,125 - 2,472	250 - 585	17,148 - 21,079
Oil Wells	1,180 - 1,324	687 - 722	1,135 - 1,209	1,315 - 1,748	699 - 1,465	168 - 396	5,184 - 6,864
Gas Wells	6,210 - 6,857	2,912 - 3,268	922 - 1,023	1,412 - 1,871	426 - 1,007	82 - 189	11,964 - 14,215
Workovers and Other Well Activities	83,000 - 86,600	32,900 - 34,700	12,300 - 13,100	13,500 - 17,700	5,400 - 12,000	1,200 - 2,900	148,300 - 167,000
<b>Production Structures</b>							
Installed	2,239 - 2,969	426 - 566	100 - 107	151 - 200	57 - 125	14 - 32	2,987 - 3,999
Removed Using Explosives	3,696 - 4,243	579 - 692	29 - 30	0 - 0	0 - 0	0 - 0	4,305 - 4,965
Total Removed	5,286 - 6,069	827 - 988	82 - 87	85 - 109	28 - 55	8 - 14	6,303 - 7,296
<b>Method of Oil Transportation***</b>							
Percent Piped	99%	100%	92 - 100%	93 - 100%	94 - 100%	100%	94 - > 99%
Percent Barged	1%	0%	0%	0%	0%	0%	< 1%
Percent Tankered	0	0	0 - 7%	0 - 6%	0 - 7%	0 - 4%	0 - 6%
<b>Length of Installed Pipelines (km)#</b>							
Blowouts	99 - 108	42 - 46	24 - 26	33 - 45	15 - 28	3 - 7	215 - 258
Service-Vessel Trips (1,000 trips)	9,689 - 9,835	1,433 - 1,531	276 - 314	332 - 451	121 - 264	38 - 84	11,889 - 12,479
Helicopter Trips (1,000 trips)	11,374 - 18,920	4,792 - 8,360	4,075 - 5,727	5,094 - 10,203	2,150 - 6,047	501 - 1,445	27,997 - 50,692

\* See Figure 3-10.

\*\* Water depth totals may not add up to the OCS total because of rounding.

\*\*\* 100% of gas is assumed to be piped.

# Projected length of OCS pipelines does not include length in State waters.

NA means that information is not available.

Table 4-4

Offshore Scenario Information Related to OCS Program Activities in the Eastern Planning Area for the Years 2003-2042

	E0-60m	Offshore Subareas* E1600-2400m	E>2400m	Total EPA**
Wells Drilled				
Exploration and Delineation Wells	8 - 8	14 - 29	24 - 44	46 - 81
Development Wells	25 - 27	25 - 55	35 - 81	85 - 163
Oil Wells	0 - 0	10 - 27	19 - 50	29 - 77
Gas Wells	25 - 27	15 - 28	16 - 31	56 - 86
Workovers and Other Well Activities	100 - 100	100 - 300	200 - 400	400 - 800
Production Structures				
Installed	1 - 2	2 - 3	2 - 4	5 - 9
Removed Using Explosives	0	0	0	0
Total Removed	6 - 7	2 - 2	2 - 3	10 - 12
Method of Oil Transportation***				
Percent Piped	100%	100%	100%	100%
Percent Barged	0%	0%	0%	0%
Percent Tankered	0%	0%	0%	0%
Length of Installed Pipelines (km)#	160 - 224	N/A	N/A	1,040 - 1,664
Blowouts	0 - 0	0 - 1	0 - 1	1
Service-Vessel Trips (1,000 trips)	4 - 8	8 - 14	9 - 20	21 - 42
Helicopter Trips (1,000 trips)	4 - 9	7 - 15	8 - 20	19 - 43

\* See Figure 3-10.

\*\* Subarea totals may not add up to the planning area total because of rounding.

\*\*\* 100% of gas is assumed to be piped.

# Projected length of OCS pipelines does not include length in State waters.

NA means that information is not available.

Table 4-5

## Offshore Scenario Information Related to OCS Program Activities in the Central Planning Area for the Years 2003-2042

	C0-60m (western)	C0-60m (eastern)	C60-200m	Offshore Subareas*			C>2400m	Total CPA**
				C200-800m	C800-1600m	C1600-2400m		
<b>Wells Drilled</b>								
Exploration and Delineation Wells	2,337 - 2,728	413 - 481	1,056 - 1,233	703 - 736	1,651 - 1,996	834 - 1,150	114 - 260	7,108 - 8,584
Development Wells	4,708 - 5,190	831 - 916	2,874 - 3,108	1,268 - 1,327	1,899 - 2,428	821 - 1,736	152 - 347	12,553 - 15,052
Oil Wells	801 - 882	141 - 156	552 - 558	692 - 692	962 - 1,194	538 - 1,063	115 - 258	3,801 - 4,803
Gas Wells	3,907 - 4,308	690 - 760	2,322 - 2,550	576 - 635	937 - 1,234	283 - 673	37 - 89	8,752 - 10,249
Workovers and Other Well Activities	61,300 - 63,500	5,800 - 6,200	25,800 - 26,900	7,800 - 8,100	9,400 - 11,900	4,000 - 8,400	700 - 1,700	114,800 - 126,700
<b>Production Structures</b>								
Installed	1,539 - 2,034	271 - 359	331 - 429	62 - 65	106 - 136	42 - 90	9 - 21	2,360 - 3,134
Removed Using Explosives	2,808 - 3,161	377 - 452	474 - 552	16 - 18	0	0	0	3,676 - 4,183
Total Removed	4,012 - 4,515	539 - 646	677 - 789	47 - 50	56 - 72	15 - 32	4 - 6	5,350 - 6,110
<b>Method of Oil Transportation***</b>								
Percent Piped	99%	99%	100%	94% - 100%	94% - 100%	93% - 100%	94% - 100%	94% - > 99%
Percent Barged	1%	1%	0%	0%	0%	0%	0%	< 1%
Percent Tankered	0%	0%	0%	0 - 6%	0 - 6%	0 - 7%	0 - 6%	0 - 6%
Length of Installed Pipelines (km)#	4,100 - 12,320	720 - 2,170	NA	NA	NA	NA	NA	16,900 - 31,380
Blowouts	68 - 74	10 - 11	33 - 36	15 - 15	25 - 31	12 - 20	2 - 4	164 - 192
Service-Vessel Trips (1,000 trips)	8,345 - 8,384	657 - 709	1,164 - 1,215	158 - 178	220 - 293	80 - 172	21 - 45	10,644 - 10,996
Helicopter Trips (1,000 trips)	5,290 - 11,540	930 - 2,040	2,950 - 6,330	1,480 - 3,010	2,670 - 6,450	1,240 - 4,210	200 - 880	14,770 - 34,450

\* See Figure 3-10.

\*\* Subarea totals may not add up to the planning area total because of rounding.

\*\*\* 100% of gas is assumed to be piped.

# Projected length of OCS pipelines does not include length in State waters.

NA means that information is not available.

Table 4-6

## Offshore Scenario Information Related to OCS Program Activities in the Western Planning Area for the Years 2003-2042

	Offshore Subareas*					Total WPA**	
	W0-60m	W60-200m	W200-800m	W800-1600m	W1600-2400m		W>2400m
<b>Wells Drilled</b>							
Exploration and Delineation Wells	651 - 760	161 - 187	459 - 526	338 - 786	155 - 279	78 - 130	1,842 - 2,668
Development Wells	1,826 - 2,048	725 - 882	789 - 905	828 - 1,191	279 - 681	63 - 157	4,510 - 5,864
Oil Wells	238 - 286	135 - 164	443 - 517	353 - 554	151 - 375	34 - 88	1,354 - 1,984
Gas Wells	1,588 - 1,762	590 - 718	346 - 388	475 - 637	128 - 306	29 - 69	3,156 - 3,880
Workovers and Other Well Activities	15,800 - 16,800	7,100 - 7,800	4,500 - 5,000	4,100 - 5,800	1,300 - 3,300	300 - 800	33,100 - 39,500
<b>Production Structures</b>							
Installed	428 - 574	95 - 137	38 - 42	45 - 64	13 - 32	3 - 7	622 - 856
Removed Using Explosives	510 - 631	105 - 139	12 - 13	0	0	0	629 - 783
Total Removed	729 - 901	150 - 199	35 - 37	29 - 37	11 - 21	2 - 5	943 - 1,174
<b>Method of Oil Transportation***</b>							
Percent Piped	99%	100%	92 - 100%	93 - 100%	94 - 100%	100%	94 - >99%
Percent Barged	1%	0%	0%	0%	0%	0%	< 1%
Percent Tankered	0%	0%	0 - 8%	0 - 7%	0 - 6%	0%	0 - 6%
Length of Installed Pipelines (km)#	4,820 - 9,660	NA	NA	NA	NA	NA	9,650 - 19,320
Blowouts	21 - 24	8 - 9	9 - 10	8 - 14	3 - 7	1 - 2	51 - 66
Service-Vessel Trips (1,000 trips)	682 - 733	269 - 316	118 - 136	113 - 158	33 - 78	8 - 19	1,223 - 1,440
Helicopter Trips (1,000 trips)	5,150 - 5,331	1,842 - 2,030	2,595 - 2,717	2,424 - 3,753	902 - 1,823	293 - 545	13,208 - 16,199

\* See Figure 3-10.

\*\* Subarea totals may not add up to the planning area total because of rounding.

\*\*\* 100% of gas is assumed to be piped.

# Projected length of OCS pipelines does not include length in State waters.

NA means that information is not available.



Table 4-7

## Coastal Infrastructure Related to OCS Program Activities in the Gulf of Mexico for the Years 2003-2042 by Coastal Subarea

	Coastal Subareas*																		Total OCS Program**			
	TX-1		TX-2		LA-1		LA-2		LA-3		MA-1		FL-1		FL-2		FL-3		FL-4		Current	New
Infrastructure	Current	New	Current	New	Current	New	Current	New	Current	New	Current	New	Current	New	Current	New	Current	New	Current	New	Current	New
Pipeline Landfalls	2	0-2	11	4-8	38	4-6	33	6-9	35	5-7	7	4-6	0	0	0	0	0	0	0	0	126	23-38
Service Bases	10	0	6	0	10	0	13	0	6	0	4	0	1	0	0	0	0	0	0	0	50	0
Helicopter Hubs	7	0	32	0	29	0	28	0	27	0	5	0	0	0	0	0	0	0	0	0	128	0
Platform Yards	3	0	4	0	11	0	12	0	8	0	5	0	0	0	0	0	0	0	0	0	43	0
Shipyards	2	0	25	0	3	0	15	0	20	0	20	0	4	0	1	0	4	0	0	0	94	0
Pipecoating Plants	0	0	7	0	5	0	0	0	2	0	2	0	2	0	0	0	1	0	0	0	19	0
Refineries	5	0	14	0	4	0	1	0	9	0	4	0	0	0	0	0	0	0	0	0	37	0
Petrochemical Plants	4	0	16	0	3	0	4	0	2	0	0	0	0	0	0	0	0	0	0	0	29	0
Gas Processing Plants	0	0-2	1	1-3	13	1-3	8	1-3	7	1-3	6	0-2	0	0	0	0	0	0	0	0	35	4-16
Pipeline Shore Facilities	6	0-1	7	2-4	18	2-3	10	3-5	9	3-4	0	2-3	0	0	0	0	0	0	0	0	50	12-20
Barge Terminals	1	0	3	0	1	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	8	0
Tanker Ports	1	0	3	0	1	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	10	0
Waste Disposal Plants	4	0	5	0	10	0	8	0	3	0	4	0	0	0	0	0	0	0	0	0	34	0

\* See Figure 3-10.

\*\* Individual coastal subarea totals do not add up to the OCS Program total because some navigation channels span more than one subarea (Chapter 4.1.2.1.10).

Notes: Current infrastructure refers to the maximum number of existing facilities that will be used to support future operations.

New infrastructure refers to facilities projected to be built to support future operations. Expansion of existing facilities is not included.

Table 4-8(a)

Average Volumes of Fluids (muds) and Cuttings Projected for a Typical Shallow Exploration Well or Development Well in the Proposed Lease Sale Area

Well Type	Drilling Fluid Type	Interval of Well Depth (m)	Volume of Fluid Generated (bbl)	Volume of Fluid Discharged (bbl)	Volume of Cuttings Generated (bbl)	Volume of Cuttings Discharged (bbl)
Exploration	WBF <sup>1</sup>	Seafloor to 800	0-230	0-230	2,300	2,300
	SBF <sup>2</sup>	800- TD <sup>3</sup>	100 <sup>4</sup>	0 <sup>5</sup>	1,000	0 <sup>5</sup>
Development	WBF <sup>1</sup>	Seafloor to 800	100	100	1,000	1,000
	SBF <sup>2</sup>	800- TD <sup>3</sup>	50 <sup>4</sup>	0 <sup>5</sup>	500	0 <sup>5</sup>

Table 4-8(b)

Average Volumes of Fluids (muds) and Cuttings Projected for a Typical Deep Exploration Well or Development Well in the Proposed Lease Sale Area

Well Type	Drilling Fluid Type	Interval of Well Depth (m)	Volume of Fluid Generated (bbl)	Volume of Fluid Discharged (bbl)	Volume of Cuttings Generated (bbl)	Volume of Cuttings Discharged (bbl)
Exploration	WBF <sup>1</sup>	0-914	0-272	0-272	2,720	2,720
	SBF <sup>2</sup>	914-TD <sup>3</sup>	339 <sup>4</sup>	0 <sup>5</sup>	3,390	0 <sup>5</sup>
Development	WBF <sup>1</sup>	0-914	0-122	0-122	1,225	1,225
	SBF <sup>2</sup>	914-TD <sup>3</sup>	152 <sup>4</sup>	0 <sup>5</sup>	1,525	0 <sup>5</sup>

<sup>1</sup> WBF (water-based fluid) means treated seawater.

<sup>2</sup> SBF (synthetic-based fluid). If an operator chooses to use SBF to drill a portion of a wellbore, Region 4 of the USEPA will require an individual NPDES permit

to discharge these cuttings or the operator may choose the “zero discharge” option and transport the SBF drill cuttings to shore for disposal at an approved site.

<sup>3</sup> TD is the total depth of the well measured from the seafloor.

<sup>4</sup> SBF adheres to cuttings, 10%.

<sup>5</sup> The discharge of cuttings with SBF adhering to them may not be permitted.

Volumes are estimates and are shown for informational purposes only.

Assumptions:

1. A typical well may use either treated seawater with gel sweeps or water-based mud for the seafloor to 800-m segment.
2. The development well will be 45% of the exploratory well volume because drilling difficulties can be avoided (USEPA, 1999).
3. The wellbore erosional factors are as follows: 20-40% washout in upper portion (<800 m) when using WBF and 5-15% in the lower portion (>800 m) of the wellbore when using SBF.

Table 4-9

Annual Volume of Produced Water Discharged Overboard on the OCS from 1996 to 2000

Year	Produced Water Discharged Overboard (MMbbl)
1996	457
1997	454
1998	510
1999	547
2000	586

Source: USDO, MMS, 2002.

Table 4-10

Average Annual Emission Rates from OCS Infrastructures in the Gulf of Mexico

	NO <sub>x</sub>	CO	SO <sub>x</sub>	VOC	PM <sub>10</sub>
Platforms (tons/platform/year)	808	1490	68	213	8.1
Exploration Well (tons/well) <sup>1</sup>	1079	258	149	35	32
Development Well (tons/well) <sup>2</sup>	21.49	5.73	2.52	2.07	0.61

<sup>1</sup> Assumes a 4,115-m hole, 40-day drilling period, and a power consumption of 120 horsepower hour/foot.<sup>2</sup> Assumes a 3,050-m hole, a 35-day drilling period in less than 400-m water depth, a 60-day drilling period in greater than 400-m water depth, and a power consumption of 180 horsepower hour/foot.

Source: USDO, MMS, 1994.

Table 4-11

Average Annual Emission Rates from OCS Infrastructures  
in the Eastern Planning Area

	NO <sub>x</sub>	CO	SO <sub>x</sub>	VOC	PM <sub>10</sub>
Platforms (tons/platform/year)	808	1490	68	213	8.1
Exploration Well (tons/well) <sup>1</sup>	1079	258	149	35	32
Development Well (tons/well) <sup>2</sup>	35.82	9.55	4.2	3.45	1.02

<sup>1</sup> Assumes a 4,115-m hole, 100-day drilling period, and a power consumption of 120 horsepower hour/foot.<sup>2</sup> Assumes a 3,050-m hole, a 35-day drilling period in less than 400-m water depth, a 100-day drilling period in greater than 400-m water depth, and a power consumption of 180 horsepower hour/foot.

Table 4-12

OCS Louisiana Study Area Pipeline Landloss (300-m buffer) Trend Summary  
(increase in water area by time period)

Time Period	Years Total	Mi <sup>2</sup> Total	Hectare Total	Acre Total	Mi <sup>2</sup> /Ha/Ac Per Year
1956-1978	22	101	26,158	64,640	4.60/1,191/2,944
1978-1990	12	22	5,698	14,080	1.80/466/1,152
1990-2002	12	10	2,590	6,400	0.82/212/525
1956-2002	46	133	34,447	85,120	2.88/746/1,843

Source: Johnston and Barras, personal communication, 2002.

Table 4-13

2000 Cleanup Totals: People, Pounds, and Miles

State	Land			Underwater			Total		
	People	Pounds	Miles	People	Pounds	Miles	People	Pounds	Miles
Florida	32,039	1,062,064	1482.47	208	2,876	10.18	32,247	1,064,940	1492.65
Alabama	3,849	94,548	293.19	10	10	0.01	3,859	94,558	293.20
Mississippi	2,850	60,060	70	90	8,000	1.25	1,940	68,060	71.25
Louisiana	2,440	85,208	163.25	22	25	NR	2,462	85,223	163.25
Totals	41,178	1,301,880	2008.91	330	10,911	11	40,508	1,312,781	2020.35

Source: The Ocean Conservancy, 2002.

Table 4-14

## Annual Inputs of Petroleum Hydrocarbons to Gulf of Mexico Waters from Various Sources

Source	Million metric tons (Mta)	% of Inputs Calculated
Municipal Wastewater Discharges <sup>1</sup>	0.034	30
Natural Seepage <sup>2</sup>	0.027	24
Spills <sup>3</sup>	0.011	10
From OCS Operations	0.001	
From Non-OCS Operations	0.010	
Mississippi River Runoff <sup>4</sup>	0.009	8
Nonpoint-Source urban Runoff <sup>5</sup>	0.008	7
Industrial Wastewater Discharges	0.006	5
Non-Refinery Industrial Discharges <sup>6</sup>	0.004	
Refinery Discharges <sup>7</sup>	0.002	
Produced Water from OCS Production <sup>8</sup>	0.002	2
Vessel Operational Discharges <sup>9</sup>	Not calculated	Not calculated
Atmospheric Sources	Not calculated	Not calculated
Flux from Sediment Disturbances	Not calculated	Not calculated
International Inputs	Not calculated	Not calculated
Partial Sum of inputs	0.114	100

<sup>1</sup> Amount calculated by multiplying the Gulf Coast population projected for the year 2015 (Chapter 3.3.5.4.1) by an average value per person of petroleum hydrocarbon discharged in wastewater of 4.5 grams PHC/day/person, estimated by the NRC (1985).

<sup>2</sup> Amount based on estimates made by Wilson et al. (1973) for the NRC (1985) report on Oil in the Sea.

<sup>3</sup> Amount calculated by multiplying the number of spills estimated to occur for a typical future year (Table 4-15) by the average spill size for various size categories. Chapter 4.3.1.1.3 and Table 4-15 provides a detailed description of spill occurrence for both OCS and non-OCS sources.

<sup>4</sup> Amount based on assuming the Mississippi River carries 67% of total U.S. river runoff contribution estimated by NRC (1985).

<sup>5</sup> Amount calculated by multiplying the Gulf Coast population projected for the year 2015 (Chapter 3.3.5.4.1) by an average value of 1 gram PHC/day/person, estimated by the NRC (1985).

<sup>6</sup> Amount calculated by (1) using the NRC (1985) estimate of 0.2 Mta of PHC discharged from non-refinery industrial operations into the world ocean, (2) applying their assumption that U.S. coastal waters make up one-third of the world ocean, and (3) proportioning that value by the ratio of the GOM population to the U.S. population for the year 2015.

<sup>7</sup> Amount calculated by multiplying the NRC (1985) estimate of 0.005 kg PHC per 103 kg production by the 2001 refinery capacity of GOM refineries reported by the EIA (2002) as 2.589 billion bbl of oil per year.

<sup>8</sup> Amount calculated by multiplying the average annual value of 532 million bbl per year of produced water discharged (MMS, internal data 1985-2000) by the monthly allowable average oil and grease content of discharged water (29 mg/l) (Chapter 4.1.1.4).

<sup>9</sup> The MMS expects that the NRC 1985 estimate of operational discharges from vessels will be reduced significantly due to increased regulatory prohibitions on vessel operational discharges. No estimate derived from 1985 methodology is therefore provided.

Table 4-15

Projected Annual Oil Spill Occurrence within Coastal and Offshore Waters of the Gulf of Mexico  
(Gulfwide Projections)

Spills ≥ 1,000 bbl			Spills < 1,000 bbl		
Source	Number of Spills*	Assumed Size (bbl)	Source	Number of Spills*	Assumed Size (bbl)
<b>OFFSHORE SPILLS</b>			<b>OFFSHORE SPILLS</b>		
Total All Sources	4-5 per year	not calculated	Total All Sources	1,550-2,150	6
Total Non-OCS Sources	3-4 per year		Total Non-OCS Sources	200-250 per year	6
Tanker Traffic	1 per year	14,600	Tanker Traffic		
Barge Traffic	2-3 per year	3,000	Barge Traffic		
Total OCS Program Sources	1 every 1-2 years		Total OCS Program Sources	1,350-1,900 per year	
Facility	1 every 15-20 years	1,500	By Size		
Pipeline	1 every 2-3 years	4,600	0.1bbl - 1 bbl	1,300-1,850 per year	0.7
Shuttle Tanker	1 in next 40 years	14,600	1.1 bbl - 50 bbl	35-50 per year	6
			51 bbl - 999 bbl	2-4 per year	165
<b>COASTAL SPILLS</b>			<b>COASTAL SPILLS</b>		
Total All Sources	10-15 per year	not calculated	Total All Sources	1,875 per year	6
Non-OCS Sources	10-12 per year		Non-OCS Sources	1,775 per year	6
Tankers	1 per year	4,500			
Barge Traffic	7-8 per year	3,000			
Other	3-4 per year	4,200			
OCS Sources	1 per year	4,200	OCS Sources	100 per year	6

\*Non-OCS and OCS sources may not add up to the total from all sources because of rounding.

Table 4-16

Projected Total OCS Emissions Related to a Proposed Action by Source  
(tons over the life of a proposed action)

Activity/Pollutant	NO <sub>x</sub>	CO	SO <sub>x</sub>	VOC	PM <sub>10</sub> *
Service Vessels	11,308.7-12,722.3	1,136.2-1,278.2	1,177.7-1,324.9	493.4-555.1	684.2-769.7
Pipeline Vessels	229.8-3,676.8	77.0-1,232.0	32.0-512.0	21.0-336.0	19.0-304.0
LTO Helicopters	0.8-1.0	0.6-0.8	0.1-0.2	0.0-0.0	0.0-0.0
Cruise Helicopters	1.3-1.7	3.7-4.8	0.3-0.4	0.3-0.4	0.4-0.5
Blowouts without Fire	0	0	0	0.0-10.9	0
Spills without Fire	0	0	0	232.6-255.0	0
Barge Loading	0	0	0	0	0
Tanker Loading	0	0	0	0	0
Tanker Loss	0	0	0	0	0
Tanker Exhaust	0	0	0	0	0
Tug Exhaust	0	0	0	0	0
Platform Construction	421.2-421.2	83.2-83.2	23.98-24.0	24.7-24.7	25.9-25.9
Exploratory Wells	11,869.0-14,027.0	2,838.0-3,354.0	1,639.0-1,937.0	385.0-455.0	352.0-416.0
Development Wells	680.6-967.1	181.5-257.9	79.8-113.4	65.6-93.2	19.4-27.5
Platforms	70,135.0-6,410.9	16,770.0-1,539.2	9,685.0-1,111.5	2,275.0-5,015.4	2,080.0-120.9
Totals	94,646.4-38,228.0	21,090.2-7,750.1	12,637.9-5,023.3	3,497.6-6,745.7	3,180.9-1,664.6

\*TSP emissions were calculated in the spreadsheets. For conservative estimates of PM<sub>10</sub>, it is assumed that the ratio of PM<sub>10</sub> to TSP is equal to 1.0.

Table 4-17

Projected Total OCS Emissions Related to a Proposed Action by Offshore Subarea  
(tons over the life of a proposed action)

Pollutant Distribution	E1600-2400m	E>2400m	Total
NO <sub>x</sub>	47,323.2-19,114.0	47,323.2-19,114.0	94,646-38,228.0
CO	10,545.1-3,875.0	10,545.1-3,875.0	21,090-7,750.1
SO <sub>x</sub>	6,318.9-2,511.6	6,318.9-2,511.6	12,638-5,023.3
VOC	1,748.8-3,372.9	1,748.8-3,372.9	3,498-6,745.7
PM <sub>10</sub>	1,590.4-832.3	1,590.4-832.3	3,181-1,664.6

Table 4-18

Projected Peak-Year OCS Emissions Related to a Proposed Action by Source (tons)

Activity/Pollutant	NO <sub>x</sub>	CO	SO <sub>x</sub>	VOC	PM <sub>10</sub>
Service Vessels	348.0-391.5	35.0-39.3	36.2-40.8	15.2-17.1	21.1-23.7
Pipeline Vessels	114.9-1838.4	38.5-616.0	16.0-256.0	10.5-168.0	9.5-152.0
LTO Helicopters	0.02-0.02	0.02-0.02	0.0-0.0	0.0-0.0	0-0.0
Cruise Helicopters	0.04-0.04	0.11-321.4	0.01-0.01	0.01-0.01	0.01-0.01
Blowouts without Fire	0	0	0	0.0-10.9	0
Spills without Fire	0	0	0	232.6-255.0	0
Barge Loading	0	0	0	0	0
Tanker Loading	0	0	0	0	0
Transit Loss	0	0	0	0	0
Tanker Exhaust	0	0	0	0	0
Tug Exhaust	0	0	0	0	0
Platform Construction	210.6-210.6	41.6-41.6	12.0-12.0	12.4-12.4	12.9-12.9
Exploratory Wells	2158.0-3237.0	516.0-774.0	298.0-447.0	70.0-105	64.0-96.0
Development Wells	71.6-71.6	19.1-19.1	8.4-8.4	6.9-6.9	2.0-2.0
Platforms	2158.0-203.5	516.0-47.4	298.0-34.2	70.0-154.3	64.0-3.7
Totals	5061.2-5952.7	1166.3-1858.8	668.6-798.4	417.5-729.6	173.5-290.4

Table 4-19

Projected Peak-Year OCS Emissions Related to a Proposed Action by Offshore Subarea (tons/year)

Pollutant Distribution	E1600-2400m	E>2400m	Total
NO <sub>x</sub>	2530.6-2976.4	2530.6-2976.4	5061.2-5952.7
CO	583.1-929.4	583.1-929.4	1166.3-1858.8
SO <sub>x</sub>	334.3-399.2	334.3-399.2	668.6-798.4
VOC	208.8-364.8	208.8-364.8	417.5-729.6
PM <sub>10</sub>	86.8-145.2	86.8-145.2	173.5-290.4



Table 4-20

Results of Concentration Estimates and the  
Corresponding Maximum Allowable Increases, Class I Areas  
(micrograms per cubic meter)

Pollutant/ Averaging Period	Class I Maximum Allowable Increase*	Class I Modeled Impact**
SO <sub>2</sub>		
Annual Average	2.0	0.01
24-hour Average	5.0	0.08
3-hour Average	25.0	0.17
NO <sub>2</sub>		
Annual Average	2.5	0.05
PM <sub>10</sub>		
Annual Average	4.0	***
24-hour Average	8.0	***

\* 30 CFR 250.303

\*\* Calculated using MMS's Offshore and Coastal Dispersion (OCD) Model.

\*\*\* PM<sub>10</sub> emissions were not calculated because they are emitted in smaller quantities than NO<sub>2</sub> or SO<sub>2</sub>; hence, their impacts would be even less than those modeled and presented above.

Table 4-21

Results of Concentration Estimates and the  
Corresponding Maximum Allowable Increases, Class II Areas  
(micrograms per cubic meter)

Pollutant/ Averaging Period	Class II Maximum Allowable Increase*	Class II Modeled Impact**
SO <sub>2</sub>		
Annual Average	20.0	0.02
24-hour Average	91.0	0.24
3-hour Average	512.0	0.16
NO <sub>2</sub>		
Annual Average	25.0	0.08
PM <sub>10</sub>		
Annual Average	17.0	***
24-hour Average	30.0	***

\* 30 CFR 250.303

\*\* Calculated using MMS's Offshore and Coastal Dispersion (OCD) Model.

\*\*\* PM<sub>10</sub> emissions were not calculated because they are emitted in smaller quantities than NO<sub>2</sub> or SO<sub>2</sub>; hence, their impacts would be even less than those modeled and presented above.









Table 4-26  
Past OCS Oil<sup>1</sup> Spills, 1985-1999

Spill Size Group (bbl)	Total Number of Spills	Total Volume of Oil Spilled (bbl)	Number of Spills by Source (facility <sup>2</sup> /pipeline)	Spills Per Billion Barrels of Oil Handled <sup>3</sup>	Average Spill Size (bbl)	Median Spill Size (bbl)
0-1.0	19,506	1,365	Unavailable	3,357.31	0.07	unavailable
1.1-9.9	434	1,302	326/108	74.70	3.0	2.8
10.0-49.9	94	1,786	66/28	16.18	19.0	17.8
50.0-499.9	37	4,551	28/9	6.37	123	87
500.0-999.9	3	2,043	2/1	0.52	681	643
≥1,000	8	5,373	0/8	0.13/1.38 <sup>4</sup>	6,716	4,551
≥10,000	2	30,000	0/2	0.05/.34	15,000	15,000

<sup>1</sup> Oil spilled includes crude oil, condensate, and refined petroleum products.

<sup>2</sup> Facilities represent spills that have occurred during drilling, development, and production operations.

<sup>3</sup> 1985–1999 OCS oil production = 5.81 BBO.

<sup>4</sup> Facility Spills Rate/Pipeline Spill Rate.

Source: Anderson and LaBelle, 2000.

Table 4-27

Offshore Spills  $\geq 1,000$  bbl, 1964-2000, from Accidents Associated with OCS Facility Operations

Year	Volume Spilled (bbl)	Area and Block	Water Depth (ft)	Distance from Shore (mi)	Cause of Spill
1964	2,5559	EI208	94	48	Freighter struck production platform, fire
1964	5,180	EI208	94	48	Hurricane Hilda destroyed 3 production platforms, blowout
1964	5,100	SS149	55	33	Hurricane Hilda destroyed production platform, blowout
1964	1,589	SS199	102	44	Hurricane Hilda destroyed production platform, caused storage oil loss
1965	1,688*	SS29	15	7	Drilling blowout
1969	80,000	**	190	6	Drilling blowout
1969	2,500	SS72	30	6	Storm caused vessel to bump drilling rig resulting in blowout
1970	30,000	MP41	39	14	Fire destroyed production platform, blowout
1970	53,000	ST26	60	8	Workover caused fire, destroyed platform and 2 drilling rigs
1973	9,935	WD79	110	17	Oil storage tank ruptured
1973	7,000	SP23	61	15	Rough seas sunk stationary storage barge
1979	1,500***	MP151	280	10	Collision during rough seas between service vessel and drilling rig, damaged rig's diesel tank
1980	1,456	HI206	60	27	During ballasting, for Hurricane Jeanne, oil storage tank overflowed

Notes: Gulf of Mexico crude oil unless otherwise indicated: \*condensate; \*\*occurred in Santa Barbara Channel, California; and \*\*\* diesel.

Table 4-28

Offshore Spills  $\geq 1,000$  bbl, 1964-2000, from Accidents Associated with OCS Pipeline Oil Transport

Year	Volume Spilled (bbl)	Area and Block	Water Depth (ft)	Distance from Shore (mi)	Cause of Spill
1967	160,638	WD73	168	22	Internal corrosion caused by anchor kink
1968	6,000	ST131	160	28	Anchor drag
1969	7,532	MP299	210	17	Anchor drag
1973	5,000	WD73	168	22	Internal corrosion
1974	19,833	EI317	240	75	Anchor drag
1974	3,500	MP73	141	9	Hurricane Carmen, connection torn loose
1976	4,000	EI297	210	71	Trawl drag
1981	5,100	SP60	185	4	Service vessel's anchor
1988	15,576	GAL2A	75	34	Anchor drag
1990	14,423*	SS281	197	60	Anchor drag
1990	4,569	EI314	230	78	Trawl drag
1992	2,000	SP8	30	6	During Hurricane Andrew, drilling rig's anchor drag
1994	4,533*	SS281	197	60	Trawl drag
1998	1,211*	EC334	264	105	Service vessel anchor drag during rescue operation
1998	8,212	SP38	10	6	During Hurricane Georges, damage from mudslide
1999	3,200	SS241	133	50	Jack-up barge damage
2000	2,240	SS332	435	75	Drilling rig anchor drag

Notes: Crude oil unless otherwise indicated: \*condensate.



Table 4-29

## Offshore Spill Rates\* Used to Estimate the Future Potential for Spills

	Proposed Action	OCS Program	Non-OCS Operations
<1,000 bbl (all OCS sources)			
≤1 bbl	3,357	3,357	**
>1 and <50 bbl	91	91	**
≥50 bbl and <1,000 bbl	7	7	**
≥1,000 bbl			
Offshore Facility ***	0.13	0.13	n/a
Pipelines on the OCS	1.38	1.38	n/a
U.S. Tanker Operations	n/a	0.72	0.72
Offshore	n/a	0.29	0.29
Near Port	n/a	0.43	0.43
Import Tanker Operations	n/a	n/a	0.82
Offshore	n/a	n/a	0.36
Near Port	n/a	n/a	0.46
Barge Operations	n/a	1.23	1.23

\* The spill rate is an occurrence rate that is based on historic spill occurrences and associated volume of oil produced or transported. Rates are expressed in terms of estimated mean number of spills per billion barrels of oil handled.

\*\* No spill rates based on oil volume handled calculated. Estimates of future spills in the EIS are based on total average number spills per year derived from annual average of 1973-2000 USGS data (USDOT, Coast Guard, 2001) minus estimated OCS spills.

\*\*\* Offshore facilities include drilling rigs, drillships, and storage, processing, or production structures that are used for OCS oil exploration, development, and production.

n/a = not applicable.

Source: Anderson and LaBelle, 2000.

Table 4-30

Probability of One or More Offshore Spills Occurring and the Number of Assumed Offshore Spills Occurring from a Facility, Pipeline, or Tanker Accident as a Result of the OCS Program (2003-2042)

	OCS		OCS		OCS		All OCS	
	Low	High	Low	High	Low	High	Low	High
For Estimated Spills Occurring $\geq 1,000$ bbl								
Western Planning Area - OCS Program								
Assumed* Number of Spills	0	1	5	7	0	0	5	8
Probability of One or More Occurrences (%)	35	51	99	99+	< 0.5	20	99	99+
Central Planning Area - OCS Program								
Assumed* Number of Spills	2	2	17	22	0	1	18	24
Probability of One or More Occurrences (%)	79	88	99+	99+	< 0.5	49	99+	99+
Eastern Planning Area - OCS Program								
Assumed* Number of Spills	0	0	0	1	0	0	0	1
Probability of One or More Occurrences (%)	2	5	18	40	0	0	19	43
Gulf Wide OCS Program								
Assumed* Number of Spills	2	3	21	29	0	1	23	33
Probability of One or More Occurrences (%)	87	95	99+	99+	< 0.5	60	99+	99+
For Estimated Spills Occurring $\geq 10,000$ bbl								
Western Planning Area - OCS Program								
Assumed* Number of Spills	0	0	1	2	0	0	1	2
Probability of One or More Occurrences (%)	15	24	68	83	< 0.5	8	73	88
Central Planning Area - OCS Program								
Assumed* Number of Spills	1	1	4	5	0	0	5	6
Probability of One or More Occurrences (%)	45	56	98	99	< 0.5	21	99	99+
Eastern Planning Area - OCS Program								
Assumed* Number of Spills	0	0	0	0	0	0	0	0
Probability of One or More Occurrences (%)	1	2	5	12	0	0	5	13
Gulfwide OCS Program								
Assumed* Number of Spills	1	1	5	7	0	0	6	9
Probability of One or More Occurrences (%)	54	68	99	99+	< 0.5	27	99+	99+

\* The assumed number of spills is the rounded average (mean) estimated by multiplying historical spill rates (Table 4-29) times the volume of oil resources estimated to be developed.

Table 4-31

Number of Assumed Offshore Spills Occurring, the Probability of these Offshore Spills Occurring, and the Assumed Offshore Spill Sizes as a Result of a Proposed Action

Spill Size Category	Range of Resource Estimates	
	Low	High
$\leq 1$ bbl		
Number of Spills that MMS Assumes Will Occur*	220	290
Percent Chance that the Assumed Number Will Occur	nc**	nc**
Percent Chance that One or More Spills Will Occur	99%	99%
Assumed Size*** that Will Occur	1 bbl	1 bbl
$>1$ to $<10$ bbl		
Number of Spills that MMS Assumes Will Occur*	50	60
Percent Chance that the Assumed Number Will Occur	6%	5%
Percent Chance that One or More Spills Will Occur	99%	99%
Assumed Size*** that Will Occur	3 bbl	3 bbl
$\geq 10$ to $<50$ bbl		
Number of Spills that MMS Assumes Will Occur*	1	1
Percent Chance that the Assumed Number Will Occur	37%	35%
Percent Chance that One or More Spills Will Occur	65%	75%
Assumed Size*** that Will Occur	20 bbl	20 bbl
$\geq 50$ to $<500$ bbl		
Number of Spills that MMS Assumes Will Occur*	0	1
Percent Chance that the Assumed Number Will Occur	66%	31%
Percent Chance that One or More Spills Will Occur	34%	42%
Assumed Size*** that Will Occur	120 bbl	120 bbl
$\geq 500$ to $<1,000$ bbl		
Number of Spills that MMS Assumes Will Occur*	0	0
Percent Chance that the Assumed Number Will Occur	97%	96%
Percent Chance that One or More Spills Will Occur	3%	4%
Assumed Size*** that Will Occur	680 bbl	680 bbl
$\geq 1,000$ bbl		
Number of Spills that MMS Assumes Will Occur*	0	0
Percent Chance that the Assumed Number Will Occur	91%	88%
Percent Chance that One or More Spills Will Occur	9%	12%
Assumed Size*** that Will Occur	4,600 bbl	4,600 bbl

\* The assumed number of spills is the rounded average (mean) that was estimated by multiplying historical spill rates (Table 4-29) times the volume of oil resources estimated to be developed.

\*\* n/c (not calculated) - Because of the large number of possibilities for the number of spill occurrences, the probability that any particular number will occur is very low and cannot be statistically calculated.

\*\*\* The assumed size of spills is the rounded average size of historical occurrences for spills  $<1,000$  bbl and the median size of historical occurrences for spills  $\geq 1,000$  bbl (median is used because data skewed by a few events).

Table 4-32

Number of Assumed Spills Occurring in Louisiana Coastal Waters from Support Operation Accidents as a Result of a Proposed Action

Spill Size Group	Assumed Number of Coastal Spills*	Assumed Size of Possible Coastal Spills**
Total (all sizes)	12-16	
<1 bbl	10-12	1 bbl
>1 bbl and <50 bbl	3	4 bbl
≥50 bbl and <1,000 bbl	0	
≥1,000 bbl	0	

\* Numbers of spills are calculated by multiplying Gulfwide coastal spill projections (Table IV-39, FEIS 181) by the percentage oil resources transported into Louisiana coastal waters as a result of a EPA proposed action.

\*\* Size is derived from Coast Guard statistics of all coastal spills (USDOT, Coast Guard, 2001).

Table 4-33

Probability of a Particular Number of Offshore Spills Occurring from OCS Facility Operations and/or OCS Pipelines as a Result of a Proposed Action

Percent Chance for Spills ≥1,000 bbl						
Number of Spill Events	OCS Facility Operations		OCS Pipelines		All OCS Sources	
1	1%	- 1%	8%	- 10%	9%	- 11%
2	<0.5%	- <0.5%	<0.5%	- 1	<0.5%	- 1
3	<0.5%	- <0.5%	<0.5%	- <0.5%	<0.5%	- <0.5%
4	<0.5%	- <0.5%	<0.5%	- <0.5%	<0.5%	- <0.5%
5	<0.5%	- <0.5%	<0.5%	- <0.5%	<0.5%	- <0.5%
Percent Chance for Spills ≥10,000 bbl						
Number of Spill Events	OCS Facility Operations		OCS Pipelines		All OCS Sources	
1	<0.5%	- <0.5%	2%	- 3%	2%	- 3%
2	<0.5%	- <0.5%	<0.5%	- <0.5%	<0.5%	- <0.5%
3	<0.5%	- <0.5%	<0.5%	- <0.5%	<0.5%	- <0.5%
4	<0.5%	- <0.5%	<0.5%	- <0.5%	<0.5%	- <0.5%
5	<0.5%	- <0.5%	<0.5%	- <0.5%	<0.5%	- <0.5%

Table 4-34

Probability of One or More Offshore Spills  $\geq 1,000$  bbl Occurring and Contacting Environmental Resource Habitats, Offshore Features, Beach Areas, or Parish Shorelines within 10 or 30 Days as a Result of a Proposed Action (only those features that have a probability  $>0.5\%$  are shown)

Environmental Feature	Within 10 Days		Within 30 Days	
	Low %	High %	Low %	High %
<b>BIRD HABITATS</b>				
Diving Bird Habitat	1	1	2	3
Gulls, Terns, And Charadriid Allies Habitat	2	2	3	4
Raptor Bird Habitat	<0.5	<0.5	1	1
Charadriid Shorebird Habitat	2	2	3	4
Wading Bird Habitat	1	2	3	3
Waterfowl Habitat	2	3	4	5
<b>ENDANGERED BIRD HABITATS</b>				
Snowy Plover Habitat	1	1	1	2
Brown Pelican Habitat	1	1	2	2
Bald Eagle Habitat	2	2	3	4
Piping Plover Habitat	2	2	3	4
<b>OTHER ENDANGERED SPECIES</b>				
Gulf Sturgeon - Known Shoreline Locations	1	1	2	2
<b>RECREATIONAL BEACH AREAS</b>				
LA Beach Areas	<0.5	<0.5	1	1
<b>PARISHES</b>				
Lafourche, LA	<0.5	<0.5	<0.5	1
Plaquemines, LA	1	1	2	2
<b>OFFSHORE FEATURES</b>				
LA (Eastern) State Offshore Waters	1	1	1	1
LA (Western) State Offshore Waters	2	3	3	4
Chandeleur Islands	<0.5	1	1	1
Florida Panhandle State Offshore Waters	<0.5	<0.5	<0.5	1
<b>SEA TURTLE HABITATS</b>				
LA Sea Turtle Nesting Habitat	<0.5	<0.5	1	1
LA Sea Turtle Mating Habitat	<0.5	<0.5	<0.5	1
LA Sea Turtle General Coastal Habitat - West	2	3	3	4
LA Sea Turtle General Coastal Habitat - East	1	1	1	1
FL Sea Turtle General Coastal Habitat - Panhandle Area	<0.5	<0.5	<0.5	1
<b>MARINE MAMMAL HABITATS</b>				
LA West Marine Mammal Habitat	2	3	3	4
LA East Marine Mammal Habitat	1	1	1	1
FL Panhandle Marine Mammal Habitat	<0.5	<0.5	<0.5	1
LA/MS/AL Manatee Area	<0.5	<0.5	1	1

Table 4-35

Surface Area Covered and Length of Shoreline Contacted as a Function of Time for a Hypothetical Spill of 4,600 bbl of Neptune Composite Oil Spilled Over 12 Hours from an OCS Pipeline Break in DeSoto Canyon Block 884 during the Summer (represents the minimum volume of oil remaining in a slick as a function of time for EPA conditions)

Time Elapsed after Spill Events Begins (hours/days)	Amount Spilled (bbl)	Estimated Volume in Slick (spilled oil remaining on water surface) (bbl)	Estimated Open Water Slick Thickness (mm)	Open water Covered by Slick (mi <sup>2</sup> )	Estimated Length of Shoreline Contacted, if Slick were to Reach Land (km)
4 hours	1,530	1,240	1	0.03	5
12 hours	4,600	2,750	1	0.13	10
24 hours	4,600	2,430	1	0.42	35
48 hours	4,600	440	1	0.23	20
3 days	4,600	0	1	0.03	5

Table 4-36

Surface Area Covered or Length of Shoreline Contacted as a Function of Time for a Hypothetical Spill of 4,600 bbl of Heavy Arabian Crude Spilled Over 12 Hours from an OCS Pipeline Break DeSoto Canyon Block 225 during the Winter (represents the maximum volume of oil remaining in slick as a function of time for EPA conditions)

Time Elapsed after Spill Events Begins (hours/days)	Amount Spilled (bbl)	Estimated Volume in Slick (spilled oil remaining on water surface) (bbl)	Estimated Open Water Slick Thickness (mm)	Open water Covered by Slick (mi <sup>2</sup> )	Estimated Length of Shoreline Contacted, if Slick were to Reach Land (km)
4 hours	1,530	1,110	1	0.03	0-5
12 hours	4,600	2,340	1	0.11	5-10
24 hours	4,600	2,240	1	0.19	15-20
48 hours	4,600	1,250	1	0.22	15-20
3 days	4,600	1,000	1	0.20	15-20
4 days	4,600	980	1	0.31	25-30
5 days	4,600	970	1	0.50	40-45
7 days	4,600	940	1	0.73	60-65
10 days	4,600	890	1	0.92	80-85
20 days	4,600	610	1	0.95	80-85
30 days	4,600	570	1	0.90	75-80

Table 4-37

Surface Area Covered and Length of Shoreline Contacted as a Function of Time for a Hypothetical Spill of 4,600 bbl of Neptune Composite Oil Spilled Over 12 Hours from an OCS Pipeline Break in Viosca Knoll Block 948 during the Winter (represents the minimum volume of oil remaining in slick as a function of time for CPA conditions)

Time Elapsed after Spill Events Begins (hours/days)	Amount Spilled (bbl)	Estimated Volume in Slick (spilled oil remaining on water surface) (bbl)	Estimated Open Water Slick Thickness (mm)	Open water Covered by Slick (mi <sup>2</sup> )	Estimated Length of Shoreline Contacted, if Slick were to Reach Land (km)
4 hours	1,530	1,210	1.4	0.06	0-5
12 hours	4,600	1,890	1	0.33	25-30
24 hours	4,600	1,610	1	0.84	70-75
48 hours	4,600	0	1	0.00	0

Table 4-38

Surface Area Covered or Length of Shoreline Contacted as a Function of Time for a Hypothetical Spill of 4,600 bbl of Heavy Arabian Crude Spilled Over 12 Hours from an OCS Pipeline Break at Mississippi Canyon Block 952 during the Summer (represents the maximum volume of oil remaining in slick as a function of time for CPA conditions)

Time Elapsed after Spill Events Begins (hours/days)	Amount Spilled (bbl)	Estimated Volume in Slick (spilled oil remaining on water surface) (bbl)	Estimated Open Water Slick Thickness (mm)	Open water Covered by Slick (mi <sup>2</sup> )	Estimated Length of Shoreline Contacted, if Slick were to Reach Land (km)
4 hours	1,533	1,250	1.4	0.03	0-5
12 hours	4,600	2,840	1	0.13	10-15
24 hours	4,600	2,710	1	0.23	15-20
48 hours	4,600	860	1	0.15	15
3 days	4,600	330	1	0.06	5
4 days	4,600	270	1	0.08	5
5 days	4,600	220	1	0.11	10
7 days	4,600	140	1	0.11	10
10 days	4,600	50	1	0.08	5
20 days	4,600	10	1	0.06	5

Table 4-39

Employment Associated with the Cleanup and Remediation of a Scenario Spill  
(number of jobs per year)

Subarea	Direct Employment	Indirect Employment	Induced Employment	Total Employment
TX-1	16.1	3.9	8.1	28.1
TX-2	84.4	27.0	51.2	162.6
WGOM	100.5	30.8	59.3	190.7
LA-1	23.1	5.2	10.2	38.5
LA-2	27.1	5.5	11.5	44.1
LA-3	35.3	7.6	19.4	62.3
MA-1	14.5	2.9	7.6	25.0
CGOM	100.0	21.2	48.7	169.9
FL-1	0.4	0.2	0.2	0.8
FL-2	0.0	0.0	0.0	0.0
FL-3	0.6	0.4	0.3	1.4
FL-4	0.1	0.1	0.0	0.2
EGOM	1.1	0.7	0.5	2.4
GOM	201.6	52.8	108.6	362.9

Table 4-40

Employment Associated with the Cleanup and Remediation of a Small Spill  
(number of jobs per year)

Subarea	Direct Employment	Indirect Employment	Induced Employment	Total Employment
TX-1	0.0	0.0	0.0	0.0
TX-2	0.0	0.0	0.0	0.0
WGOM	0.0	0.0	0.0	0.0
LA-1	0.0	0.0	0.0	0.0
LA-2	0.0	0.0	0.0	0.0
LA-3	0.0	0.0	0.0	0.0
MA-1	0.0	0.0	0.0	0.0
CGOM	0.0	0.0	0.0	0.0
FL-1	0.0	0.0	0.0	0.0
FL-2	0.0	0.0	0.0	0.0
FL-3	0.0	0.0	0.0	0.0
FL-4	0.0	0.0	0.0	0.0
EGOM	0.0	0.0	0.0	0.0
GOM	0.0	0.0	0.0	0.1



Table 4-41

Projected Total OCS Emissions Related to the OCS Program in the EPA by Source for the Years 2003-2042  
(tons)

Activity/Pollutant	NO <sub>x</sub>	CO	SO <sub>x</sub>	VOC	PM <sub>10</sub> *
Service Vessels	29,685.4-59,370.8	2,982.5-5,965.1	3,091.4-6,182.8	1,295.2-2,590.5	1,796.1-3,592.1
Pipeline Vessels	5,515.2-7,647.7	1,848.0-2,562.6	768.0-1,065.0	504.0-698.9	456.0-632.3
LTO Helicopters	2.1-4.7	1.7-3.8	0.3-0.7	0.1-0.2	0.1-0.2
Cruise Helicopters	3.5-8.0	10.1-22.9	0.8-1.7	0.8-1.7	1.0-2.3
Blowouts without Fire	0	0	0	21.9-10.9	0
Spills without Fire	0	0	0	645.1-255.0	0
Barge Loading	0	0	0	0	0
Tanker Loading	0	0	0	0	0
Tanker Loss	0	0	0	0	0
Tanker Exhaust	0	0	0	0	0
Tug Exhaust	0	0	0	0	0
Platform Construction	1,053.12-1,895.6	208.0-374.4	60.0-107.9	61.8-111.2	64.7-116.5
Exploratory Wells	41,398.4-79,163.4	9,909.6-18,939.4	5,708.4-10,923.4	1,368.2-2,593.2	1,227.4-2,347.4
Development Wells	3,044.7-58,38.7	811.8-1,556.7	357.0-684.6	293.3-562.4	86.7-166.3
Platforms	87,911.0-31,342.1	153,258.7-7,482.9	7,859.4-5,403.6	25,892.6-24,382.6	926.6-587.8
Totals	168,613.5-185,271.0	169,030.4-36,907.9	17,845.2-24,369.7	29,903.0-31,206.6	4,558.6-7,444.8

\*TSP emissions were calculated in the spreadsheets. For conservative estimates of PM<sub>10</sub>, it is assumed here that the ratio of PM<sub>10</sub> to TSP is equal to 1.0.

Table 4-42

Projected Total OCS Emissions Related to the OCS Program in the CPA by Source for the Years 2003-2042  
(tons)

Activity/Pollutant	NO <sub>x</sub>	CO	SO <sub>x</sub>	VOC	PM <sub>10</sub> *
Service Vessels	5,015,421–5,181,282	503,908–520,572	522,298–539,571	218,832–226,067	303,448–313,483
Pipeline Vessels	77,672–144,223	26,026–48,325	10,816–20,083	7,098–13,180	6,422–11,924
LTO Helicopters	1,600–3,732	1,292–3,014	246–574	55–129	61–144
Cruise Helicopters	2,757–6,431	7,877–18,373	591–1,378	591–1,378	788–1,837
Blowouts without Fire	0	0	0	0	0
Spills without Fire	0	0	0	0	0
Barge Loading	0	0	0	2,723–3,748	0
Tanker Loading	0	0	0	0	0
Tanker Loss	0	0	0	3,669–5,051	0
Tanker Exhaust	0	0	0	0	0
Tug Exhaust	0	0	0	0	0
Platform Construction	497,073–660,517	98,176–130,458	28,296–37,601	29,170–38,761	30,538–40,580
Exploratory Wells	140,861–170,135	37,525–45,324	16,488–19,915	13,574–16,395	4,051–4,893
Development Wells	269,743–325,595	71,923–86,815	31,631–38,181	25,983–31,363	7,657–9,242
Platforms	2,498,310–2,505,815	581,368–2,403,899	419,822–1,735,924	1,894,355–7,832,975	45,665–188,820
Totals	8,503,436–8,997,729	1,328,095–3,256,780	1,030,189–2,393,226	2,196,050–8,169,048	398,630–570,923

\*TSP emissions were calculated in the spreadsheets. For conservative estimates of PM<sub>10</sub>, it is assumed here that the ratio of PM<sub>10</sub> to TSP is equal to 1.0.

Table 4-43

Projected Total Emissions Related to the OCS Program in the EPA by Subarea for the Years 2003-2042  
(tons)

Pollutant Distribution	E0-60m	E1600-2400m	E>2400m	Total
NO <sub>x</sub>	13,388.5-41,171.3	77,612.5-61,757.0	77,612.5-82,342.7	168,613-185,271.0
CO	2,481.7-8,201.7	83,274.4-12,302.6	83,274.4-16,403.5	169,030-36,907.9
SO <sub>x</sub>	1,778.3-5,415.5	8,033.5-8,123.2	8,033.5-10,831.0	17,845-24,369.7
VOC	4,861.1-6,934.8	12,521.0-10,402.2	12,521.0-13,869.6	29,903-31,206.6
PM <sub>10</sub>	553.5-1,654.4	2,002.6-2,481.6	2,002.6-3,308.8	4,559-7,444.8

Table 4-44

Projected Total Emissions Related to the OCS Program in the CPA by Subarea for the Years 2003-2042  
(tons)

Pollutant Distribution	0-60m	60-200m	200-800m	800-1600m	1600-2400m	>2400m	Total
NO <sub>x</sub>	6,521,703-6,871,671	1,192,643-1,230,876	223,395-186,496	381,934-390,208	151,332-258,226	32,428-60,253	8,503,436-8,997,729
CO	1,018,581-2,487,241	186,271-445,523	34,891-67,503	59,652-141,238	23,636-93,466	5,065-21,809	1,328,095-3,256,780
SO <sub>x</sub>	790,103-1,827,735	144,488-327,390	27,064-49,605	46,271-103,788	18,334-68,683	3,929-16,026	1,030,189-2,393,226
VOC	1,684,258-6,238,798	308,005-1,117,513	57,693-169,320	98,636-354,270	39,082-234,443	8,375-54,703	2,196,050-8,169,048
PM <sub>10</sub>	305,729-436,021	55,910-78,101	10,472-11,834	17,905-24,759	7,094-16,385	1,520-3,823	398,630-570,923

Table 4-45

Projected Peak-Year Emissions Related to the OCS Program in the EPA by Source for the Years 2003-2042  
(tons)

Activity/Pollutant	NO <sub>x</sub>	CO	SO <sub>x</sub>	VOC	PM <sub>10</sub>
Service Vessels	1,256.5-2,254.6	126.2-226.5	130.9-234.8	54.8-98.4	76.0-136.4
Pipeline Vessels	1,930.3-1,699.5	646.8-569.5	268.8-236.7	176.4-155.3	159.6-140.5
LTO Helicopters	0.1-0.2	0.1-0.1	0-0.0	0-0.1	0-0
Cruise Helicopters	0.2-0.3	0.4-148.1	0.0-0.1	0.0-0.0	0.0-0.1
Blowouts without Fire	0	0	0	21.9-10.9	0
Spills without Fire	0	0	0	465.1-255.0	0
Barge Loading	0	0	0	0	0
Tanker Loading	0	0	0	0	0
Transit Loss	0	0	0	0	0
Tanker Exhaust	0	0	0	0	0
Tug Exhaust	0	0	0	0	0
Platform Construction	421.2-421.2	83.2-83.2	24.0-24.0	24.7-24.7	25.9-25.9
Exploratory Wells	5,399.8-10,750.6	1,292.6-2,572.0	744.6-1,483.4	178.5-352.2	160.1-318.8
Development Wells	322.4-618.2	86.0-164.8	37.8-72.5	31.1-59.5	9.2-17.3
Platforms	3,537.3-1,424.6	6031.0-331.5	323.3-239.4	1,083.5-1,080.2	38.0-26.0
Totals	12,867.8-17,169.3	8,266.3-4,095.8	1,529.4-2,290.8	2,036.0-2,036.4	468.8-665.3

Table 4-46

Projected Peak-Year Emissions Related to the OCS Program in the CPA by Source for the Years 2003-2042  
(tons)

Activity/Pollutant	NO <sub>x</sub>	CO	SO <sub>x</sub>	VOC	PM <sub>10</sub>
Service Vessels	174,103-176,697	17,492-17,753	18,131-18,401	7,596-7,710	10,534-10,691
Pipeline Vessels	3,357-6,439	1,125-2,157	467-8,97	307-588	278-532
LTO Helicopters	56-127	45-103	9-20	4-Feb	5-Feb
Cruise Helicopters	96-219	273-627	21-47	21-47	27-63
Blowouts without Fire	0	0	0	0	0
Spills without Fire	0	0	0	0	0
Barge Loading	0	0	0	114-157	0
Tanker Loading	0	0	0	0	0
Transit Loss	0	0	0	154-212	0
Tanker Exhaust	0	0	0	0	0
Tug Exhaust	0	0	0	0	0
Platform Construction	21,484-29,487	4,243-5,824	1,223-1,679	1,261-1,730	1,320-1,812
Exploration Wells	4,023-4,856	1,072-1,294	471-568	388-468	116-140
Development Wells	9,133-10,960	2,435-2,922	1,071-1,285	880-1,056	259-311
Platforms	86,725-352,293	20,181-81,980	14,573-59,200	65,760-267,128	1,585-6,439
Totals	298,976-316,859	46,867-112,660	35,966-82,097	76,482-279,101	14,121-19,992

Table 4-47

Projected Peak-Year Emissions Related to the OCS Program in the EPA by Subarea for the Years 2003-2042  
(tons)

Pollutant Distribution	E0-60m	E1600-2400m	E>2400m	Total
NO <sub>x</sub>	1,712.0-3,815.4	5,577.9-5,723.1	5,577.9-7,630.8	12,867.8-17,169.3
CO	429.8-910.2	3,918.3-1,365.3	3,918.3-1,820.4	8,266.3-4,095.8
SO <sub>x</sub>	215.6-509.1	656.9-763.6	656.9-1,018.1	1,529.4-2,290.8
VOC	582.4-452.5	726.8-678.8	726.8-905.1	2,036.0-2,036.4
PM <sub>10</sub>	102.5-147.9	183.1-221.8	183.1-295.7	468.8-665.3

Table 4-48

Projected Peak-Year Emissions Related to the OCS Program in the CPA by Subarea for the Years 2003-2042  
(tons)

Pollutant Distribution	0-60m	60-20m	200-800m	800-1600m	1600-2400m	>2400m	Total
NO <sub>x</sub>	229,300-241,989	41,933-43,346	7,854-6,568	13,429-13,741	7,854-9,094	1,140-2,122	301,510-316,859
CO	35,945-86,040	6,573-15,412	1,231-2,335	2,105-4,886	1,231-3,233	179-754	47,264-112,660
SO <sub>x</sub>	27,584-62,698	5,044-11,231	945-1,702	1,615-3,560	945-2,356	1,615-549	37,749-82,097
VOC	58,658-213,153	10,727-381,181	2,009-5,785	3,435-12,104	2,009-8,010	292-1,869	77,130-279,101
PM <sub>10</sub>	10,830-15,268	1,981-2,735	371-414	634-867	371-574	54-134	14,240-19,992

Table 4-49

Class I Air Quality Area Results of Concentration Estimates  
from OCS Emissions and Corresponding Maximum Allowable Increases  
(micrograms per cubic meter) for the Years 2003-2042

Pollutant/ Averaging Period	Maximum Allowable Increase	EPA Modeled Impact	CPA Modeled Impact	Total Modeled Impact
SO <sub>2</sub>				
Annual Average	2.0	0.02-0.03	0.29	0.32
24-hour Average	5.0	0.78-1.2	4.46	5.66
3-hour Average	25.0	2.6-3.8	9.74	13.54
NO <sub>2</sub>				
Annual Average	2.5	0.10-0.14	3.61	3.75
PM <sub>10</sub>				
Annual Average	5.0	*	*	*
24-hour Average	10.0	*	*	*

\*PM<sub>10</sub> emissions were not calculated because they are emitted in smaller quantities than NO<sub>2</sub> or SO<sub>2</sub>; hence, their impacts would be even less than those modeled and presented above.

Table 4-50

Class II Air Quality Areas Results of Concentration Estimates  
for OCS Emissions and Corresponding Maximum Allowable Increases  
(micrograms per cubic meter) for the Years 2003-2042

Pollutant/ Averaging Period	Maximum Allowable Increase	EPA Modeled Impact	CPA Modeled Impact	Total Modeled Impact
SO <sub>2</sub>				
Annual Average	20.0	0.03	1.12	1.15
24-hour Average	91.0	0.99-1.1	13.18	14.28
3-hour Average	512.0	4.7-5.1	97.91	103.01
NO <sub>2</sub>				
Annual Average	25.0	0.19-0.25	6.17	6.42
PM <sub>10</sub>				
Annual Average	17.0	*	*	*
24-hour Average	30.0	*	*	*

\*PM<sub>10</sub> emissions were not calculated because they are emitted in smaller quantities than NO<sub>2</sub> or SO<sub>2</sub>; hence, their impacts would be even less than those modeled and presented above.

Table 4-51

## Gulf Ecological Management Site (GEMS) Areas

Texas	Habitat	Area
Christmas Bay Coastal Preserve	Migratory and resident waterfowl habitat	4,173 ac
North Deer Island Sanctuary	Natural island, colonial water bird nesting	10+ ac
Candy Abshier Wildlife Management Area	Coastal prairie habitat with significant coastal woodlot or oak mottes	209 ac
Murphree Wildlife Management Area	Fresh-intermediate and brackish marsh; a component of the Texas Chenier Plain	12,267 ac
Sea Rim State Park	Gulf Coast beach and marsh	15,109 ac
Armand Bayou Coastal Preserve and Nature Center	Salt and brackish marsh, open water	2,800 ac
Freeport Liberty Ship Reef Complex	Artificial reef complex	0.5 mi <sup>2</sup>
Louisiana	Habitat	Area
Atchafalaya Delta Wildlife Management Area	Barrier island with sand beaches, freshwater marshes and shrub/scrub habitats	11,500 ac
Atchafalaya Delta and Swamp Basin	Riverine, natural levees, coastal flatlands and basins, and point bars	1.2 million ac
Baptiste Collette Marsh	Natural bayous, levees, beach ridges	4,100 ac
Barataria Basin Estuaries	Swamp forest, fresh marsh, brackish marsh, saline marsh and offshore; beaches and elevated areas	900,000 ac
Bayou Bois Piquant Crevasse Swamp	Live oak forest (riparian habitat)	unknown
Bayou Mauvais Bois Ridge	Live oak forest (riparian habitat)	unknown
Bayou Sauvage National Wildlife Refuge	Marshes, tidal and backswamp drainage canals, shallow open water	22,700 ac
Big Oak Island	Flood Control and Riparian habitat	2,000 ac
Cameron Prairie National Wildlife Refuge	Natural bayous, levees, hummocks	24,620 ac
Chandeleur Islands	Beach dune systems on barrier islands	18 mi x 0.5 mi
Cote Blanche Salt Dome	Salt dome	700 ac
Cheniere Au Tigre	Riparian habitat	3,400 ac
White's Kitchen	No description	N/A
River Pines Plantation	No description	N/A
Queen Bess Island	No description	N/A
Honey Island Swamp	No description	N/A
Sabine National Wildlife Refuge	No description	N/A
East Jetty Woods	No description	N/A
Petit Bois	No description	N/A
Timbalier Island and East Timbalier Island	No description	N/A
Peveto Beach	No description	N/A
Delta National Wildlife Refuge	No description	N/A
Weeks Island	No description	N/A
Grande Terre Island	No description	N/A
Jean Lafitte National Historic Park	No description	N/A
Mississippi	Habitat	Area
Bayou La Croix Coastal Preserve	The following ecological communities are expected or known to occur: estuarine subtidal - small tidal creek; estuarine intertidal - oligohaline marsh.	1,478 ac
Bayou Portage Coastal Preserve	This is an estuarine marsh that is expected or known to include the following ecological communities: estuarine subtidal - muddy sand embayment and small tidal creek; estuarine intertidal - mesohaline marsh and oligohaline marsh.	1,137 ac

N/A means information is not available.



Table 4-51. Gulf Ecological Management Site (GEMS) Areas (continued).

Bellefontaine Marsh Coastal Preserve	The following ecological communities are expected or known to occur: estuarine subtidal - small tidal creek; estuarine intertidal - polyhaline marsh, mesohaline marsh, sand shore and mud shore; other - beach dune scrub and oak-pine maritime woodland.	1,305 ac
Biloxi River Marshes	The following ecological communities are expected or known to occur: estuarine subtidal - muddy sand embayment, embayment widgeon grass bed and large tidal creek; estuarine intertidal - mesohaline marsh, oligohaline marsh and tidal freshwater marsh.	4,020 ac
Davis Bayou Coastal Preserve	The following ecological communities are expected or known to occur: estuarine subtidal, - muddy sand embayment, small tidal creek and embayment widgeon grass bed; estuarine intertidal, - mesohaline marsh, oligohaline marsh and sand shore; and others, beach dune scrub.	1,410 ac
Deer Island Coastal Preserve	The following ecological communities are expected or known to occur on the island: estuarine subtidal - Mississippi Sound-sand bottom (near shore), barrier island pond/lagoon complex and small tidal creek; estuarine intertidal - sand shore, salt flat, polyhaline marsh and mesohaline marsh; other - slash pine maritime forest and relic dune scrub.	674 ac
Escatawpa River Marsh Coastal Preserve	The following estuarine communities are expected or known to occur: estuarine subtidal - muddy sand embayment and riverine estuary (sand and muddy types); and other - cypress swamp, black gum swamp and pitcher plant bog.	2,826 ac
Grand Bay Savanna Coastal Preserve	The following ecological communities are expected or known to occur: estuarine subtidal - small tidal creek, muddy sand embayment and Mississippi sound mollusk reef; estuarine intertidal - mesohaline marsh, oligohaline marsh, tidal fresh water marsh, salt flat and supratidal coastal meadows; and others - wet pine savanna, pine savanna, pond cypress, shell midden, pitcher plant flat, pitcher plant bog, bottomland hardwood forest and pocosin-like wetland scrub.	26,900 ac
Grand Bayou Coastal Preserve	This is a small area of estuarine marsh in which the following estuarine communities are expected or known to occur; estuarine subtidal - muddy sand embayment; and estuarine intertidal - mesohaline marsh and oligohaline marsh.	565 ac
Graveline Bay Coastal Preserve	The following ecological communities are expected or known to occur: Estuarine subtidal - muddy sand embayment, small tidal creek and mollusk reef; Estuarine intertidal - sand beach, mesohaline marsh and oligohaline marsh.	2,339 ac
Hancock County Marsh Coastal Preserve	The ecological communities expected or known to occur are: estuarine subtidal - large tidal creek; estuarine intertidal - sand shore, mesohaline marsh and oligohaline marsh; and other shell middens.	13,570 ac
Horn Island Coastal Preserves	A large barrier island with the following ecological communities are expected or known to occur on the island: marine subtidal - Gulf of Mexico shallow sandy bottom (near shore); marine intertidal - sand shore; estuarine subtidal - Mississippi Sound-sand bottom (nearshore), barrier island pond/lagoon complex, tidal pass, barrier island seagrass bed and mollusk reef; estuarine intertidal - oligohaline or mesohaline marsh and barrier island high marsh.	2,763 ac
Jourdan River Coastal Preserve	The following ecological communities are expected or known to occur: estuarine subtidal - large tidal creek; estuarine intertidal - oligohaline marsh and mesohaline marsh.	6,423 ac

Table 4-51. Gulf Ecological Management Site (GEMS) Areas (continued).

Pascagoula River Marsh Coastal Preserve	The following ecological communities are expected or known to occur: estuarine subtidal - riverine estuary (sand), riverine estuary (muddy sand), tape grass beds and large tidal creek; estuarine intertidal - mesohaline marsh, oligohaline marsh and tidal freshwater marsh; and other - cypress swamp, black gum swamp and riverine sand bar.	11,150 ac
Petit Bois Island Coastal Preserve	A large barrier island, 6 miles long with the following ecological communities are expected or known to occur on the island: marine subtidal - Gulf of Mexico shallow sandy bottom (near shore); marine intertidal - sand bottom (near shore), barrier island pond/lagoon complex, tidal pass, barrier island seagrass beds, embayment seagrass bed and mollusk reef; estuarine intertidal - oligohaline or mesohaline marsh and barrier island high marsh. Only a small area of slash pine forest remains near the center of the island.	1,673 ac
Round Island Coastal Preserve	The following communities are expected or known to occur: estuarine subtidal - Mississippi Sound – sand bottom (near shore); estuarine intertidal - sand shore.	65 ac
Ship Island Coastal Preserve	This barrier island is currently in 3 parts; connected by narrow tidal sandbars. The island is 8 miles in length and the terrain is low and sandy except at the east end.	2,051 ac
Wolf River Marsh Coastal Preserve	This is a large extent of estuarine marsh that is expected or known to include the following estuarine communities: estuarine subtidal - large tidal creek and muddy sand embayment; and estuarine intertidal - mesohaline marsh and oligohaline marsh.	2,426 ac
Alabama	Habitat	Area
Orange Beach Maritime Forest	Coastal freshwater wetland, maritime live oak forest, longleaf pine-turkey oak sandhill, coastal sand pine scrub, bluejack oak scrub, wet longleaf pine savannah, pitcher plant bog, sphagnum/cypress swamp.	588 ac
Mobile-Tensaw River Delta	Mesic flood plains, cypress-gum swamps, tidal brackish water marshes, bottomland forests, submersed grassbeds.	185,000 ac
Weeks Bay National Estuarine Research Reserve (WBNERR)	Saltmarsh, freshwater marsh, estuarine benthos, tidal flats, swamp, bogs, pine savannah, upland forest, sawgrass marsh, other estuarine, riverine, and palustrine habitats.	6,000 ac
Florida (Northwest and Apalachicola Bay)	Habitat	Area
Fort Pickens State Park Aquatic Preserve	Salt marsh, seagrasses, and open water	34,000 ac
Rocky Bayou State Park Aquatic Preserve	Salt marsh, floodplain marsh, bottomland forest, seagrasses, and estuarine open water	480 ac
St. Andrews State Park Aquatic Preserve	Salt marsh, seagrasses, and open water	25,000 ac
Yellow River Marsh Aquatic Preserve	Salt marsh, floodplain marsh, seagrasses, forested wetland, and estuarine open water	16,435 ac
Alligator Harbor Aquatic Preserve	Seagrass beds, salt marshes, and nearshore coastal communities	14,366 ac
Apalachicola Bay Aquatic Preserve	Estuarine, riverine, floodplain, and adjacent upland habitats such as barrier islands	80,000 ac
St. Joseph Bay Aquatic Preserve	Extensive seagrass beds, expansive salt marshes, and nearshore coastal communities.	73,000 ac
St. Joseph Bay State Buffer Preserve	Upland, tidal marsh, bog and swamp habitats that closely interrelate and influence each other, as well as, St. Joseph Bay.	2,145 ac
Apalachicola National Estuarine Research Reserve	Barrier island, estuarine, riverine, floodplain and upland environments which are closely interrelated and influenced by each other.	246,766 ac

Table 4-52

Recommended Mitigation Techniques Used to Avoid or Reduce Adverse Impact to Wetlands  
by Pipelines, Canals, Dredging, and Dredged Material Placement

Technique	Decision Process	Factors To Consider
Pipeline Construction		
Avoidance	Route Selection and Location Evaluation of potential routes that avoid wetlands entirely Shared ROW and Pipelines Using all or part of an existing ROW would avoid new impacts to wetlands	Length of route Difficulty of the land for pipeline installation, i.e., access points, sediment characteristics Presence of other pipelines Presence of transportation corridors Density of surrounding developments Number of different land owners
Minimization	Necessity of pipeline contents	Environment function Timing of the project Previous pipeline installations Availability of equipment
Location/Route Selection	Early planning Considering wetland type Use of aerial photography as well as digital and topo maps combined with field surveys to identify route of minimal impact	Most routes are predetermined by the beginning and end points Flexibility within general route to locate sections of pipelines to one side or another to take advantage of upland areas, existing ROW, etc.
Existing ROW/Corridors	Plan routes paralleling existing pipelines (safety issues) Timing right to share section of pipeline between or among users	Group pipelines in corridors where impacts are limited to smaller areas of coastal wetlands
Construction/Installation	Methods depend on environment pipeline is constructed Flotation canals Push-pull method Single versus double ditching techniques Directional drilling*	Choice of method has implications for Type of impact Access impact Impact from specific equipment
Dredging		
Dredge and Other Material Disposal	Features associated with pipeline canals and navigation channels Avoid levees by spray dredging, levee manipulation/spoil bank removal, and canal backfilling	Navigation channels and some canals must be left open for access Impacts associated with spoil banks include soil compaction, impoundment, and creation of upland vegetation
Dredge Material Bank Removal	Identify areas to place dredge Navigation channels Canals that cannot be backfilled Potential use for filling nearby old canal or abandoned navigation channels Offsite mitigation	Due to expense and difficulty in many coastal areas only used in sensitive areas
Levee Manipulation	Dredge material should allow water to pass through openings in the line of dredge placement	Levees used as walkways and built from material placed in a long line paralleling the length of the project is detrimental to marsh and should be built discontinuous instead Must maintain natural hydrologic pattern Technique is post construction technique where sections of dredge banks are removed in order to restore hydrologic flow

Table 4-52. Recommended Mitigation Techniques Used to Avoid or Reduce Adverse Impact to Wetlands by Pipelines, Canals, Dredging, and Dredged Material Placement (continued).

Technique	Decision Process	Factors To Consider
Spray Dredge	Suggested and used to avoid completely the creation of dredge banks Spray dredging places material over a large area of marsh surface at a depth that avoids destroying vegetation or altering hydrology	Normally dredge is deposited discontinuously and unevenly, enabling the avoidance of sensitive habitats or minimize spoil over small creeks More costly than more traditional use of the bucket dredge; most contractors along the coast of GOM have not invested in spray dredge technology
Canals and Channels		
Backfill	Suggested as a way to minimize impacts from canals and to restore impacted habitats Based on OCS permit information, this is the most common required mitigation in recent years In Texas and Louisiana, a typical backfilled pipeline canal results in 75% reduction in direct impacts to the marsh as compared to non-backfilled canals (Baumann and Turner, 1990)	Involves returning soil into the canal so that the elevation is restored as close as possible to pre-construction elevation May occur on site for canal restoration, as well as offsite as mitigation for other dredging operations Intended benefits of backfilling are reestablishment of marsh vegetation in the canal and on the re-graded spoil bank, and restoration of marsh soils on bottom of the canal
Wood Chipping	A new technique unique to forested wetlands Regulatory personnel believe the use of windrows should be avoided. Requirement for chipping on-site started approximately 1992/93	Prior to 1996, trees removed for ROW being pushed to the side created <i>windrows</i> with the potential to act as hydrologic barriers Success of wood chipping remains undetermined. Problems encountered: Equipment not adapted to the function of marshes Equipment is expensive Process is time-consuming
Erosion Stabilization	Many impacts are from pipeline canals and navigation channels Stabilization of banks is critical Lack of stabilization can result in slumping of canal sides and blockage of natural creeks/drainage streams	Erosion control measures are required through the use of Best Management Practices Requirement is usually erosion control./siltation fences
Revegetation	Often required by permits Extremely valuable to the acceleration of marsh recover over first growing season Most extensive data exist for the re-vegetation of dunes, but through the use of directional drilling, is not the concern as in past cases	Stabilizes shorelines, shore banks, and areas surrounding stream crossings where erosion is most likely to occur Helps to reduce sedimentation and erosion
Plugs/Dams	Structures have been used frequently in order to mitigate adverse hydrodynamic impacts and accelerated erosion (structures include dams, weirs, bulkheads, rip-rapshell/gravel mats, and biodegradable mats)	Reduces erosion and provides barriers to saltwater intrusion Plugs maintain elevated marsh water levels Prevent salt water intrusion into low-salinity marshes Reduces tidal exchange thereby reducing bank erosion
Erosion Control During Project	Construction of pipelines and navigation Channels are governed by the Best Management Practices and erosion control during the construction phase is a requirement	Natural features of each construction site should be identified for the necessary erosion control

Table 4-52. Recommended Mitigation Techniques Used to Avoid or Reduce Adverse Impact to Wetlands by Pipelines, Canals, Dredging, and Dredged Material Placement (continued).

Technique	Decision Process	Factors To Consider
Timing of Project	Seasonal timing of the project can minimize impacts Avoid impacts to endangered species, particularly bird breeding seasons	Expanding restrictions to ensure there will be at least part of one growing season for reestablishment of vegetation before fall/winter has been discussed, but dismissed for economic reasons too industry
Restoration	Can occur either immediately, post construction, or many years after pipeline and navigation canal construction	Backfilling of canals, resulting in levee removal, has been a requirement for most pipeline installation projects There is benefit to backfilling old canals and navigation channels in order to reduce or reverse the trend of wetland losses in coastal Louisiana Other options include the use of imported material
Compensation	Typically occurs through the creation of new wetland habitat or through a cash payment to the appropriate land management agency Allows for the creation and restoration of lost wetland habitat In Louisiana, the payment for cash for wetlands into a State trust fund is administered by LADNR and is controversial This fund has been in existence for several years and has a significant accumulation of funds, however, no creation projects have yet to tap into it	In many cases not an option Saline marshes have yet to be successfully created, and finding appropriate locations to create salt marsh is difficult Forested wetlands are also difficult to compensate

\* Trenchless, or directional drilling, is the newest and favored technique in sensitive habitats. This technique is considered to be extremely protective of sensitive habitats. At present, directional drilling is required almost without exception for crossing barrier island and shore faces. Impacts are limited to the access and staging sites for the equipment. By using directional drilling, pipeline installation can occur without having to cut through shore facings minimizing any erosion and surface habitat disturbance.











Table A-1

## Watermasses in the Eastern Gulf of Mexico

Watermass	Depth (m)	Feature(s)	Sigma-theta (mg/cm <sup>3</sup> )
SUW (Subtropical Underwater)	150-250	S <sub>max</sub>	25.40
18 °C W (18 °C Sargasso Sea Water)	200-400	O <sub>2 max</sub>	26.50
TACW (Tropical Atlantic Central Water)	400-700	O <sub>2 min</sub>	27.15
AAIW (Antarctic Intermediate Water)	700-900	PO <sub>4 max</sub>	27.40
AAIW (Antarctic Intermediate Water)	800-1,000	S <sub>min</sub> , SiO <sub>2 max</sub>	27.50
UNADW*	900-1,200	SiO <sub>2 max</sub>	27.70

\* Mixture of North Atlantic deep water and high silicate Caribbean midwater.

Table A-2

## Climatological Data for Selected Gulf Coast Locations

Location	Precipitation (annual average, meters)	Temperature (mean annual, °C)	Wind Speed (average annual mean, m/sec)	Humidity (average percent)	Barometric Pressure (average annual millibars)	Stability Conditions Annual Percent		
						Unstable	Neutral	Stable
Corpus Christi, TX	0.77	21.7	5.4	89	1,014	11.0	61.0	28.0
Galveston, TX	1.07	20.9	4.9	83	1,015	16.0	61.4	22.6
Lake Charles, LA	1.35	19.9	3.9	90	1,016	23.0	44.0	33.0
Gulfport, MS	1.50	20.0	3.6	85	1,016	17.5	47.4	35.1
Pensacola, FL	1.55	19.9	3.7	85	1,013	18.0	22.0	60.0
Key West, FL	1.01	25.3	5.0	79	1,014	80.0	18.0	2.0

Sources: USDOC, NOAA, 1961-1986.

Table A-3

Summary of the Most Damaging Hurricanes in the Gulf of Mexico (1900-1999)

Hurricane	Year	Category <sup>1</sup>	Damage <sup>2</sup> (million \$)	Deaths
Texas	1900	4	NA	6,000+
Mississippi/Alabama/Pensacola, Florida	1906	3	NA	134
Southeast Florida	1906	2	NA	164
Louisiana	1909	4	NA	350
Texas	1909	3	NA	41
Louisiana	1915	4	NA	275
North Texas	1915	4	1,177	275
Southwest Louisiana	1918	3	NA	34
Florida Keys	1919	4	NA	600-900
Florida	1926	4	1,315	243
Louisiana	1926	3	NA	25
Texas	1932	4	NA	40
South Texas	1933	3	NA	40
Southwest Florida	1944	3	582	NA
Southeast Florida/Louisiana/Mississippi	1947	4	707	51
Audrey (Louisiana/Texas)	1957	4	696	390
Carla (Texas)	1961	4	1,926	46
Hilda (Louisiana)	1964	3	578	38
Betsy (Florida/Louisiana)	1965	3	6,461	75
Beulah (Texas)	1967	3	844	NA
Camille (Mississippi/Alabama)	1969	5	5,242	256
Celia (Texas)	1970	3	1,560	NA
Eloise (Florida)	1975	3	1,081	NA
Claudette (Texas)	1979	T.S.	609	NA
Frederic (Alabama/Mississippi)	1979	3	3,502	NA
Allen (Texas)	1980	3	410	NA
Alicia (Texas)	1983	3	2,391	NA
Elena (Mississippi/Alabama/Louisiana)	1985	3	1,392	NA
Juan (Louisiana)	1985	1	1,671	NA
Allison (Texas)	1989	T.S.	511	NA
Andrew (Florida/Louisiana)	1992	4	30,475	NA
Gordon (Florida)	1994	T.S.	400	NA
Alberto (Florida/Alabama)	1994	T.S.	500	30
Erin (Florida/Miss/Alabama)	1995	1	700	NA
Opal (Florida/Alabama)	1995	3	3,069	NA
Danny (Louisiana/Florida)	1997	1	NA	NA
Earl (Florida)	1998	1	NA	NA
Georges (Florida/Mississippi)	1998	2	NA	NA
Bret (Texas)	1999	4	NA	NA
Irene (Florida)	1999	1	NA	NA

<sup>1</sup> Storm Category represents the Saffir/Simpson Scale

Category 1 = winds of 74-95 mph

Category 4 = winds of 131-155 mph

Category 2 = winds of 96-110 mph

Category 5 = winds greater than 155 mph

Category 3 = winds of 111-130 mph

<sup>2</sup> Damage in adjusted 1990 U.S. dollars.

T.S. = tropical storm.

NA= Data not available.

Sources: Modified from Herbert et al., 1992 and USDOC, NOAA, 2001.

## **REFERENCES**

**REFERENCES**

- Anderson, C.M. and R.P. LaBelle. 2000. Update of comparative occurrence rates for offshore oil spills. *Spill Science and Technology Bulletin* 6(5/6):302-321.
- Continental Shelf Associates, Inc. (CSA) and Texas A&M University, Geochemical and Environmental Research Group (GERG). 2001. Mississippi/Alabama pinnacle trend ecosystem monitoring: Final synthesis report. U.S. Dept. of the Interior, Geological Survey, Biological Resources Division, USGS/BRD/CR-2001-0007 and Minerals Management Service, Gulf of Mexico OCS Region, New Orleans, LA. OCS Study MMS 2001-080. 415 pp. + apps.
- Boland, G.S. 2000. Personal communication. Observations of two new chemosynthetic community sites during an MMS-funded cruise from the Johnson Sea Link submersible. Locations at lease blocks GC 354 and GB 525. MMS study: Improving the predictive capability of 3D-seismic surface amplitude data for identifying chemosynthetic community sites (Contract no. 17801).
- Dismukes, D., W. Olatubi, D. Mesyanzhinov, and A. Pulsipher. 2003. Modeling the economic impacts of offshore oil and gas activities in the Gulf of Mexico: Methods and applications. U.S. Dept. of the Interior, Minerals Management Service, Gulf of Mexico OCS Region, New Orleans, LA. OCS Study MMS 2003-018. 106 pp.
- Herbert, P.J., J.D. Jarrell, and M. Mayfield. 1992. The deadliest, costliest, and most intense United States hurricanes of this century (and other frequently requested hurricane facts). U.S. Dept. of Commerce, National Oceanic and Atmospheric Administration, National Hurricane Center, Coral Gables, FL. NOAA Tech. Memo. NWS NHC-31, updated February 1992. 40 pp.
- Johnston, J. and J. Barras. 2002. Personal communication. Telephone conversations concerning preliminary results from MMS/USGS's NWRC current Coastal Wetland Pipeline Impact Study.
- National Research Council (NRC). 1985. *Oil in the sea: Inputs, fates, and effects*. Washington, DC: National Academy Press.
- Pequegnat, W.E. 1983. The ecological communities of the continental slope and adjacent regimes of the northern Gulf of Mexico. Prepared by TerEco Corp. for the U.S. Dept. of the Interior, Minerals Management Service, New Orleans, LA. Contract no. AA851-CT1-12. 398 pp.
- Rowe, G.T. and M.C. Kennicutt II. 2002. Deepwater program: Northern Gulf of Mexico continental slope habitats and benthic ecology; Year 2: Interim report. U.S. Dept. of the Interior, Minerals Management Service, Gulf of Mexico OCS Region, New Orleans, LA. OCS Study MMS 2002-063.
- Sherman, K., R. Lasker, W.J. Richards, and A.W. Kendall, Jr. 1983. Ichthyoplankton and fishes recruitment studies in large marine ecosystems. *Mar. Fish. Rev.* 45(10-11-12):1-25.
- The Ocean Conservancy. 2002. International coastal cleanup 2000: U.S. cleanup totals -- people, pounds and miles. Internet website: <http://www.cmc-ocean.org/cleanupbro/ousppm.php>.3.
- U.S. Dept. of Commerce. National Marine Fisheries Service. 1999. Final fishery management plan for Atlantic tunas, swordfish, and sharks. Volumes 1-3. U.S. Dept. of Commerce, National Marine Fisheries Service, Highly Migratory Species Division. April 1999.
- U.S. Dept. of Commerce. National Oceanic and Atmospheric Administration. 1961-1986. Environment Data Service, National Climate Center.
- U.S. Dept. of Commerce. National Oceanic and Atmospheric Administration. 2001. National Hurricane Center, December 2001. Internet website: <http://www.nhc.noaa.gov>.
- U.S. Dept. of Energy. National Energy Information Administration. 2002. Petroleum topics. Internet website: <http://www.eia.doe.gov/neic/a-z/petroleuma-z.htm>.
- U.S. Dept. of the Army. Corps of Engineers. 2001. NDC publications and U.S. waterway data CD, volume 7. U.S. Dept. of the Army, Corps of Engineers, Institute for Water Resources Navigation Data Center.
- U.S. Dept. of the Interior. Minerals Management Service. 1994. Federal offshore statistics: 1993. Leasing, exploration, production, and revenue as of December 31, 1993. U.S. Dept. of the Interior, Minerals Management Service, Operations and Safety Management, Herndon, VA. OCS Report MMS 94-0060. 171 pp.
- U.S. Dept. of the Interior. Minerals Management Service. 1996. Internal MMS database, December.
- U.S. Dept. of the Interior. Minerals Management Service. 2001. Deepwater program: OCS-related infrastructure in the Gulf of Mexico fact book.

- U.S. Dept. of the Interior. Minerals Management Service. 2002. TIMS database, May 3, 2002.
- U.S. Dept. of Transportation. Coast Guard. 2001. Polluting incident compendium: Cumulative data and graphics for oil spills, 1973-2000. Internet website: <http://www.uscg.mil/hq/g-m/nmc/response/stats/summary.htm>.
- U.S. Environmental Protection Agency. 1999. Development document for proposed effluent limitations guidelines and standards for synthetic-based drilling fluids and other non-aqueous drilling fluids in the oil and gas extraction point source category. EPA-821-98-021.
- Wilson, R.D., P.H. Monaghan, A. Osanik, L.C. Price, and M.A. Rogers. 1973. Estimate of annual input of petroleum to the marine environment from natural marine seepage. *Trans. Gulf Coast Association of Geological Societies* 23:182-193.
- Woods and Poole Economics, Inc. 2002. The 2002 complete economic and demographic data source (CEEDS) on CD-ROM.



### **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.