# Social Impact Assessment and Offshore Oil and Gas in the United States

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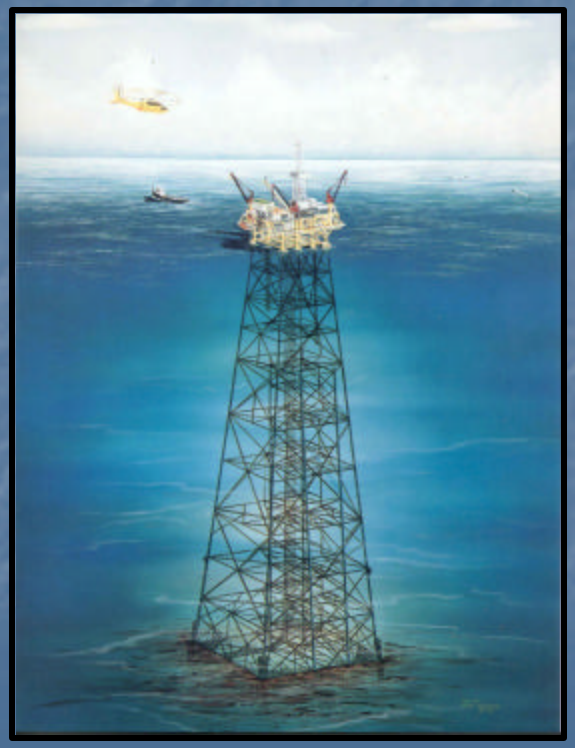
**IAIA ’04**
**Department of the Interior**
**Minerals Management Service**



# MMS Mission

- Primary responsibility is to manage oil, gas, and mineral resources on the OCS

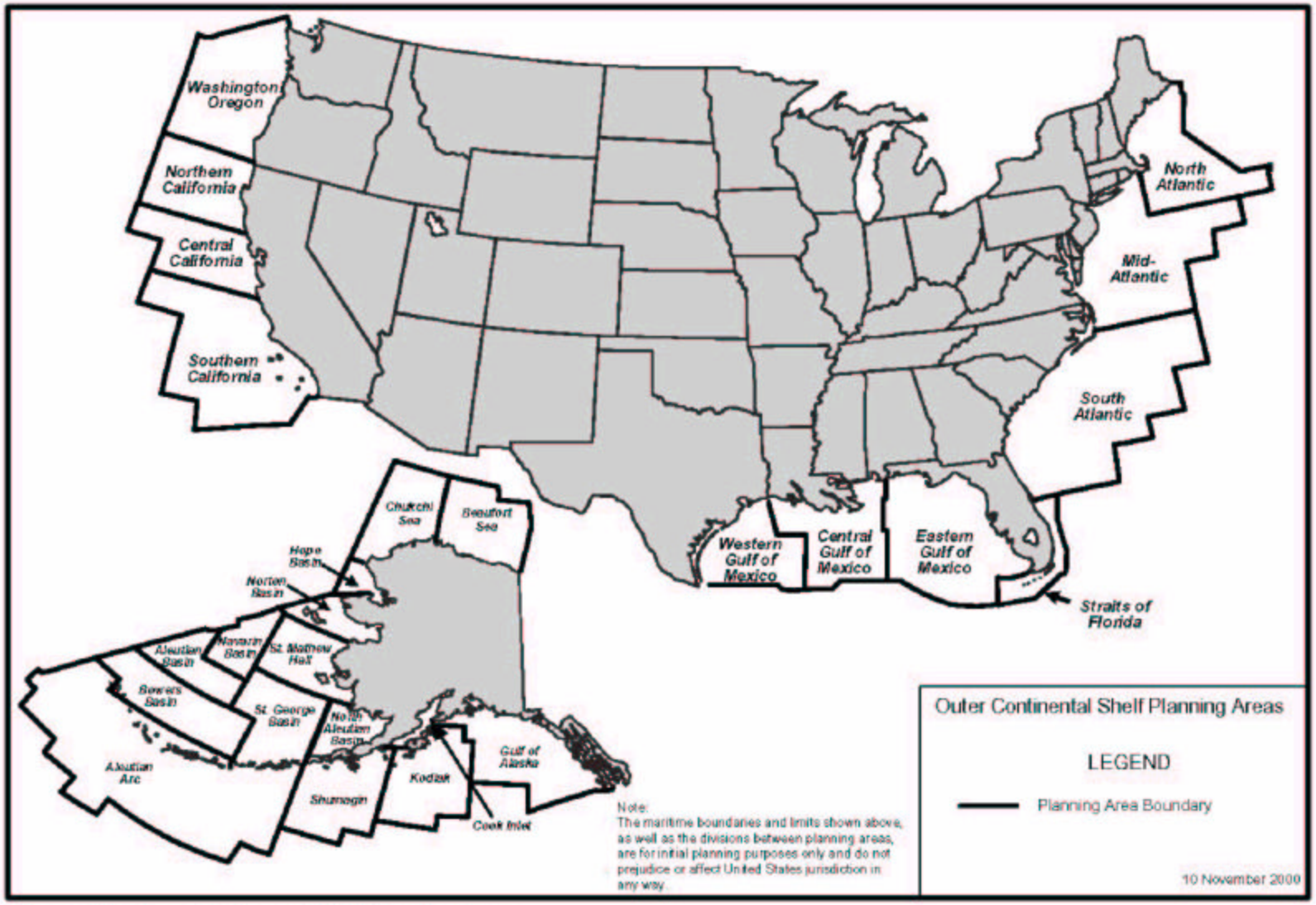
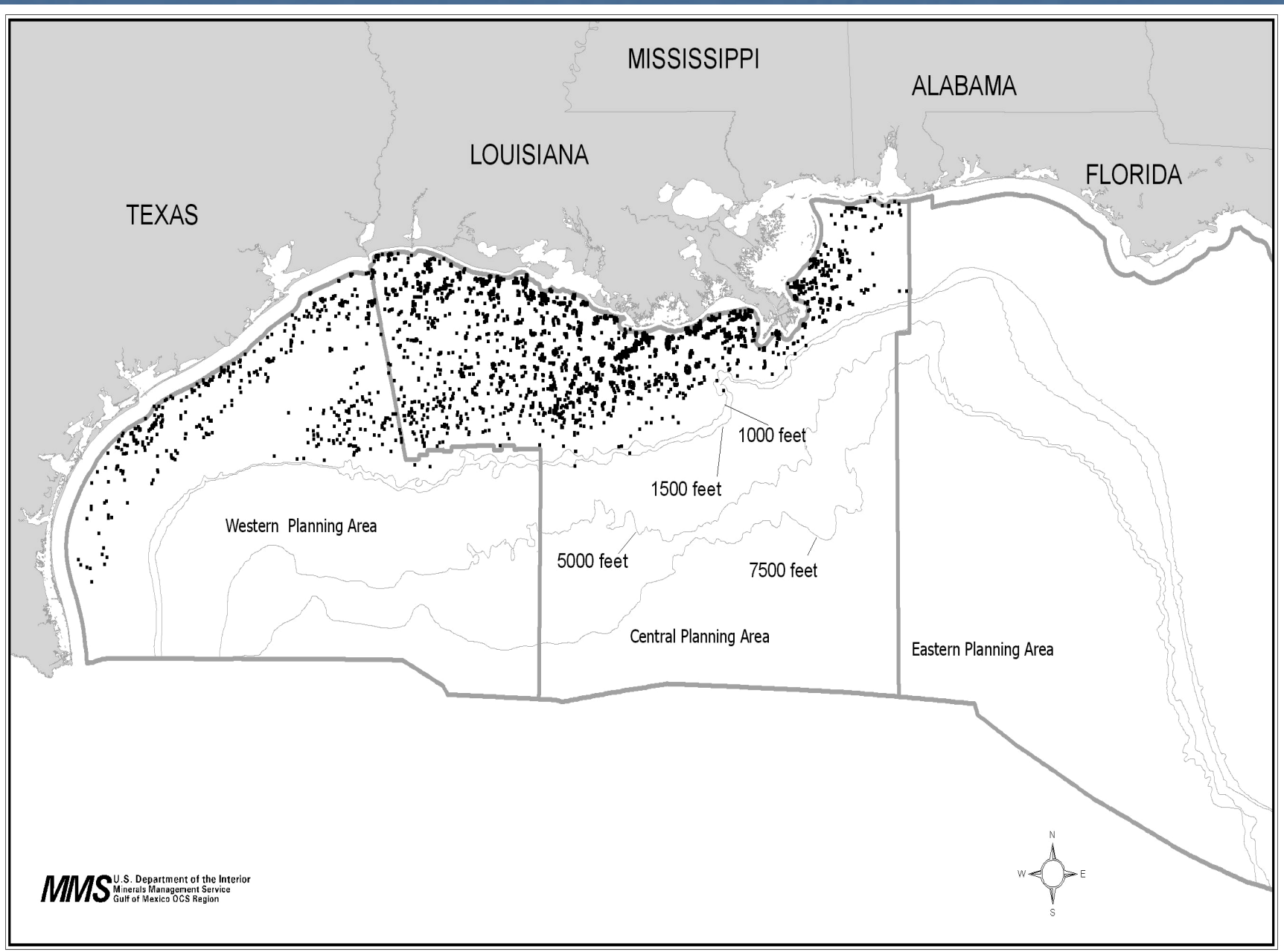
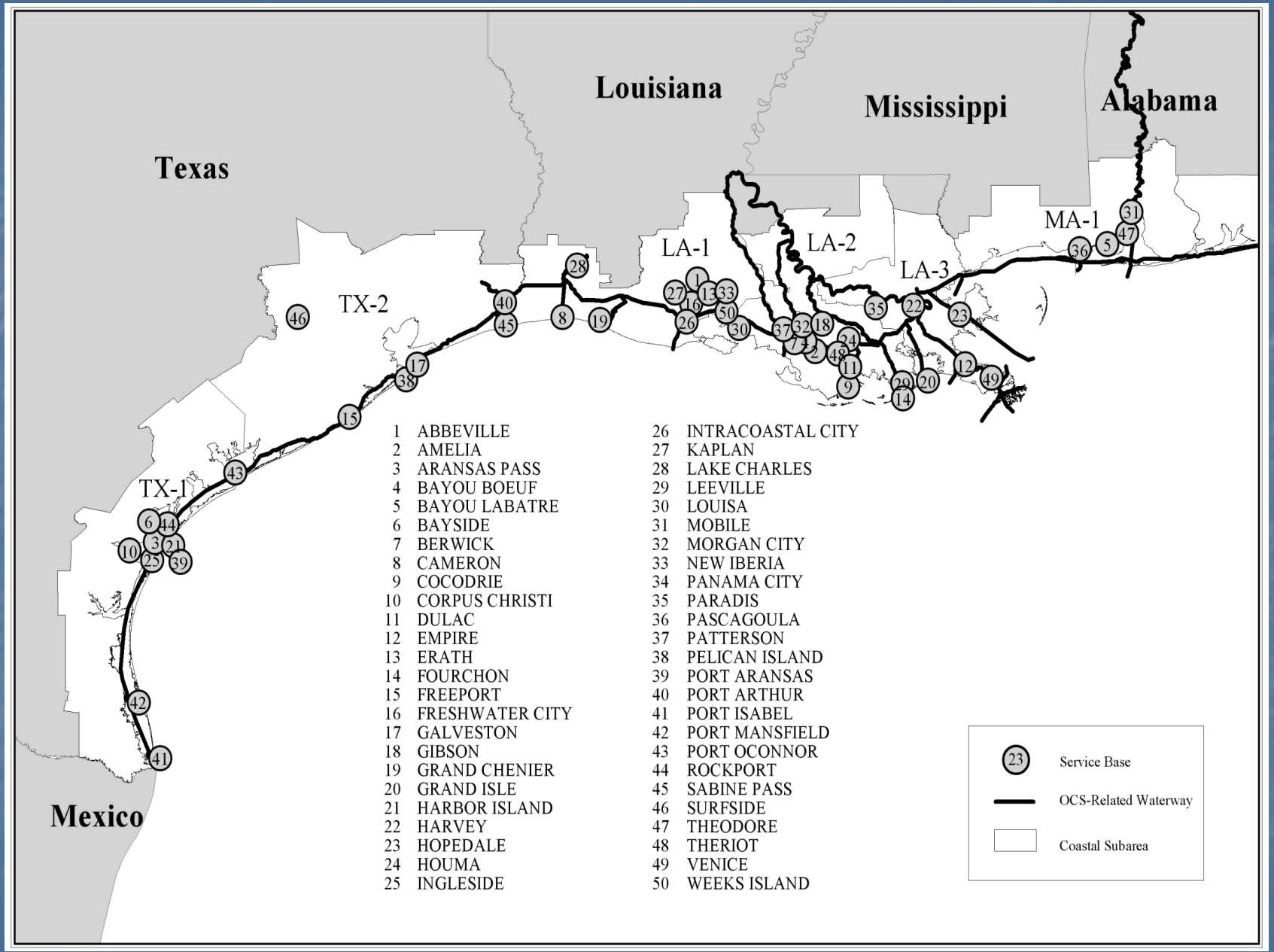



Figure 1-1. Outer Continental Shelf Planning Areas


MISSISSIPPI
ALABAMA
LOUISIANA
FLORIDA
TEXAS
1000 feet
1500 feet
Western Planning Area
5000 feet
7500 feet
Central Planning Area
Eastern Planning Area
MMS U.S. Department of the Interior
Minerals Management Service
Gulf of Mexico OCS Region
N
W
E
S


Texas
Louisiana
Mississippi
Alabama
Mexico
TX-1
TX-2
LA-1
LA-2
LA-3
MA-1
1 ABBEVILLE
2 AMELIA
3 ARANSAS PASS
4 BAYOU BOEUF
5 BAYOU LABATRE
6 BAYSIDE
7 BERWICK
8 CAMERON
9 COCODRIE
10 CORPUS CHRISTI
11 DULAC
12 EMPIRE
13 ERATH
14 FOURCHON
15 FREEPORT
16 FRESHWATER CITY
17 GALVESTON
18 GIBSON
19 GRAND CHENIER
20 GRAND ISLE
21 HARBOR ISLAND
22 HARVEY
23 HOPEDALE
24 HOUMA
25 INGLESIDE
26 INTRACOASTAL CITY
27 KAPLAN
28 LAKE CHARLES
29 LEEVILLE
30 LOUISA
31 MOBILE
32 MORGAN CITY
33 NEW IBERIA
34 PANAMA CITY
35 PARADIS
36 PASCAGOULA
37 PATTERSON
38 PELICAN ISLAND
39 PORT ARANSAS
40 PORT ARTHUR
41 PORT ISABEL
42 PORT MANSFIELD
43 PORT OCONNOR
44 ROCKPORT
45 SABINE PASS
46 SURFSIDE
47 THEODORE
48 THERIOT
49 VENICE
50 WEEKS ISLAND
Service Base
OCS-Related Waterway
Coastal Subarea

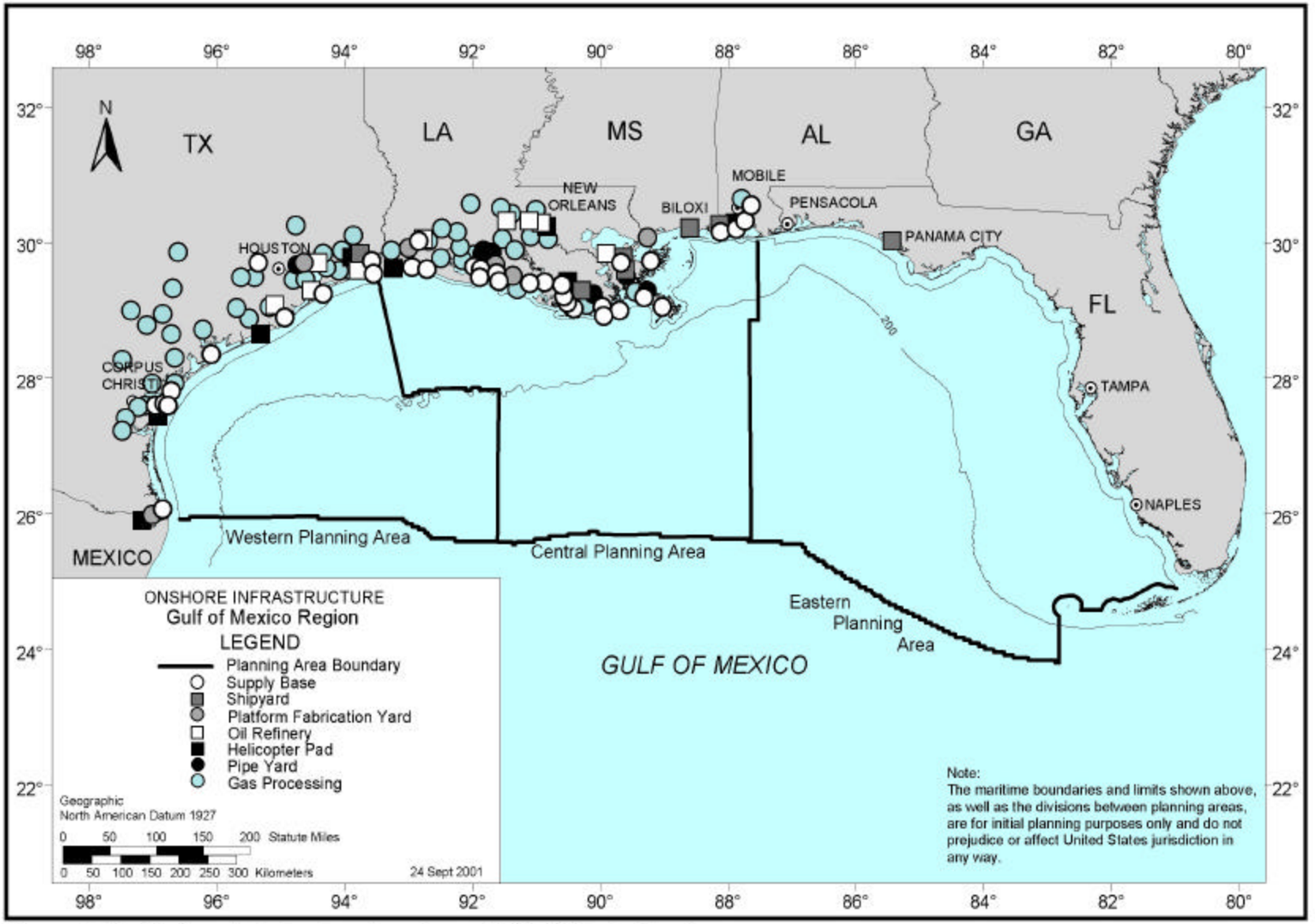
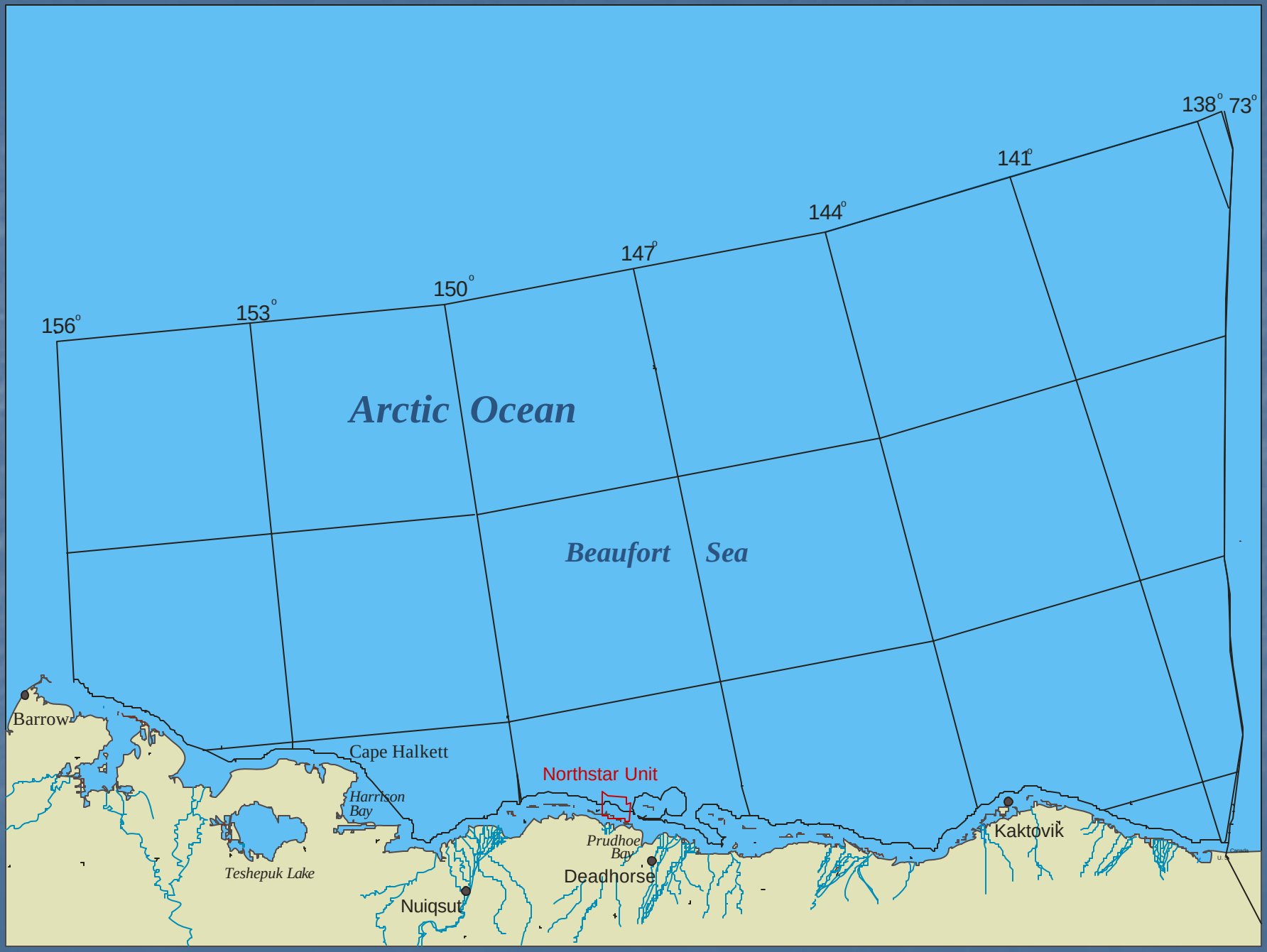
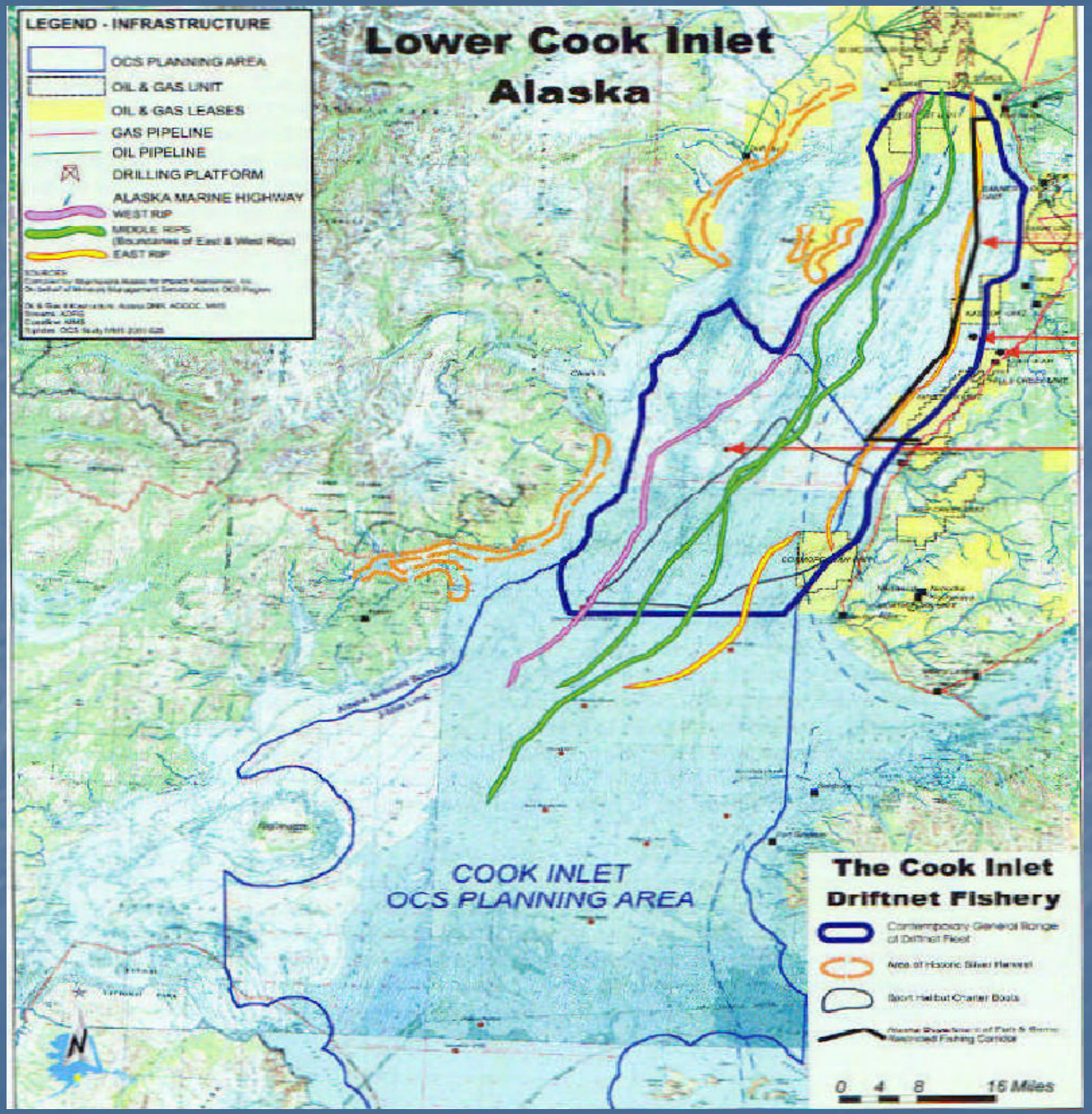



Figure 3-16. Onshore Infrastructure Locations - Gulf of Mexico Region


156°
153°
150°
147°
144°
141°
138°
73°
Arctic Ocean
Beaufort Sea
Barrow
Cape Halkett
Harrison Bay
Teshepuk Lake
Northstar Unit
Prudhoe Bay
Deadhorse
Nuiqsut
Kaktovik


LEGEND - INFRASTRUCTURE
OCS PLANNING AREA
OIL & GAS UNIT
OIL & GAS LEASES
GAS PIPELINE
OIL PIPELINE
DRILLING PLATFORM
ALASKA MARINE HIGHWAY
WEST RIP
MIDDLE RIPS
(Boundaries of East & West Rips)
EAST RIP
Lower Cook Inlet
Alaska
COOK INLET
OCS PLANNING AREA
The Cook Inlet
Driftnet Fishery
Contemporary General Range of Driftnet Fleet
Area of Historic Silver Harvest
Sport Halibut Charter Boats
0 4 8 15 Miles
N

# Environmental Assessment

- Assess the likely effects of OCS activities on the marine, coastal, cultural, and human environments, including...
  - Assessment of each proposed lease sale and all proposed exploration and production activities.

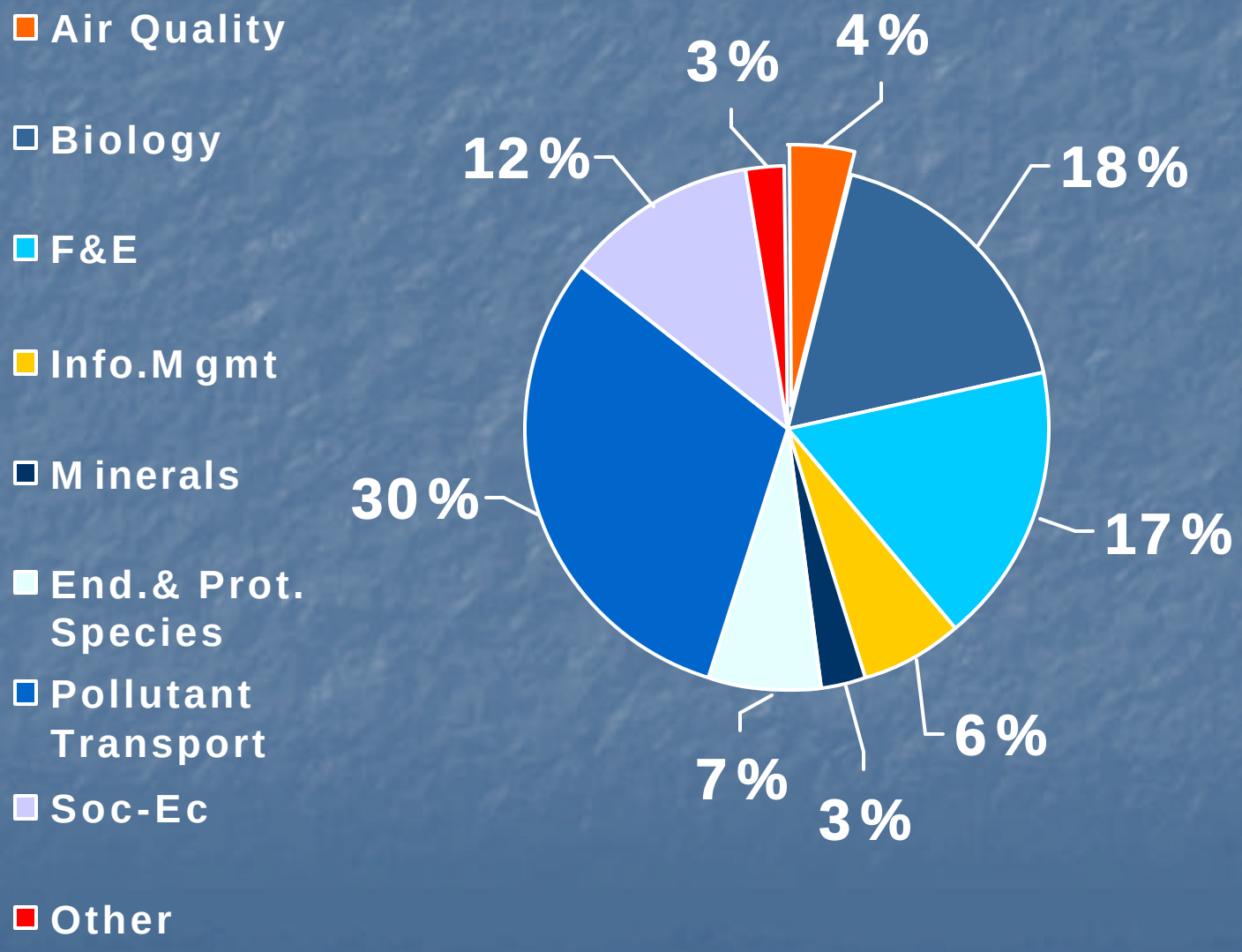
# Environmental Studies Program

Ongoing Research by Region

*A Snapshot!*

| | | |
|---|---|---|
| Gulf of Mexico | ~ 120 Studies at | ~ $56 million |
| Alaska | ~ 50 Studies at | ~ $22 million |
| Pacific | ~ 40 Studies at | ~ $38 million |
| National | ~ 22 Studies at | ~ $ 7 million |

# Budget by Discipline



# The Original US SIA Paradigm

- Driven by population effects (labor demand, construction phase, boomtowns, etc.)
  - Demographic effects
  - Economic Impacts
  - Infrastructure and services
  - Fiscal Effects
  - Social/Cultural effects and change (an after thought?)

# The Original US SIA Paradigm (cont.)

- Specific context grew out of rural areas becoming more developed
  - Introduction of large, new energy developments
  - Morphed concerns about small towns and boomtowns into a systematic analysis of socioeconomic impacts

  Is the original US SIA paradigm appropriate for analyzing the OCS oil and gas program's social and economic effects?

Figure 2a
Generic

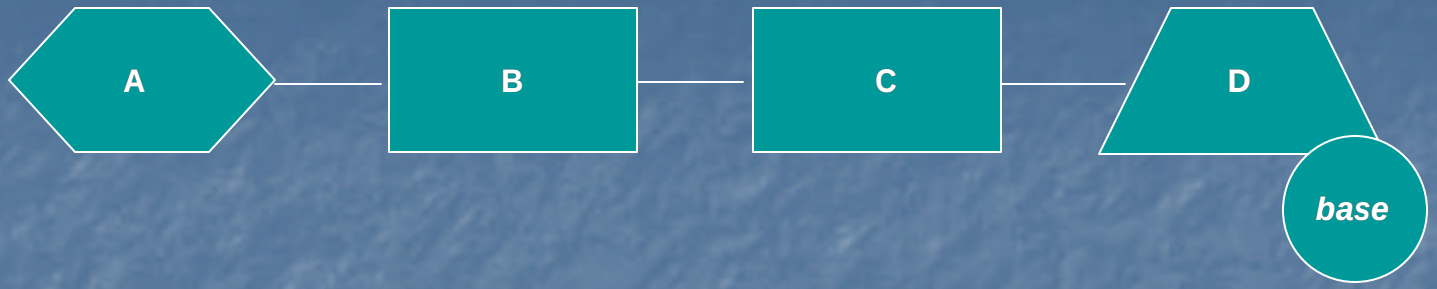



Figure 2b
Original US SIA

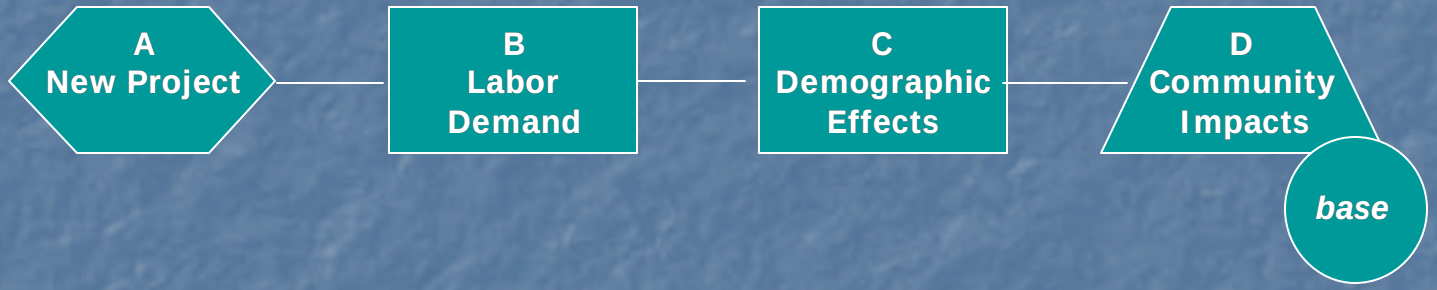



Figure 2c
OCS Activity

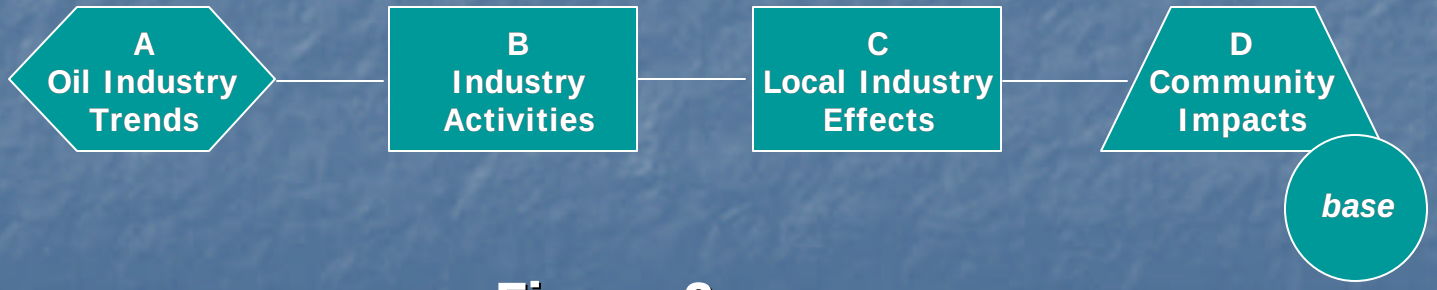



**Figure 2**
**General Model**

# Boomtowns and the Original US Social Impact Assessment Paradigm

- Boomtowns shaped “classic” SIA approach including an emphasis on demographic effects
- The magnitude of demographic effects became synonymous with all impacts
- These studies articulated a logic that still underlies much of current SIA analysis

# Underlying Logic Still Incorporated into Much of Federal SIA in the US

- Current SIA deals with what happens during and after construction
- Current SIA deals with community change due to the influx of newcomers
- Current SIA deals with new industry/development
- Current SIA deals with short/long-term effects to community

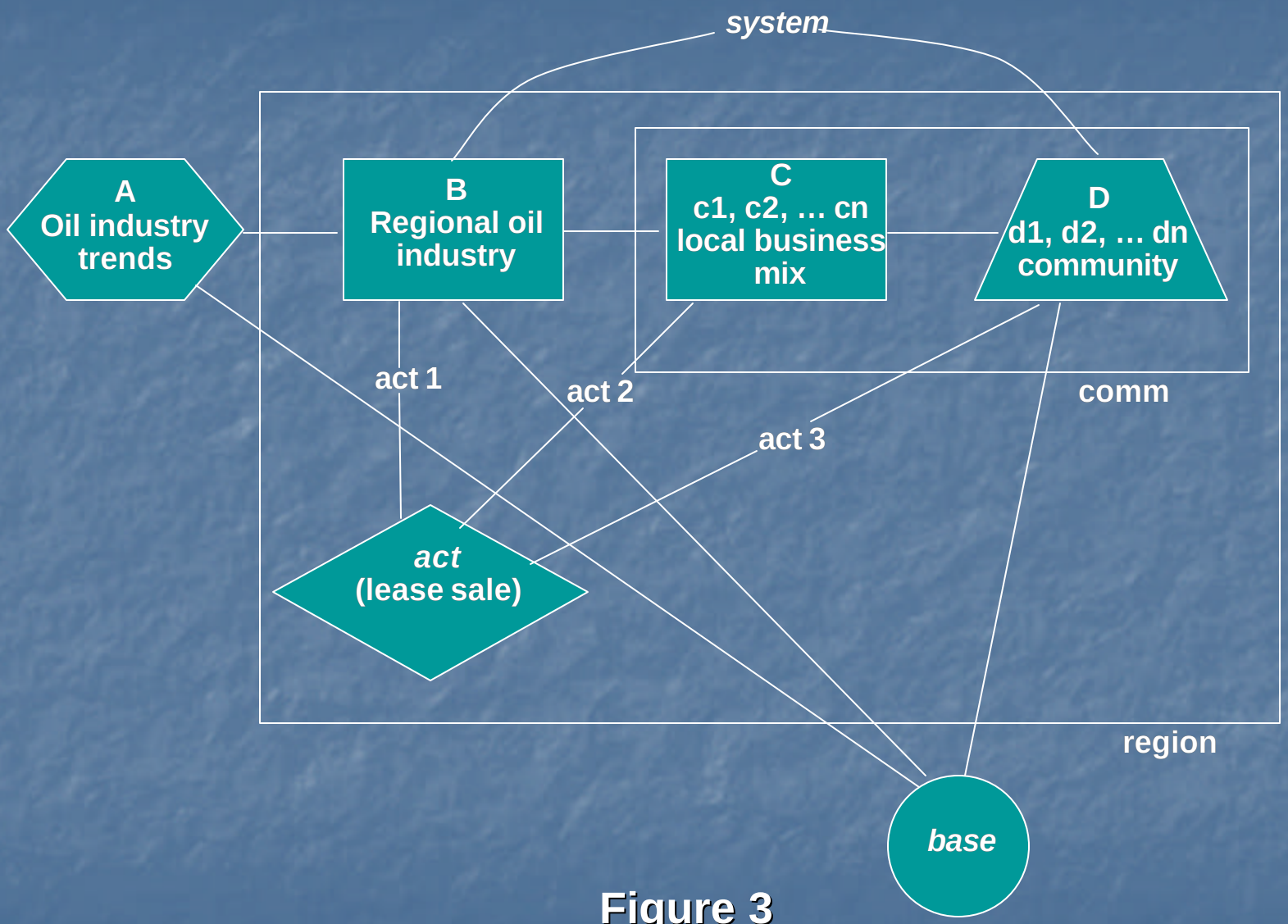



**Figure 3**
**Offshore Model**

## Table 1

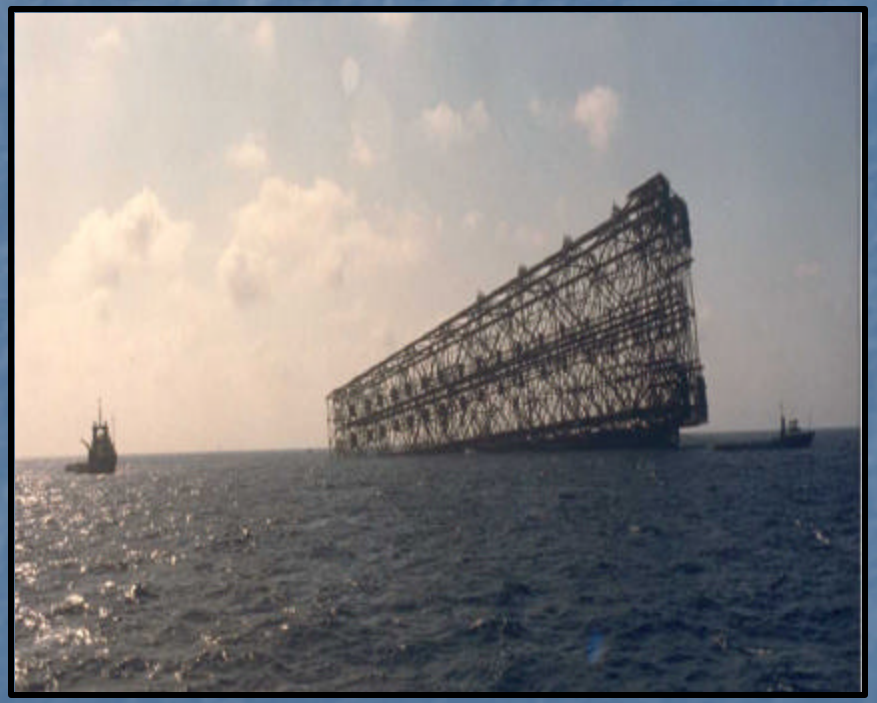
| *Original US SIA* | *OCS Activity* |
|---|---|
| Assesses a project | Assesses a program |
| Project simple and key variables specific to plan and geography | Industry complex and key variables hypothetical and general |
| Assessment area = the community | Assessment area = multiple states |
| Community small, rural & isolated | Affected areas include urban and/or industrialized |
| Processes related to industrialization | Processes related to regional development |
| Project new to area | Program (and industry) developed in area |
| Project timeframe discontinuous | Program timeframe ongoing |
| Time compression highlights effects | Timelines not compressed |
| Timeframe segmented | Timeframe segments all ongoing & overlapping |
| Effects vary by project phase | Effects vary by industry mix and activity level |
| Effects concentrated in construction | Effects of segments indistinct |

**Table 1—Cont.**

| *Original US SIA* | *OCS Activity* |
|---|---|
| Project imposed from without | Program (industry) evolved in area |
| Project organization unfamiliar | Industry tied to local entrepreneurship |
| Project technology unfamiliar | Project technology locally developed |
| Project scale massive & unfamiliar | Project scale typical and familiar |
| Labor demand greater than supply | Local labor supply matched to industry |
| Labor demand compressed in time | Labor demand continuous |
| “Boom and bust” concerns | Market fluctuation concerns |
| Cumulative effects = other projects | Cumulative effects = ongoing program |
| Effects decision driven | Effects economically driven |
| Assessment rationalistic | Assessment probabilistic |
| Outcomes more “predictable” | Outcomes less “predictable” |
| EIS stresses planning | EIS stresses documentation |

# The Regions, the Industry, and Socioeconomic Effects

- Challenges
  - Baseline
  - Affected area
  - Offshore oil industry
  - Addressing local effects
  - Cumulative effects



# Current Approach

- Away from population driven models (one size does not fit all)
- Away from strong bent to invoke Durkheim and anomie
- Focus towards reflexive community/social change and “perceived freedom”
  - By studying issues of importance depending on “place”
  - By integrating effects as a “layer cake” and linking levels of analysis (macro/micro)
  - By emphasizing social and cultural effects rather than treating them as a residual after thought
  - By focusing on realities rather than academic exercises