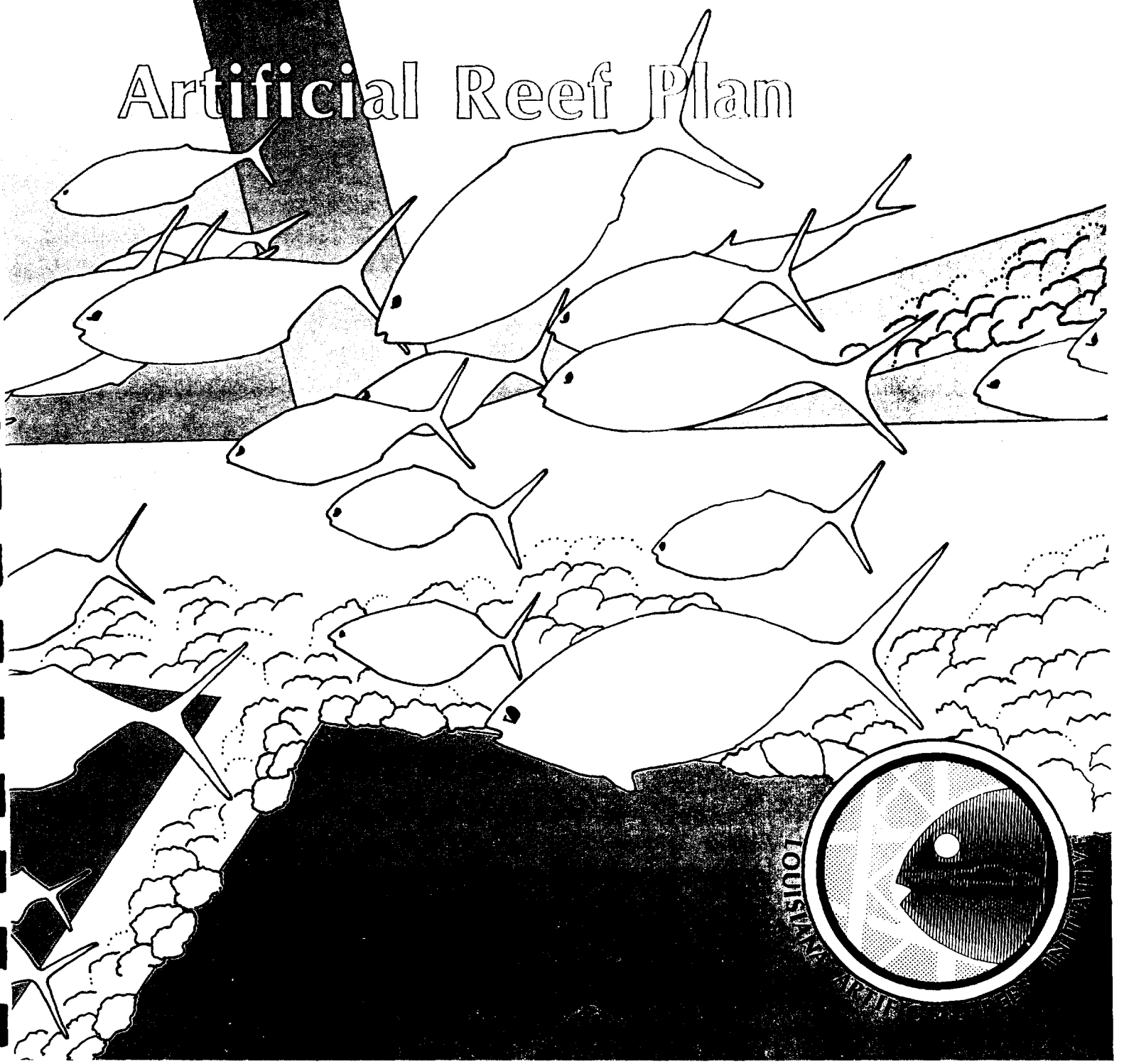
Louisiana

Artificial Reef Plan



LOUISIANA ARTIFICIAL REEF PLAN

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EXECUTIVE SUMMARY

The development of the oil and gas industry in the Gulf of Mexico resulted in the creation of this country's most extensive artificial reef system. Over 90% of the 4,000 mineral mining structures in the United States coastal waters are located off Louisiana's coastline. Since the first platform went into place in 1947, fishermen of Louisiana and bordering states have recognized the fishing value associated with this industry, and such structures are currently the destination of over 75% of all recreational fishing trips originating in Louisiana. For over 40 years, Louisiana fishermen have benefited from the increased biological activity associated with this unintentional artificial reef habitat.

Since these platforms are so commonplace off the Louisiana coast, many citizens and management groups believe that they are permanent and will always be available for fishing. This is, however, not the case. Already, 470 structures are estimated to have been removed from coastal Louisiana, and by the year 2000, over 40% of the remaining oil and gas structures in the Gulf of Mexico could be removed. This would represent a major loss to Louisiana fishermen.

It was, therefore, imperative that Louisiana recognize this potential loss of habitat and plan to offset it by either creating new artificial reefs or preserving existing structures. Many U.S. states and Japan already have artificial reef programs. Louisiana can profit from the mistakes and successes of these other programs and build what could become one of the largest artificial reef programs in the United States.

LIST OF ABBREVIATIONS USED

COE	U.S. Army Corps of Engineers
CWR	Center for Wetland Resources, Louisiana State University
DNR	Louisiana Department of Natural Resources
EPA	U.S. Environmental Protection Agency
LARI	Louisiana Artificial Reef Initiative
LDWF	Louisiana Department of Wildlife and Fisheries
LGS	Louisiana Geological Survey, Louisiana State University
LSU	Louisiana State University
MMS	Minerals Management Services
NFEA	National Fishing Enhancement Act
NGDC	National Geophysical Data Center
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollution Discharge and Eliminations System
NPS	National Park Service
OCS	Federal Outer Continental Shelf
USFWS	U.S. Fish and Wildlife Service

Many coastal states already have well-developed artificial reef programs. These programs have used many different types of materials to create reefs, including rocks, cars, tires, trees, bridge rubble, boats, boxcars, and oil and gas structures. South Carolina, whose first documented artificial reef was initiated by a private individual in the early 1800s, has numerous state-supported artificial reefs both inshore and offshore. In 1973, South Carolina formally established an artificial reef program within the Recreational Fisheries Branch of the Department of Marine Resources, and the state has been the permittee for all subsequent structures (Aska 1981; Artificial Reef Development Center 1985; Barrett 1984; Schmied 1983; Sport Fishing Institute 1985).

Florida has developed an active program sponsored by state, county, and private organizations. Over 140 artificial reefs composed of a variety of available material have been established in state waters. Recently, the state and some local groups have expressed a willingness to acquire and help bear the expense of moving oil and gas structures, as they are retired, from the coast of Louisiana to Florida (Barrett 1984b; Bohnsack and Sutherland 1985; Stone 1979).

Alabama's artificial reef program began in 1953 as a cooperative program between state and private interests. Although the program lost momentum in 1979, it has since been revitalized. Alabama now has several liberty ships and at least one oil and gas structure located off its coast and is interested in obtaining additional oil and gas structures for future reefs. Alabama received an artificial reef permit for a 300-square-mile area in 1987. Mississippi, Alabama, and Texas together have another 25 permitted artificial reefs composed of various materials (Swingle 1985).

Between 1981 and 1983, Washington state allocated $3.7 million for 14 artificial reefs and three new fishing piers. Washington's program continues to enjoy strong government support (Bohnsack and Sutherland 1985).

Japanese Program

Japan has by far the most impressive artificial reef program, on which it spends millions of dollars per year. Japan's artificial reefs are designed for either aquaculture or commercial fishing. In most cases, the national government funds 50%-70% of the construction costs, and local prefecture or private groups fund the remainder. The Japanese develop different types of artificial reefs, depending on the species they wish to attract. They have made much of their information available to artificial reef proponents in the United States. Japanese experts consider oil and gas structures ideal reef materials very similar to the fabricated structures the Japanese spend a great deal of money to build (Bohnsack and Sutherland 1985; Mottet 1982; Sheehy and Vik 1982).

Need for a Louisiana Artificial Reef Plan

Louisiana needs an artificial reef program and plan because

1. The inevitable removal of the oil and gas structures Louisiana fishermen presently utilize will result in the loss of recreational and commercial fishing opportunities.
2. Other states are willing to receive retired Louisiana structures.
3. User-group conflicts could increase if fishery habitat decreases.

4. The loss of existing oil and gas structures could lead to a reduction in current charter-boat operations, as well as potential tourism and coastal development opportunities.
5. Haphazard and uncoordinated siting of artificial reefs would seriously impact Louisiana's net fisheries and others to whom unmarked bottom obstructions would pose a hazard.

The National Research Council's recent study on disposition of oil and gas structures indicates that an average of 100 oil and gas platforms are scheduled for removal from U.S. waters each year for the next 15 years (Lee 1985). By the year 2000, approximately 40% of all existing structures offshore of Louisiana will become unproductive; under present MMS regulations, they must then be removed (Lee 1985; National Research Council 1985).

Loss of Louisiana's oil and gas structures could have several adverse consequences. These consequences could include a significant decrease in recreational and commercial fishing and thus a potentially negative economic impact on coastal communities. Fishermen might shift their efforts from offshore to the already stressed inshore fishery stocks, leading to greater competition and conflict between user groups.

Loss of existing oil and gas structures could also affect the charter-boat industry along the coast. Likewise, without a well-planned program for artificial reef development, the state will not share in potential increases in tourism and charter-boat fishing promoted by other states with artificial reef programs (Hardison 1982).

Demonstration Projects

Several demonstration projects supported by the oil and gas industry have heightened interest in the use of oil and gas structures as artificial reefs:

- In 1980, Exxon towed a 2,200-ton submerged production system structure 300 miles from the Louisiana coast to a preselected site permitted by the Florida Department of Natural Resources.
- In 1982, a Tenneco structure was removed from the coast of Louisiana, towed 275 miles, and placed off of the coast of Pensacola, Florida, approximately 22 miles from the coastline (Bohnsack and Sutherland 1985; Ditton and Falk 1981; Frishman 1982).
- In 1983, Marathon Oil Company towed a 1,650-ton oil platform 220 miles from the coast of Louisiana to an artificial reef site 50 miles south-southeast of Mobile Bay off of Alabama. The Alabama Department of Conservation and Natural Resources was the permit recipient for this project.
- On October 2, 1985, two Tenneco structures were towed 920 miles from Louisiana to a site 1.5 miles off of Dade County, Florida.

Authority: The Louisiana Fishing Enhancement Act

The first step in providing authority for a Louisiana program was to enact enabling legislation. The Louisiana Fishing Enhancement Act (Act 100-1986), signed into law on June 25, 1986 (Appendix III), provides for the following:

1. Establishment and administration of the Louisiana Artificial Reef Development Program

2. Creation of the Louisiana Artificial Reef Council, consisting of the
   - Secretary, Louisiana Department of Wildlife and Fisheries (Chairman)
   - Dean, Center for Wetland Resources, Louisiana State University
   - Director, Louisiana Geological Survey
3. The roles of the Louisiana Department of Wildlife and Fisheries, the Center for Wetland Resources, the Louisiana Geological Survey, the Louisiana Sea Grant College Program, and the Louisiana Artificial Reef Initiative
4. Establishment of the Artificial Reef Development Fund to provide monies for program development, operation, and research
5. Development of the Louisiana Artificial Reef Development Plan and its legislative approval (this document)
6. Establishment of the state of Louisiana as the permittee for artificial reefs developed under the plan and appointment of the Louisiana Department of Wildlife and Fisheries as agent for the state
7. Relief of the state, donors, and other participants in the program from liability, provided the terms and conditions of the federal artificial reef permits are met

The Louisiana Artificial Reef Plan contains the rationale and procedures for the implementation and maintenance of the state artificial reef program. The plan is intended to serve as a flexible working document that will be periodically updated through the Council on the basis of the results of operation.

SITE SELECTION

Proper development and implementation of an artificial reef program for Louisiana requires an understanding of the legal, technical, social, and economic aspects of developing and maintaining artificial reefs in state and federal waters off Louisiana.

Provisions of the plan are applicable to all territorial waters and the Exclusive Economic Zone (EEZ) off the coast of Louisiana to the international boundary. In effect, this area comprises the zone defined by extending the eastern and western boundaries of the state to the international boundary.

This plan provides guidance for artificial reef development in both state and federal waters. One intent of the plan is to help prevent haphazard construction of artificial reefs; all Louisiana artificial reefs should be developed consistent with this plan. To accomplish this, LARI delineated planning areas on the basis of a combination of exclusion mapping and site-selection screening described below. Any additional planning areas added in subsequent phases of the program will be selected through a similar process.

The Louisiana Artificial Reef Plan uses the following terms:

Reef planning area. Planners used exclusion and inclusion mapping to outline the perimeters of general areas within which artificial reefs will be located. Within a reef planning area will be located complexes composed of reef units.

Artificial reef complexes. An aggregation of artificial reef units planned and placed within an artificial reef planning area constitutes an artificial reef complex. The space left between artificial reef units and the sizes of artificial reef complexes

will be determined on a case-by-case basis. However, the area of an artificial reef complex generally will not exceed 0.75 mile on each side. If the side of a complex is limited to less than 0.75 mile, the Coast Guard will require only a single buoy in or near the center of the complex. The artificial reef complex will be the site designated in an artificial reef permit.

Artificial reef unit. A set of structures planned and placed at a specific site within an artificial reef complex constitutes an artificial reef unit. A permit application to the COE for an artificial reef site should include a description of several artificial reef units. It is anticipated that completed artificial reef units will be composed of five to six oil and gas structures.

The artificial reef plan for Louisiana includes three categories of reef development: (1) reefs for recreational fishing established within a 25-mile radius of the popular boat landings and facilities of Louisiana, (2) reefs to help promote and enhance recreational and commercial fishing and sport diving between 25 and 75 miles offshore in depths of 200-400 feet, and (3) reefs established to provide deep-water sanctuaries for important marine fishes.

Exclusion and Inclusion Mapping

The selection of the artificial reef planning areas identified for Phase I of the state program began with exclusion mapping efforts that eliminated areas in which reefs could not be established for a variety of reasons. Planners utilized a series of Gulfwide exclusion maps developed by the Sport Fishing Institute that provide information on population

centers, areas used as navigation fairways, and bottom type (Myatt and Ditton 1986). Personnel at Louisiana State University (LSU) developed more detached maps showing the locations of fishing grounds, bottom obstructions, muddy areas, slide-prone areas, and present oil and gas exploration activities. Such areas include navigation fairways, trawlable bottoms traditionally used by the commercial fishing industry, pipeline corridors, restricted military zones, existing live bottom areas (e.g., coral reefs), and other areas that are unsuitable for reefs because of bottom type and hydrological conditions (Christian 1984a; D'Itri 1985; Myatt 1985; Sport Fishing Institute 1985; Swingle 1985). A collection of wall maps incorporating the results of exclusion mapping is available at the LSU Center for Wetland Resources.

Geologic and Engineering Criteria

Before obsolete oil and gas platforms and other "materials of opportunity" can be sited as artificial reefs offshore of Louisiana, natural (geologic) and man-made features must be identified and evaluated so that their possible impacts on the stability or function of artificial reefs can be assessed. Geologic and man-made features, commonly referred to as "hazards," are identified and assessed from data acquired through a variety of geophysical surveys that provide a comprehensive acoustical picture of the seafloor morphology and the underlying shallow stratigraphy and structure. The seafloor and subbottom data obtained from geophysical surveys may be correlated directly with the surface and subsurface geologic and engineering properties of reef-site sediments obtained by bottom sampling, geotechnical borehole measurements, and core analysis. Combined with data from computerized ship navigation, the geophysical and geotechnical data provide accurate geologic information on the seafloor

and subbottom that can be used to identify geologic and man-made hazards (Ploessel and Campbell 1980; Bouma 1981; Prior 1984; Prior and Coleman 1984).

Numerous high-resolution geophysical surveys and geotechnical borings and cores have been obtained offshore of Louisiana by federal agencies, universities, other research institutions, and private industry. These data have been obtained (1) to assess strategic minerals and other resources on the continental shelf, (2) to identify areas on the continental shelf of potential archaeological significance, (3) to assess geologic engineering hazards to platform and pipeline installation for oil and gas exploration and development, and (4) to further geologic and oceanographic research projects. Although most of this data is proprietary, a considerable portion is within the public domain. Sources of proprietary and nonproprietary data identified for the proposed artificial reef planning areas are described below.

Nonproprietary data sources

MMS. Nonproprietary geophysical, geologic, and cartographic data available from the MMS in New Orleans include high-resolution geophysical data with survey trackline maps and technical reports, offshore area/lease block maps, bathymetric maps, pipeline and platform location maps, numerous technical reports and environmental impact statements, and visuals (various maps that illustrate bottom sediment type, oceanographic currents, shrimp trawling areas, etc.).

NGDC. Nonproprietary geophysical and geologic data available from the National Geophysical Data Center (NGDC) in Boulder, Colorado, include high-resolution geophysical data with survey trackline maps and technical

reports; bathymetric data; magnetics data; numerous logs of cores, grab, and dredged samples; and geotechnical borings.

DNR. Nonproprietary data available from the Louisiana Department of Natural Resources (DNR) include latitude/longitude coordinates and well-status information for drilling and production facilities in Louisiana territorial waters. This information will be used to prepare location maps showing where "shell pads" were utilized to prevent drilling barges and production facilities from sinking into the soft, muddy sediments. The firm substrate offered by the shell pads has proved to be an effective fish attractor in an otherwise soft-bottom environment. The shell-pad location maps will be prepared for use by nearshore and inland fishermen.

Other data sources. Additional nonproprietary data available include published research papers, technical reports, and other publications, as well as detailed bathymetric and seafloor morphologic and sediment maps.

Proprietary Data Sources

MMS. In addition to nonproprietary data, MMS files also archive proprietary data. Although these data may not be released without the permission of the respective offshore operators, they may be inspected by authorized representatives of the state. These data are required of the offshore operators to ensure compliance with federal regulations concerning exploration, development, and construction on the outer continental shelf. Proprietary data archived at MMS include high-resolution and deep-penetration geophysical data, geotechnical borings and technical reports, and archaeological, hazard, and pipeline side-scan sonar and magnetometer surveys and technical reports. The proprietary data at MMS can be used as a supplementary data base for those lease blocks within

artificial reef planning areas for which no nonproprietary data is available.

Offshore operators. Numerous offshore operators engaged in oil and gas exploration and development on the Louisiana continental shelf have obtained large quantities of high-resolution geophysical data; geotechnical borings and cores; archaeological, hazard, and pipeline surveys; and platform and pipeline location maps. Proprietary data will generally be requested from participating offshore operators who have leases for blocks within the proposed artificial reef planning areas for which nonproprietary data is not available.

Other data sources. Additional "nonexclusive" proprietary geophysical data from several geophysical surveying companies are also available for certain areas offshore of Louisiana, although these data are generally rather expensive. Also, atlases of the seafloor sediments and their general engineering properties offshore of Louisiana have been published by McClelland Engineers and are available for purchase.

Data Collection and Correlation

Once the data are identified and located through the procedures outlined above, copies are made or purchased. The geophysical and geotechnical data are used to compile information on the geologic and man-made hazards on the seafloor that must be avoided. Features mapped from the geophysical, geotechnical, and cartographic data that are considered "hazards" include faults, gas pockets and vents, sediments of low bearing capacity, irregular and steep seafloor topography, active and relict channels, scarps, salt diapirs, natural reefs, pipelines, platforms, sub-sea production facilities, unstable areas on the seafloor susceptible to landslides (i.e., Mississippi delta region), and others. Planners use

these maps to determine the most suitable sites for artificial reefs within the proposed planning areas.

Once a suitable site is selected and materials identified, a placement pattern/design is constructed that will optimize both stability and habitat-enhancement goals (Sport Fishing Institute 1985).

User-Group Preferences

Analysis of User-Group Patterns. The use patterns of recreational fishermen, commercial fishermen, and sport divers were analyzed in an effort to select areas that participants in the artificial reef program would prefer. Several available sources of data document user-group patterns. The Sport Fishing Institute published a document that explains exclusion mapping to maximize artificial reefs for recreational fishermen in the Gulf of Mexico (Myatt and Ditton 1986). This report discusses recreational user-group patterns in four population centers--New Orleans, Houma, Lafayette, and Lake Charles. It lists the locations of public boat launches, numbers of boats in the areas, and water-depth patterns offshore at these respective population centers. In general, Myatt and Ditton (1986) report that recreational fishermen are willing to travel some 25 miles from their departure points. This finding is based on boat size, fuel consumption, and phone interviews of recreational fishermen.

In a separate study, the MMS collected data from offshore petroleum platform operators (Ditton and Auyong 1984). Operators on the platforms were given questionnaires concerning the types of boats, number of fishermen, and types of fish being caught off various structures. Analysis of these data confirms the Myatt and Ditton finding that, in general, recreational fishermen fished an average of 25 miles from shore. Average distance from shore varied by region from 29 miles on the western

side of the state to 12 miles off the New Orleans area. The MMS study revealed a similar pattern for charter fishermen, scuba divers, and commercial fishermen, although these groups were willing to go farther offshore than recreational fishermen. The MMS study found that, in general, charter fishermen were willing to go 16-40 miles offshore, scuba divers 19-47 miles offshore, and commercial fishermen 23-72 miles offshore.

Menhaden and shrimp industry preferences. In assessing user-group data, planners also had to consider both the menhaden and shrimp fisheries off Louisiana. Menhaden industry representatives reported that they operate generally within 5-10 miles of shore fairly uniformly along the coast. However, they indicated that if the state wished to place artificial reefs within this range of the shoreline, they would help the Council select specific sites not heavily fished during the menhaden season.

Representatives of LARI also consulted with members of the shrimp industry. The Louisiana Cooperative Extension Service coordinated two meetings in Lafitte and Galliano between shrimp fishermen and council members. Shrimping industry representatives indicated that in general they had no objections to the Louisiana Artificial Reef Program if they were involved in the specific site-selection process. After reviewing the proposed sites shown in Figure 1, the shrimping representatives provided specific input concerning which areas within these sites would be acceptable. Future siting activities should include immediate contact with the shrimping industry through the marine advisory service of the Louisiana Cooperative Extension Service.

In general, shrimpers strongly preferred that artificial reefs and reef complexes be sited where existing structures are located. Interestingly, shrimpers will drag to within 0.25 mile of a structure because

these areas tend to be more productive. We anticipate that most, if not all, artificial reefs will be placed in areas where oil and gas structures and other obstructions now exist.

Artificial Reef Planning Areas

Site selection for Louisiana's Artificial Reef Program will occur in multiple phases. Upon completion of the exclusion and selection mapping, the sites most suited for reef construction during Phase I were identified (locations listed in Appendix IV; Figures 1 and 2). These selections were based on the best available scientific information and comments obtained from user groups, the oil and gas industry, and other federal and state agencies.

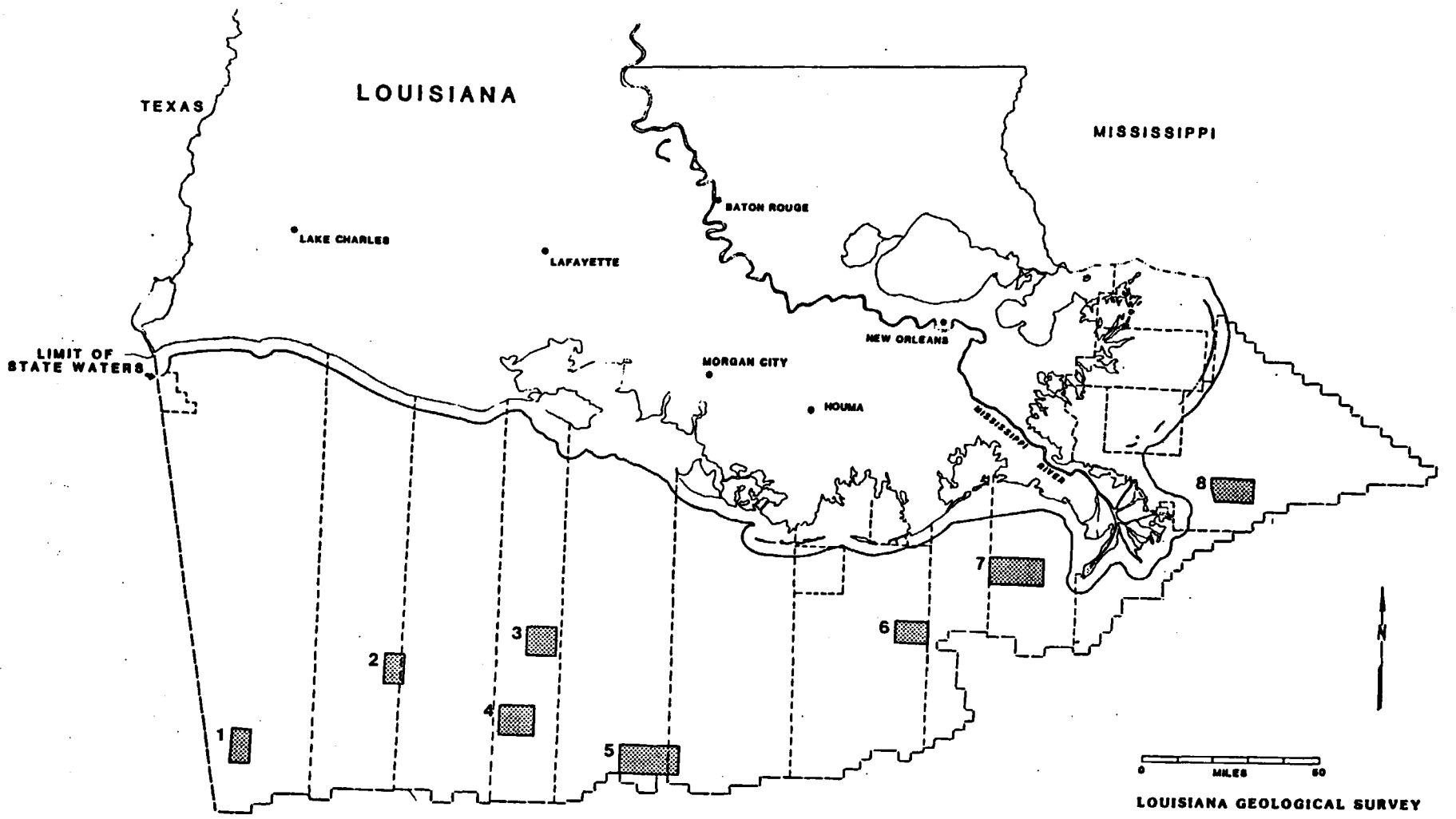
Public Hearings

Public hearings were held at the following times and locations to obtain additional information concerning user-group preferences for reef sites:

Houma: February 26, 1987
7:30 p.m., East Park Recreation Center

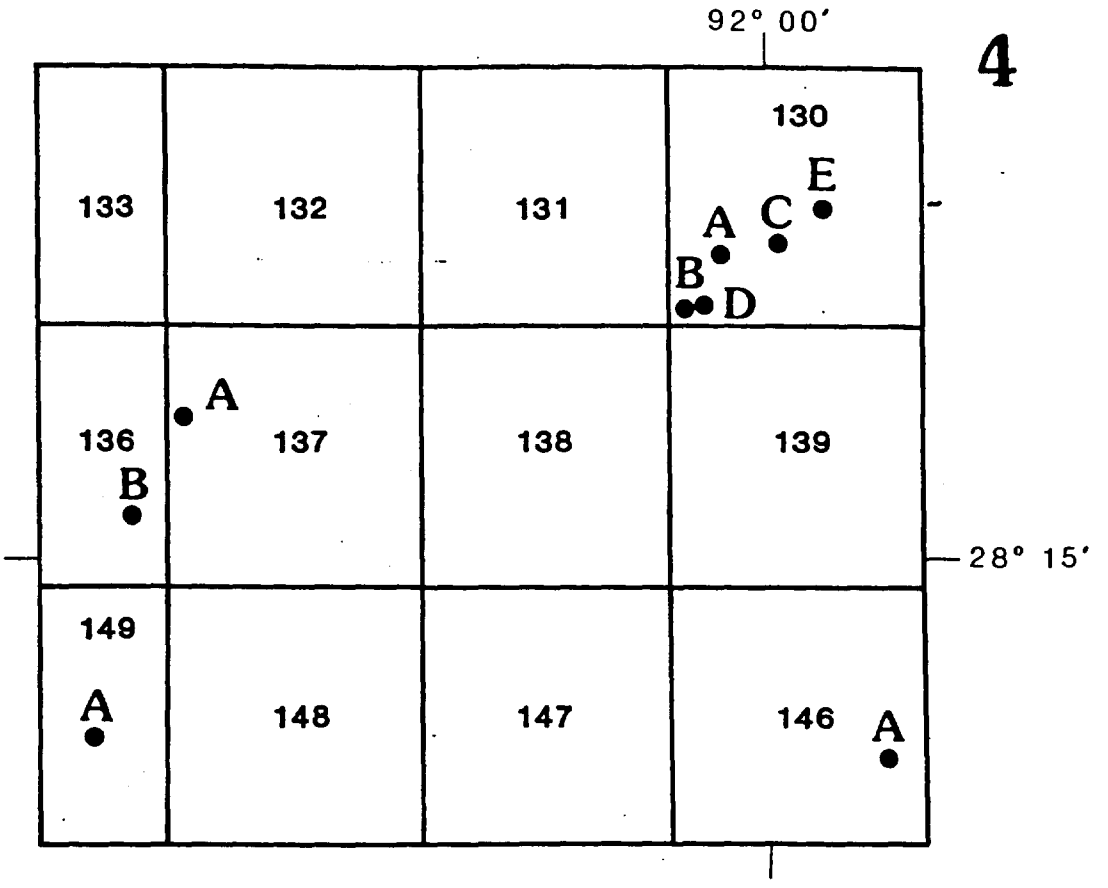
Chalmette: March 5, 1987
7:30 p.m., Police Jury Meeting Room
St. Bernard Police Jury Office
Government Complex

Lake Charles: March 9, 1987
7:30 p.m., Police Jury Meeting Room
Calcasieu Policy Jury Office
Government Complex



1. West Cameron Planning Area
2. East Cameron Planning Area
3. South Marsh Island (76) Planning Area
4. South Marsh Island (146) Planning Area
5. Eugene Island Planning Area
6. South Timbalier Planning Area
7. West Delta Planning Area
8. Main Pass Planning Area

Figure 1. Offshore Louisiana artificial reef planning areas (Phase I). Reef complexes will not exceed 0.75 square mile in area.



BLOCK	NO.	OPERATOR
130	A	Shell Offshore, Inc.
130	B	Shell Offshore, Inc.
130	C	Shell Offshore, Inc.
130	D	Shell Offshore, Inc.
130	E	Shell Offshore, Inc.
136	B	Conoco, Inc.
137	A	Conoco, Inc.
146	A	Cities Service Co.
149	A	Shell Offshore, Inc.

Figure 2. South Marsh Island (146) planning area.

As a result of these hearings, the south Timbalier planning area (no. 6, Figure 1) was added off the Fourchon/Timbalier coastline. These hearings also provided detailed and valuable information regarding which specific areas and platforms fishermen preferred. Ideas on the buoying of sites, descriptions of the depth and profile of reef that scuba divers prefer, and many other types of information were obtained at the hearings. Virtually all of the comments obtained supported the concept of an artificial reef plan for Louisiana. Many interest groups felt that a centrally coordinated state plan was critical to preventing artificial reef development from deteriorating into haphazard ocean dumping off the Louisiana coast.

Phase I Sites

For several reasons, Phase I will focus on areas of the federal outer continental shelf (OCS) where water depths are greater that 90 feet. Because the enabling legislation does not provide a state budget for the program, it must develop an independent funding base. This will depend upon oil and gas companies donating a portion of their savings realized through their participation in the program. Therefore, money will have to be generated from the offshore program to fund the development of a nearshore and inshore program. Additionally, the first few years of Louisiana's plan will be a learning process, and slight errors in placement will have less impact in the greater depths of the Phase I areas than they would inshore.

Phase II Sites

Phase II of the program will include the establishment and maintenance of artificial reefs in state waters. Presently, there are still

numerous shell pads, wellheads, and the remains of jackets from inshore oil and gas activities that can provide cores for reef habitats.

The first step in developing the inshore program will be to map all of the inshore obstructions known to exist. The Louisiana Department of Wildlife and Fisheries (LDWF) will publish these maps and provide them to fishermen. The state will next determine which of these obstructions would be most effective as reefs. Whether it would be more valuable to enhance shell pads with more shell or to use concrete rubble and other available materials through the oil and gas industry are among the questions that must be answered.

PERMITTING

This section presents a general overview of the regulatory authorities involved in permitting artificial reefs. Much of the information was taken from a guide by Richard Christian (1984b) of the Artificial Reef Development Center in Washington, D.C. Christian compiled information for the guide by reviewing existing artificial reef programs and contacting appropriate agency administrators at the regional and national levels.

Primary Agencies

At least two agencies are directly involved in issuing permits for artificial fishing reefs in federal waters: the COE and the U.S. Coast Guard. These highly decentralized agencies have regional decision-making capabilities, and agency-promulgated rules and regulations are thus subject to interpretation by the regional district authorities. As a result, permits are considered on a case-by-case basis within the agency's legislatively mandated authority. Approval of an application depends on regional or site-specific variables as well as the physical characteristics of the material to be used for reef construction. In some cases, the necessary permits may be obtained within a minimal amount of time (U.S. Dept. Commerce 1985). However, as in the case of the Texas Liberty Ship Reef Program, the permit process may be hindered by unforeseen delays.

U.S. Army Corps of Engineers

A permit from the COE is the primary certificate of approval for establishing the reef (Figure 3). Applications for these permits are open for review and comment through public notice and notices sent directly to state and federal agencies or concerned private interests at the discretion of the COE district engineer. Several federal agencies

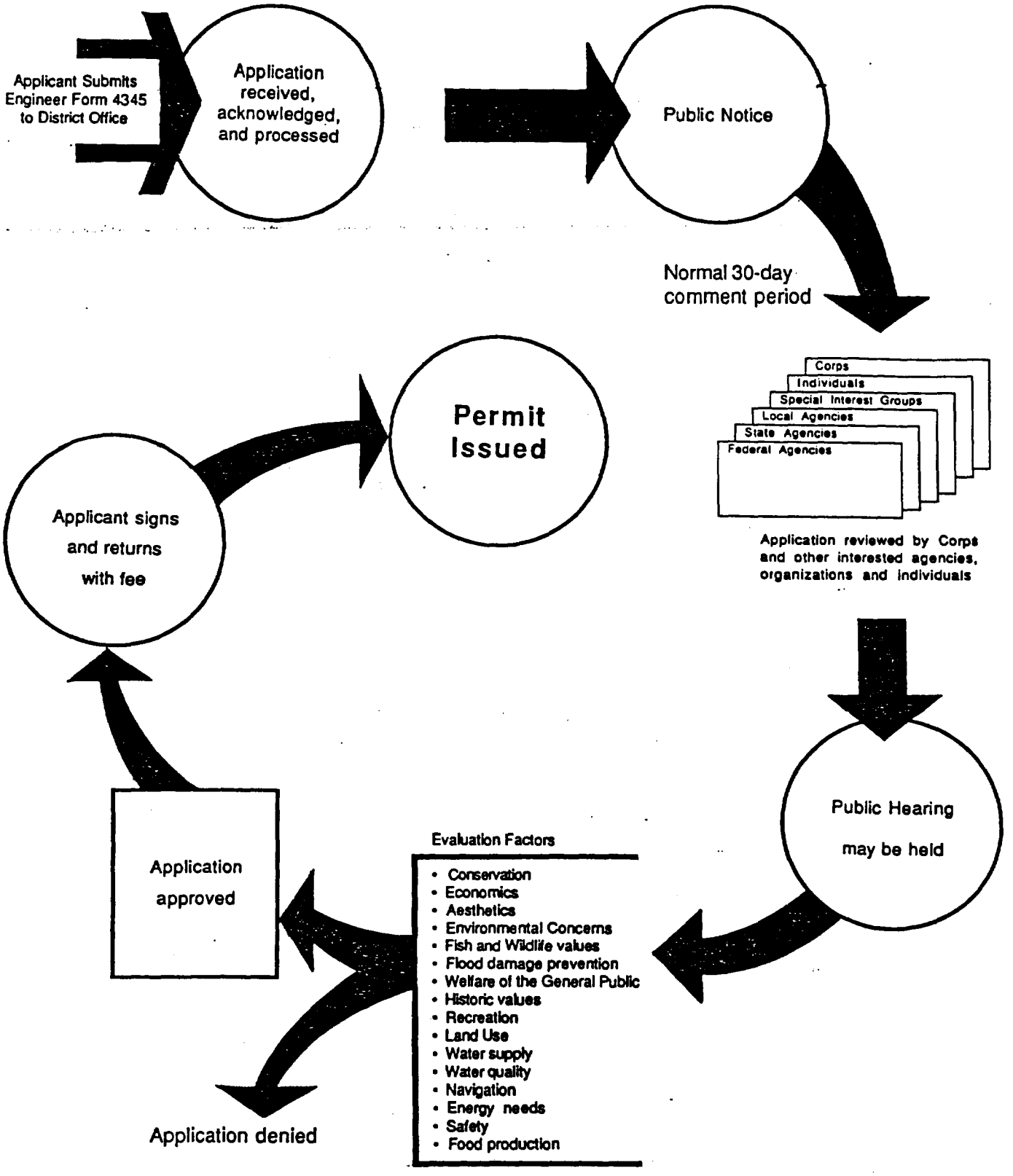


Figure 3. Typical permit review process of the U.S. Army Corps of Engineers (from U.S. Army Corps of Engineers 1977).

may indirectly participate in the permit process through COE solicitation of evaluation and comment. In the territorial sea, state authorization precedes federal approval of applications. Up to 12 federal and state agencies may review a permit application before it is approved. The number and type of reviewing groups, organizations, or agencies varies according to the material to be used and site-specific variables (U.S. Dept. Commerce 1985).

All pertinent information regarding the COE permit program was published in the "Final Rule for Regulatory Programs" in the Federal Register, Vol. 51, No. 219, November 13, 1986, under Title 33 CFR, parts 320 through 330 (Appendix V). These rules and regulations incorporate authorities mandated to the COE as set forth in public law. A permit to site a structure to be used as an artificial fishing reef is granted by the COE under Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403). Section 10 authorizes the COE to prohibit the obstruction or alteration of any navigable waters of the United States. Section 4 of the Outer Continental Shelf Lands Act of 1953 (43 U.S.C. 1333[f]) extends this authority to artificial islands and fixed structures on the outer continental shelf (beyond the territorial sea). Hence, a Section 10 permit is required for structures in either the territorial sea or beyond on the outer continental shelf.

Structures placed within the territorial sea must also comply with Section 404 of the Clean Water Act of 1972 (PL 92-500; 33 U.S.C. 1344). Regulations promulgated under Section 404 (33 U.S.C. 1344) require that a COE permit be obtained before dredge or fill material is discharged into any of the navigable waters of the United States and stipulate state

certification of discharge projects. The term "discharge of fill material" is defined in 33 CFR 323.2(1).

States are provided an opportunity to veto COE approvals under Section 401 of PL 92-500 (33 U.S.C. 1251g). State consistency certification is also required under approved Coastal Zone Management programs. This authority stems from Section 307(c)(3) of the Coastal Zone Management Act of 1972 (PL 92-583; 16 U.S.C. 1463).

Much of the authority for administering the COE's permitting process has been delegated to the separate district engineers through 33 CFR 320.1(a)(2).

U.S. Coast Guard

After the required COE permit is obtained, a reef sponsor must next apply to the U.S. Coast Guard to establish private aids to navigation. The Coast Guard exercises regulatory authority over artificial reef structures to ensure that obstructions in U.S. waters are properly marked for the protection of maritime navigation (this authority is granted the Coast Guard under 43 U.S.C. 1333[e], 14 U.S.C. 81-87, and 33 CFR, parts 64-66). Under 43 U.S.C. 1333(e), the secretary of the department in which the Coast Guard is operating has the authority to "promulgate and enforce such reasonable regulations" with respect to aids to navigation. Further, under 14 U.S.C. 81, the Coast Guard is given authority to establish and maintain a system aiding navigation for commerce and the armed forces. Under 14 U.S.C. 83-85, penalties are prescribed for establishing unauthorized aids to maritime navigation, for interference with aids to navigation, and for failure to comply with the rules and regulations set forth in 33 CFR parts 64 and 66 (Appendix VI).

Most important to reef builders, under Section 86 of 43 U.S.C., the owner of an obstruction is held liable to the United States for the cost of such marking "until such time as the obstruction is removed or its abandonment legally established or until such earlier time as the Secretary may determine." Myatt (1984) estimates buoy costs to range from $300 to $13,000 and annual maintenance costs to average approximately $1,000 per year.

Regulatory authority is delegated to the Coast Guard district commander (within the confines of his respective district) under 33 CFR 66.01-3. At the recommendation of the COE district engineer, the district commander will decide, on a case-by-case basis, if marking is required (33 CFR 64.30) and the type, number, and description of the required markings (Sec. 64.20-1).

Artificial reefs are classified as obstructions to navigation and must be marked in accordance with current U.S. Coast Guard Eighth District "Guidelines for marking submerged artificial structures in the Gulf of Mexico." The following criteria are general guidelines; specific decisions regarding each reef site are made on a case-by-case basis. As part of the permitting process, the reef permit holder is required to use "Private Aid to Navigation Application Form CG-2554" to apply to the Eighth District, U.S. Coast Guard, New Orleans, Louisiana, for approvals for marking each reef site. In general, three factors determine the marking requirements for artificial fishing reefs:

1. distance from navigation fairways
2. diameter of the reef complex
3. minimum clearance between the top of the reef structure and the water surface

Each requirement is discussed below.

Distance from navigation fairways. If an artificial reef is located within 500 yards of a fairway, channel, or anchorage area, a quick-flashing, lateral (i.e., red or green) marker is to be placed between the edge of the reef and the fairway (see Figure 4A). This marker is in addition to any yellow buoy required for locating the reef complex. The reef complex must be located at least 2 miles from fairways, channels, or anchorages for any waiver request to be considered by the U.S. Coast Guard.

Overall diameter of the reef complex. The size of the complex is determined by the widest dimension of the actual submerged structure. Reef marking requirements are divided into three size categories:

1. Reef complexes of up to 0.5 mile from the center with less than 85 feet of water clearance are required to have one lighted, 6-second, yellow, special-purpose buoy located at the center of the complex. Reefs with more than 85 feet, but less than 200 feet, of water clearance are required to have one unlighted, yellow, special-purpose buoy located at the center of the complex. A complex with more than 200 feet of water clearance over the structure is not required to have any markers (Figure 4B).
2. Reef complexes extending from 0.5 to 1.0 mile from the center with less than 85 feet of water clearance are required to have one lighted, 6-second, yellow, special-purpose buoy on each corner of the reef complex. Complexes with more than 85 feet, but less than 200 feet, of water clearance are required to have one unlighted, yellow, special-purpose buoy on each corner of the reef complex. Complexes with more than 200 feet of water

clearance over the reef structure are not required to have any marker (Figure 4C).

3. Reef complexes extending over 1.0 mile from center with less than 85 feet of water clearance are required to have one lighted, 6-second, yellow, special-purpose buoy on each corner of the reef complex. Additional yellow buoys are to be located at 1.0-mile intervals around the circumference of the reef complex, as determined by the Eighth District, U.S. Coast Guard. Reef complexes with more than 85 feet, but less than 200 feet, of water clearance are required to have one unlighted, special-purpose buoy on each corner of the reef complex. Additional unlighted, yellow buoys are required at 1.0-mile intervals around the circumference of the complex as determined by the U.S. Coast Guard. Reef complexes with more than 200 feet of water clearance over the reef structure are not required to have any marker (Figure 4D).

Buoy identification. The Eighth District, U.S. Coast Guard, will assign an identification number to each buoy on the returned copy of the approved "Private Aid to Navigation Application Form (CG-2554)." This assigned number will consist of the letters "FR" (for "fishing reef"), followed by LA (for Louisiana), and an assigned number (e.g., FR-LA-1). Larger reefs requiring more than one buoy will have letter suffixes assigned to identify each buoy. The assigned number will be displayed at least once on each buoy, in block lettering of contrasting color. The identification must be at least 3 inches high, larger if buoy space permits. There are no Coast Guard limitations concerning other markings

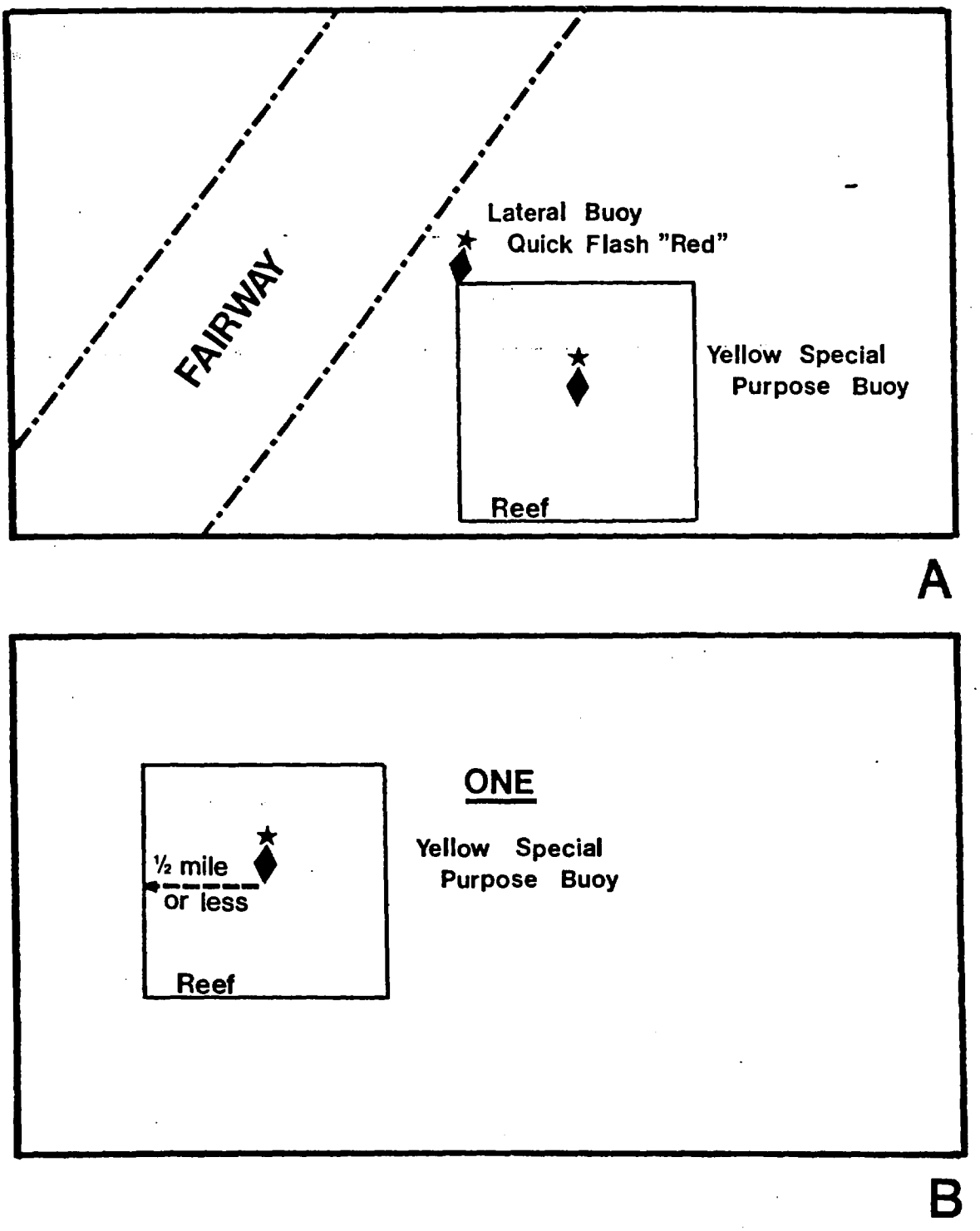
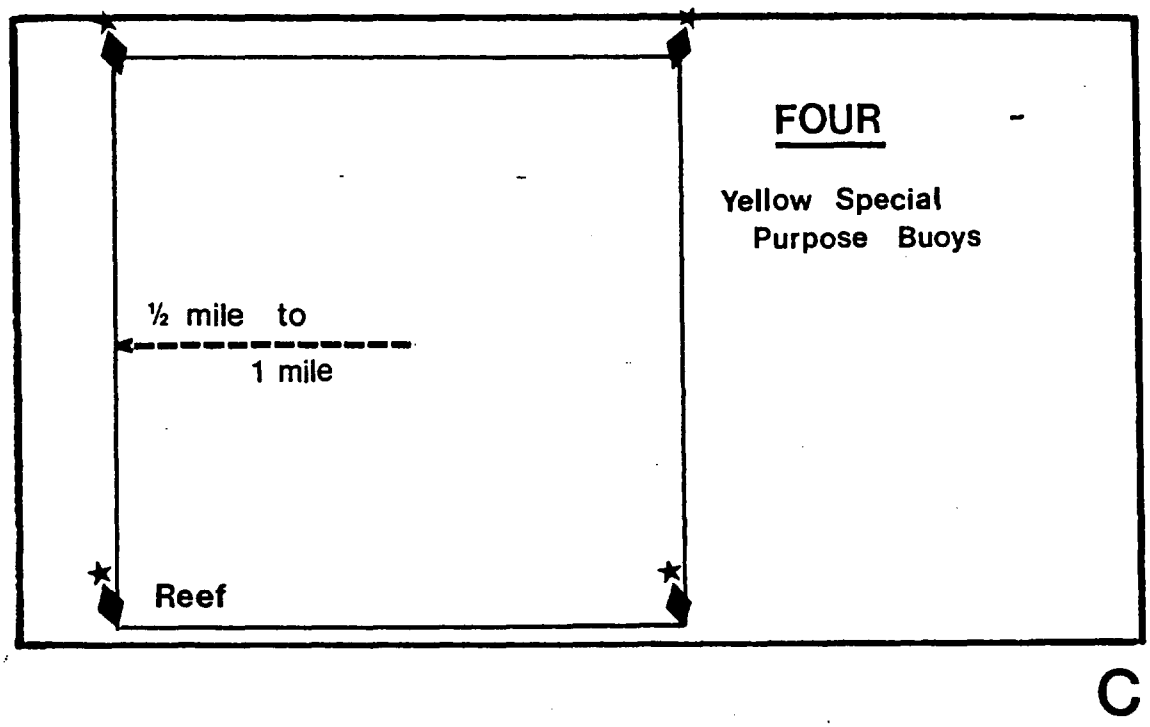
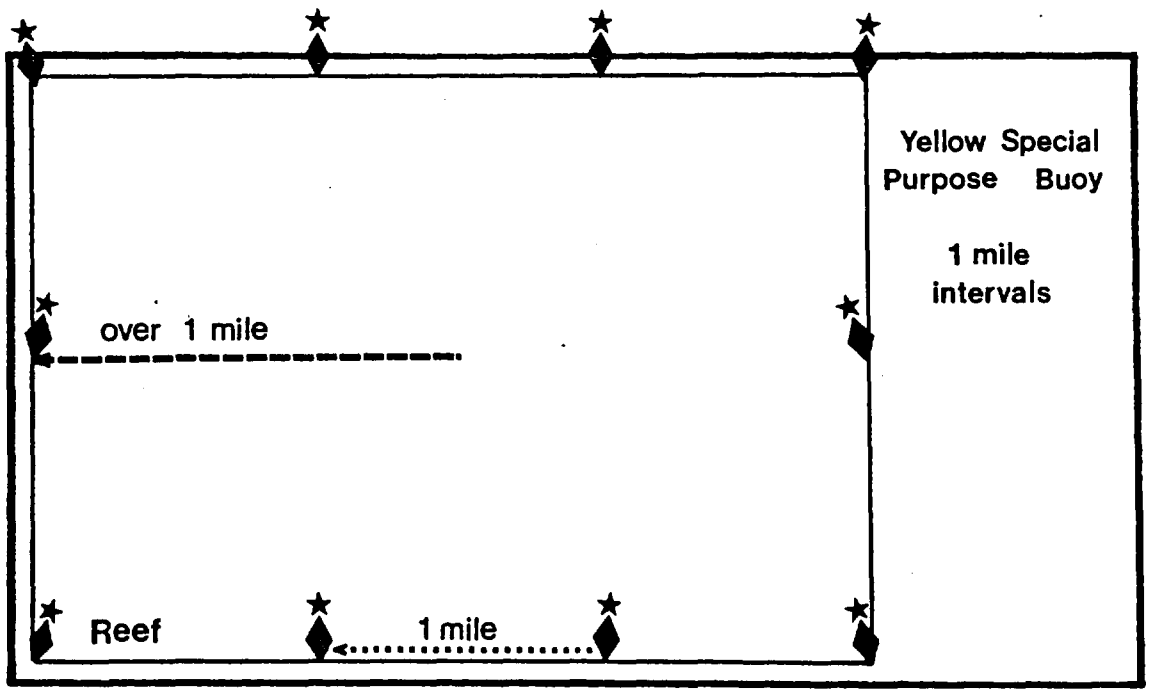


Figure 4. U.S. Coast Guard buoying requirements for artificial reefs: (A) requirements for reef complexes within 500 yards of a fairway, channel, or anchorage area; (B) requirements for reef complexes of up to 0.5 mi from the center; (C) requirements for reef complexes extending from 0.5 to 1.0 mile from the center; and (D) requirements for reef complexes extending over 1.0 mile from the center.



C



D

Figure 4. Continued.

(such as program logos) on the buoys, but they must not interfere with the assigned Coast Guard identification number.

Waiver of marking requirements. Marking requirements for each reef complex, and requests to waive requirements, will be determined on a case-by-case basis by the Eighth District, U.S. Coast Guard. Current guidelines for granting waivers of marking requirements are as follows: A waiver of lighted buoy requirements may be granted for reefs with over 50 feet of water clearance. A waiver of marking requirements may be granted for reefs with over 85 feet of water clearance once the reef is charted on navigational charts.

The following requirements must be met for a waiver to be considered:

1. The reef structure must be over 2 miles from fairways, channels, and anchorages.
2. The reef must have a minimum of 50 feet of water clearance.
3. The entire reef complex must be adequately marked and charted.
4. The individual reef structure must be part of an overall reef plan involving a number of reefs.
5. There must be no history of deep-draft traffic through the area.

The Coast Guard suggests that reef sponsors contact the district Coast Guard office early in the process so that the marking requirements can be approximated and the cost considered in deciding whether the reef should be constructed.

Other Affected Agencies

Other agencies may play an indirect role in the processing of COE permits. These agencies become involved through authorities outlined in public laws relating to the COE authority and through special interests

of national and regional concerns. The final decision of whether to issue or deny a permit will be the result of comments from state and federal agencies obtained through the public notice procedure. The agencies that may be involved in this procedure include, but are not limited to, the U.S. Environmental Protection Agency (EPA), the National Parks Service (NPS) (through the Advisory Council on Historic Preservation), the Department of Defense, the MMS, the U.S. Fish and Wildlife Service (USFWS), the National Marine Fisheries Service (NMFS), and state agencies (e.g., DNR, Department of Culture, Recreation and Tourism).

EPA Authority

Some discrepancy occurs within the laws granting authority to the EPA for the permitting of artificial reef structures. In general, the EPA acts only as a review agency for COE permits. Typically, the EPA will not require a separate permit if the structure is intended for fisheries enhancement and the reef materials do not violate water-quality standards (Casselbaum 1983; Rogers 1983; Vickery 1983). The EPA reviews permits using criteria developed for the EPA permit program for ocean dumping and the permit program for the National Pollution Discharge and Eliminations Systems (NPDES). Under Section 122.3(b) of 40 CFR, materials regulated under Section 404 (33 U.S.C. 1344) of the Clean Water Act are excluded from NPDES permit requirements.

Secretary of Commerce Authority

The Secretary of Commerce, acting through the National Oceanic and Atmospheric Administration (NOAA) and the NMFS, is authorized to administer Section 302 of the Marine Protection Research and Sanctuaries Act of 1972 (PL 92-532; 16 U.S.C. 1431). Section 1431 of 16 U.S.C. authorizes the

Secretary of Commerce to designate areas within the oceans and the Great Lakes as sanctuaries for the purpose of preserving or restoring such areas for their conservation, recreational, ecological, or aesthetic values. Activities within a designated sanctuary are allowed only if NOAA certifies that those activities are consistent with the regulations of the sanctuary.

USFWS and NMFS Authority

Under the Fish and Wildlife Coordination Act of 1956 (16 U.S.C. 760c-760g) and the Reorganization Plan No. 4 of 1970, any agency that proposes to control or modify any body of water must first consult with the USFWS, NMFS (as appropriate), and the head of the state agency managing the fish and wildlife resources of the affected state.

The USFWS and NMFS also share responsibilities under the Endangered Species Act (16 U.S.C. 1531. et. seq.) to conserve threatened and endangered species and the ecosystems on which those species depend. Activities should not jeopardize, destroy, or adversely modify habitat of species covered by the Endangered Species Act.

NPS Authority

The NPS, acting through the Advisory Council on Historic Preservation, may voice concerns if a site selected could be of particular archeological or historical significance. Under the Historical and Archeological Data Act of 1974 (16 U.S.C. 469 et. seq.), the Secretary of the Interior may take action necessary to recover and preserve any data of significance before a project begins.

Department of Defense Authority

A number of restricted areas, danger zones, and prohibited areas in the oceans are set aside for safety or the security of the U.S. Navy, U.S. Air Force, or National Aeronautics and Space Administration (Goode 1985). The Department of Defense may become involved if a proposed artificial reef site falls within military stipulation areas. Some areas may be more sensitive in regard to military operations, especially when metal is to be used in reef construction.

MMS Authority

The MMS reviews artificial reef applications with respect to areas of prospective development of hydrocarbons and other mineral resources. The MMS might object if reef construction could prohibit or interfere with the effective extraction of mineral resources.

DNR Authority

The Coastal Zone Management Division of DNR issues coastal-use permits for activities in state waters and reviews activities in federal waters that have a direct and significant impact on state waters for consistency with program guidelines. This state artificial reef plan will be reviewed for consistency by the Coastal Management Division, and its findings will be incorporated into the program.

Permit Application and Processing

The procedure for obtaining the necessary permits to establish an artificial reef is somewhat confusing because of the lack of interagency communication or agreements on specific standards and criteria for artificial reef implementation. Although artificial reefs have been used in the United States for many years, interpretation of the general laws

and rules and regulations has varied from case to case. In some instances, interpretation has varied between agencies or even between the regional offices of those agencies.

The NMFS Office of Marine Recreational Fisheries in Tampa, Florida, has been working with the COE District Office in Jacksonville, Florida, to develop criteria to be incorporated into a general permit for artificial reefs (Schmied 1983). As a result, the COE District Office in Jacksonville has recently issued a public notice and draft of a General Permit, SA J-50, for artificial fishing reefs and fish attractors proposed to be sited in the waters of Florida, the Commonwealth of Puerto Rico, the U.S. Territory of the Virgin Islands, and in the adjacent waters subject to U.S. jurisdiction.

The general procedure for obtaining a reef permit is outlined in Figure 3. Following this procedure, the applicant first notifies the COE district engineer and asks for a pre-application consultation for a Section 10 permit identifying all the agencies and public interest groups (e.g., sport and commercial fishermen) that may become involved in the review process. It is particularly important for the applicant to consult the Coast Guard district office at this stage because the marking requirements may prove to be costly to the project in the long run.

The COE will make recommendations to the Coast Guard with regard to establishing private aids to navigation. The applicant is responsible for contacting the Coast Guard district commander and submitting an application, Form CG 2554, to establish private aids to navigation. This permit is typically issued without delay. After the necessary permits have been obtained and the reef has been placed, the permittee is solely

responsible for maintenance costs and making routine inspections to verify that the required markers remain in place.

IMPLEMENTATION

Procedures

This state plan, approved by the Louisiana Artificial Reef Council and the Senate and House Natural Resources Committees, will be implemented under the leadership of the LDWF. The following concurrent actions are required to initiate the implementation process:

1. Permit applications must be prepared and submitted to the appropriate state and federal agencies.
2. Public notice must be given to oil and gas operators in both state and federal offshore waters. This will be accomplished by sending a letter to all members of the Offshore Operators Committee inviting their participation. A separate letter will be sent to the Mid-Continent Oil and Gas Association to solicit the participation of oil and gas companies operating in state waters.

Materials will be accepted or rejected for use as artificial reefs on a case-by-case basis by consensus of the Louisiana Artificial Reef Council. A donation agreement will then be signed by the Secretary of the LDWF or his designee and an authorized representative of the company, organization, or individual donating the reef material. A suggested "Act of Donation" that can be used for this purpose is presented in Appendix VII.

Artificial reef complexes will be sited within each planning area on the basis of the best available information regarding bottom type, currents, bathymetry, and other factors affecting the performance and productivity of a reef. The precise design and location of reef complexes will also depend upon the physical dimensions of the donated materials.

We anticipate that retired oil and gas structures will be the primary materials available for reef construction off the Louisiana coast.

Five alternatives exist for emplacing and utilizing oil and gas structures as artificial reefs (Bleakey 1982; Christian 1984a; Ditton and Falk 1981; Frishman 1982; National Research Council 1985; Reggio 1987; Sport Fishing Institute 1985).

1. The short-term plan most popular with oil and gas companies is to leave the structures standing in place. Many fishermen also prefer this option because they can easily locate and tie up to the structures. However, this alternative would increase liability associated with the reef site. This option also requires that the structure be lighted and maintained with cathodic protection. In addition, Department of Defense representatives recently shared their concerns about this option with representatives of other countries at a meeting of the International Maritime Organization concerning the International Law of the Sea. The organization may establish international regulations prohibiting this option in the future; also the Navy has informed the state of Louisiana that it would object to any permit incorporating this option.
2. Partial removal of a structure, the second option, entails cutting off the structure at a preselected, approved depth below the water line. This option represents one of the most stable ways of emplacing an oil and gas structure as an artificial reef because the structure would be well anchored and have only a minimal chance of drifting. Maintenance costs and liability risks would therefore be minimized.

3. A third option is to cut the upper portion of the structure at a preselected depth and allow it to topple over next to the lower part. This option is attractive because it would provide a relatively stable structure and minimize the chance of drifting.

4. The option most attractive to the Department of Defense is relocation of the oil and gas structures to permitted sites. This option entails cutting the rig off 15 feet below the mud line, picking up or floating the structure to a new artificial reef site, and sinking it on that site in a manner consistent with the terms and conditions of the permit.

5. A fifth option is to use a combination of any or all of the above-mentioned alternatives. Part of the site-selection process could include gathering information on existing structures. Other structures could then be moved to the selected site to enhance the existing habitat. A number of architectural variations are possible under this option. For example, one oil and gas structure could be cut off at a predescribed depth consistent with the law and other oil and gas structures subsequently emplaced in a spokelike fashion radiating out from the central rig.

Roles of Primary Participants

Pursuant to the Louisiana Fishing Enhancement Act, three entities will be the primary participants in Louisiana's Artificial Reef Program: the LDWF, the Louisiana Geological Survey (LGS) at LSU, and the Center for Wetland Resources (CWR) at LSU.

The LDWF will administer and enforce the program as provided in the Louisiana Fishing Enhancement Act and in accordance with the NFEA. This will include planning and reviewing permit applications with the advice of the CWR and LGS. The LDWF will also coordinate activities with relevant state and federal agencies, hold joint public hearings on proposed reef sites, oversee the maintenance and placement requirements of the artificial reefs, and gather additional technical information needed to carry out the program. The LDWF will either oversee or contract out buoying stipulated under permits. The LDWF will periodically publish maps depicting the location of inshore and offshore artificial reefs and other obstructions, which will be useful to Louisiana's commercial and recreational fishermen. To promote public relations, the LDWF will cooperate with the media by arranging news releases concerning new artificial reef sites and by occasionally providing data of public interest concerning artificial reef activities in Louisiana.

The LGS at LSU will provide geotechnical support for siting reefs through evaluation and interpretation of available geologic data. This data will be used to identify geologic hazards and determine sediment type and suitability. The LGS will assist the Department by coordinating federal and state permitting procedures and other activities and will develop engineering criteria for the placement of reefs in cooperation with the offshore operators or other parties donating the reef materials. In addition, the LGS will serve as liaison with federal (MMS) and state (DNR) agencies to consider the potential for future oil and gas or other mineral leasing and production activities in reef-site areas in the respective federal or state territorial waters.

The CWR at LSU will provide technical support to the LDWF for program development. The CWR will prepare, update, and provide the LDWF with technical, biological, and operational criteria for site selection and development and assist the LDWF in preparing permit applications for artificial reefs. In addition, the CWR will work to develop a biological monitoring program to evaluate created artificial reefs for future improvements. The CWR will evaluate reef potential and design and update exclusion mapping as necessary. The CWR will also assist LDWF in promoting public awareness of the program.

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REFERENCES CITED

Aska, D. Y. (ed.) 1981. Artificial Reefs: Proceedings Artificial Reef Conference. Florida Sea Grant Report No. 41. Gainesville, Fla.: Florida Sea Grant College Program, University of Florida.

Barrett, J. 1984a. Rigs-to-reefs in the eastern Gulf: past accomplishments and future plans. Pp. 137-142 in Proceedings, Fourth Annual Gulf of Mexico Information Transfer Meeting. OCS Report MMS 84-0026. Metairie, La.: Minerals Management Service, U.S. Dept. Interior.

Barrett, J. 1984b. Comments on rigs-to-reefs by the administrator of Florida's artificial reef program. Paper presented at the Third REEFS Task Force Meeting, 1984 Louisiana World Exposition, New Orleans, La.

Bertrand, A. 1984. Marine Recreational Finfishermen in Louisiana: A Socioeconomic Study of Licensed Recreational Fishermen Fishing in Coastal Study Area IV. Coastal Ecology and Fisheries Institute Technical Series No. 3. Baton Rouge, La.: Center for Wetland Resources, Louisiana State University.

Bleakey, W. B. 1982. Platform demobilization: a future shock. Petroleum Engineer International Magazine, May.

Bohnsack, J. A. and D. L. Sutherland. 1985. Artificial reef research: a review with recommendations for future priorities. Bulletin of Marine Science 37(1):11-39.

Bockstail, N., A. Graefe, and I. Strand. 1985. Economic Analysis of Artificial Reefs: An Assessment of Issues and Methods. Technical Report Series No. 5. Washington, D.C.: Sport Fishing Institute, Artificial Reef Development Center.

Bouma, A. H. 1981. Introduction to geologic hazards. Pp. 1-1-1-69 in Offshore Geologic Hazards, AAPG Short Course Note Series No. 18. Tulsa, Okla.: American Association of Petroleum Geologists.

Buckley, R. M., J. J. Grant, and J. Stephens, Jr. 1985. Foreword on Proceedings of the Third International Artificial Reef Conference. Bulletin of Marine Science 37(1).

Byrd, W. 1983. Fall rig fishing. Louisiana Conservationist, September/October.

Caldwell, H. 1982. Scuba diving and oil rigs. Pp. 66-68 in Proceedings, Third Annual Gulf of Mexico Information Transfer Meeting. Metairie, La: Minerals Management Service, U.S. Dept. Interior.

Casselbaum, Carl. 1983. Ocean Dumping Coordinator, U.S. Environmental Protection Agency, Seattle, Washington. Personal communication.

Christian, R. T. 1984a. Transportation Costs of Artificial Reef Materials. Technical Report No. 4. Washington, D.C.: Sport Fishing Institute, Artificial Reef Development Center.

Christian, R. T. 1984b. Permitting Procedure for Artificial Reefs. Technical Report Series No. 1. Washington, D.C.: Sport Fishing Institute, Artificial Reef Development Center.

Claverie, M. F., Jr. 1982. Offshore mineral development and private boat recreational fishing in the Gulf. Pp. 61-63 in Proceedings, Third Annual Gulf of Mexico Information Transfer Meeting. Metairie, La.: Minerals Management Service, U.S. Dept. Interior.

Collier, H. 1984. Comments on rigs-to-reefs by the chairman of the Gulf of Mexico Offshore Operators Committee. Paper presented at the Third REEFS Task Force Meeting, 1984 Louisiana World Exposition, New Orleans, La.

Colunga, L., and R. Stone (eds.). 1974. Proceedings of an International Conference on Artificial Reefs. TAMU-SG-74-103. Houston, Tex.: Texas A&M University.

Dimitroff, F. 1982. Survey of snapper/grouper fishermen of the northwest Florida Coast. Pp. 56-68 in Proceedings, Third Annual Gulf of Mexico Information Transfer Meeting. Metairie, La.: Minerals Management Service, U.S. Dept. Interior.

D'Itri, F. M. (ed.). 1985. Artificial Reefs: Marine and Freshwater Applications. Chelsea, Mich.: Lewis Publishers.

Ditton, R. B., and J. Auyong. 1984. Fishing Offshore Platforms, Central Gulf of Mexico: An Analysis of Recreational and Commercial Fishing Use at 164 Major Offshore Petroleum Structures. OCS Monograph MMS 84-0006. Metairie, La.: Gulf of Mexico Regional Office, Minerals Management Service, U.S. Dept. Interior.

Ditton, R. B., and J. Falk. 1981. Obsolete petroleum platforms as artificial reef material. Pp. 96-105 in D. Y. Aska (ed.), Proceedings Artificial Reef Conf. Report No. 41. Gainesville, Fla.: Florida Sea Grant College Program, University of Florida.

Ditton, R. B., and A. R. Graefe. 1978. Recreational Fishing Use of Artificial Reefs on the Texas Coast. College Station, Tex.: Department of Recreation and Parks, Texas A&M University.

Dugas, Ronald, Vincent Guillory, and Myron Fischer. 1979. Oil rigs and offshore sportfishing in Louisiana. Fisheries 4(6):2-20.

Frishman, S. 1982. Use of offshore production structures in artificial reef development and enhancement. Pp. 68-73 in Proceedings, Third Annual Gulf of Mexico Information Transfer Meeting. Metairie, La.: Minerals Management Service, U.S. Dept. Interior.

Goode, B. N. 1985. Regulatory artificial reefs. In 1983 Proceedings for Artificial Reefs in the Great Lakes. Lansing, Mich.: Michigan Sea Grant College Program.

Hardison, C. 1982. Charter boats and offshore oil and gas development. Pp. 64-65 in Proceedings, Third Annual Gulf of Mexico Information Transfer Meeting. Metarie, La.: Gulf of Mexico Regional Office, Minerals Management Service, U.S. Dept. Interior.

Horst, J., and Mialjevich. 1985. Potential impacts of the removal of oil and gas production platforms on the Louisiana shrimp industry. Pp. 339-341 in Proceedings, Fifth Annual Gulf of Mexico Information Transfer Meeting. OCS Study, MMS 85-0008. Metairie, La.: Minerals Management Service, U.S. Dept. Interior.

Lee, G. C. 1985. National research council study of the disposition of offshore petroleum platforms. Pp. 329-335 in Proceedings, Fifth Annual Gulf of Mexico Information Transfer Meeting. OCS Study, MMS 85-0008. Minerals Management Service, U.S. Dept. Interior.

Mottet, M. G. 1982. Enhancement of the Marine Environment for Fisheries and Aquaculture in Japan. Technical Report 69. Washington Department of Fisheries.

Myatt, D. O. 1984. Artificial Reef Maintenance. Technical Report Series No. 2. Washington, D.C.: Sportfishing Institute, Artificial Reef Development Center.

Myatt, D. O. 1985. Artificial reef site selection to maximize recreational fishing benefits in the Gulf of Mexico. Pp. 314-321 in Proceedings, Fifth Annual Gulf of Mexico Transfer Meeting. OCS Study, MMS 85-0008. Metairie, La.: Minerals Management Service, U.S. Dept. Interior.

Myatt, D. O., and R. B. Ditton. 1986. Exclusion mapping for artificial reef site selection to maximize recreational fishing benefits in the Gulf of Mexico. Washington, D. C.: Sport Fishing Institute, Artificial Reef Development Center.

National Research Council. 1985. Disposal of Offshore Platforms--Marine Board Committee on Disposition of Offshore Platforms. Washington, D.C.: National Academy Press.

Ploessel, M. R., and K. J. Campbell. 1980. Northwestern Gulf of Mexico--engineering implications of regional geology. Pp. 61-76 D. A. Ardus (ed.), The Society for Underwater Technology Conference Proceedings. London, England: Graham and Trotman, Ltd.

Prior, D. B. 1984. Subaqueous landslides. Pp. 179-196 in Fourth International Symposium on Landslides, Vol. 1, Toronto.

Prior, D. B., and J. M. Coleman. 1984. Submarine slope instability. Pp. 419-455 in D. Brundsden and D. B Prior (eds.), Slope Instability. New York: John Wiley and Sons, Ltd.

Radonski, G. C. 1983. The Needs of the Recreational Fisheries Community in the Development of a National Artificial Reef Policy: A Report to the Secretary of the Interior from the Sport Fishing Institute. Presented at the Second REEF meeting, Washington, D.C.

Reggio, Villere C., Jr. 1987. Rigs-to-reefs. OCS Rept., MMS 87-0015. New Orleans, La.: Minerals Management Service, U.S. Dept. Interior.

Richards, W. L. 1973. A Bibliography of Artificial Reefs and Other Man-made Fish Attractants. UNC-SG-73-04. Chapel Hill, N.C.: North Carolina Sea Grant College Program, University of North Carolina.

Roberts, K. J., and M. E. Thompson. 1983. Petroleum Production Structures: Economic Resources of the Louisiana Sport Divers. Baton Rouge, La.: Louisiana Sea Grant College Program, Center for Wetland Resources, Louisiana State University.

Rogers, Reginald. 1983. Ocean Dumping Coordinator, U.S. Environmental Protection Agency, Fourth District, Atlanta, Ga. Personal communication.

Schmied, R. L. 1983. The role of artificial reefs in the future of the Gulf of Mexico fishery management process. Pp. 125-131 in Proceedings, Fourth Annual Gulf of Mexico Information Transfer Meeting. Raliegh, N.C.: Science Applications, Inc.

Sheehy, D. J., and S. F. Vik (eds.). 1982. Japanese Artificial Reef Technology. Tech. Rept. 604. Annapolis, Md.: Aquabio, Inc.

Sport Fishing Institute. 1980. Economic Activity Associated with Marine Recreational Fishing. Washington, D.C.: Sport Fishing Institute, Artificial Reef Development Center.

Sport Fishing Institute. 1985. Artificial Reef Development for Recreational Fishing: A Planning Guide. Washington, D.C.: Sport Fishing Institute, Artificial Reef Development Center.

Stanton, Gregg, Dara Wilbur, and Anthony Murray. 1985. Annotated Bibliography of Artificial Reef Research and Management. Report No. 74. Tallahassee, Fla.: Florida Sea Grant College Program, Florida State University.

Stone, R. B. 1979. A comparison of fish populations on an artificial and natural reef in the Florida Keys. Marine Fisheries Review (September):1-11.

Stone, R. B. 1982. Artificial reefs: toward a new era in fisheries enhancement. Marine Fisheries Review (June-July):2-3.

Stone, B. 1985. National Artificial Reef Plan. (Draft.) Washington, D.C.: National Marine Fisheries Services, U.S. Dept. Commerce.

Sullivan, C. R. 1984. Fishery enhancement. Paper presented at the Third Reefs Task Force Meeting, U.S. Pavilion, 1984 Louisiana World Exposition, New Orleans, La.

Swingle, H. 1985. Alabama's artificial reef program. Pp. 324-326 in Proceedings, Fifth Annual Gulf of Mexico Information Transfer Meeting. OCS Study, MMS 85-0008. Metairie, La.: Minerals Management Service, U.S. Dept. Interior.

U.S. Army Corps of Engineers. 1977. United States Army Corps of Engineers Regulatory Program Applicant Information. EP 1145-2-1. Washington, D.C.: U.S. Army Corps of Engineers.

U.S. Department of Commerce. 1980. Marine Recreational Fishery Statistics Survey, Atlantic and Gulf Coasts, 1979. US.S DOC/NOAA/NMFS Current Fishery Statistics No. 8063. Washington, D.C.: National Marine Fisheries Service, U.S. Dept. Commerce.

U.S. Department of Commerce. 1985. National Artificial Reef Plan. NOAA Technical Memorandum NMFS OF-6. Washington, D.C.: National Oceanic and Atmospheric Administration, National Marine Fisheries Service, U.S. Dept. Commerce.

Vickery, Bob. 1983. Ocean Dumping Coordinator, U.S. Environmental Protection Agency, Region 6, Dallas, Tex. Personal communication.

APPENDIX I

MEMBERS OF THE LOUISIANA ARTIFICIAL REEF INITIATIVE

Center for Wetland Resources, Louisiana State University

Louisiana Cooperative Extension Service

Louisiana Department of Culture, Recreation and Tourism

Louisiana Department of Natural Resources

Louisiana Department of Wildlife and Fisheries

Louisiana Geological Survey, Louisiana State University

Louisiana Sea Grant College Program

Louisiana Wildlife Federation and other conservation groups

National Marine Fisheries Service

Offshore Operators Committee, oil and gas industry

Recreational and commercial fisheries groups

U.S. Army Corps of Engineers

U.S. Department of the Interior, Minerals Management Service

APPENDIX II

NATIONAL FISHING ENHANCEMENT ACT OF 1984

1 TITLE II—ARTIFICIAL REEFS

2 **SEC. 201. SHORT TITLE.**

3 This title may be cited as the "National Fishing En-
4 hancement Act of 1984".

5 **SEC. 202. FINDINGS AND CONCLUSIONS.**

6 (a) FINDINGS.—The Congress finds that—

7 (1) although fishery products provide an important
8 source of protein and industrial products for United
9 States consumption, United States fishery production
10 annually falls far short of satisfying United States
11 demand;

12 (2) overfishing and the degradation of vital fishery
13 resource habitats have caused a reduction in the abun-
14 dance and diversity of United States fishery resources;

15 (3) escalated energy costs have had a negative
16 effect on the economics of United States commercial
17 and recreational fisheries;

18 (4) commercial and recreational fisheries are a
19 prominent factor in United States coastal economies
20 and the direct and indirect returns to the United States
21 economy from commercial and recreational fishing ex-
22 penditures are threefold; and

23 (5) properly designed, constructed, and located ar-
24 tificial reefs in waters covered under this title can en-
25 hance the habitat and diversity of fishery resources; en-

1 hance United States recreational and commercial fish-
2 ing opportunities; increase the production of fishery
3 products in the United States; increase the energy efficiency
4 ciency of recreational and commercial fisheries; and
5 contribute to the United States and coastal economies.
6 (b) PURPOSE.—The purpose of this title is to promote
7 and facilitate responsible and effective efforts to establish ar-
8 tificial reefs in waters covered under this title.

9 **SEC. 203. ESTABLISHMENT OF STANDARDS.**

10 Based on the best scientific information available, artifi-
11 cial reefs in waters covered under this title shall be sited and
12 constructed, and subsequently monitored and managed in a
13 manner which will—
14 (1) enhance fishery resources to the maximum
15 extent practicable;
16 (2) facilitate access and utilization by United
17 States recreational and commercial fishermen;
18 (3) minimize conflicts among competing uses of
19 waters covered under this title and the resources in
20 such waters;
21 (4) minimize environmental risks and risks to per-
22 sonal health and property; and
23 (5) be consistent with generally accepted princi-
24 ples of international law and shall not create any un-
25 reasonable obstruction to navigation.

1 SEC. 204. NATIONAL ARTIFICIAL REEF PLAN.

2 Not later than one year after the date of enactment of
3 this title, the Secretary of Commerce, in consultation with
4 the Secretary of the Interior, the Secretary of Defense, the
5 Administrator of the Environmental Protection Agency, the
6 Secretary of the Department in which the Coast Guard is
7 operating, the Regional Fishery Managment Councils, inter-
8 ested States, Interstate Fishery Commissions, and represent-
9 atives of the private sector, shall develop and publish a long-
10 term plan which will meet the purpose of this title and be
11 consistent with the standards established under section 203.
12 The plan must include—

13 (1) geographic, hydrographic, geologic, biological,
14 ecological, social, economic, and other criteria for
15 siting artificial reefs;

16 (2) design, material, and other criteria for con-
17 structing artificial reefs;

18 (3) mechanisms and methodologies for monitoring
19 the compliance of artificial reefs with the requirements
20 of permits issued under section 205;

21 (4) mechanisms and methodologies for managing
22 the use of artificial reefs;

23 (5) a synopsis of existing information on artificial
24 reefs and needs for further research on artificial reef
25 technology and management strategies; and

1 (6) an evaluation of alternatives for facilitating the
2 transfer of artificial reef construction materials to per-
3 sons holding permits issued pursuant to section 205,
4 including, but not limited to, credits for environmental
5 mitigation and modified tax obligations.

6 **SEC. 205. PERMITS FOR THE CONSTRUCTION AND MANAGE-**
7 **MENT OF ARTIFICIAL REEFS.**

8 (a) SECRETARIAL ACTION ON PERMITS.—In issuing a
9 permit for artificial reefs under section 10 of the Rivers and
10 Harbors Act of 1899, section 404 of the Federal Water Pol-
11 lution Control Act, or section 4(e) of the Outer Continental
12 Shelf Lands Act, the Secretary of the Army (hereinafter in
13 this section referred to as the "Secretary") shall—

14 (1) consult with and consider the views of appro-
15 priate Federal agencies, States, local governments, and
16 other interested parties;

17 (2) ensure that the provisions for siting, construct-
18 ing, monitoring, and managing the artificial reef are
19 consistent with the criteria and standards established
20 under this title;

21 (3) ensure that the title to the artificial reef con-
22 struction material is unambiguous, and that responsibil-
23 ity for maintenance and the financial ability to assume
24 liability for future damages are clearly established; and

1 (4) consider the plan developed under section 204
2 and notify the Secretary of Commerce of any need to
3 deviate from that plan.
4 (b) TERMS AND CONDITIONS OF PERMITS.—(1) Each
5 permit issued by the Secretary subject to this section shall
6 specify the design and location for construction of the artifi-
7 cial reef and the types and quantities of materials that may be
8 used in constructing such artificial reef. In addition, each
9 such permit shall specify such terms and conditions for the
10 construction, operation, maintenance, monitoring, and man-
11 aging the use of the artificial reef as are necessary for compli-
12 ance with all applicable provisions of law and as are neces-
13 sary to ensure the protection of the environment and human
14 safety and property.
15 (2) Before issuing a permit under section 402 of the
16 Federal Water Pollution Control Act for any activity relating
17 to the siting, design, construction, operation, maintenance,
18 monitoring, or managing of an artificial reef, the Administra-
19 tor of the Environmental Protection Agency shall consult
20 with the Secretary to ensure that such permit is consistent
21 with any permit issued by the Secretary subject to this sec-
22 tion.
23 (c) LIABILITY OF PERMITTEE.—(1) A person to whom
24 a permit is issued in accordance with subsection (a) and any
25 insurer of that person shall not be liable for damages caused

1 by activities required to be undertaken under any terms and
2 conditions of the permit, if the permittee is in compliance
3 with such terms and conditions.

4 (2) A person to whom a permit is issued in accordance
5 with subsection (a) and any insurer of that person shall be
6 liable, to the exent determined under applicable law, for dam-
7 ages to which paragraph (1) does not apply.

8 (3) The Secretary may not issue a permit subject to this
9 section to a person unless that person demonstrates to the
10 Secretary the financial ability to assume liability for all dam-
11 ages that may arise with respect to an artificial reef and for
12 which such permittee may be liable.

13 (4) Any person who has transferred title to artificial reef
14 construction materials to a person to whom a permit is issued
15 in accordance with subsection (a) shall not be liable for dam-
16 ages arising from the use of such materials in an artificial
17 reef, if such materials meet applicable requirements of the
18 plan published under section 204 and are not otherwise de-
19 fective at the time title is transferred.

20 (d) LIABILITY OF THE UNITED STATES.—Nothing in
21 this title creates any liability on the part of the United States.

22 (e) CIVIL PENALTY.—Any person who, after notice and
23 an opportunity for a hearing, is found to have violated any
24 provision of a permit issued in accordance with subsection (a)
25 shall be liable to the United States for a civil penalty, not to

1 exceed $10,000 for each violation. The amount of the civil
2 penalty shall be assessed by the Secretary by written notice.
3 In determining the amount of such penalty, the Secretary
4 shall take into account the nature, circumstances, extent, and
5 gravity of the violation. The Secretary may compromise,
6 modify, or remit with or without conditions, any civil penalty
7 which is subject to imposition or which has been imposed
8 under this section. If any person fails to pay as assessment of
9 a civil penalty after it has become final, the Secretary may
10 refer the matter to the Attorney General for collection.

11 **SEC. 206. DEFINITIONS.**

12 For purposes of this title—

13 (1) The term "artificial reef" means a structure
14 which is constructed or placed in waters covered under
15 this title for the purpose of enhancing fishery resources
16 and commercial and recreational fishing opportunities.

17 (2) The term "State" means a State of the United
18 States, the District of Columbia, Puerto Rico, the
19 United States Virgin Islands, American Samoa, Guam,
20 Johnston Island, Midway Island, and Wake Island.

21 (3) The term "waters covered under this title"
22 means the navigable waters of the United States and
23 the waters superjacent to the outer Continental Shelf
24 as defined in section 2 of the Outer Continental Shelf

1 Lands Act (43 U.S.C. section 1331), to the extent
2 such waters exist in or are adjacent to any State.

3 SEC. 207. USE OF CERTAIN VESSELS AS ARTIFICIAL REEFS.

4 The Act entitled "An Act to authorize appropriations
5 for the fiscal year 1973 for certain maritime programs of the
6 Department of Commerce and for other purposes", approved
7 August 22, 1972 (16 U.S.C. 1220–1220c), is amended—

8 (1) by striking out "Liberty" each place it appears
9 in sections 3, 4, 5, and 6 and inserting in lieu thereof
10 "obsolete";

11 (2) by striking out "Commerce" in section 3 and
12 inserting in lieu thereof "Transportation";

13 (3) by striking out "shall" in the matter preceding
14 paragraph (1) in section 4 and inserting in lieu thereof
15 "may", and

16 (4) by adding at the end thereof the following new
17 section:

18 "SEC. 7. For purposes of sections 3, 4, 5, and 6, the
19 term "obsolete ship' means any vessel owned by the Depart-
20 ment of Transportation that has been determined to be of
21 insufficient value for commercial or national defense purposes
22 to warrant its maintenance and preservation in the national
23 defense reserve fleet and has been designated as an artificial
24 reef candidate.".

1 SEC. 208. SAVINGS CLAUSES.

2 (a) TENNESSEE VALLEY AUTHORITY JURISDIC-
3 TION.—Nothing in this title shall be construed as replacing
4 or superseding section 26a of the Tennessee Valley Author-
5 ity Act of 1933, as amended (16 U.S.C. 831y-1).

6 (b) STATE JURISDICTION.—Nothing in this title shall
7 be construed as extending or diminishing the jurisdiction or
8 authority of any State over the siting, construction, monitor-
9 ing, or managing of artificial reefs within its boundaries.

• U. S. GOVERNMENT PRINTING OFFICE : 1986 491-097/46859

APPENDIX III

THE LOUISIANA FISHING ENHANCEMENT ACT OF 1986

1986 REGULAR SESSION

LOUISIANA FISHING ENHANCEMENT ACT— ESTABLISHMENT AND MAINTENANCE OF ARTIFICIAL REEFS

ACT NO. 100

HOUSE BILL NO. 1111

AN ACT

To enact R.S. 36:610(H) and to enact Subpart M of Part VII of Chapter 1 of Title 56 of the Louisiana Revised Statutes of 1950, to be comprised of R.S. 56:639.1 through R.S. 56:639.10, to provide for the establishment and administration of the Louisiana Artificial Reef Development Program; to provide for agency participation in the program; to provide for the creation, placement, composition, powers, and duties of the Louisiana Artificial Reef Development Council; to provide for the acceptance and receipt of grants, donations of monies or materials, and other forms of assistance by the Department of Wildlife and Fisheries; to provide for the establishment of the Artificial Reef Development Fund, deposit into the fund, and expenditures from the fund; to provide for the funding of certain research projects, the development and preparation of the Louisiana Artificial Reef Development Plan, and the review of the plan by legislative committee; to provide for certain required contents of the plan; to provide for the acquisition of permits for the establishment of artificial reefs; to provide for the liability of participants in and donors to the program; and to provide for related matters.

Be it enacted by the Legislature of Louisiana:

Section 1. Subpart M of Part VII of Chapter 1 of Title 56 of the Louisiana Revised Statutes of 1950, comprised of R.S. 56:639.1 through R.S. 56:639.10, is hereby enacted to read as follows:

SUBPART M. ARTIFICIAL REEFS

§639.1. Title

This Subpart shall be known and may be cited as the "Louisiana Fishing Enhancement Act".

§639.2. Purposes

The purpose of this Act is to promote and facilitate effective establishment and maintenance of artificial reefs in the offshore waters of Louisiana, as provided in this Act and in compliance with the National Fishing Enhancement Act. It is the further purpose of this Act to provide for the jurisdiction and cooperation of various state agencies in the implementation of any plan or program developed pursuant to this Act.

§639.3. Definitions

As used in this Subpart, the following terms shall have the meanings ascribed to them in this Section, unless the context clearly indicates otherwise:

(1) "Artificial reef" means a structure or system of structures which is constructed, placed, or permitted in waters covered under this Subpart for the purpose of enhancing fishery resources and commercial and recreational fishing opportunities.

(2) "Commission" means the Louisiana Wildlife and Fisheries Commission.

(3) "Department" means the Louisiana Department of Wildlife and Fisheries.

(4) "Geological Survey" means the Louisiana Geological Survey.

(5) "Initiative" means the Artificial Reef Initiative at Louisiana State University, which is developing a Louisiana Artificial Reef Development Plan.

(6) "National Fishing Enhancement Act" means the federal artificial reef development legislation, PL 98-623, Title II.

(7) "Reef materials" means any materials allowed under the National Artificial Reef Plan, adopted pursuant to the National Fishing Enhancement Act for construction of artificial reefs.

(8) "Secretary" means the secretary of the Louisiana Department of Wildlife and Fisheries.

(9) "Waters covered under this Act" means the navigable waters of Louisiana and waters of the federal fisheries conservation zone adjacent to Louisiana waters.

(10) "Wetland Resources" means the Center for Wetland Resources at Louisiana State University.

§639.4. Establishment of standards

Artificial reefs in waters covered under this Act shall be sited, constructed, and subsequently maintained, monitored, and managed based upon the best scientific information available; and, in a manner which shall:

(1) Enhance and conserve fishery resources to the maximum extent practicable.

(2) Facilitate access and utilization by Louisiana recreational and commercial user groups.

(3) Minimize conflicts among competing uses of waters covered under this Act and the resources in such waters.

(4) Minimize environmental risks and risks to personal and public health and property.

(5) Be consistent with generally accepted principles of international law and national fishing law, and not create any unreasonable obstructions to navigation.

§639.5. Artificial Reef Development Program; authorities and responsibilities of cooperating agencies

A. There is hereby created the Louisiana Artificial Reef Development Program, hereinafter called the "program", to promote, develop, maintain, monitor, and enhance the artificial reef potential in the waters covered under this Act. The department, geological survey, and wetland resources shall be primary participants in this program and shall operate out of the Artificial Reef Development Fund under the direction of the Louisiana Wildlife and Fisheries Commission, hereinafter called the "commission".

B. The department shall administer and enforce the program as provided in this Subpart and in accordance with the National Fishing Enhancement Act. The department shall plan and review permit applications with advice from wetland resources; coordinate with relevant state and federal agencies; hold joint public hearings on proposed reefs; oversee maintenance and placement requirements of the reefs; and develop additional technical information needed to carry out the program.

C. The Center for Wetland Resources shall provide technical support to the department for program development. The center shall additionally:

(1) Prepare, update, and provide the department with technical, biological, and operational criteria for site selection and development.

(2) Assist the department in preparing permit applications for artificial reefs.

(3) Assist in biological monitoring.

(4) Evaluate and recommend reef sites.

(5) Evaluate reef potential and design.

(6) Update exclusion mapping.

(7) Promote public awareness of the program.

D. Geological Survey shall provide geotechnical support for reef siting by determining bottom suitability and identifying geologic hazards, evaluating the potential for future oil, gas, and other mineral production in reef sites, and by analyzing the potential for using artificial reefs to supplement the state's coastal protection effort as described in the Coastal Environment Protection Master Plan. Geological Survey shall also serve as liaison with the United States Department of the Interior regarding the interaction of the program with federal outer continental shelf leasing and production activities.

E. The Louisiana Sea Grant College Program shall coordinate fisheries research projects that might be proposed by Louisiana universities to support the program.

§639.6. Louisiana Artificial Reef Development Council

A. To oversee the program, there is hereby created the Louisiana Artificial Reef Development Council, hereinafter referred to as the "council", which shall be within the Louisiana Department of Wildlife and Fisheries. The council will be composed of the secretary of the Department of Wildlife and Fisheries, the director of the Geological Survey, and the dean of the Center for Wetland

Resources at Louisiana State University, or their designees. The council shall select a chairman.

B. The council is empowered to oversee development and implementation of the Louisiana Artificial Reef Development Plan. The council is charged with providing guidance to the commission and department on policy and procedural matters concerning the program and shall make recommendations to the department regarding the allocation of funds to various program components.

§639.7. Preparation of the Louisiana Artificial Reef Development Plan

A. The Louisiana Artificial Reef Initiative is directed to complete its work on the Louisiana Artificial Reef Development Plan, hereinafter called the "plan", within one year of the effective date of this Act.

B. The initiative shall present the plan to the council for approval. Upon unanimous approval by the council, and after review by the department, the plan shall be presented by October 1, 1987, to the House and Senate Natural Resources Committees for their approval.

C. All artificial reefs developed in state waters shall be consistent with the approved plan. State agency comments and recommendations on artificial reefs in federal waters shall also be consistent with the approved plan.

D. The plan shall include:

(1) Operational guidelines for the program, including specific participant roles and projected funding requirements for program elements.

(2) Geographic, hydrographic, geological, biological, ecological, social, economic, and other criteria for permitting and siting artificial reefs.

(3) Design, material, and other criteria for establishing, constructing, and maintaining artificial reefs.

(4) Mechanisms and methodologies for monitoring artificial reefs in compliance with the requirements of permits issued under Section 205 of the National Fishing Act.

(5) Mechanisms and methodologies for managing the use of artificial reefs.

(6) An exclusionary map which depicts priority areas for artificial reef development consistent with this Act and the National Fishing Enhancement Act.

(7) Provisions for updating the plan based on findings of the Artificial Reef Development Program.

(8) Provisions for managing the Reef Fund in a manner which will assure successful program implementation.

§639.8. Department of Wildlife and Fisheries; Artificial Reef Development Fund

A. The secretary is authorized to accept and receive grants, donations of monies or materials, and other forms of assistance from private and public sources which are provided to the state for the purpose of siting, designing, constructing, monitoring, and otherwise managing an artificial reef system.

B. Any funds received by the department pursuant to the provisions and purposes of this Subpart shall be deposited immediately upon receipt into the state treasury.

C. There is hereby established a fund in the state treasury to be known as the Artificial Reef Development Fund, hereinafter referred to as the "Reef Fund" or "Fund", into which the state treasurer shall each fiscal year, and beginning with the 1986-87 Fiscal Year, deposit the funds received as provided in R.S. 56:639.8(A) and (B), after those revenues have been deposited in the Bond Security and Redemption Fund. Out of the funds remaining in the Bond Security and Redemption Fund after a sufficient amount is allocated from that fund to pay all obligations secured by the full faith and credit of the state that become due and payable within each fiscal year, the treasurer, prior to placing such funds in the state general fund, shall pay into the Reef Fund an amount equal to the funds deposited by the department into the treasury as provided in Subsection B. The monies in the Reef Fund shall be used solely as provided by Subsection E herein and only in the amounts appropriated by the legislature. All unexpended and unencumbered monies in the Reef Fund at the end of the fiscal year shall remain in the fund. The monies in the fund shall be invested by the state treasurer in the same manner as monies in the state general fund, and interest earned on the investment of these monies shall be credited to the fund, again, following compliance with the requirement of Article VII, Section 9(B) of the Louisiana Constitution, relative to the Bond Security and Redemption Fund.

D. The council shall review and comment on proposed expenditures from the fund at the time of budget preparation by the department. The department shall maintain records of the sources of money received and the purpose therefor, as well as the person or persons to whom money is paid and the purpose therefor.

Vouchers or receipts shall be kept for all money paid out. The department shall employ such personnel as are necessary to meet the department's responsibilities under the program. The department shall allocate from the fund an amount sufficient to pay the salaries of personnel assigned to or responsible for the conduct of the program and shall allocate such amount as necessary for related operating expenses. Money appropriated or otherwise made available to the participants in the program for authorized purposes shall be withdrawn from the treasury on warrant of the secretary or his designee.

E. Monies may be withdrawn directly from the Reef Fund for the operation of the program as described in R.S. 56:639.5, including administrative and field support for the permitting, establishing, monitoring, and maintenance of artificial reefs established pursuant to this Subpart until such time that the council determines that the annual interest earnings from the fund are sufficient to run the program.

F. The secretary shall insure that the Reef Fund contains sufficient reserves to operate the program in a manner consistent with the state plan.

G. In future years, if interest income exceeds operational costs, marine fisheries research and habitat enhancement projects may be funded through the department, the Louisiana Sea Grant College Program, and the Coastal Environment Protection Program within the Geological Survey.

§639.9. Permitting for the construction and management of artificial reefs

A. The state of Louisiana is empowered to serve as permittee for artificial reefs in waters covered under this Act, provided such reefs are consistent with and established within the guidelines of this Subpart and the National Fishing Enhancement Act. The secretary is hereby empowered to administer and enforce the program for the state of Louisiana.

B. In acquiring necessary federal permits for artificial reefs, the secretary or his designee shall:

(1) Consult with and consider the views of appropriate federal agencies, state, and local governments, and other interested parties.

(2) Ensure that the provisions for siting, constructing, monitoring, maintaining, and managing any artificial reef developed pursuant to this Subpart be consistent with the criteria and standards established under this Subpart and the National Fishing Enhancement Act.

(3) Ensure that title to any artificial reef component or construction material is unambiguous.

(4) Consider the National Artificial Reef Plan developed under Section 204 of the National Fishing Enhancement Act, and notify the secretary of the United States Department of Commerce of any need to deviate from that plan. The secretary of the Department of Wildlife and Fisheries, in consultation with the other members of the council, shall also review and comment on other artificial reef permit applications to insure that artificial reef permits sought by groups other than Louisiana are consistent

with the state plan developed under this Subpart and the National Fishing Enhancement Act.

§639.10. Liability

A. The department, the state of Louisiana and its agencies, and any insurer of these groups shall not be liable for damages caused by activities required to be undertaken under the terms and conditions of state and federal permits acquired for reef development.

B. Any person or company who has transferred title of artificial reef construction materials to the state of Louisiana shall not be liable for damages arising from the use of such materials in an artificial reef, if such materials meet applicable requirements of the National Artificial Reef Plan published under Section 204 of the National Fishing Enhancement Act, and United States Department of Interior regulations.

Section 2. R.S. 36:610(H) is hereby enacted to read as follows:

§610. Transfer of agencies to Department of Wildlife and Fisheries

* * *

H. The Louisiana Artificial Reef Development Council (R.S. 56:639.6) is placed within the Department of Wildlife and Fisheries and shall exercise and perform its powers, duties, functions, and responsibilities in the manner provided for agencies transferred in accordance with Part III of Chapter 22 of this Title.

Section 3. This Act shall become effective upon signature by the governor or, if not signed by the governor, upon expiration of the time for bills to become law without signature by the governor, as provided in Article III, Section 18 of the Constitution of Louisiana.

Approved June 23, 1986.

APPENDIX IV

COORDINATES OF ARTIFICIAL REEF PLANNING AREAS

OFFSHORE LOUISIANA, PHASE I

LOUISIANA ARTIFICIAL REEF PLANNING AREAS - OFFSHORE LEASE BLOCK LISTING

1. West Cameron Planning Area

   Blocks 586-587, 594-595, 608-609, 616-617

2. East Cameron Planning Area

   Blocks 254-256, 269-274; Vermilion Blocks 262, 281-282

3. Ship Shoal Planning Area

   Blocks 204-209, 214-219, 228-233

4. South Marsh Island (76) Planning Area

   Blocks 65-67, 75-77, 80-82

5. South Marsh Island (146) Planning Area

   Blocks 130-133, 136-139, 146-149

6. Eugene Island Planning Area

   Blocks 346-350, 363-372; Ship Shoal Blocks 320, 343-344

7. South Timbalier Planning Area

   Blocks 128-135, 151-154

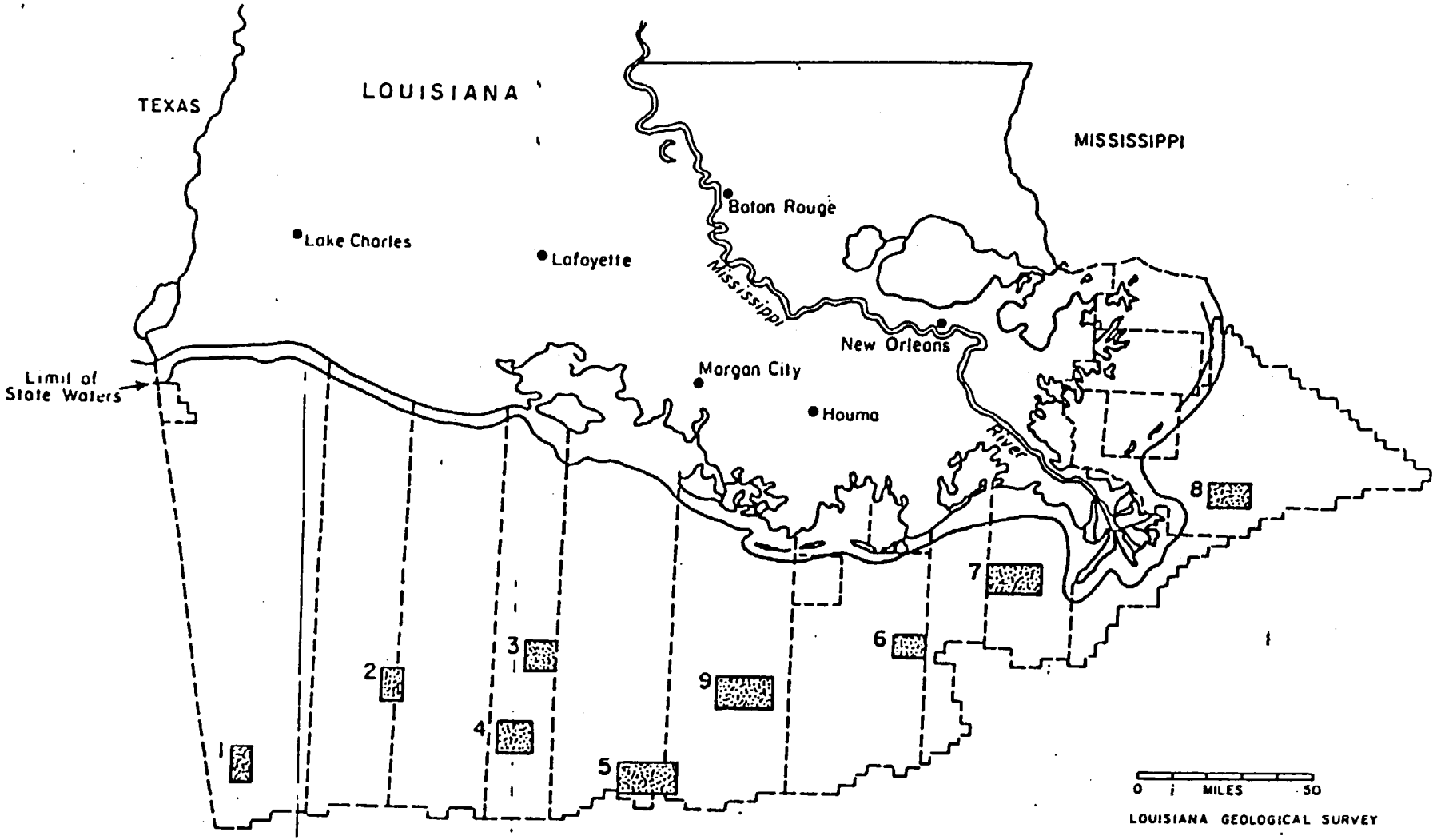
8. West Delta Planning Area

   Blocks 69-76, 89-96

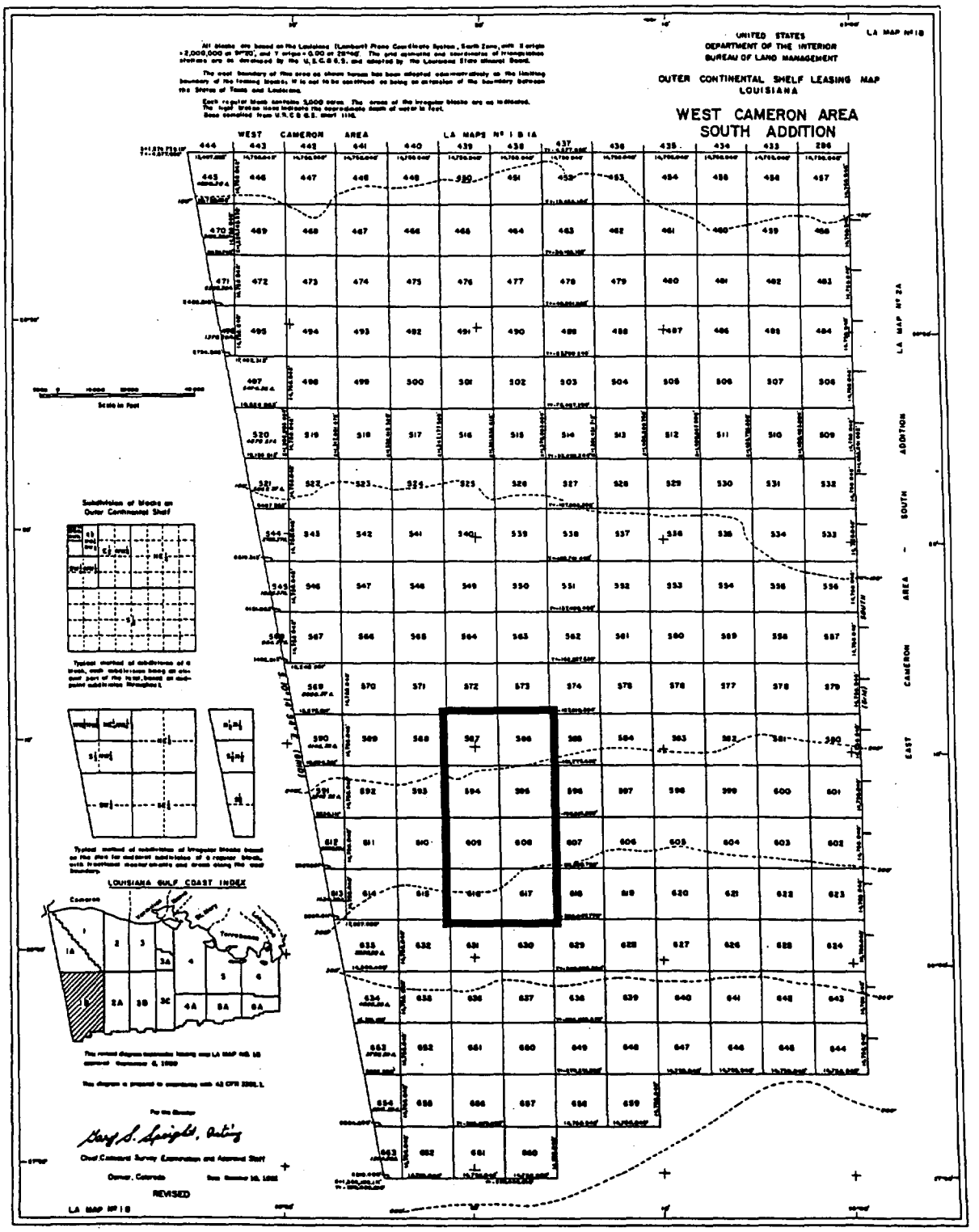
9. Main Pass Planning Area

   Blocks 144-145, 272-273, 292-306

Louisiana Artificial Reef Planning Area



1. West Cameron Planning Area
2. East Cameron Planning Area
3. South Marsh Island (76) Planning Area
4. South Marsh Island (146) Planning Area
5. Eugene Island Planning Area
6. South Timbalier Planning Area
7. West Delta Planning Area
8. Main Pass Planning Area
9. Ship Shoal Planning Area


UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
OUTER CONTINENTAL SHELF LEASING MAP
LOUISIANA
WEST CAMERON AREA
SOUTH ADDITION
LA MAP Nº 1 B 1A
LA MAP Nº 2A
LA MAP Nº 1 B
LOUISIANA GULF COAST INDEX
REVISED

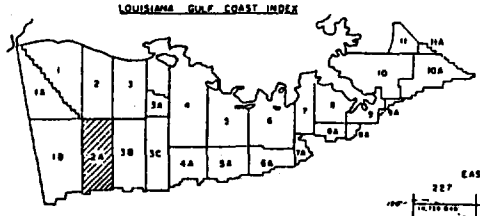
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

LA MAP Nº 2A

OUTER CONTINENTAL SHELF LEASING MAP
LOUISIANA

EAST CAMERON AREA
SOUTH ADDITION

LOUISIANA GULF COAST INDEX



All blocks are based on the Louisiana Lambert Plane Coordinate System, South Zone, with X origin = 2,000,000 at 91°20' and Y origin = 0.00 at 26°40'. The grid spacing and coordinates of triangulation stations are as developed by the U.S.C.&G.S. and adopted by the Louisiana State Mineral Board.

Each regular block contains 5,000 acres. The areas of the irregular blocks are as indicated.

The light broken lines indicate the approximate depth of water in feet.

Data compiled from U.S.C.&G.S. chart 1116

Scale in Feet

Subdivision of blocks on Outer Continental Shelf

Typical method of subdivision of a regular block, each subdivision being an aliquot part of the total, based on mid-point subdivision throughout.

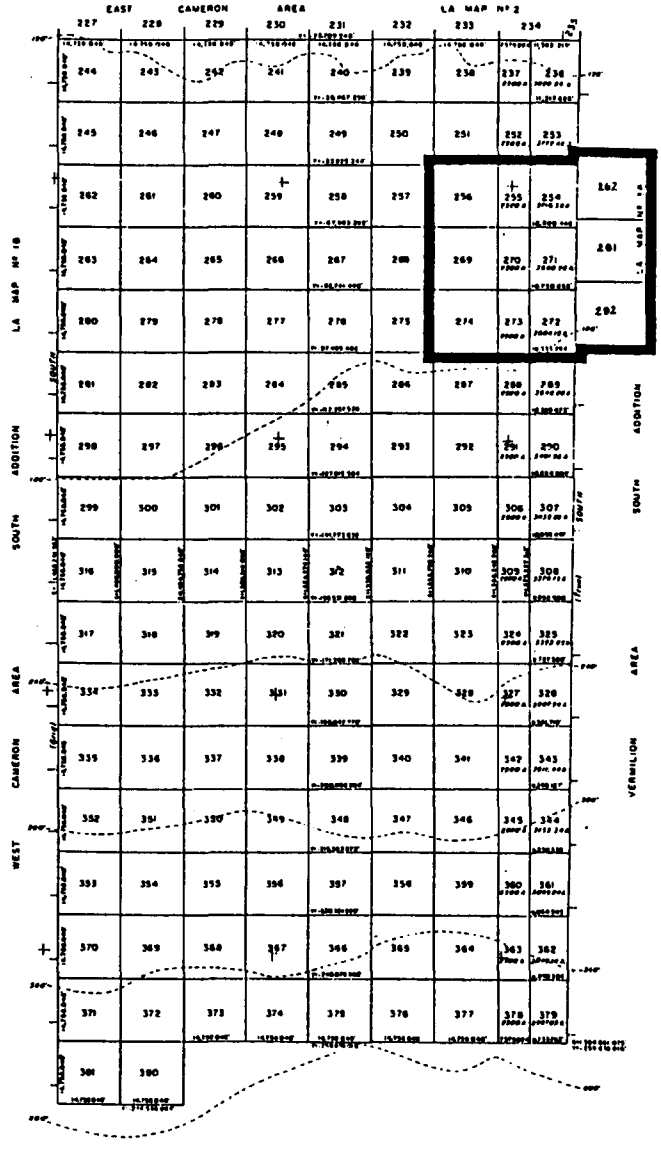
Typical method of subdivision of irregular blocks, each subdivision being an aliquot part of the total, based on mid point subdivision throughout.

This map prepared in accordance with 43 CFR 2011.2, is approved for use in leasing areas on the Outer Continental Shelf.

Director

Washington, D.C., September 8, 1959

The above CFR citation has been renumbered to 43 CFR 3300.1 as of June 15, 1978



LA MAP Nº 2A

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OUTER CONTINENTAL SHELF LEASING MAP
LOUISIANA

SHIP SHOAL AREA

Scale in Feet

All blocks are based on the Louisiana (Lambert) Plane Coordinate System, South Zone, with X origin 2,000,000 at 91°20' and Y origin 0.00 at 28°40'. The grid azimuths and coordinates of triangulation stations are as developed by the U.S.C.&G.S., and adopted by the Louisiana State Mineral Board.

Each regular block contains 5,000 acres. The areas of certain irregular blocks are as indicated.

The light broken lines indicate the approximate depth of water in feet.

Base compiled from U.S.C.&G.S. charts nos. 1274 and 1273.

This map, prepared in accordance with 43 CFR 201.3, is approved for use in leasing areas on the Outer Continental Shelf.

Director

Washington, D.C. June 8, 1954
The above CFR citation has been renumbered to 43 CFR 3301.1 as of June 13, 1970

Subdivision of blocks on Outer Continental Shelf

Typical method of subdivision of the blocks, each subdivision being an aliquot part of the total, based on mid-point subdivision throughout

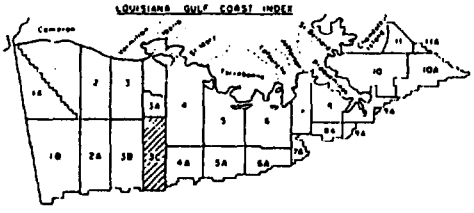
LOUISIANA GULF COAST INDEX

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OUTER CONTINENTAL SHELF LEASING MAP
LOUISIANA

SOUTH MARSH ISLAND AREA
SOUTH ADDITION

LOUISIANA GULF COAST INDEX



All blocks are based on the Louisiana (Lambert) Plane Coordinate System, South Zone, with X origin = 2,000,000 at 91° 20' and Y origin = 0.00 at 28° 40'. The grid geometry and coordinates of triangulation stations are as developed by the U.S.C.&G.S. and adopted by the Louisiana State Mineral Board.

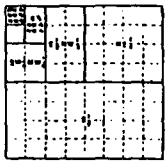
Each regular block contains 5,000 acres. The areas of the irregular blocks are as indicated.

The light broken lines indicate the approximate depth of water in feet.

Base compiled from U.S.C.&G.S. chart 418.

Scale in Feet

Subdivision of blocks on Outer Continental Shelf



Typical method of subdivision of a regular block, each subdivision being an equal part of the total, based on mid-point subdivision throughout

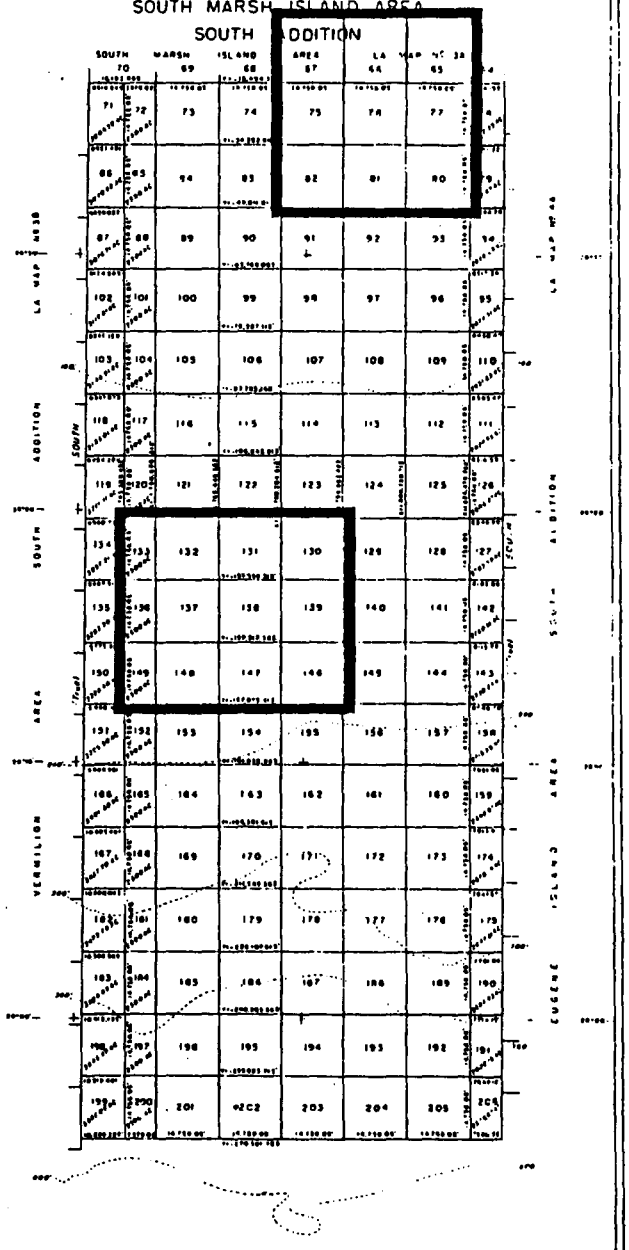
Typical method of subdivision of irregular blocks, each subdivision being an equal part of the total, based on mid-point subdivision throughout

This map, prepared in accordance with 43 CFR 2011.3, is approved for use in leasing areas on the Outer Continental Shelf.

Director

Washington, D.C., September 8 1959

The above CFR citation has been renumbered 43 CFR 3300.1 as of June 13, 1970



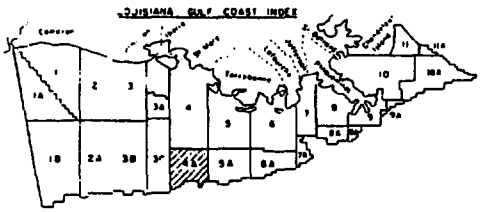
LA MAP NO 3C

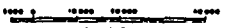
LA MAP Nº 4A

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OUTER CONTINENTAL SHELF LEASING MAP
LOUISIANA

EUGENE ISLAND AREA
SOUTH ADDITION





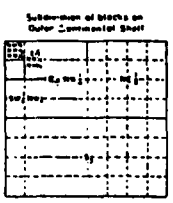
Zip blocks are based on the Louisiana (Lambert) Plane Coordinate System South Zone, with X origin = 2,000,000'or 91°20' and Y origin = 0.00' or 26°40' The grid coordinates of triangulation stations are as developed by the U.S.C.&G.S. and adopted by the Louisiana State Mineral Board.

Each regular block contains 5,000 acres. The areas of the irregular blocks are as indicated

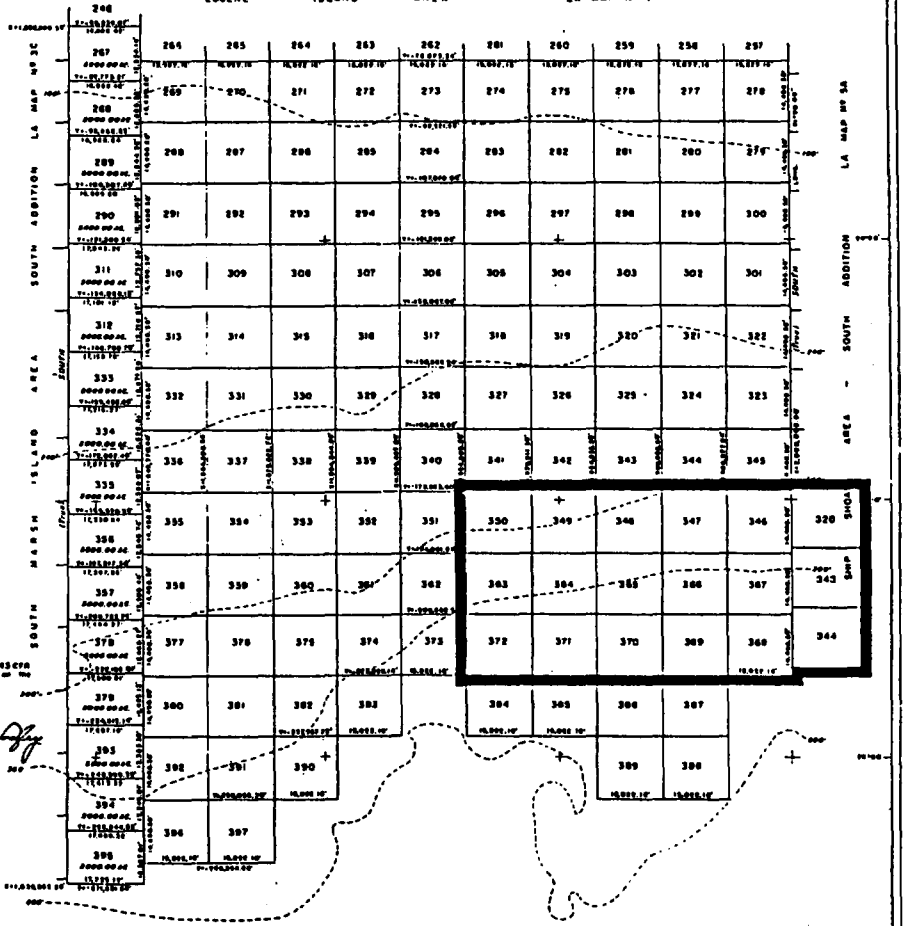
The light broken lines indicate the approximate depth of water in feet.

Base compiled from U.S.C.&G.S. chart 1110

EUGENE ISLAND AREA LA MAP Nº 4



Typical method of subdivision of a regular block with subdivision being an integer power of number 2 based on one half subdivision throughout



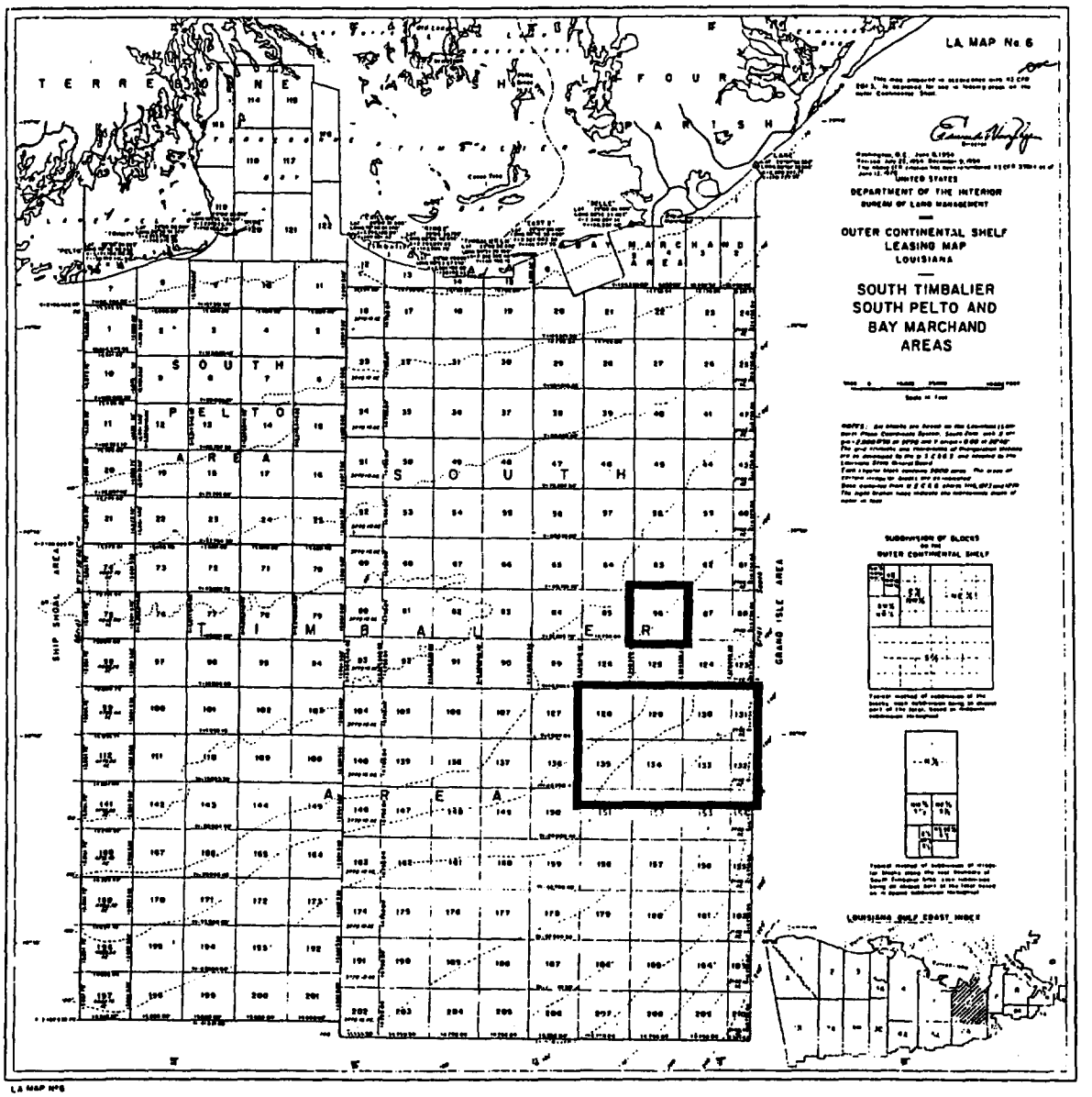
This map prepared in accordance with 43 CFR 2011.3, is therefore for use in leasing areas on the Outer Continental Shelf

Director

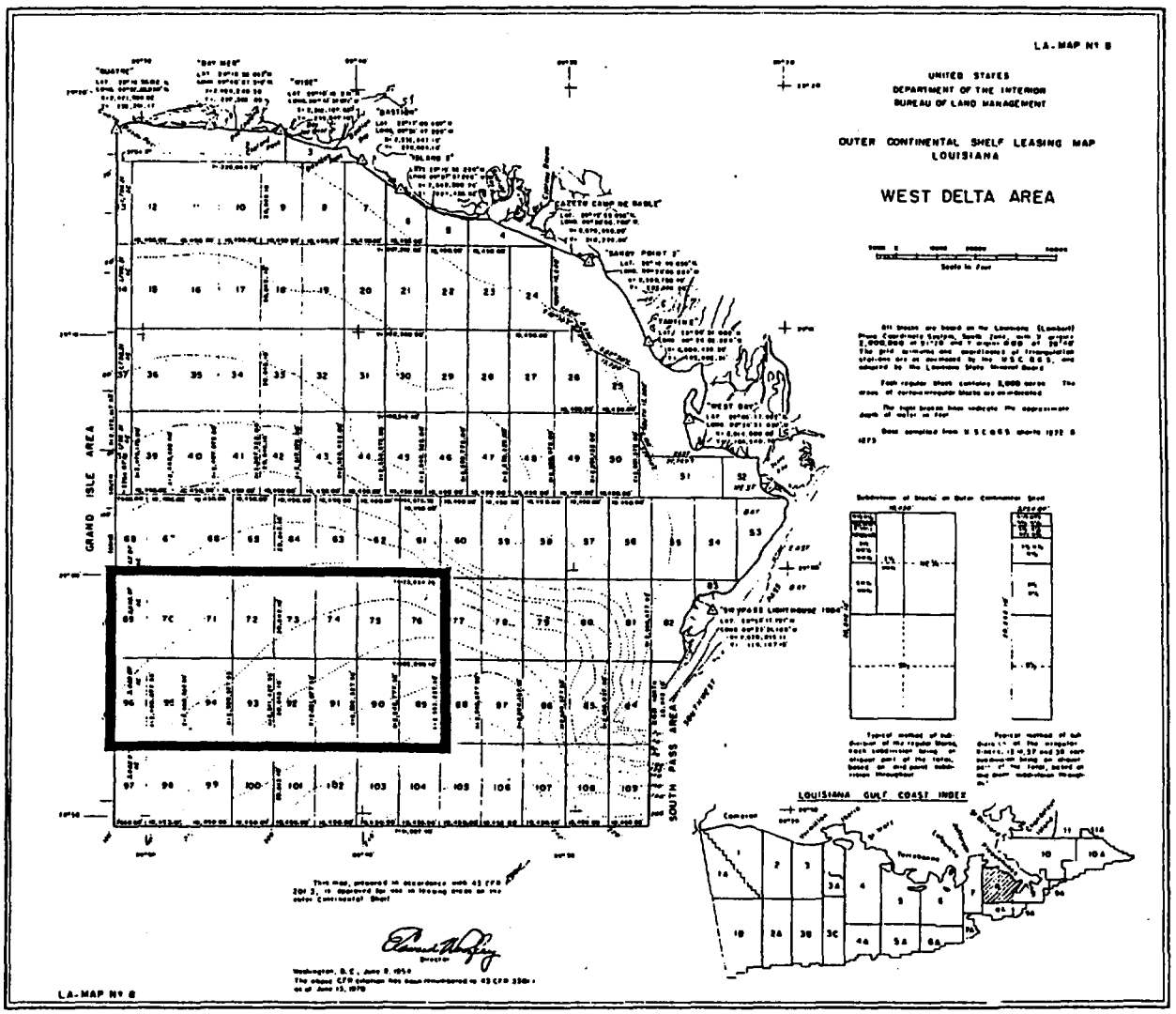
Washington, D.C., September 8, 1959

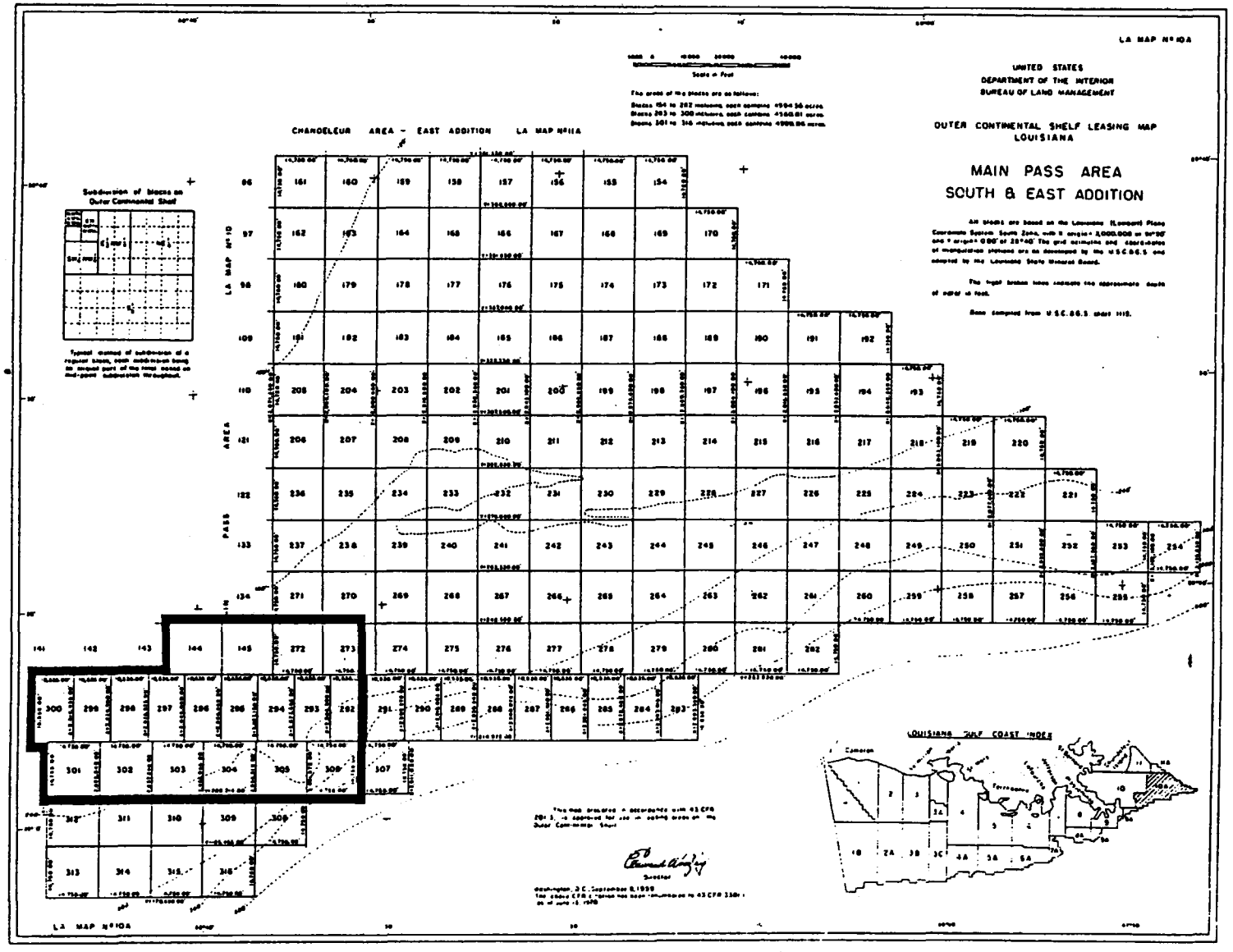
The above CFR citation has been redesignated to 43 CFR 3300, as of June 13, 1978

LA MAP Nº 4.1


LA MAP No. 6
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
OUTER CONTINENTAL SHELF
LEASING MAP
LOUISIANA
SOUTH TIMBALIER
SOUTH PELTO AND
BAY MARCHAND
AREAS
SUBDIVISION OF BLOCKS
ON THE
OUTER CONTINENTAL SHELF
LOUISIANA GULF COAST INDEX
TERREBONNE PARISH
LAFOURCHE PARISH
SOUTH PELTO AREA
SOUTH TIMBALIER AREA
BAY MARCHAND AREA
SHIP SHOAL AREA
GRAND ISLE AREA

LA MAP No 6


LA-MAP Nº 8
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
OUTER CONTINENTAL SHELF LEASING MAP
LOUISIANA
WEST DELTA AREA
GRAND ISLE AREA
SOUTH PASS AREA
LOUISIANA GULF COAST INDEX
LA-MAP Nº 8


LA MAP No 10A
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
OUTER CONTINENTAL SHELF LEASING MAP
LOUISIANA
MAIN PASS AREA
SOUTH & EAST ADDITION
CHANDELEUR AREA - EAST ADDITION LA MAP No 11A
LA MAP No 10
MAIN PASS AREA
Subdivision of blocks on Outer Continental Shelf
LOUISIANA GULF COAST INDEX
LA MAP No 10A

APPENDIX V

FEDERAL REGULATIONS FOR PERMITTING ARTIFICIAL REEFS

federal register

Thursday
November 13, 1986

Part II

Department of Defense

Corps of Engineers, Department of the Army

33 CFR Parts 320 through 330

Regulatory Programs of the Corps of Engineers; Final Rule

DEPARTMENT OF DEFENSE

Corps of Engineers, Department of the Army

33 CFR Parts 320, 321, 322, 323, 324, 325, 326, 327, 328, 329 and 330

Final Rule for Regulatory Programs of the Corps of Engineers

AGENCY: Corps of Engineers, Army Department, DOD.

ACTION: Final rule.

SUMMARY: We are hereby issuing final regulations for the regulatory program of the Corps of Engineers. These regulations consolidate earlier final, interim final, and certain proposed regulations along with numerous changes resulting from the consideration of the public comments received. The major changes include modifications that provide for more efficient and effective management of the decision-making processes, clarifications and modifications of the enforcement procedures, modifications to the nationwide permit program, revision of the permit form, and implementation of special procedures for artificial reefs as required by the National Fishing Enhancement Act of 1984.

EFFECTIVE DATE: January 12, 1987.

FOR FURTHER INFORMATION CONTACT: Mr. Sam Collinson or Mr. Bernie Goode, HQDA (DAEN-CWO-N), Washington, DC 20314-1000, (202) 272-0199.

SUPPLEMENTARY INFORMATION:

Consolidation of Corps Permit Regulations

These final regulations consolidate and complete the six following rulemaking events affecting the Corps regulatory program:

1. *Interim Final Regulations.* These regulations contained Parts 320-330 and were published (47 FR 31794) on July 22, 1982, to incorporate policy and procedural changes resulting from legislative, judicial, and administrative actions that had occurred since the previous final regulations had been published in 1977. Because it had been almost two years since we had proposed changes to the 1977 regulations, we published the 1982 regulations as "interim final" and asked for public comments. We received nearly 200 comments.

2. *Proposed Regulatory Reform Regulations.* On May 12, 1983, we published (48 FR 21466) proposed revisions to the interim final regulations to implement the May 7, 1982, directives of the Presidential Task Force on Regulatory Relief. The Task Force directed the Army to reduce uncertainty and delay, give the states more authority and responsibility, reduce conflicting and overlapping policies, expand the use of general permits, and redefine and clarify the scope of the permit program. Since these regulations proposed changes to our existing nationwide permits and the addition of two new nationwide permits, a public hearing was held in Washington, DC, on October 12, 1983, to obtain comments on these proposed changes. As a result of the public comments received, nearly 500 in response to the proposed regulations and 22 at the public hearing, we have determined that some of the proposed revisions should be adopted and some should not. We have adopted some of the provisions that were designed to clarify policies for evaluating permit applications, to revise certain permit processing procedures, to add additional conditions to existing nationwide permits, and to modify certain nationwide permit procedures. We have not adopted some of the other proposed changes, including the two proposed new nationwide permits.

3. *Settlement Agreement Final Regulations.* On October 5, 1984, we published (49 FR 39478) final regulations to implement a settlement agreement reached in a suit filed by 16 environmental organizations in December of 1982 against the Department of the Army and the Environmental Protection Agency (*NWF v. Marsh*) concerning several provisions of the July 22, 1982, interim final regulations. The court approved the settlement agreement on February 10, 1984, and on March 29, 1984, we published (49 FR 12660) the implementing proposed regulations. We received over 150 comments on these proposed regulations covering a full range of views. Those comments which were applicable to the provisions of the March 29, 1984, proposals were considered and addressed in the final regulations published on October 5, 1984. The remaining comments have been considered in the development of the final regulations we are issuing today.

In the October 5, 1984, final rule there were several new provisions relating to the 404(b)(1) guidelines. In 33 CFR 320.4(a)(1) we clarified the fact that no 404 permit can be issued unless it complies with the 404(b)(1) guidelines.

If a proposed action complies with the guidelines, a permit will be issued unless the district engineer determines that it will be contrary to the public interest. In 33 CFR 323.6(a) we stated that district engineers will deny permits for discharges which fail to comply with the 404(b)(1) guidelines, unless the economic impact on navigation and anchorage necessitates permit issuance pursuant to section 404(b)(2) of the Clean Water Act. Although no 404 permit can be issued unless compliance with the 404(b)(1) guidelines is demonstrated (i.e., compliance is a prerequisite to issuance), the 404(b)(1) evaluation is conducted simultaneously with the public interest review set forth in 33 CFR 320.4(a).

4. *Proposed Permit Form Regulations.* On May 23, 1985, we published (50 FR 21311) proposed revisions to 33 CFR Part 325 (Appendix A), which contains the standard permit form used for the issuance of Corps permits and the related provisions concerning special conditions. This proposal provided for the complete revision of the permit form and its related provisions to make them easier for permittees to understand. General permit conditions were written in plain English and greatly reduced in number; unnecessary material was deleted; and material which is informational in nature was reformatted under a "FURTHER INFORMATION" heading. We received 18 comments on this proposal.

5. *Proposed Regulations to Implement the National Fishing Enhancement Act of 1984 (NFEA).* On July 26, 1985, we published (50 FR 30479) proposed regulations to implement a portion of the Corps regulatory responsibilities pursuant to the NFEA. Specialized procedures relative to the processing of Corps permits for artificial reefs were proposed for inclusion in Parts 322 and 325. Eight organizations commented on these proposed regulations. The NFEA also authorizes the Secretary of the Army to assess a civil penalty on any person who, after notice and an opportunity for a hearing, is found to have violated any provision of a permit issued for an artificial reef. Procedures for implementing such civil penalties will be proposed at a later date. In addition, we are hereby notifying potential applicants for artificial reef permits that the procedures contained in Part 323 relating to the discharge of dredged or fill materials and those in Part 324 relating to the transportation of dredged material for the purpose of dumping in ocean waters will be used in the processing of artificial reef permits when applicable.

6. *Proposed Regulations (Portion of Part 323 and All of Part 328.* On March 20, 1986, we published (51 FR 9661) a proposed change to 33 CFR 323.2(d), previously 323.2(j), to reflect the Army's policy regarding *de minimis* or incidental soil movements occurring

during normal dredging operations and a proposed complete revision of the Corps of Engineers enforcement procedures (33 CFR Part 326). Seventeen comment letters were received on these proposed regulations. These comments and the resulting changes reflected in the final regulations for § 323.2(d) and Part 326 are discussed in detail below.

Environmental Documentation

We have determined that this action does not constitute a major Federal action significantly affecting the quality of the human environment. Appropriate environmental documentation has been prepared for all permit decisions. Environmental assessments for each of the nationwide permits previously issued or being modified today are available from the Corps of Engineers. You may obtain these assessments by writing to the address listed in this preamble. Considering the potential impacts, we have determined that none required an environmental impact statement.

Discussion of Public Comments and Changes

Part 320—General Regulatory Policies

Section 320.1(a)(6): In order to provide clarity to the public, we have added a provision to codify existing practice that when a district engineer makes certain determinations under these regulations, the public can rely on that determination as a Corps final agency action.

Section 320.3(o): The National Fishing Enchancement Act of 1984 has been added to the list of related laws in § 320.3.

Section 320.4: In the May 12, 1983, proposed rule and the March 29, 1984, proposed rule we proposed changes to §§ 320.4(a)(1)—public interest review, 320.4(b)(5)—effect on wetlands, 320.4(c)—fish and wildlife, 320.4(g)—consideration of property ownership, and 320.4(j)—other Federal, state or local requirements. Changes to these paragraphs were adopted in the October 5, 1984, final rule. The various comments relating to these proposals have been fully discussed in the October 5, 1984 final rule (49 FR 39478).

Section 320.4(a)(3): Many commenters objected, some strongly, to the deletion in the October 5, 1984, final regulations of the term "great weight" from § 320.4(c), the paragraph concerning the consideration of opinions expressed by fish and wildlife agencies. Many stated that fish and wildlife agencies had the expertise and knowledge to know the impact of work in wetlands; therefore, their opinions should be given strong consideration. Some commenters supported removal of the "great weight" statement expecting less value would be given fish and wildlife agency views. It is not our intention to reduce or discount the value or expertise of fish and wildlife agency comments or those of any other experts in any field. Comments also varied from support of to objection to the deletion of the "great weight" statement from the other policy statements such as energy and navigation in § 320.4. Therefore, we added a new paragraph (a)(3) to clarify our position on how we consider comments from the public, including those from persons or agencies with special expertise on particular factors in the public interest review.

Section 320.4(b)(1): One commenter objected to the placement of the word "some" in this paragraph as a rewrite of E.O. 11990 which places no qualifier on "wetlands" indicating that all wetlands are vital. We have found through experience in administering the Section 404 permit program that wetlands vary in value. While some are vital areas, others have very little value; however, most are important. We recognize that "some wetlands are vital . . ." is being read by some people as "Some wetlands are important . . ." This was not our intent. To avoid this confusion we have revised this paragraph by deleting "some wetlands are vital areas . . ." and indicating that "most" wetlands are important.

Section 320.4(b)(2)(vi): We have included in the list of important wetlands those wetlands that are ground water discharge areas that maintain minimum baseflows important to aquatic resources. Scientific research now indicates that wetlands more often serve as discharge areas than recharge areas. Those discharge areas which are necessary to maintain a minimum baseflow necessary for the continued existence of aquatic plants and animals are recognized as important.

Section 320.4(b)(2)(viii): We have included in the list of important wetlands those which are unique in nature or scarce in quantity to the region or local area.

Section 320.4(d): We have revised this paragraph to clarify that impacts from both point source and non-point source pollution are considered in the Corps public interest review. However, section 208 of the Clean Water Act provides for control of non-point sources of pollution by the states.

Section 320.4(j)(1): Clarifying language has been added to this section to eliminate confusion regarding denial procedures when another Federal, state, and/or local authorization or certification has been denied.

Section 320.4(p): Some commenters felt that environmental considerations should take precedence over other factors. Other commenters believed that guidance should be given as to who determines whether there are environmental benefits to a project. Many commenters indicated that the regulation does not define the possible range of environmental benefits that will be considered. Environmental benefits are determined by the district engineer and the district staff based on responses received from the general public, special interest groups, other government agencies and staff evaluation of the proposed activity. Defining the possible range of environmental benefits would be almost impossible to cover in the rules in sufficient detail, since circumstances vary considerably for each permit application. After considering all the comments we have decided to make the change as proposed on May 12, 1983.

Section 320.4(q): Some commenters believed that this rule would distort review criteria by inserting inappropriate economic assumptions and minimizing environmental criteria. Some commenters suggested that the Corps revise this paragraph to include a provision to challenge an applicant's economic data and that of governmental agencies as well. Other commenters believe that economic factors do not belong in these regulations since the intent of the Clean Water Act is: "to restore and maintain the chemical, physical, and biological integrity of the nation's waters"; therefore, any regulation under the CWA should have, as its primary objective, provisions which give environmental factors the greatest weight. They were concerned that this part may be applied to allow economic benefits to offset negative environmental effects. Some commenters, however, believed that the Corps should assume that projects proposed by state and local governmental interests and private industry are economically viable and are needed in the marketplace. They also believed that the Corps and other governmental agencies should not engage in detailed economic evaluations. Economics has been included in the Corps list of public interest factors since 1970. However, there has never been a specific policy on economics in the regulations. The Corps generally accepts an applicant's determination that a proposed activity is needed and will be economically viable, but makes its own decision on whether

a project should occur in waters of the U.S. The district engineer may determine that the impacts of a proposed project on the public interest may require more than a cursory evaluation of the need for the project. The depth of the evaluation would depend on the significance of the impacts and in unusual circumstances could include an independent economic analysis. The Corps will balance the economic need for a project along with other factors of the public interest. Accordingly, § 320.4(q) has been modified from the proposed rule to provide that the district engineer may make an independent review of the need for a project from the perspective of the public interest.

Section 320.4(r): Many comments were offered as to the intent, scope and implementation of the proposed mitigation policy. Comments were almost equally divided between those who felt that the policy should be expanded and those that felt it should be more limited. The issues that were raised include: mitigation should not be used to outweigh negative public interest factors; mitigation should not be integrated into the public interest review; mitigation should be on-site to the maximum extent practicable; off-site mitigation extends the range of concerns beyond those required by Section 404. A wide range of views were expressed on our proposed mitigation policy, but virtually all commenters expressed need for a policy. The Corps has been requiring mitigation as permit conditions for many years based on our regulations and the 404(b)(1) guidelines. Because of the apparent confusion on this matter, we have decided to clarify our existing policy at 320.4(r).

The concept of "mitigation" is many-faceted, as reflected in the definition provided in the Council on (Environmental Quality (CEQ) NEPA regulations at 40 CFR 1508.20. Viewing "mitigation" in its broadest sense, practically any permit condition or best management practice designed to avoid or reduce adverse effects could be considered "mitigation." Mitigation considerations occur throughout the permit application review process and are conducted in consultation with state and Federal agencies responsible for fish and wildlife resources. District engineers will normally discuss modifications to minimize project impacts with applicants at pre-application meetings (held for large and potentially controversial projects) and during the processing of applications. As a result of these discussions, district engineers may condition permits to require minor project modifications, even though that project may satisfy all legal requirements and the public interest review test without those modifications.

For applications involving Section 404 authority, mitigation considerations are required as part of the Section 404(b)(1) guidelines analysis; permit conditions requiring mitigation must be added when necessary to ensure that a project complies with the guidelines. To emphasize this, we have included a footnote to § 320.4(r) regarding mitigation requirements for Section 404, Clean Water Act, permit actions. Some types of mitigation measures are enumerated in Subpart H of the guidelines. Other laws such as the Endangered Species Act may also lead to mitigation requirements in order to ensure that the proposal complies with the law. In addition to the mitigation developed in preapplication consultations and through application of the 404(b)(1) guidelines and other laws, these regulations provide for further mitigation should the public interest review so indicate.

One form of mitigation is "compensatory mitigation," defined at 40 CFR 1508.20(e) to mean "compensating for the impact by replacing or providing substitute resources or environments." Federal and state natural resource agencies sometimes ask the Corps to require permit applicants to compensate for wetlands to be destroyed by permitted activities. Such compensatory mitigation might be provided by constructing or enhancing a wetland; by dedicating wetland acreage for public use; or by contributing to the construction, enhancement, acquisition or preservation of such "mitigation lands." Compensatory mitigation of this type is often referred to as "off-site" mitigation. However, it can be provided either on-site or off-site. Such mitigation can be required by permit conditions only in compliance with 33 CFR 325.4, and specifically with 33 CFR 325.4(a)(3). In addition to those restrictions, the Corps has for many years declined to use, and does now decline to use, the public interest review to require permit applicants to provide compensatory mitigation unless that mitigation is required to ensure that an applicant's proposed activity is not contrary to the public interest. If an applicant refuses to provide compensatory mitigation which the district engineer determines to be necessary to ensure that the proposed activity is not contrary to the public interest, the permit must be denied. If an applicant voluntarily offers to provide compensatory mitigation in excess of the amount needed to find that the project is not contrary to the public interest, the district engineer can incorporate a permit condition to implement that mitigation at the applicant's request.

Part 321—Permits for Dams and Dikes in Navigable Waters of the United States

The Secretary of the Army delegated his authority under Section 9 of the Rivers and Harbors Act of 1899, 33 U.S.C. 401 to the Assistant Secretary of the Army (Civil Works). The Assistant Secretary in turn delegated his authority under Section 9 for structures in intrastate navigable waters of the United States to the Chief of Engineers and his authorized representative. District engineers have been authorized in 33 CFR 325.8 to issue or deny permits for dams or dikes in intrastate navigable waters of the United States" under Section 9 of the Rivers and Harbors Act of 1899. This section of the regulation and §§ 325.5(d) and 325.8(a) have been revised to reflect this delegation.

Part 322—Permits for Structures or Work In or Affecting Navigable Waters of the United States

Section 322.2(a): We have revised the term "navigable waters of the United States" to reference 33 CFR Part 329 since it and all other terms relating to the geographic scope of the Section 10 program are defined at 33 CFR Part 329.

Section 322.2(b): Commenters on the definition of structures indicated that several terms needed further amplification. It was suggested that the term "boom" be defined to exclude a float boom, as would be used in front of a spillway. The term was not redefined because those dams constructed in Section 10 waters do require a permit for a float boom. However, most dams in the United States are constructed in non-Section 10 waters and do not require a permit for a boom (floating or otherwise) unless it involves the discharge of dredged or fill material. It was suggested that the term "obstacle or obstruction" be modified to reinstitute the language from the July 19, 1977, final regulations. We have adopted the suggestion which will clarify our intent that obstacles or obstructions, whether permanent or not, do require a permit; it will also assist in jurisdictional decisions on enforcement. It was suggested that "boat docks" and "boat ramps" be included in the list of structures, since these are frequently proposed structures. These have been included. It was suggested that the term "artificial gravel island" be added, as

Congress, by Section 4(e) of the Outer Continental Shelf Lands Act of 1953, extended the regulatory program to the Outer Continental Shelf, and specifically cited artificial islands as falling under Section 10 jurisdiction. This type of structure is also constructed on state lands within the territorial seas. Accordingly, artificial islands have been included.

Section 322.2(c): Two commenters discussed the definition of "work"; one stated that it was too broad and the other that it should be expanded. The present definition of the term "work" has remained unchanged for many years and has achieved general acceptance by the regulators and those requiring a permit. The present language has been retained.

Sections 322.2(f)(2) and 323.2(n)(2): Both of these sections are concerned with the definition of general permits. Several commenters expressed support for the additional criteria contained in the May 12, 1983 proposed rule. Other commenters expressed concern that the proposed criteria were illegal. Some commenters believed that the proposal would amount to a delegation of the Section 404 program to the states, and that this is not a prerogative of the Corps of Engineers. Many commenters expressed serious concern that state programs were not comprehensive enough to properly represent the public interest review. Still others objected to the proposal because there were no assurances that the state approved projects themselves were "similar in nature" or would have "minimal adverse environmental effects"; those objections extended to the proposal to assess the impacts of the differences in the State/Corps decisions. Some commenters suggested that an automatic "kick-out" provision, whereby concerned agencies could cause the Corps to require an individual application on a case-by-case basis, may provide sufficient safeguards for the proposal to go forward. Some commenters suggested that a preferred approach to reducing duplication would be for the Corps to express, in its regulations, direction for its districts to vigorously pursue joint processing, permit consolidation, pre-application consultation, joint applications, joint public notices and special area management planning. This change was proposed in 1983. At that time we believed that additional flexibility in the types of general permits which could be developed was necessary to effectively administer the regulatory program. Our experience since then has shown that the existing definitions of general permit at both of these sections is flexible enough to develop satisfactory general permits. Therefore we have decided not to adopt this proposed change. Because several definitions previously found in Part 323 have been moved to Part 328, § 323.2(n) has been redesignated § 323.2(h).

Section 322.2(g): This section adds the definition of the term "artificial reefs" from the National Fishing Enhancement Act and clarifies what activities or structures the term does not include. Two commenters suggested modifications, or clarifications, to this definition to ensure that old oil and gas production platforms can be considered for use as artificial reefs. We agree with their suggestion. The definition would include the use of some production platforms, either abandoned in place or relocated, as artificial reefs as long as they are evaluated and permitted as meeting the standards of Section 203 of the Act.

Section 322.2(h): This section was proposed to add the definition of the term "outer continental shelf" from the Outer Continental Shelf Lands Act (OCSLA). Two commenters suggested that the territorial sea off the Gulf Coast of Florida and Texas is greater than three nautical miles from the coast line. We have determined that this is not the case, and have decided not to include a definition of the term "outer continental shelf" in these regulations and to rely instead on the definition of this term that is already in the OCSLA.

Sections 322.3(a) and 322.4: Activities which do not require a permit have been moved from § 322.3 and included in § 322.4. The limitation of the applicability of Section 154 of the Water Resource Development Act of 1976 in certain waterbodies has been deleted because no such limitation exists in that Act.

Section 322.5(b): This section addresses the policies and procedures for processing artificial reef applications. One commenter suggested that the opportunity for a general permit should not be precluded by this section. A general permit for artificial reefs is not precluded by this regulation change. Furthermore, the opportunity for the issuance of general permits may be enhanced with the implementation of the National Artificial Reef Plan by the Department of Commerce.

Section 322.5(b)(1): This section cites the standards established under section 203 of the National Fishing Enhancement Act. These standards are to be met in the siting and construction, and subsequent monitoring and managing, of artificial reefs. Two commenters insisted that these should be called goals or objectives, and several commenters said that more specific guidelines or criteria are needed to evaluate proposed artificial reefs against the standards or goals. Section 204 of the Act states that the Department of Commerce will develop a National Artificial Reef Plan which will be consistent with the standards established under Section 203, and will include criteria relating to siting, constructing, monitoring, and managing artificial reefs. Specification of such criteria in these rules would be inappropriate in view of the intent of Congress to have the Department of Commerce perform this function. The National Marine Fisheries Service (NMFS), acting for the Department of Commerce, has consulted with us in developing the National Artificial Reef Plan; and we will continue to consult with them to ensure permits are issued consistent with the criteria established in that plan. The Department of Commerce announced the availability of the National Artificial Reef Plan in the Federal Register on November 14, 1985.

The U.S. Coast Guard was particularly concerned that these rules be more specific with regard to information and criteria that will be used to ensure navigation safety and the prevention of navigational obstructions. Section 204 of the National Fishing Enhancement Act requires that the Department of Commerce consult the U.S. Coast Guard in the development of the National Artificial Reef Plan regarding the criteria to be established in the plan. One of the standards with which the criteria must be consistent is the prevention of unreasonable obstructions to navigation. In addition, the district engineer shall consult with any governmental agency or interested party, as appropriate, in issuing permits for artificial reefs. This includes pre-application consultation with the U.S. Coast Guard, and placing conditions in permits recommended by the U.S. Coast Guard to ensure navigational safety.

Section 322.5(b) (2) and (3): These sections state that the district engineer will consider the National Artificial Reef Plan, and that he will consult with governmental agencies and interested parties, as necessary, in evaluating a permit application. Two commenters supported this coordination. The NMFS requested notification of decisions to issue permits which either deviate from or comply with the plan. Paragraph (b)(2) requires the district engineer to notify the Department of Commerce of any need to deviate from the plan. In addition, the NMFS receives a monthly list of permit applications on which the

district engineer has taken final action. This should be sufficient notification for those permits which do not deviate from the plan.

Section 322.5(b)(4): Although some commenters strongly supported this section describing the liability of permittees authorized to build artificial reefs, several expressed concern that this provision was not clearly written or required specific criteria to assist the district engineer in determining financial liability. This paragraph has been rewritten to correspond closely with the wording in the National Fishing Enhancement Act, and examples of ways an applicant can demonstrate financial responsibility have been added.

Section 322.5(g): We have revised this paragraph on canals and other artificial waterways by eliminating procedural-only provisions which are redundant with requirements in 33 CFR Parts 325 and 326.

Section 322.5(l): A new section on fairways and anchorage areas has been added. This section was formerly found at 33 CFR 209.135. We are moving this provision to consolidate all of the permit regulations on structures to this part. We will delete 33 CFR 209.135 by separate notice in the Federal Register.

Part 323—Permits for Discharges of Dredged or Fill Material Into Waters of the United States

Section 323.2: Several commenters supported moving the definitions relating to waters of the United States to a separate paragraph. As proposed on May 12, 1983, we have moved the term "waters of the United States" and all other terms related to the geographic scope of jurisdiction of Section 404 of the CWA to 33 CFR Part 328 which is titled "Definition of the Waters of the United States." We believe that, by setting these definitions apart in a separate and distinct Part of the regulation and including in that Part all of the definitions of terms associated with the scope of the Section 404 permit program, we are better able to clarify the scope of our jurisdiction. We have not changed any existing definitions nor added any definitions proposed on May 12, 1983. Comments related to these definitions are addressed in Part 328 below.

We have not changed the definition of fill material at § 323.2(e). However, the Corps has entered into a Memorandum of Agreement with the Environmental Protection Agency to better identify the difference between section 402 and section 404 discharges under the Clean Water Act.

Section 323.2(d)—Previously 323.2(j): The proposed modification of this paragraph states that "*de minimis* or incidental soil movement occurring during normal dredging operations" is not a "discharge of dredged material," the term defined by this paragraph.

Eight commenters raised concerns relating to this provision. Most of these supported the regulation of "*de minimis* or incidental soil movement occurring during normal dredging operations" in varying degrees. Two specifically expressed a belief that the fallback from dredging operations constituted a discharge within the intent of section 404 of the Clean Water Act. One of these stated that the proposed provision was contrary to a binding decision by the U. S. District Court for the Northern District of Ohio in *Reid* v. *Marsh*, No. C-81-600 (N. D. Ohio, 1984). Another commenter objected to the provision on the basis that it would force states that perceived a need to regulate dredging operations to regulate such activities under their National Pollutant Discharge Elimination System authority. The recommendations of the above group of commenters included the regulation of dredging activities on an individual or general permit basis or on a selective basis that would take into account the scopes and anticipated effects of the projects involved. Two commenters expressed concern over the fact that discharge activities such as the sidecasting of dredged material might be considered "soil movement" that was "incidental" to a "normal dredging operation." The final concern raised related to the list of dredging equipment cited as examples. This list was seen, alternatively, as too limited or as not limited enough in reference to the types of equipment that may be used in a "normal dredging operation." Four commenters supported the proposed provision as a reasonable interpretation of the section 404 authority of the Corps.

Section 404 clearly directs the Corps to regulate the *discharge* of dredged material, not the dredging itself. Dredging operations cannot be performed without some fallback. However, if we were to define this fallback as a "discharge of dredged material," we would, in effect, be adding the regulation of dredging to section 404 which we do not believe was the intent of Congress. We have consistently provided guidance to our field offices since 1977 that incidental fallback is not an activity regulated under section 404. The purpose of dredging is to remove material from the water, not to discharge material into the water. Therefore, the fallback in a "normal dredging operation" is incidental to the dredging operation and *de minimis* when compared to the overall quantities removed. If there are tests involved, we believe they should relate to the dredging operator's intent and the result of his dredging operations. If the intent is to remove material from the water and the results support this intent, then the activity involved must be considered as a "normal dredging operation" that is not subject to section 404.

Based on the above discussion, we have not adopted any of the recommendations relating to the revision or deletion of this provision for the purpose of bringing about the regulation of "normal dredging operations" in varying degrees. We have replaced the "or" between the words "*de minimis*" and "incidental" with a comma to more clearly reflect the fact that the incidental fallback from a "normal dredging operation" is considered to be *de minimis* when compared to the overall quantities removed. In addition, we have deleted the examples of dredging equipment at the end of the proposed provision to make it clear that *de minimis* or incidental soil movement occurring during *any* "normal dredging operation" is not a "discharge of dredged material." However, we wish to also make it clear that the provision applies only to the incidental fallback occurring during "normal dredging operations" and not to the disposal of the dredged material involved. If this material is disposed of in a water of the United States, by sidecasting or by other means, this disposal will be considered to be a "discharge of dredged material" and will be subject to regulation under section 404.

Section 323.4: We have made some minor corrections to this section to be consistent with EPA's permit exemption regulations at 40 CFR Part 233.

Part 324—Ocean Disposal

Section 324.4(c): The language of this section on the EPA review process has been rewritten to clarify the procedures the district engineer will follow when the Regional Administrator advises that a proposed dumping activity does not comply with the criteria established pursuant to section 102(a) of the Marine Protection, Research and Sanctuaries Act (MPRSA), or the restrictions established pursuant to section 102(c) thereof, in accordance with the provisions of 40 CFR 225.2(b).

Part 325—Permit Processing

Several minor changes have been made in this part. These changes involve requesting additional information from

an applicant, providing for a reasonable comment period, combining permit documentation, and documenting issues of national importance.

Section 325.1(b): This section has been rewritten to clarify the pre-application consultation process for major permit applications. No significant changes have been made in the content of this section.

Section 325.1(d)(1): One commenter on this content of applications paragraph asked that where, through experience, it has been found that specific items of additional information are routinely necessary for permit review, the district engineer should be allowed to develop supplemental information forms. Another observed that restricting production of local forms may inhibit joint permit application processes. If it becomes necessary to routinely request additional information, the Corps can change the application form, but that must be done at Corps headquarters with the approval of the Office of Management and Budget. This change does not place any additional restrictions on developing local forms. As is now the case, local forms may be developed for joint processing with a Federal or state agency.

Section 325.1(d)(8): This is a new section requiring an applicant to include provisions for siting, construction, monitoring and managing the artificial reef as part of his application for a permit. One commenter suggested that the criteria for accomplishing these activities must be completed in the National Artificial Reef Plan before establishment of such reefs can be encouraged. Another recommended that the regulation describe more specifically the information to be supplied by an applicant with regard to monitoring and maintaining an artificial reef. The plan includes general mechanisms and methodologies for monitoring the compliance of reefs with permit requirements, and managing the use of those reefs. It can be used as a guide for the information to be supplied by the permit applicant. Specific conditions for monitoring and managing, as well as for maintaining artificial reefs generally need to be site-specific and should be developed during permit processing.

The U.S. Coast Guard requested that they be provided copies of permit applications for artificial reefs, and that a permittee be required to notify the Coast Guard District Commander when reef construction begins and when it is completed so timely information can be included in notices to mariners. The district engineer may elect to consult with the Coast Guard, when appropriate, during the pre-application phase of the permit process. At any rate, the Coast Guard will receive public notices of permit applications, and may make recommendations to ensure navigational safety on a case-by-case basis. Appropriate conditions can be added to permits to provide for such safety.

Section 325.1(e): Several commenters expressed concern with language changes requiring only additional information "essential to complete an evaluation" rather than the former requirement for information to "assist in evaluation of the application." They felt this change would reduce the data base on which decisions would be made. They indicated further that without necessary additional information, district engineers would not be able to make a reasonable decision, the public's ability to provide meaningful comments would be limited, and resource agencies would have to spend more time contacting the applicant and gathering information. They felt this could increase delays rather than limiting them. Several commenters asked that the regulations be altered to specifically require submission of information necessary for a 404(b)(1) evaluation. Similar concerns were expressed with the change stating that detailed engineering plans and specifications would not be required for a permit application. Commenters advised that without adequate plans or the ability to routinely require supplemental information it may be impossible to insure compliance with applicable water quality criteria or make reasonable permit decisions. Other commenters wanted further restrictions placed on the district engineer's ability to request additional information. Suggestions included altering the regulations to specify the type, need for, and level of detail which could be requested, and requiring the district engineer to prepare an analysis of costs and benefits of such information. Some commenters objected to requirements for providing information on project alternatives and on the source and composition of dredged or fill material.

This paragraph has been changed as proposed. The intent of this change was to assure that information necessary to make a decision would be obtained, while requests for non-essential information and delays associated with such requests would be limited.

Section 325.2(a)(6): The new requirement to document district engineer decisions contrary to state and local decisions was adopted essentially as proposed. The reference to state or local decisions in the middle of this paragraph incorrectly did not reference § 320.4(j)(4) in addition to § 320.4(j)(2). The adopted paragraph references state and local decisions in both of these paragraphs.

Section 325.2(b)(1)(ii): The May 12, 1983, proposed regulations sought to speed up the process by reducing the standard 60 day comment/waiver period to 30 days for state water quality certifications. Commenters on this paragraph offered a complete spectrum of views from strong support for the proposed changes to strong opposition to the proposal. Comments within this spectrum included opinions that: states must have 60 days; certification time should be the same as allowed by EPA (i.e. 6 months); the proposal is illegal; it conflicts with some state water quality certification regulations and procedures; and it would reduce state and public input to the decision-making process. Most states objected to this reduction with many citing established water quality certification procedures required by statute and/or regulations which require notice to the public (normally 30 days) and which allow requests for public hearings which cannot be completed within the 30-day period. We have, therefore, retained the 60 day period in the July 22, 1982, regulations. Some Corps districts have developed formal or informal agreements with the states, which identify procedures and time limits for submittal of water quality certifications and waivers. Where these are in effect, problems associated with certifications are minimized.

Many commenters objected to the May 12, 1983, proposal to delete from the July 22, 1982, regulations the statement, "The request for certification must be made in accordance with the regulations of the certifying agency." Deleting this statement will not delete the requirement that valid requests for certification must be made in accordance with State laws. However, we have found that, on a case-by-case basis in some states, the state certifying agency and the district engineer have found it beneficial to have some flexibility to determine what constitutes a valid request. Furthermore, we believe that the state has the responsibility to determine if it has received a valid request. If this statement were retained in the Corps regulation, it would require the Corps to determine if a request has been submitted in accordance with state law. To avoid this problem, we have decided to eliminate this statement.

Section 325.2(d)(2): Numerous commenters expressed concern with comment periods of less than 30 days. They were concerned that, in order to expedite processing times, 15 day

APPENDIX VI

PERMIT APPLICATION PROCEDURES PUBLISHED IN THE NATIONAL ARTIFICIAL REEF PLAN

THE PERMIT APPLICATION

General

The application form used to apply for a permit is Engineer Form 4345, *Application for a Department of the Army Permit.* You can obtain the application from one of the Corps of Engineers district regulatory offices listed in the back of this pamphlet. Some offices may use a slightly modified form for joint processing with a state agency; however, the required information is basically the same. It is important that you provide complete information in the requested format. If incomplete information is provided, processing of your application will be delayed. This information will be used to determine the appropriate form of authorization, and to evaluate your proposal. Some categories of activities have been previously authorized by nationwide or regional permits, and no further Corps approvals are required. Others may qualify for abbreviated permit processing, with authorizations in the form of letters of permission, in which a permit decision can usually be reached in less than 30 days. For other activities, a Public Notice may be required to notify Federal, state, and local agencies, adjacent property owners, and the general public of the proposal to allow an opportunity for review and comment or to request a public hearing. Most applications involving Public Notices are completed within four months and many are completed within 60 days.

The district engineer will begin to process your application immediately upon receipt of all required information. You will be sent an acknowledgement of its receipt and the application number assigned to your file. You should refer to this number when inquiring about your application. Your proposal will be reviewed, balancing the need and expected benefits against the probable impacts of the work, taking into consideration all comments received and other relevant factors. This process is called the *public interest review.* The Corps goal is to reach a decision regarding permit issuance or denial within 60 days of receipt of a complete application. However, some complex activities, issues, or requirements of law may prevent the district engineer from meeting this goal.

For any specific information on the evaluation process, filling out the application forms, or the status of your application, you should contact the regulatory branch of the Corps of Engineers district office which has jurisdiction over the area where you plan to do the work.

Typical Processing Procedure for a Standard Individual Permit

1. Preapplication consultation (optional)
2. Applicant submits ENG Form 4345 to district regulatory office*
3. Application received and assigned identification number
4. Public notice issued (within 15 days of receiving all information)
5. 15 to 30 day comment period depending upon nature of activity
6. Proposal is reviewed** by Corps and:
   - Public
   - Special interest groups
   - Local agencies
   - State agencies
   - Federal agencies
7. Corps considers all comments
8. Other federal agencies consulted, if appropriate
9. District engineer may ask applicant to provide additional information
10. Public hearing held, if needed
11. District engineer makes decision
12. Permit issued
    or
    Permit denied and applicant advised of reason

A local variation, often a joint federal-state application form may be submitted.

***Review period may be extended if applicant fails to submit information or due to requirements of certain laws.*

Evaluation Factors

The decision whether to grant or deny a permit is based on a public interest review of the probable impact of the proposed activity and its intended use. Benefits and detriments are balanced by considering effects on items such as:

conservation
economics
aesthetics
general environmental concerns
wetlands
cultural values
fish and wildlife values
flood hazards
floodplain values
food and fiber production
navigation
shore erosion and accretion
recreation
water supply and conservation
water quality
energy needs
safety
needs and welfare of the people
considerations of private ownership

The following general criteria will be considered in the evaluation of every application:

- ☐ the relative extent of the public and private need for the proposed activity;
- ☐ the practicability of using reasonable alternative locations and methods to accomplish the objective of the proposed activity; and
- ☐ the extent and permanence of the beneficial and/or detrimental effects which the proposed activity is likely to have on the public and private uses to which the area is suited.

Section 404(b) (1) of the Clean Water Act

If your project involves the discharge of dredged or fill material, it will be necessary for the Corps to evaluate your proposed activity under the Section 404(b)(1) guidelines prepared by the Environmental Protection Agency. The guidelines restrict discharges into aquatic areas where less environmentally damaging, practicable alternatives exist.

Forms and Permits

The following forms apply to the permit process:

Application

The form that you will need to initiate the review process is ENG Form 4345 or a joint Federal-state application that may be available in your state. The appropriate form may be obtained from the district regulatory office which has jurisdiction in the area where your proposed project is located.

Individual Permits

An individual permit may be issued as either ENG Form 1721, the standard permit, or as a Letter of Permission.

- ☐ A standard permit is one processed through the typical review procedures, (see page 7) which include public notice, opportunity for a public hearing, and receipt of comments. It is issued following a case-by-case evaluation of a specific activity.
- ☐ If work is minor or routine with minimum impacts and objections are unlikely, then it may qualify for a Letter of Permission (LOP). An LOP can be issued much more quickly than a standard permit since an individual public notice is not required. The District Engineer will notify you if your proposed activity qualifies for an LOP.

General Permits

In many cases the formal processing of a permit application is not required because of general permits already issued to the public at large by the Corps of Engineers. These are issued on a regional and nationwide basis.

Separate applications may not be required for activities authorized by a general permit; nevertheless, reporting may be required. For specific information on general permits, contact a district regulatory office.

ENG Form 4336

The third form, ENG Form 4336, is used to assist with surveillance for unauthorized activities. The form, which contains a description of authorized work, should be posted at the site of an authorized activity. If the Corps decides it is appropriate for you to post this form, it will be furnished to you when you receive your permit.

Fees. Fees are required for most permits. $10.00 will be charged for a permit for a non-commercial activity; $100.00 will be charged for a permit for a commercial or industrial activity. The district engineer will make the final decision as to the amount of the fee. Do not send a fee when you submit an application. When the Corps issues a permit, you will be notified and asked to submit the required fee payable to the Treasurer of the United States. No fees are charged for transferring a permit from one property owner to another, for Letters of Permission, or for any activities authorized by a general permit or for permits to governmental agencies.

Instructions for Preparing an Application

The instructions given below, together with the sample application and drawings, should help in completing the required application form. If you have additional questions, do not hesitate to contact the district regulatory office.

Block Number 1. Application Number. Leave this block blank. When your completed application is received, it will be assigned a number for identification. You will be notified of the number in an acknowledgement letter. Please refer to this number in any correspondence or inquiry concerning your application.

Block 2. Name and address of applicant(s). Fill in name, mailing address, and telephone number(s) for all applicants. The telephone number(s) should be a number where you can be reached during business hours. If space is needed for additional names, attach a sheet of white, 8½ × 11 inch paper labeled "Block 2 Continued."

Block 3. Name, address and title of authorized agent. It is not necessary to have an agent represent you; however, if you do, fill in the agent's name, address, title and telephone number(s). If your agent is submitting and signing the application, you must fill out and sign the Statement of Authorization in Block 3.

Block 4. Detailed description of proposed activity. The written description and the drawings are the most important parts of the application. If there is not enough space in Block 4, (a), (b) or (c) attach additional sheet(s) of white, 8½ × 11 inch paper labeled "Block 4 Continued."

a. **Activity.** Describe the overall activity. Give the approximate dimensions of structures, fills, excavations (lengths, widths, heights or depths).

b. **Purpose.** Describe the purpose, need and intended use (public, private, commercial, or other use) of the proposed activity. Include a description of related facilities, if any, to be constructed on adjacent land. Give the date you plan to begin work on the activity and the date work is expected to be completed.

c. **Discharge of Dredged or Fill Material.** If the activity will involve the discharge of dredged or fill material, describe the type (rock, sand, dirt, rubble, etc.), quantity (in cubic yards), and mode of transportation to the discharge site.

Block 5. Names and addresses of adjoining property owners, lessees, etc. whose property adjoins the waterbody. List complete names, addresses and zip codes of adjacent property owners (both public and private), lessee, etc., whose property also adjoins the waterbody or wetland, in order that they may be notified of the proposed activity. This information is usually available at the local tax assessor office. If more space is needed attach a sheet of white, 8½ × 11 inch paper labeled "Block 5 Continued."

Block 6. Waterbody and location on waterbody where activity exists or is proposed. Fill in the name of the waterbody and the river mile (if known) at the location of the activity. Include easily recognizable landmarks on the shore of the waterbody to aid in locating the site of the activity.

Block 7. Location and land where activity exists or is proposed. This information is used to locate the site. Give the street address of the property where the proposed activity will take place. If the site does not have a street address, give the best descriptive location (name or waterbody), names and/or numbers of roads or highways, name of nearest community or town, name of county and state, and directions, such as 2 miles east of Brown's Store on Route 105.

Do not use your home address unless that is the location of the proposed activity. Do not use a post office box number.

Block 8. Information about completed activity. Provide information about parts of the activity which may be complete. An activity may have been authorized by a previously issued permit, may exist from a time before a Corps permit was required or may be constructed on adjacent upland.

Block 9. Information about approvals or denials by other government agencies. You may need approval or certification from other Federal, interstate, state, or local government agencies for the activity described in your application. Applications you have submitted, and approvals, certifications, or disapprovals that you have received should be recorded in Block 9. It is not necessary to obtain other Federal, state, and local permits before applying for a Corps of Engineers permit.

Block 10. Signature of applicant or agent. The application must be signed in Block 10 by the owner, lessee, or a duly authorized agent. The person named in Block 3 will be accepted as the officially designated agent of the applicant. The signature will be understood to be affirmation that the applicant possesses the requisite property interest to undertake the proposed activity.

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT

(33 CFR 325)

OMB APPROVAL NO. 0702-0036
Expires 30 June 1986

The Department of the Army permit program is authorized by Section 10 of the River and Harbor Act of 1899, Section 404 of the Clean Water Act and Section 103 of the Marine, Protection, Research and Sanctuaries Act. These laws require permits authorizing activities in or affecting navigable waters of the United States, the discharge of dredged or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters. Information provided on this form will be used in evaluating the application for a permit. Information in this application is made a matter of public record through issuance of a public notice. Disclosure of the information requested is voluntary; however, the data requested are necessary in order to communicate with the applicant and to evaluate the permit application. If necessary information is not provided, the permit application cannot be processed nor can a permit be issued.

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application *(see sample drawings and instructions)* and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

1. APPLICATION NUMBER *(To be assigned by Corps)*

2. NAME AND ADDRESS OF APPLICANT

Fred R. Harris
852 West Branch Road
Blue Harbor, Maryland 21703

Telephone no. during business hours

A/C (301) 585-2779 *(Residence)*
A/C ( ) _____ *(Office)*

3. NAME, ADDRESS, AND TITLE OF AUTHORIZED AGENT

None

Telephone no. during business hours

A/C ( ) _____ *(Residence)*
A/C ( ) _____ *(Office)*

Statement of Authorization: I hereby designate and authorize _____ to act in my behalf as my agent in the processing of this permit application and to furnish, upon request, supplemental information in support of the application.

SIGNATURE OF APPLICANT

DATE

SAMPLE

4. DETAILED DESCRIPTION OF PROPOSED ACTIVITY

4a. ACTIVITY

Build timber bulkhead and pier and fill.

4b. PURPOSE

To provide boat access and prevent erosion of shoreline at my place of residence.

4c. DISCHARGE OF DREDGED OR FILL MATERIAL

Approximately 200 cubic yards of upland fill will be placed between new bulkhead and existing shoreline.

ENG FORM 4345, Apr 83 EDITION OF 1 OCT 77 IS OBSOLETE (Proponent: DAEN-CWO-N)

5. NAMES AND ADDRESSES OF ADJOINING PROPERTY OWNERS, LESSEES, ETC., WHOSE PROPERTY ALSO ADJOINS THE WATERWAY

Mary L. Clark
850 West Branch Road
Blue Harbor, Maryland 21703

(301) 585-8830

Harry N. Hampton
854 West Branch Road
Blue Harbor, Maryland 21703

(301) 585-3676

6. WATERBODY AND LOCATION ON WATERBODY WHERE ACTIVITY EXISTS OR IS PROPOSED

West Branch of the Haven River on Blue Harbor.

7. LOCATION ON LAND WHERE ACTIVITY EXISTS OR IS PROPOSED

ADDRESS:

852 West Branch Road
STREET, ROAD, ROUTE OR OTHER DESCRIPTIVE LOCATION

King Edward, Maryland 21703
COUNTY STATE ZIP CODE

Town of Blue Harbor
LOCAL GOVERNING BODY WITH JURISDICTION OVER SITE

8. Is any portion of the activity for which authorization is sought now complete? ☐ YES ☒ NO
If answer is "Yes" give reasons, month and year the activity was completed. Indicate the existing work on the drawings.

9. List all approvals or certifications and denials received from other federal, interstate, state or local agencies for any structures, construction, discharges or other activities described in this application.

ISSUING AGENCY	TYPE APPROVAL	IDENTIFICATION NO.	DATE OF APPLICATION	DATE OF APPROVAL	DATE OF DENIAL
Town of Blue Harbor	Zoning	BH25172	6/20/82	6/30/82	
Md DNR	Certification	DNR258WQ	6/11/82	8/12/82	

10. Application is hereby made for a permit or permits to authorize the activities described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities or I am acting as the duly authorized agent of the applicant.

Fred R. Harris — Oct. 15, 1982
SIGNATURE OF APPLICANT — DATE — SIGNATURE OF AGENT — DATE

The application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in Block 3 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of The United States knowingly and willfully falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statement or entry, shall be fined not more than $10,000 or imprisoned not more than five years, or both.

Do not send a permit processing fee with this application. The appropriate fee will be assessed when a permit is issued.

SAMPLE

DRAWINGS

General Information

Three types of drawings—Vicinity, Plan, and Elevation—are required to accurately depict activities (See sample drawings on pages 16 and 17).

Submit one original, or good quality copy, of all drawings on 8½ × 11 inch white paper (tracing cloth or film may be used). Submit the fewest number of sheets necessary to adequately show the proposed activity. Drawings should be prepared in accordance with the general format of the samples, using block style lettering. Each page should have a title block. See check list below. Drawings do not have to be prepared by an engineer, but professional assistance may become necessary if the project is large or complex.

Leave a 1-inch margin at the top edge of each sheet for purposes of reproduction and binding.

In the title block of each sheet of drawings identify the proposed activity and include the name of the body of water; river mile (if applicable); name of county and state; name of applicant; number of the sheet and total number of sheets in set; and date the drawing was prepared.

Since drawings must be reproduced, use heavy dark lines. Color shading cannot be used; however, dot shading, hatching, or similar graphic symbols may be used to clarify line drawings.

Vicinity Map

The vicinity map you provide will be printed in any public notice that is issued and used by the Corps of Engineers and other reviewing agencies to locate the site of the proposed activity. You may use an existing road map or U.S. Geological Survey topographic map (scale 1:24,000) as the vicinity map. Please include sufficient details to simplify locating the site from both the waterbody and from land. Identify the source of the map or chart from which the vicinity map was taken and, if not already shown, add the following:

- ☐ location of activity site (draw an arrow showing the exact location of the site on the map).
- ☐ latitude, longitude, river mile, if known, and/or other information that coincides with Block 6 on the application form.
- ☐ name of waterbody and the name of the larger creek, river, bay, etc., that the waterbody is immediately tributary to.
- ☐ names, descriptions and location of landmarks.
- ☐ name of all applicable political (county, parish, borough, town, city, etc.) jurisdictions.
- ☐ name of and distance to nearest town, community, or other identifying locations.
- ☐ names or numbers of all roads in the vicinity of the site.
- ☐ north arrow.
- ☐ scale.

Plan View

The plan view shows the proposed activity as if you were looking straight down on it from above. Your plan view should clearly show the following:

- ☐ Name of waterbody (river, creek, lake, wetland, etc.) and river mile (if known) at location of activity.
- ☐ Existing shorelines.
- ☐ Mean high and mean low water lines and maximum (spring) high tide line in tidal areas.
- ☐ Ordinary high water line and ordinary low water line if the proposed activity is located on a non-tidal waterbody.

- ☐ Average water depths around the activity.
- ☐ Dimensions of the activity and distance it extends from the high water line into the water.
- ☐ Distances to nearby Federal projects, if applicable.
- ☐ Distance between proposed activity and navigation channel, where applicable.
- ☐ Location of structures, if any, in navigable waters immediately adjacent to the proposed activity.
- ☐ Location of any wetlands (marshes, swamps, tidal flats, etc.)
- ☐ North arrow.
- ☐ Scale.
- ☐ If dredged material is involved, you must describe the type of material, number of cubic yards, method of handling, and the location of fill and spoil disposal area. The drawing should show proposed retention levees, weirs, and/or other means for retaining hydraulically placed materials.
- ☐ Mark the drawing to indicate previously completed portions of the activity.

Elevation and/or Cross Section View

The elevation and/or cross section view is a scale drawing that shows the side, front, or rear of the proposed activity. If a section view is shown, it represents the proposed structure as it would appear if cut internally for display. Your elevation should clearly show the following:

- ☐ Water elevations as shown in the plan view.
- ☐ Water depth at waterward face of proposed activity or, if dredging is proposed, dredging and estimated disposal grades.
- ☐ Dimensions from mean high water line (in tidal waters) for proposed fill or float, or high tide line for pile supported platform. Describe any structures to be built on the platform.
- ☐ Cross section of excavation or fill, including approximate side slopes.
- ☐ Graphic or numerical scale.
- ☐ Principal dimensions of the activity.

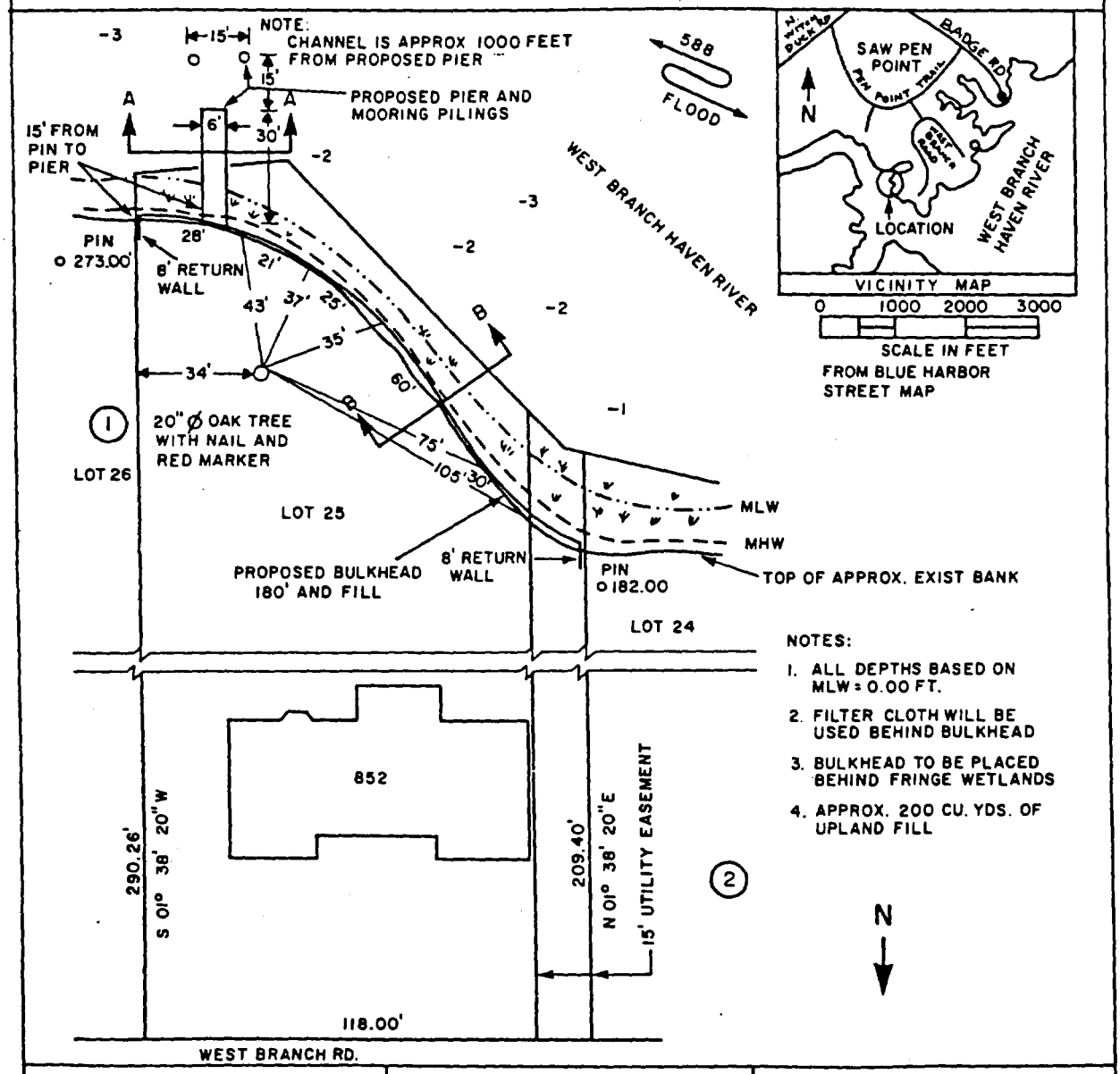
Notes on Drawings*

- ☐ Names of adjacent property owners who may be affected. Complete names and addresses should be shown in Block 5 on ENG Form 4345.
- ☐ Legal property description: Number, name of subdivision, block and lot number. Section, Township and Range (if applicable) from plot, deed or tax assessment.
- ☐ Photographs of the site of the proposed activity are not required; however, pictures are helpful and may be submitted as part of any application.

**Drawings should be as clear and simple as possible (i.e., not too "busy").*

SAMPLE DRAWINGS FOR A PERMIT APPLICATION

NOTE: THE DRAWINGS SUBMITTED NEED NOT BE PREPARED BY A PROFESSIONAL DRAFTSMAN AS IN THESE SAMPLES.



NOTES:

1. ALL DEPTHS BASED ON MLW = 0.00 FT.
2. FILTER CLOTH WILL BE USED BEHIND BULKHEAD
3. BULKHEAD TO BE PLACED BEHIND FRINGE WETLANDS
4. APPROX. 200 CU. YDS. OF UPLAND FILL

PURPOSE: PREVENT EROSION AND PROVIDE BOATING ACCESS

DATUM: MLW

ADJACENT PROPERTY OWNERS:

1. MARY L. CLARK
2. HARRY N. HAMPTON
3.

PLAN VIEW

0 40 80

1" = 40'

FRED R. HARRIS
852 WEST BRANCH ROAD
BLUE HARBOR, MD 21703

PROPOSED BULKHEAD PIER AND FILL

IN: WEST BRANCH HAVEN RIVER

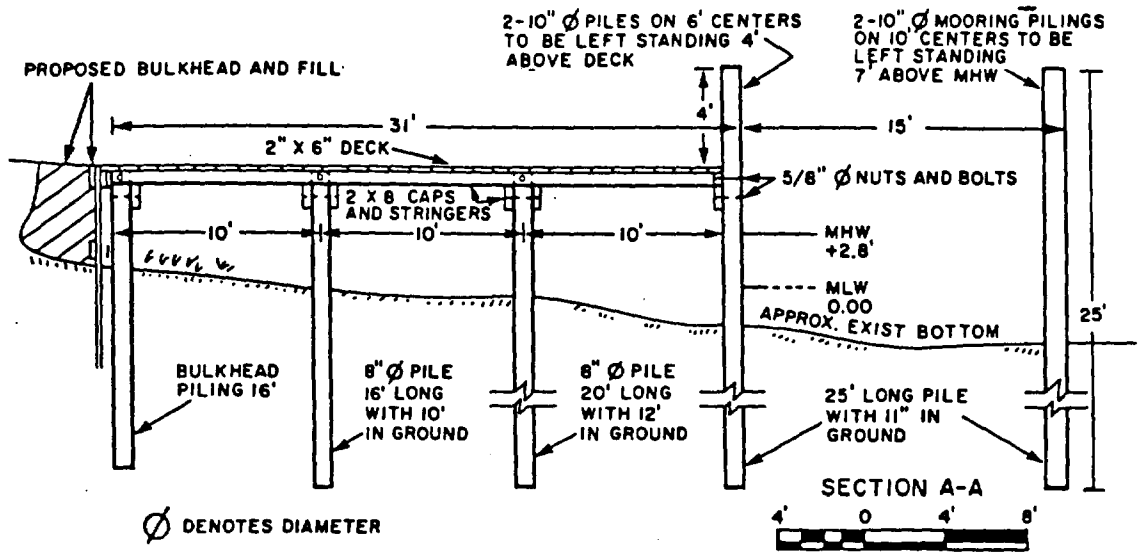
AT: BLUE HARBOR

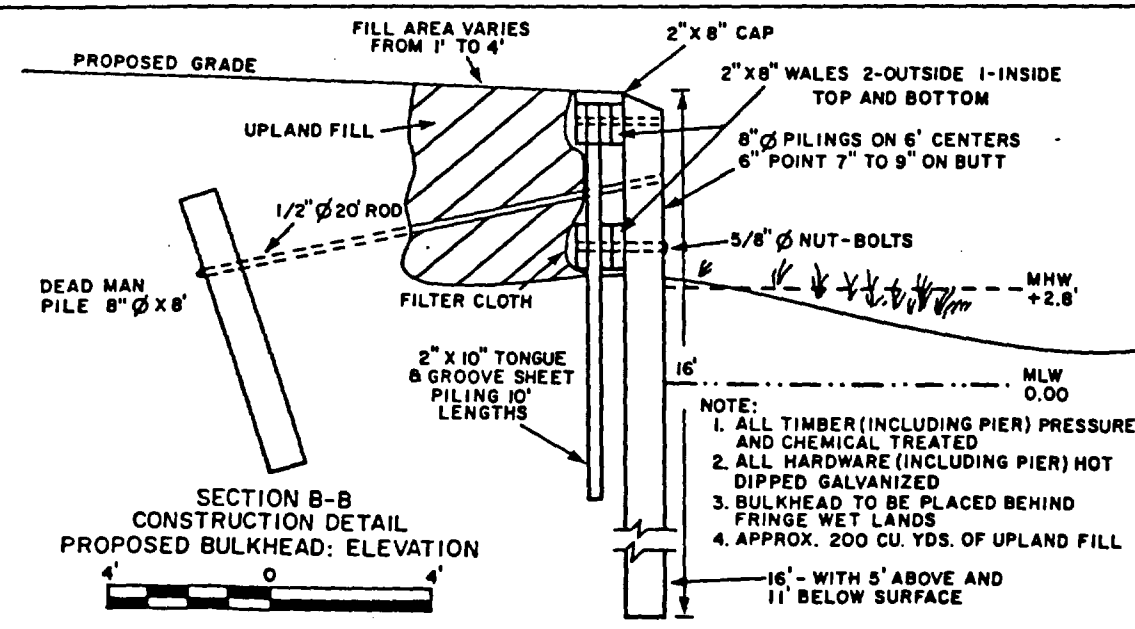
COUNTY OF: KING EDWARD STATE: MD

APPLICATION BY: FRED R. HARRIS

SHEET 1 OF 2 DATE 10-16-82

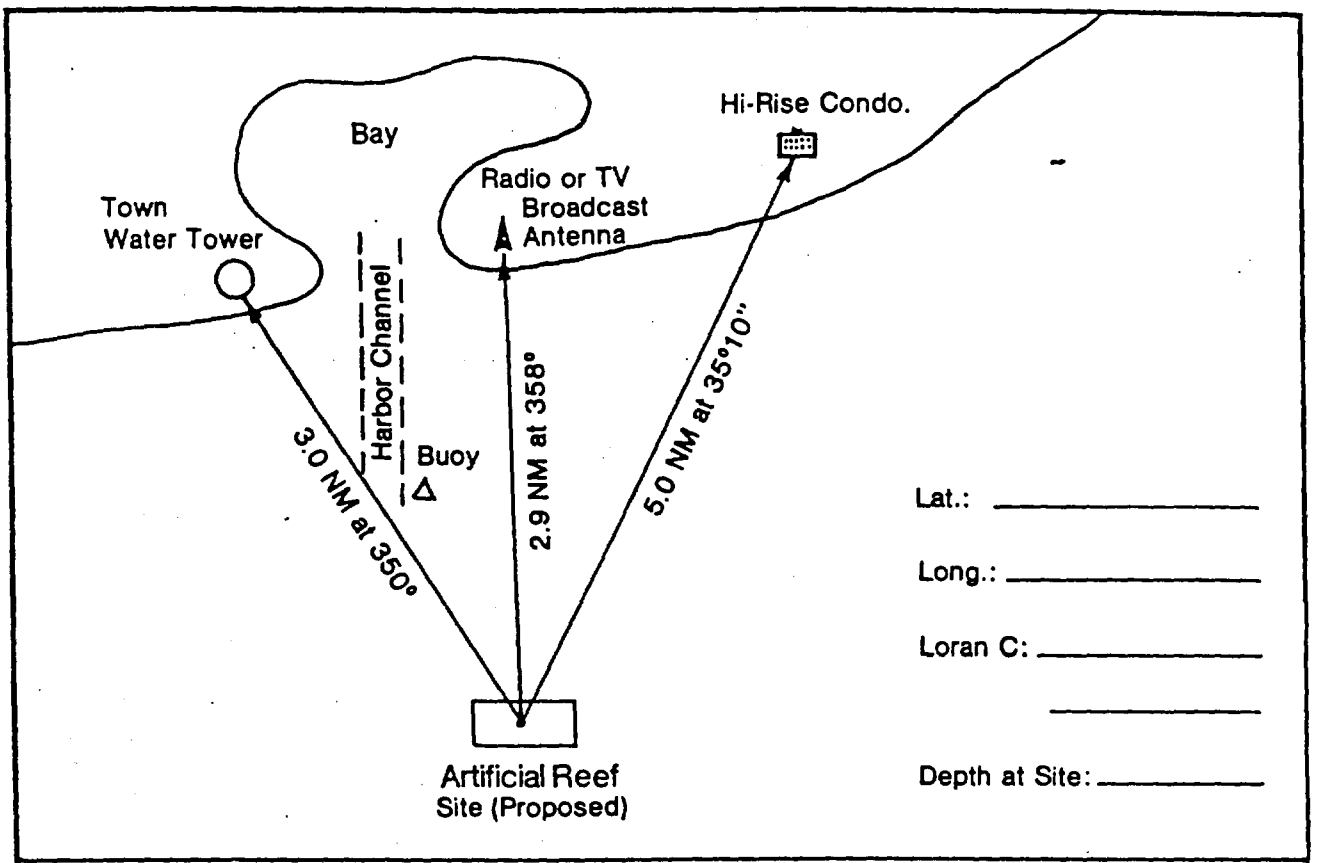
REV. 11-28-82





PURPOSE: PREVENT EROSION AND PROVIDE BOATING ACCESS DATUM: MLW ADJACENT PROPERTY OWNERS: 1. MARY L. CLARK 2. HARRY N. HAMPTON 3.	SECTION VIEWS FRED R. HARRIS 852 WEST BRANCH ROAD BLUE HARBOR, MD 21703	PROPOSED BULKHEAD PIER AND FILL IN: WEST BRANCH HAVEN RIVER AT: BLUE HARBOR COUNTY OF: KING EDWARD STATE: MD APPLICATION BY: FRED R. HARRIS SHEET 2 OF 2 DATE 10-16-82

REV. 11-28-82



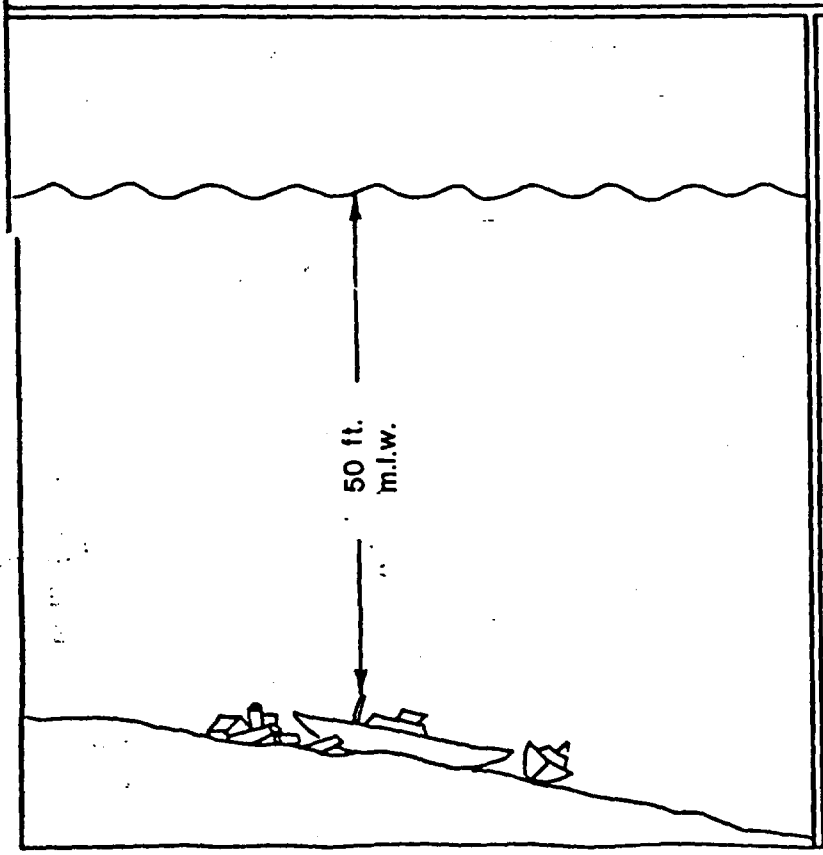
Lat.: _____

Long.: _____

Loran C: _____

_____

Depth at Site: _____



Corps Permit Application

Number _____

State Permit Application

Number _____

Applicant:

_____

_____

_____

Date: _____

Sheet: _____ of _____

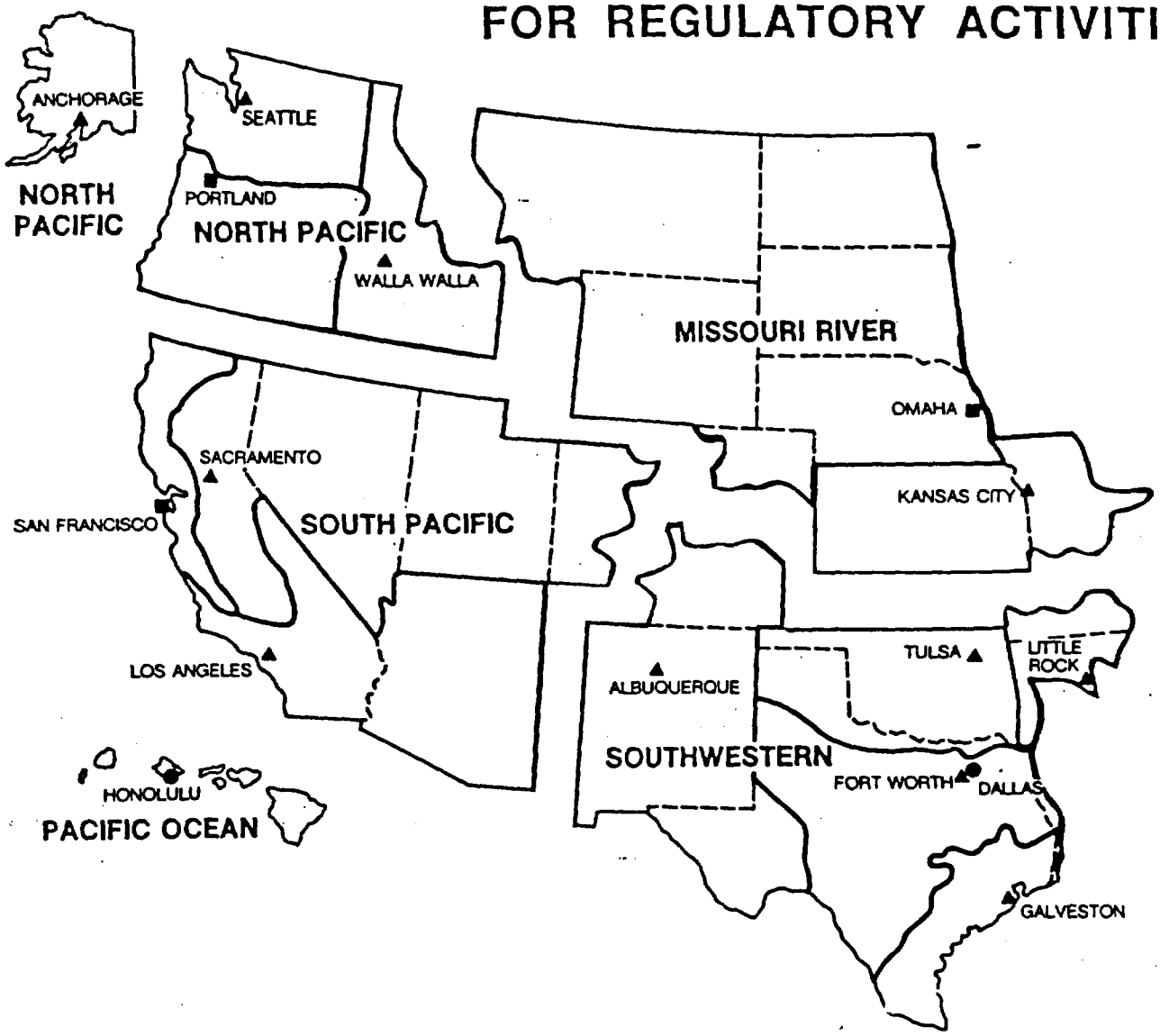
Materials Used for Reef:

_____

_____

_____

DIVISIONS AND DISTRICTS FOR REGULATORY ACTIVITIES



■ DIVISION AND DISTRICT HEADQUARTERS
● DIVISION HEADQUARTERS
▲ DISTRICT HEADQUARTERS
– – – – STATE BOUNDARIES
——— DISTRICT BOUNDARIES

Note: In Iowa the eastern bank of the Missouri River is regulated by the Omaha office.

Address correspondence to:

The District Engineer
U.S. Army Engineer District
Please include attention line in address.

LOCATIONS OF REGULATORY OFFICES

ALASKA
P.O. Box 898
Anchorage, AK
99506-0898
Attention: NPACO-RF
907/753-2712

ALBUQUERQUE
P.O. Box 1580
Albuquerque, NM
87103-1580
Attention: SWACO-OR
505/766-2776

BALTIMORE
P.O. Box 1715
Baltimore, MD 21203-1715
Attention: NABOP-R
301/962-3670
Joint application with New York, Maryland

BUFFALO
1776 Niagara Street
Buffalo, NY 14207-3199
Attention: NCBCO-S
716/876-5454 x2313
Joint application with New York

CHARLESTON
P.O. Box 919
Charleston, SC
29402-0919
Attention: SACCO-P
803/724-4330

CHICAGO
219 S. Dearborn Street
Chicago, IL 60604-1797
Attention: NCCCO-R
312/353-6428
Joint application with Illinois

DETROIT
P.O. Box 1027
Detroit, MI 48231-1027
Attention: NCECO-L
313/226-2218
Joint application with Michigan

FT. WORTH
P.O. Box 17300
Ft. Worth, TX 76102-0300
Attention: SWFOD-O
817/334-2681

GALVESTON
P.O. Box 1229
Galveston, TX 77553-1229
Attention: SWGCO-R
409/766-3925

HUNTINGTON
502 8th Street
Huntington, WV 25701-2070
Attention: ORHOP-F
304/529-5487
Joint application with West Virginia

HONOLULU
Building 230, Fort Shafter
Honolulu, HI 96858-5440
Attention: PODCO-O
808/438-9258

JACKSONVILLE
P.O. Box 4970
Jacksonville, FL 32232-0019
Attention: SAJRD
904/791-1659
Joint application with Florida, Virgin Islands

KANSAS CITY
700 Federal Building
601 E. 12th Street
Kansas City, MO 64106-2896
Attention: MRKOD-P
816/374-3645

LITTLE ROCK
P.O. Box 867
Little Rock, AR
72203-0867
Attention: SWLCO-P
501/378-5295

LOS ANGELES
P.O. Box 2711
Los Angeles, CA 90053-2325
Attention: SPLCO-R
213/688-5606

LOUISVILLE
P.O. Box 59
Louisville, KY 40201-0059
Attention: ORLOP-F
502/582-5452
Joint application with Illinois

MEMPHIS
Clifford Davis Federal Building
Room B-202
Memphis, TN 38103-1894
Attention: LMMCO-G
901/521-3471
Joint application with Missouri, Tennessee, Kentucky

MOBILE
P.O. Box 2288
Mobile, AL 36628-00001
Attention: SAMOP-S
205/690-2658
Joint application with Mississippi

NASHVILLE
P.O. Box 1070
Nashville, TN 37202-1070
Attention: ORNOR-F
615/251-5181
Joint application with TVA, Tennessee, Alabama

NEW ORLEANS
P.O. Box 60267
New Orleans, LA
70160-0267
Attention: LMNOD-S
504/838-2255

NEW YORK
26 Federal Plaza
New York, NY 10278-0090
Attention: NANOP-R
212/264-3996

NORFOLK
803 Front Street
Norfolk, VA 23510-1096
Attention: NAOOP-P
804/446-3652
Joint application with Virginia

OMAHA
P.O. Box 5
Omaha, NE 68101-0005
Attention: MROOP-N
402/221-4133

PHILADELPHIA
U.S. Custom House
2nd and Chestnut Street
Philadelphia, PA
19106-2991
Attention: NAPOP-R
215/597-2812

PITTSBURGH
Federal Building
1000 Liberty Avenue
Pittsburgh, PA 15222-4186
Attention: ORPOP-F
412/644-4204
Joint application with New York

PORTLAND
P.O. Box 2946
Portland, OR 97208-2946
Attention: NPPND-RF
503/221-6995
Joint application with Oregon

ROCK ISLAND
Clock Tower Building
Rock Island, IL 61201-2004
Attention: NCROD-S
309/788-6361 x6370
Joint application with Illinois

SACRAMENTO
650 Capitol Mall
Sacramento, CA 95814-4794
Attention: SPKCO-O
916/440-2842

ST. LOUIS
210 Tucker Blvd., N
St. Louis, MO 63101-1986
Attention: LMSOD-F
314/263-5703
Joint application with Illinois, Missouri

ST. PAUL
1135 USPO & Custom House
St. Paul, MN 55101-1479
Attention: NCSCO-RF
612/725-5819

SAN FRANCISCO
211 Main Street
San Francisco, CA 94105-1905
Attention: SPNCO-R
415/974-0416

SAVANNAH
P.O. Box 889
Savannah, GA 31402-0889
Attention: SASOP-F
912/944-5347
Joint application with Georgia

SEATTLE
P.O. Box C-3755
Seattle, WA 98124-2255
Attention: NPSOP-RF
206/764-3495
Joint application with Idaho

TULSA
P.O. Box 61
Tulsa, OK 74121-0061
Attention: SWTOD-RF
918/581-7261

VICKSBURG
P.O. Box 60
Vicksburg, MS 39180-0060
Attention: LMKOD-F
601/634-5276
Joint application with Mississippi

WALLA WALLA
Building 602
City-County Airport
Walla Walla, WA
99362-9265
Attention: NPWOP-RF
509/522-6718
Joint application with Idaho

WILMINGTON
P.O. Box 1890
Wilmington, NC
28402-1890
Attention: SAWCO-E
919/343-4511
Joint application with North Carolina

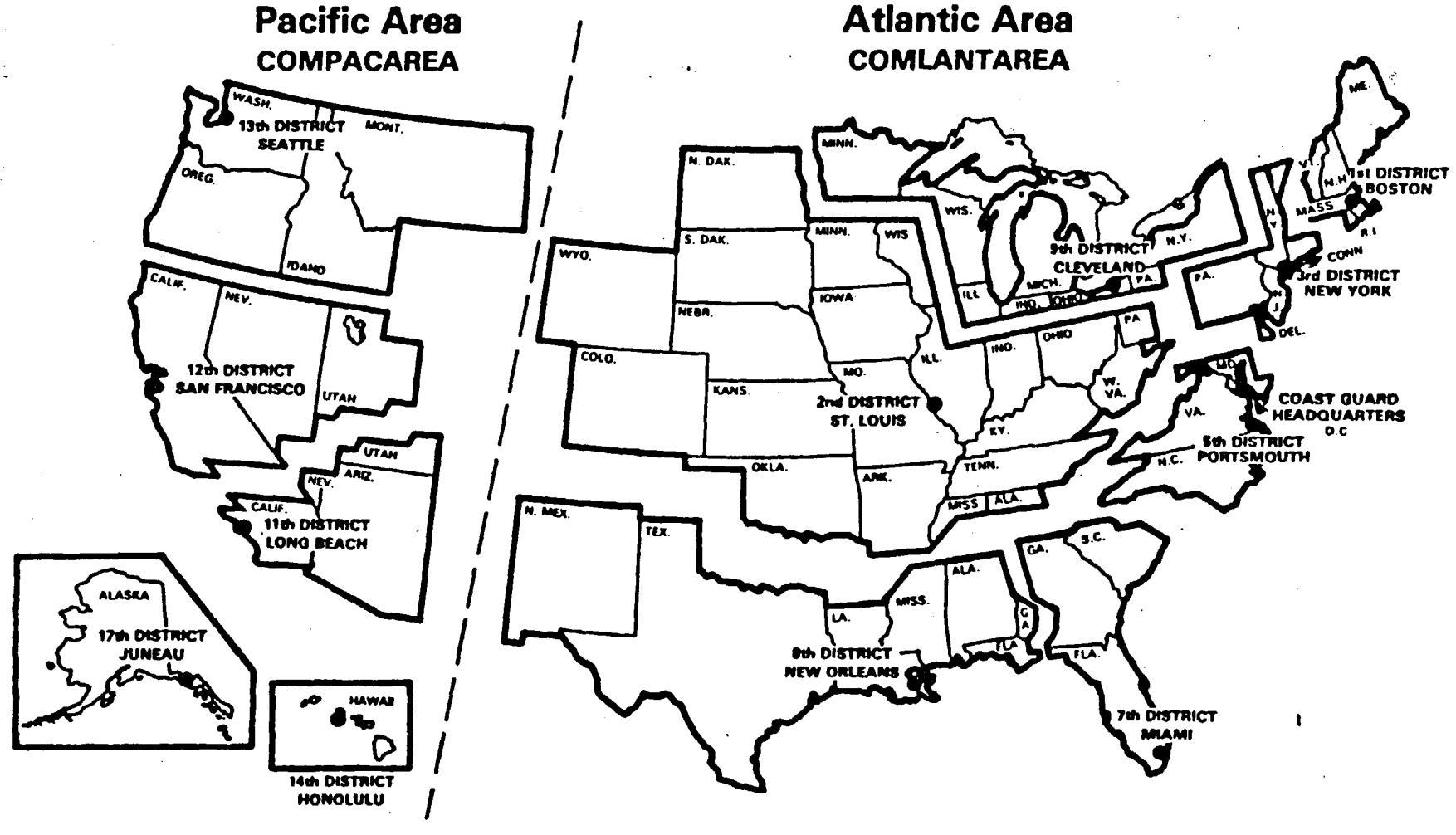
The Division Engineer
U.S. Army Engineer Division
NEW ENGLAND
424 Trapelo Road
Waltham, MA 02254-9149
Attention: NEDOD-R
617/647-8338
Joint application with Massachusetts, Maine

U. S. COAST GUARD

PRIVATE AIDS TO NAVIGATION

INFORMATION

U.S. Coast Guard Districts



ADDRESSES OF COAST GUARD DISTRICT COMMANDERS

Mailing Address and Telephone Number	Approximate Area
Commander, First Coast Guard District (oan) 150 Causeway Street Boston, MA 02114 (617) 223-3644	Maine, Rhode Island New Hampshire, Massachusetts
Commander, Second Coast Guard District (oan) 1430 Olive Street St. Louis, MO 63103 (314) 425-4601	Mississippi, Missouri, Ohio
Commander, Third Coast Guard District (oan) Governors Island New York, NY 10004 (212) 668-7192	Connecticut, New York New Jersey, Delaware Pennsylvania
Commander, Fifth Coast Guard District (oan) Federal Building 431 Crawford Street Portsmouth, VA 23705 (804) 398-6000	Maryland, Virginia, District of Columbia, North Carolina
Commander, Seventh Coast Guard District (oan) Federal Building 51 SW 1st Avenue Miami, FL 33130 (305) 350-5654	South Carolina, Georgia, Florida
Commander, Eighth Coast Guard District (oan) Hale Boggs Federal Building 500 Camp Street New Orleans, LA 70130 (504) 589-6298	Western Florida, Alabama, Mississippi Texas, Louisiana
Commander, Ninth Coast Guard District (oan) 1240 East 9th Street Cleveland, OH 44199 (216) 522-3910	Great Lakes States
Commander, Eleventh Coast Guard District (oan) Union Bank Building 400 Oceangate Blvd. Long Beach, CA 90802 (213) 590-2311	Southern California
Commander, Twelfth Coast Guard District (oan) Government Island Alameda, CA 94501 (415) 273-7141	Northern California
Commander, Thirteenth Coast Guard District (oan) Federal Building 915 Second Avenue Seattle, WA 98174 (206) 442-5864	Oregon, Washington, Idaho, Montana
Commander, Fourteenth Coast Guard District (oan) 300 Ala Moana Blvd., 9th Floor Honolulu, Hawaii 96850 (808) 546-7109	Hawaii
Commander, Seventeenth Coast Guard District (oan) P.O. Box 3-5000 Federal Building Juneau, Alaska 99802 (907) 586-2680	Alaska

§66.01—1 Basic provisions.

(a) No person, public body or instrumentality not under the control of the Commandant, exclusive of the Armed Forces, shall establish and maintain, discontinue, change or transfer ownership of any aid to maritime navigation, without first obtaining permission to do so from the Commandant.

(b) For the purposes of this subpart, the term private aids to navigation includes all marine aids to navigation operated in the navigable waters of the United States other than those operated by the Federal Government (Part 62 of this subchapter) or those operated in State waters for private aids to navigation (Subpart 66.05).

(c) Coast Guard authorization of a private aid to navigation does not authorize any invasion of private rights, nor grant any exclusive privileges, nor does it obviate the necessity of complying with any other Federal, State or local laws or regulations.

(d) With the exception of shore based radar stations, operation of electronic aids to navigation as private aids will not be authorized.

§66.01—3 Delegation of authority to District Commanders.

(a) Pursuant to the authority in 49 CFR 1.4(g), the Commandant delegates to the District Commanders within the confines of their respective districts (see Part 3 of this Chapter for descriptions) the authority to grant permission to establish and maintain, discontinue, change or transfer ownership of private aids to maritime navigation, and otherwise administer the requirements of this subpart.

(b) The decisions of the District Commander may be appealed within 30 days from the date of decision. The decision of the Commandant in any case is final.

§66.01—5 Application procedure.

Application to establish and maintain, discontinue, change, or transfer ownership of a private aid to navigation shall be made to the Commander of the Coast Guard District in which the private aid to navigation is or will be located. Application forms (CG-2554) will be provided upon request. The applicant shall complete all parts of the form applicable to the aid to navigation concerned, and shall forward the application in triplicate to the District Commander. The following information is required:

(a) The proposed position of the aid to navigation by two or more horizontal angles, or bearings and distance from charted landmarks. A section of chart or sketch showing the proposed location of the aid to navigation shall be included.

(b) The name and address of the person at whose expense the aid will be maintained.

(c) The name and address of the person who will maintain the aid to navigation.

(d) The time and dates during which it is proposed to operate the aid.

(e) The necessity for the aid.

(f) For lights: The color, characteristic, height above water, and description of illuminating apparatus.

(g) For fog signals: Type (whistle, horn, bell, etc.) and characteristic.

(h) For buoys or daybeacons: Shape, color, number, or letter, depth of water in which located or height above water.

§66.01—10 Characteristics.

The characteristics of a private aid to navigation shall conform to the standard U.S. system of aids to navigation characteristics described in subpart 62.25 of Part 62 of this subchapter, except that only tungsten-incandescent light sources will be approved for electric lights.

§66.01—15 Action by Coast Guard.

(a) The District Commander receiving the application will review it for completeness and will assign the aid one of the following classifications:

Class I: Aids to navigation on marine structures or other works which the owners are legally obligated to establish, maintain and operate as prescribed by the Coast Guard.

Class II: Aids to navigation exclusive of Class I located in waters used by general navigation.

Class III: Aids to navigation exclusive of Class I located in waters not ordinarily used by general navigation.

(b) Upon approval by the District Commander, a signed copy of the application will be returned to the applicant.

§66.01—20 Inspection.

All classes of private aids to navigation shall be maintained in proper operating condition. They are subject to inspection by the Coast Guard at any time and without prior notice.

§66.01—25 Discontinuance and removal.

(a) No person, public body or instrumentality shall change, move or discontinue any authorized private aid to navigation required by statute or regulation (Class I § 66.01—15) without first obtaining permission to do so from the District Commander.

(b) Any authorized private aid to navigation not required by statute or regulation (Classes II and III, §66.01—15) may be discontinued and removed by the owner after 30 days' notice to the District Commander to whom the original request for authorization for establishment of the aid was submitted.

(c) Private aids to navigation which have been authorized pursuant to this part shall be discontinued and removed without expense to the United States by the person, public body or instrumentality establishing or maintaining such aids when so directed by the District Commander.

§66.01—30 Corps of Engineers' approval.

(a) Before any private aid to navigation consisting of a fixed structure is placed in the navigable waters of the United States, authorization to erect such structure shall first be obtained from the District Engineer, U.S. Army Corps of Engineers in whose district the aid will be located.

(b) The application to establish any private aid to navigation consisting of a fixed structure shall show evidence of the required permit having been issued by the Corps of Engineers.

§66.01—35 Marking of structures and floating obstructions.

Any structure, mooring, mooring buoy, or dam, in or over the navigable waters of the United States shall display the lights and other signals for the protection of maritime navigation as may be prescribed by the Commandant. The prescribed lights and signals shall be installed, maintained and operated by and at the expense of the owner, or operator. After obtaining such approval or a statement of no objection from the Corps of Engineers as is required by law, the owner or operator shall apply in accordance with § 66.01—5 to the District Commander having jurisdiction over the waters in which the structure or floating obstruction will be located for a determination of the lights and other signals to be displayed. This requirement includes the temporary lights and signals to be displayed during the construction of a structure. If no regulation exists prescribing the lights or other signals required to mark any work or obstruction, each case shall be considered individually by the District Commander, who will prescribe such lights and signals as he considers necessary for the safety of navigation.

§66.01—40 Exemptions.

(a) Nothing in the preceding sections of this subpart shall be construed to interfere with or nullify the requirements of existing laws and regulations pertaining to the marking of vessels and other obstructions sunk in the navigable waters of the United States (Part 64 of this subchapter), the marking of artificial islands and structures which are erected on or over the seabed and subsoil of the outer Continental Shelf (Part 67 of this subchapter), or the lighting of bridges over navigable waters of the United States (Part 68 of this subchapter).

(b) Persons marking structures pursuant to Part 64 or Part 68 of this subchapter are exempted from the provisions of §§66.01—5 and 66.01—35.

§66.01—45 Penalties.

Any person, public body or instrumentality, excluding the armed forces, who shall establish, erect or maintain any aid to maritime navigation without first obtaining authority to do so from the Coast Guard or who shall violate the regulations relative thereto issued in this part, is subject to the provisions of 14 U.S.C. 83. Any owner or operator of a fixed structure, excluding an agency of the United States, who violates any of the rules or regulations prescribed with respect to lights and other signals for fixed structures, is subject to the provisions of 14 U.S.C. 85.

§66.01—50 Protection of private aids to navigation.

Private aids to navigation lawfully maintained under these regulations are entitled to same protection against interference or obstruction as is afforded by law to Coast Guard aids to navigation (Part 70 of this subchapter). If interference or obstruction occurs, a prompt report containing all the evidence available should be made to the Commander of the Coast Guard District in which the aids are located.

§66.01—55 Transfer of ownership.

(a) When any private aid to navigation authorized by the District Commander, or the essential real estate or facility with which the aid is associated, is sold or transferred, both parties to the transaction shall submit application (§66.01—5) to the Commander of the Coast Guard District in which the aid is located requesting authority to transfer responsibility for maintenance of the aid.

(b) The party relinquishing responsibility for maintenance of the private aid to navigation shall indicate on the application form (CG—2554) both the discontinuance and the change of ownership of the aid sold or transferred.

(c) The party accepting responsibility for maintenance of the private aid to navigation shall indicate on the application form (CG—2554) both the establishment and the change of ownership of the aid sold or transferred.

(d) In the event the new owner of the essential real estate or facility with which the aid is associated refuses to accept responsibility for maintenance of the aid, the former owner shall be required to remove the aid without expense to the United States. This requirement shall not apply in the case of any authorized private aid to navigation required by statute or regulation (Class I, § 66.01—15) which shall be maintained by the new owner until the conditions which made the aid necessary have been eliminated.

U.S. COAST GUARD

PRIVATE AIDS TO NAVIGATION APPLICATION

INSTRUCTIONS

1. The rules, regulations, and procedures pertaining to private aids to navigation are set forth in the copy of Code of Federal Regulations; Title 33, Chapter 1, Part 66, on the back of this page.

2. Three copies of the application for private aids shall be forwarded to the Commander of the Coast Guard District in which the aids will be located 30 days in advance of the proposed action. Sections of charts or sketches showing the work proposed shall accompany each application.

3. When making application for private aids to mark structures and mooring buoys in navigable waters or to mark the excavating or depositing of material therein, evidence is required of the authorization obtained from Corps of Engineers, Department of the Army, for such work. (Code of Federal Regulations; Title 33, Part 209.120.)

4. The applicant shall complete all of Blocks 1, 2, 3, 4, 5, 9 and 10 for all new applications. When an aid is being discontinued, Block 3 need not be completed. Block 6 shall be completed whenever authorization is required to be obtained from Corps of Engineers (See Instruction No. 3). Columns of Block 7 will be completed as follows:

a. Unlighted buoys - 7a, 7e, 7f, and 7j.
b. Lighted buoys - 7a, 7b, 7c, 7d, 7e, 7f, 7g, 7h, and 7j.
c. Daybeacons - 7a, 7e, 7f (if applicable), 7h, 7i, and 7j.
d. Light on a structure - 7a, 7b, 7c, 7d, 7e, 7f (if applicable), 7g, 7h, 7i, and 7j.

When an aid is being changed, Block 8 shall be used to describe the nature of the change.

5. The required information for each column includes the following:

(7a) Proposed number or letter to be assigned to the aid.
(7b) Period of light (time in seconds for one complete cycle).
(7c) Flash length in seconds. For complex or multiple flashes, explain in column (7j).
(7d) Color of light.
(7e) Position by two or more horizontal angles, or bearing and distance from a prominent charted landmark. If a prominent charted landmark is not available, show latitude and longitude as precisely as the chart permits.
(7f) Depth of water at buoy or structure (if marine site). All depths are measured from mean low water except on Great Lakes where depths are measured from low water datum.
(7g) Candlepower, if known; otherwise, include the following information in column (7j); lens size, lamp voltage and amperage if electric, or details of other illuminant to be used.
(7h) Height of light or unlighted structure above water. Height is measured from mean high water except in the Great Lakes where heights are measured from low water datum shown on U.S. Lake Survey Charts. The height of a light on a buoy is measured from the water line.
(7i) Include details of structure (type, color).
(7j) Used for the following specific information, plus any other useful details: a. buoys - size, shape, color, and reflective material used; b. structures - daymark shape and color; c. fog signal on a buoy or structure - type and model, audible range, and characteristic (number of strokes or blasts, period and blast length).

6. This form may be used to cover more than one aid in the same geographic area. Draw a line between each aid as indicated in example. Attach separate sheet if additional space is required.

7. Attach a section of chart showing the proposed location of the aid(s) to navigation.

8. a. After receipt of the approved form the applicant will advise the District Commander by telegram or other rapid means of communications when the work authorized is actually accomplished.

b. If the aids have not been installed within one year of the approval date, the approved application is automatically cancelled.

c. Any discrepancy in the operation of the aid(s) at any time shall be reported to the District Commander by telegram or other rapid means of communication in order that Notices to Mariners may be issued. A discrepancy exists whenever the aid is not as described in the approved application, i.e., lack of signal, incorrect light characteristic, or improper color, shape or position of shore structure or buoy. The correction of the discrepancy will also be reported by the same method.

9. All classes of private aids to navigation shall be maintained in proper condition. They are subject to inspection by the Coast Guard at any time and without prior notice to the maintainer.

7. APPLICANT WILL FILL IN APPLICABLE REMAINING COLUMNS

FOR DISTRICT COMMANDERS ONLY		EXAMPLE OF USE OF APPLICATION									
LIGHT LIST NUMBER OR PAGE	NAME OF AID	NO. OR LTR. (7a)	LIGHT PER. (7b)	LIGHT FLASH LGTH. (7c)	LIGHT COLOR (7d)	POSITION (7e)	DEPTH OF WATER (7f)	CANDLE POWER (7g)	HT. ABOVE WATER (7h)	STRUCTURE TYPE, COLOR, AND HEIGHT (7i)	REMARKS (See Instructions) (7j)
		1	4s	0.4s	WHITE	205°T, 3540 yds from tank, Bayview, Va.	9 Ft.	20	8 Ft.		5' Lighted buoy - black
		2				200°T, 3425 yds from tank, Bayview, Va.	7 FT				Nun buoy - Red White Reflector
		3				210°T, 2810 yds from tank, Bayview, Va.	2 Ft.		7 Ft.	Single pile	2' square daymark - black
		5	2.5s	0.5s	WHITE	218.5°T, 330 yds from tank, Bayview, Va.	8 Ft.	20	13 Ft.	5 - pile	3' square daymark - black

Dept. of Transp., USCG, CG-2554 (Rev. 7-76)

DEPARTMENT OF TRANSPORTATION
U.S. COAST GUARD
CG-2554 (Rev. 7-76)

PRIVATE AIDS TO NAVIGATION APPLICATION

(See attached instructions and copy of Code of Fed. Reg., Title 33, Chap. 1, Part 66)

Form Approved
OMB-004-R5681

NO PRIVATE AID TO NAVIGATION MAY BE AUTHORIZED UNLESS A COMPLETED APPLICATION FORM HAS BEEN RECEIVED (14 U.S.C. 83; 33 C.F.R. 66.01-5).

1. ACTION REQUESTED FOR PRIVATE AIDS TO NAVIGATION: A. ☐ ESTABLISH AND MAINTAIN B. ☐ DISCONTINUE C. ☐ CHANGE D. ☐ TRANSFER OWNERSHIP

2. DATE ACTION TO START

3. AIDS WILL BE OPERATED: A. ☐ THROUGHOUT YEAR B. ☐ TEMPORARILY UNTIL _____ C. ☐ ANNUALLY FROM _____ TO _____

4. NECESSITY FOR AID *(Continue in Block 8)*

5. GENERAL LOCALITY

6. CORPS OF ENGINEERS AUTHORIZED THIS STRUCTURE OR BUOY BY ☐ PERMIT OR ☐ LETTER *(file and date)*

FOR DISTRICT COMMANDERS ONLY

7. APPLICANT WILL FILL IN APPLICABLE REMAINING COLUMNS

LIGHT LIST NUMBER OR PAGE	NAME OF AID	LIGHT NO. OR LTR. (7a)	LIGHT PER. (7b)	LIGHT FLASH LGTH. (7c)	LIGHT COLOR (7d)	POSITION (7e)	DEPTH OF WATER (7f)	CAN-DLE POWER (7g)	HT. ABOVE WATER (7h)	STRUCTURE TYPE, COLOR, AND HEIGHT ABOVE GROUND (7i)	REMARKS *(See Instructions)* (7j)

8. ADDITIONAL COMMENTS

9a. NAME AND ADDRESS OF PERSON IN DIRECT CHARGE OF AID

9b. TELEPHONE NO.

10a. NAME AND ADDRESS OF PERSON OR CORPORATION AT WHOSE EXPENSE AID IS MAINTAINED

10b. THE APPLICANT AGREES TO SAVE THE COAST GUARD HARMLESS WITH RESPECT TO ANY CLAIM OR CLAIMS THAT MAY RESULT ARISING FROM THE ALLEGED NEGLIGENCE OF THE MAINTENANCE OR OPERATION OF THE APPROVED AID(S).

10c. DATE

10d. SIGNATURE AND TITLE OF OFFICIAL SIGNING

FOR USE BY DISTRICT COMMANDER

SERIAL NO.	CLASSIFICATION OF AIDS Class	RECD.			DATE APPROVED	SIGNATURE *(By direction)*
		CHART				
		L. N. M.				

PREVIOUS EDITIONS ARE OBSOLETE

SN 7530-00-F01-1340

Reverse of CG-2554 (Rev. 7-76)

REMARKS

DATE	REFERENCE	ACTION AND REMARKS

	J	F	M	A	M	J	J	A	S	O	N	D

NAME OF AID	LIGHT LIST NO.	PAGE

DEPARTMENT OF TRANSPORTATION U. S. COAST GUARD CG-4143 (Rev. 3-84)	APPLICATION FOR CLASS I PRIVATE AIDS TO NAVIGATION ON ARTIFICIAL ISLANDS AND FIXED STRUCTURES *(Please read instructions on reverse)*	OMB APPROVED 2115-0038

1. NAME AND ADDRESS *(including zip code)* OF CORPORATION OR PERSON MAKING APPLICATION	2. ACTION REQUESTED FOR PRIVATE AIDS TO NAVIGATION A. ☐ ESTABLISH AND MAINTAIN B. ☐ CHANGE OWNERSHIP C. ☐ CHANGE EQUIPMENT D. ☐ MOVE E. ☐ DISCONTINUE F. DATE OF ACTION

3. POSITION

A. GENERAL LOCALITY AND GRID AREA		B. LATITUDE	C. LONGITUDE
D. BLOCK NUMBER	E. SIGN	F. LEASE NUMBER	G. WELL NUMBER

4. LIGHT

A. CHARACTERISTICS COLOR WHITE ☐ RED ☐ FLASH ..... SECONDS ECLIPSE ..... SECONDS	B. NUMBER INSTALLED	C. ILLUMINANT *(Check)* ☐ ELECTRICITY ☐ GAS ☐ OIL ☐ OTHER *(Specify)*	
D. HEIGHT ABOVE MEAN HIGH WATER	E. VOLTS	F. AMPERES	G. INSIDE DIAMETER LENS / GLOBE
H. CANDLEPOWER *(If known)*			

5. FOG SIGNAL *(Characteristic will be one two-second blast every twenty seconds)*

A. CLASS ☐ A *(2-Mile)* ☐ B *(½-Mile)*	B. MANUFACTURED BY	C. MODEL NUMBER

6. STRUCTURE

A. COLOR	B. HEIGHT ABOVE MEAN HIGH WATER	C. DEPTH OF WATER BELOW MEAN LOW WATER

7. AUTHORIZED BY CORPS OF ENGINEERS, U. S. ARMY, PERMIT NO.

8. PERSON IN DIRECT CHARGE OF AID

A. NAME	C. ADDRESS
B. TELEPHONE NUMBER	

9. The applicant agrees to save the Coast Guard harmless with respect to any claim or claims that may result arising from the alleged negligence of the operation of the approved aids.

Attached to this application are:

A. ☐ LOCATION PLAT B. ☐ PRINT OF STRUCTURE C. ☐ AIDS TO NAVIGATION EQUIPMENT LIST

D. ☐ CERTIFICATE REQUIRED BY 33 CFR 67.10-1(4)

DATE	SIGNATURE TITLE

FOR COAST GUARD USE

10. FROM: Commander Coast Guard District

A. THE ACTION DESCRIBED ABOVE IS ☐ APPROVED ☐ APPROVED SUBJECT TO THE COMMENTS IN BLOCK 11 ON REVERSE	B. NOTICE TO MARINERS ☐ WILL BE ISSUED ☐ WILL NOT BE ISSUED
C. CHARTS AFFECTED	D. NAME OF AID(S)
E. DATE	F. SIGNATURE *(By direction in accordance with 33 CFR 67)*

PREVIOUS EDITION IS USABLE

SN-7530-00-FO1-6210

INSTRUCTIONS

1. The applicant will complete items 1 through 9.

2. Submit in triplicate to the Coast Guard District Commander, Attach a location plat, print of the structure showing positions of the aids, a complete Aids to Navigation Equipment List, and when establishing or changing a fog signal, the certificate required by 33 CFR 67.10-1(4).

3. You may obtain from the Coast Guard District Commander copies of Title 33—Navigation and Navigable Waters, Chapter I—Coast Guard, Department of Transportation, Subchapter C—Aids to Navigation, Part 67—Private Aids to Navigation, Outer Continental Shelf and Waters Under the Jurisdiction of the United States.

11. REMARKS

APPENDIX VII

DONATION AGREEMENT FOR LOUISIANA ARTIFICIAL REEF PLAN

ACT OF DONATION

TO THE STATE OF LOUISIANA

FROM

STATE OF LOUISIANA

PARISH OF EAST BATON ROUGE

ACT OF DONATION

BEFORE US, the undersigned notaries, duly commissioned and qualified in and for the parish(es)/county and state(s) hereinafter stated, and in the presence of the competent witnesses hereinafter named and undersigned, on the respective dates hereinafter stated, personally came and appeared _____, acting on behalf of __(insert name)__ Corporation, who declared the following, to wit:

1. He is the __(insert title)__ of __(insert name) Corporation__, hereinafter called "Donor", a __(insert state of incorporation)__ corporation, whose address is __(insert address)____.

2. He is duly authorized to make the donations specified herein and to execute this Act of Donation on behalf of Donor.

and

JAMES H. JENKINS, JR., acting on behalf of the Louisiana Department of Wildlife and Fisheries, who declared the following, to wit:

1. He is the Secretary of the Louisiana Department of Wildlife and Fisheries, the agency charged with administering and enforcing the Louisiana Artificial Reef Development Program, pursuant to La. R.S. 56:639.5(B).

2. He is duly authorized to accept the donations specified herein and to execute this Act of Donation on behalf of the Louisiana Department of Wildlife and Fisheries, acting on behalf of the State of Louisiana ("Donee").

ARTICLE I - DEFINITIONS

1.1 **Agreement.** "Agreement" shall mean this Act of Donation from ___(insert name of Donor)___ to the State of Louisiana through the Louisiana Department of Wildlife and Fisheries.

1.2 **Artificial Reef Fund.** "Artificial Reef Fund" shall mean the Louisiana Artificial Reef Development Fund, LSA R.S. 56:639.8.

1.3 **Donated Structure.** "Donated Structure" shall mean the ___(insert description of structure)_ to be used as an Artificial Reef.

1.4 **Donee.** "Donee" shall mean the State of Louisiana through the Louisiana Department of Wildlife and Fisheries.

1.5 **Donor.** "Donor" shall mean __(insert name of entity)_ Corporation.

1.6 **Conservation Fund.** "Conservation Fund" shall mean the Louisiana Wildlife and Fisheries Conservation Fund, as established in La. Const. 1974, Art. VII, Section 10-A.

1.7 **Louisiana Fishing Enhancement Act.** "Louisiana Fishing Enhancement Act" shall mean the Louisiana Fishing Enhancement Act, LSA R.S. 56:639.1, et seq..

1.8 **Louisiana Plan.** "Louisiana Plan" shall mean the Louisiana Artificial Reef Plan.

1.9 **Louisiana Artificial Reef Development Program.** "Louisiana Artificial Reef Development Program" shall mean the Louisiana Artificial Reef Development Program, LSA R.S. 56:639.5.

1.10 **National Fishing Enhancement Act.** "National Fishing Enhancement Act" shall mean the National Fishing Enhancement Act of 1984, 33 USCA 2101, et seq..

1.11 **National Artificial Reef Plan.** "National Artificial Reef Plan" shall mean the National

Artificial Reef Plan, 33 USCA 2103.

1.12 **Notification of Acceptance.** "Notification of Acceptance" shall mean the document entitled "Notification of Acceptance of Structure Placement and Acceptance of Title", a copy of which is attached hereto and made a part hereof.

1.13 **Person.** "Person" or "Persons" shall mean both natural and juridical persons as defined by Louisiana Civil Code Article 24.

1.14 **Structure Site.** "Structure Site" shall mean the site described in Article 5.1 below.

ARTICLE II - DONATION OF STRUCTURE

2.1 **Donation of Structure.** In consideration of the mutual covenants and conditions set forth below, and for the purpose of enhancing fishing resources within and adjacent to the coast of the State of Louisiana, Donor, in accordance with the National Fishing Enhancement Act (and more particularly the National Artificial Reef Plan, and the Louisiana Fishing Enhancement Act (and more particularly the Louisiana Artificial Reef Development Program), does hereby irrevocably donate, transfer, carry, assign, and deliver unto the Donee the following described structure, which is hereinafter collectively referred to as "Donated Structure", to wit:

(INSERT DESCRIPTION OF STRUCTURE)

ARTICLE III - WARRANTIES

3.1 **Disclaimer.** This donation is made by Donor without any warranty, either express or implied, and in particular any warranty as to the condition, fitness, or usability of said

structure for any purpose, except as provided as follows, or as otherwise provided in this Agreement.

3.2 **Materials.** Donor warrants that the materials donated meet the applicable requirements of the National Artificial Reef Plan, the Louisiana Artificial Reef Plan, and any and all permits issued according to those plans, including but not limited to the permit issued by the U.S. Army Corps of Engineers.

3.3 **Hazardous Material.** Donor warrants that, except for possible trace amounts, the Donated Structure is free of any hydrocarbons or other hazardous materials listed in any current federal, Louisiana state, or local law, ordinance, rule, regulation, order, decree, or requirement.

3.4 **Good Title.** Donor warrants that their title to the Donated Structure is free and clear of all encumbrances of any kind or description.

ARTICLE IV - PERMITS

4.1 **Permits.** As set out in La. R.S. 56:639.9, Donee shall be responsible for obtaining the required permits for the construction and management of an artificial reef at the Structure Site described below pursuant to the National Fishing Enhancement Act and the Louisiana Fishing Enhancement Act.

ARTICLE V - LOCATION AND PLACEMENT

5.1 **Location.** Operations to place the Donated Structure on the floor of the Gulf of Mexico shall be conducted by Donor at the site selected by the Donee. The Donated Structure

shall be placed such that a minimum clearance of fifty (50) feet below the mean low sea level of the surface of the water is maintained, in such a manner that the Donated Structure shall be acceptable by the U.S. Coast Guard for the use of unlit aids to navigation to mark the site. The general location for the placement of the Donated Structure ("Structure Site") is as follows:

AREA/BLOCK	POLAR COORDINATES

5.2 **Position.** Donor shall place the Donated Structure at the Structure Site described above on the floor of the Gulf of Mexico in a horizontal/vertical (choose one) position.

5.3 **Accepted Range.** Donor shall place the Donated Structure as accurately as possible on the Structure Site described above, but in no case shall the Donated Structure be placed more than five hundred (500) feet from the Structure Site on the floor of the Gulf of Mexico. Furthermore, in no case shall the Donated Structure be placed such that a minimum clearance of fifty (50) feet below the mean low sea level of the surface of the water is not maintained.

5.4 **Representation.** Donor shall provide, at its expense, for a representative of Donee to be present at the Structure Site described above at the time of placement of the Donated Structure. Donee's representative shall act as an observer only and shall not serve, nor be deemed to serve, in any operational or advisory capacity whatsoever. Notwithstanding the above, Donee's representative may advise the Donor on placement of the Donated Structure but only at the specific request of the Donor, its agents, employees, or representatives. In such instances, it is specifically understood that Donor shall assume all responsibility for and all liability which may be associated with, any action resulting

from Donor's acting upon such advise, and for any and all consequences arising therefrom.

5.5 **Disclaimer.** Donor shall assume all responsibility for and all liability which may be associated with the transport and disposition of the Donated Structure, or any part thereof. Donee shall assume no liability for the transport and disposition of the Donated Structure, or any part thereof. The Donor shall be solely responsible for the Donated Structure until such time as it has been properly placed on the sea floor at the Structure Site specified above and all other terms and conditions of this Agreement, including but not limited to Donee's mailing of the completed "Notification of Acceptance" as specified in Article VIII herein, have been fulfilled.

5.6 **Structure Site Permits.** Donor warrants that the Donated Structure shall be sited and placed in accordance with all terms, conditions, and special conditions of all U.S. Army Corps of Engineers permits, and all other permits issued to construct the artificial reef, in addition to all specifications contained herein.

5.7 **Completion.** Donor's proper placement of the Donated Structure at the Structure Site described above and completion of all terms and conditions of this Agreement, including but not limited to Donee's mailing of the completed "Notification of Acceptance" as specified in Article VIII herein, shall relieve Donor of any and all obligations or requirements to further transport or move the structure.

5.8 **Surveyor's Plat.** Donor agrees to furnish Donee with a certified surveyors plat of the final location and clearance of the Donated Structure within thirty (30) days following final placement of the Donated Structure.

ARTICLE VI - TITLE

6.1 **Passing of Title.** After the completion of Donor's operations to place the Donated Structure at the Structure Site described above, and after all other terms and conditions of this Agreement, including but not limited to Donee's mailing of the completed "Notification of Acceptance" as specified in Article VIII herein have been fulfilled, title to the Donated Structure shall pass from Donor to Donee free and clear of all encumbrances of any kind or description.

ARTICLE VII - LIABILITY

7.1 **Delivery of Structure - Donor's Actions.** Donor shall be solely responsible for the Donated Structure until all terms and conditions of this Agreement, including but not limited to Donee's mailing of the completed "Notification of Acceptance" as specified in Article VIII herein, have been fulfilled. Donor shall indemnify and hold Donee harmless from and against any and all claims, demands, or causes of action of any description in favor of any person for damage or loss to persons or property arising from Donor's actions or failure to act during the operations required to deliver the Donated Structure and to properly place it on the Structure Site described above and until such time as all other terms and conditions of this Agreement, including but not limited to Donee's mailing of the completed "Notification of Acceptance" as specified in Article VIII herein, have been fulfilled.

7.2 **Delivery of Structure - Donee's Negligence.** Donor shall be solely responsible for the

Donated Structure and its delivery until such time as all terms and conditions of this Agreement, including but not limited to Donee's mailing of the completed "Notification of Acceptance" as specified in Article VIII herein, have been fulfilled. However, Donor assumes no liability and extends no indemnity to Donee for injury or loss sustained by Donee, its employees, agents or third parties, arising solely out of the negligence of Donee, its agents, or employees, during the operations required to deliver the Donated Structure to the Structure Site described above. It is understood and agreed that Donee's representative will serve as an observer only and shall not act, nor be deemed to act, in an operational or advisory capacity during the operations required to deliver and properly place the Donated Structure at the Structure Site. Notwithstanding the above, Donee's representative may advise the Donor on placement of the Donated Structure but only at the specific request of the Donor, its agents, employees, or representatives. In such instances, it is specifically understood and agreed that Donor shall assume all responsibility for, and all liability which may be associated with, any actions which may result from Donor's acting upon such advice, and for any and all consequences arising therefrom.

7.3 **Title Passage of Structure.** Donee shall be responsible for Donated Structure only after all terms and conditions of this Agreement, including but not limited to Donee's mailing of the completed "Notification of Acceptance" as specified in Article VIII herein, have been fulfilled. Donee shall have neither any interest in, responsibility for, nor liability for the Donated Structure or any part thereof until all terms and conditions of this Agreement, including but not limited to Donee's mailing of the completed "Notification of Acceptance" as specified in Article VIII herein, have been fulfilled. Donee agrees to indemnify and

hold Donor harmless from and against any and all claims, demands, or causes of action in favor of any person for damage or loss that may occur to persons or property arising after title to Donated Structure passes to the Donee and arising out of or in any way connected with use of the Donated Structure, or any appurtenances attached thereto by Donee or other persons, provided that the Donated Structure meets the requirements of the National Artificial Reef Plan and the Louisiana Artificial Reef Development Program, except that Donor hereby assumes responsibility and liability for any personal injury, property damages, loss or damage of any description, including but not limited to loss or damage to fish or wildlife, or fish or wildlife habitat, which may result from a spill, seepage, or release from the Donated Structure of hydrocarbons or hazardous materials that are listed in any current federal, state or local law, ordinance, rule, regulation, order, decree, or requirement.

7.4 **Notice of Claims.** In all aforesaid instances wherein the Donee agrees to indemnify the Donor, if such a claim, demand, or cause of action is filed against Donor, Donor shall promptly notify Donee in writing and by certified mail. This notice shall be addressed to the Secretary, Department of Wildlife and Fisheries, and shall specify the nature of and the specific basis for such claim, demand, or cause of action and the amount claimed, or the estimated amount claimed to the extent then known. In all aforesaid instances wherein the Donor agrees to indemnify the Donee, if such a claim, demand, or cause of action is filed against Donee, Donee shall promptly notify Donor in writing and by certified mail. This notice shall be addressed to _____, and shall specify the nature of and the specific basis for such claim, demand, or cause of action and the amount claimed,

or the estimated amount claimed to the extent then known.

7.5 **Legal Representation.** In all instances wherein the Donee agrees to indemnify the Donor, at the election of the Donee, the Donee shall either provide legal representation for Donor against such claim, demand or cause of action , or reimburse Donor for all reasonable costs incurred by Donor in defending against such claim, demand or cause of action, provided that the Donor provides written notice to the Donee as provided above.

7.6 **Disclaimer - Liability for Maintenance and Repair.** After all terms and conditions of this Agreement, including but not limited to Donee's mailing of the completed "Notification of Acceptance" as specified in Article VIII herein, have been fulfilled, Donor shall have no obligation or duty whatsoever to provide for the maintenance or repair of the Donated Structure or any appurtenance attached thereto.

ARTICLE VIII - ACCEPTANCE

8.1 **Appearance by Donee.** Donee hereby appears for the purpose of accepting both the Donated Structure and the funds upon the fulfillment of the conditions specified below.

8.2 **Obligation to Accept by Donee.** Donee hereby obligates itself to accept the donation of both the Donated Structure and the funds specified herein upon the fulfillment of the following conditions:

a. Donor has in fact delivered the Donated Structure to the proper Structure Site as specified herein;

b. Donor has completed any and all operations to place the Donated Structure at the Structure Site as specified herein;

c. Donor has conducted a survey and procured a certified surveyor's plat of the Donated

Structure at the Structure Site after operations have been completed in full;

d. Donor has delivered the certified surveyor's plat, as specified in section "c", above to the Donee;

e. Donee has received, examined, and accepted Donor's certified surveyor's plat and has sent to Donor by certified mail a completed and signed "Notification of Acceptance of Structure Placement and Acceptance of Title", ("Notification of Acceptance") a blank copy of which is attached hereto and made a part hereof, by certified mail. Unless otherwise agreed, Donee will mail such notification within three (3) working days following receipt of the certified surveyor's plat from Donor, provided that Donee accepts such certified surveyor's plat as indicating proper placement of the Donated Structure at the Structure Site.

8.3 **Acceptance by Donee.** Donee's acceptance of the Donated Structure and funds shall be deemed to occur and title shall pass only upon the fulfillment of the conditions specified in Section 8.2 (a-e) above. Acceptance shall particularly be deemed to occur and title shall pass at 12:00 midnight on the date that Donee mails to Donor the completed "Notification of Acceptance". Acceptance shall not be deemed to occur at any time prior to the fulfillment of said conditions. It is specifically understood and agreed that Donee shall have no ownership interest in the Donated Structure unless and until Donee mails the completed "Notification of Acceptance" and any and all liability for actions, occurrences, or omissions which might occur prior to Donee's mailing of the completed "Notification of Acceptance", other than those arising solely out the direct negligence of the Donee, as provided in Section 7.2 above, shall be the sole responsibility of the Donor.

ARTICLE IX - DONATION TO ARTIFICIAL REEF FUND

9.1 **Donation to the Artificial Reef Fund.** Donor agrees to and shall donate to the Conservation Fund the sum of $_____,_as provided by the Louisiana Fishing Enhancement Act and the Louisiana Artificial Reef Development Program, with such sums then to be placed in the Artificial Reef Fund for the benefit of the Louisiana Artificial Reef Development Program pursuant to the Louisiana Fishing Enhancement Act and the Louisiana Artificial Reef Development Program, as presently written. The Donor shall deliver the aforesaid sum to the Donee simultaneously with delivering the certified surveyor's plat to the Donee. Acceptance of the aforesaid sum shall be deemed to occur upon Donee's acceptance of the Donated Structure and title passage of the Donated Structure as evidenced by the Donee's mailing of the completed Notification of Acceptance as provided in Article VIII herein.

NOTIFICATION OF ACCEPTANCE OF STRUCTURE PLACEMENT AND ACCEPTANCE OF TITLE

Mr.

Dear Mr. :

Reference is made to an Act of Donation to the State of Louisiana from the * dated *. The Department of Wildlife and Fisheries has received and reviewed the certified surveyor's plat depicting the final locations of your structure * at our * reef site.

Pursuant to the aforementioned Act of Donation, in particular Article VIII, the Department of Wildlife and Fisheries hereby accepts the placement of the donated structure and the title to said structure.

Thank you for your cooperation in this matter.

Sincerely,

Rick A. Kasprzak
Artificial Reef Coordinator
Marine Fisheries Division

RAK/lar

c:

THUS DONE AND SIGNED this ____ day of _____, 1994, at _____ _____, in the presence of the undersigned competent witnesses who hereunto sign their names with said appearers and me, notary.

WITNESSES:

DONOR:

_____

_____

_____

BY:_____

_____
NOTARY PUBLIC

THUS DONE AND SIGNED this _____ day of _____, 1994, at Baton Rouge, Louisiana in the presence of the undersigned competent witnesses who hereunto sing their names with said appearers and me, notary.

WITNESSES:

DONEE:

_____

LOUISIANA DEPARTMENT OF
WILDLIFE AND FISHERIES

_____

BY:_____
JAMES H. JENKINS, JR.
SECRETARY

_____
NOTARY PUBLIC

Amendment II

to

Louisiana's Artificial Reef Plan

Special Artificial Reef Sites

Introduction

Since the development of Louisiana's Artificial Reef Program, several unforseen and seemingly beneficial opportunities have arisen that involve the creation of artificial reefs outside of designated planning areas. For example, a large drilling rig, owned and operated by ODECO located in South Timbalier 86, collapsed in 1986 during Hurricane Juan. This very large structure has become a very popular diving and fishing spot but not located within one of the eight original Louisiana Artificial Reef Planning Areas. While program coordinators and council members believe inclusion of the structure in the reef program is desirable, they also feel expansion of an existing planning area to encompass the ODECO structure would set a bad precedent.

The creation of a "Special Artificial Reef Site" (SARS) program category would provide the council and program the flexibility of establishing selected artificial reefs under such "unusual" circumstances. Each SARS in inshore or offshore waters of Louisiana would have to meet the following qualifications and criteria.

Definition

A Special Artificial Reef Site (SARS) is an artificial reef site created and maintained by the Louisiana Department of Wildlife and Fisheries under the Louisiana Artificial Reef Program as described in Amendment II of the Louisiana Reef Plan (this amendment).

The purpose of a SARS is to allow the Louisiana Artificial Reef Program to take advantage of materials of opportunity located outside designated planning areas that would benefit Louisiana's Artificial Reef Program with minimum negative user group impacts. A site, and materials contained in that site, would qualify as a SARS when one or more of the following criteria are met:

A) There is a historical or biological significance associated with that site. For example, if a particular area is a successful fishing spot frequented by fishermen and/or divers, or if the site provides good fishery habitat,

B) the site is part of a cooperative effort between the Louisiana Artificial Reef Program and other state, federal or private groups,

C) the site contains shipwrecks or other derelicts which cannot be practicably removed or relocated, and provide benefits to the Louisiana Artificial Reef Program, or

D) the site forms an integral part of experimental or demonstration projects undertaken by the Louisiana Artificial Reef Program.

Criteria

For a site to be considered as a SARS it must meet the following criteria:

1. designation as a SARS would provide benefit to recreational and/or commercial fishing, or fish habitat,

2. removal of existing material from that site would have a negative impact on fish

populations(s),

3. designation as a SARS would not pose a threat to navigation,

4. the area does not occupy currently trawlable bottom,

5. inclusion of the special artificial reef site in the Louisiana Artificial Reef Program would have an overall positive impact on user groups,

6. for every "SARS" constructed, an area of equal size would be eliminated from an existing planning area, and

7. except for possible trace amounts, the structure would be free and clear of any hydrocarbons or other hazardous materials as listed in current regulations promulgated by the U. S. Environmental Protection Agency.

Procedure

The following steps will be taken to establish a Special Artificial Reef Site:

1. The Louisiana Artificial Reef coordinators will draft a proposal to establish a SARS for submission to the Artificial Reef Council. The proposal shall include: a) location, b) clearance, c) bottom profile, d) condition of structure and list of potential hazardous material, and e) justification that the criteria outlined above are met.

2. Following acceptance of the proposal by the Louisiana Artificial Reef Council, the intent to create a SARS will be announced through a Louisiana Department of Wildlife and Fisheries News Release.

3. Thirty days following news releases, if no major objections are received, the Louisiana Artificial Reef Coordinator will apply for necessary permits. In the event objections are received, a public hearing will be held to provide further

information before a final determination by the Council.

4. If appropriate, a Deed of Donation will be agreed upon by the donor and recipients of the reef material.

5. The Secretary of the Department of Wildlife and Fisheries shall sign all necessary permits and the Deed of Donation.

Amendment III

to

Louisiana's Artificial Reef Plan

Deepwater Reef Sites

Allows the Louisiana Artificial Reef Program to accept proposals for artificial reefs created from platforms in water depths of 400 ft. or greater, provided that they meet the following criteria:

A. Water depth exceeds 400 ft

B. Must have a minimum clearance of 85 feet to avoid lighting requirements

C. Over 2 miles from a fairway to avoid lighting requirements

D. Meets MMS recommendations with regards to pipelines

E. Clearance does not exceed 200 ft to maintain optimum biological productivity

F. Other platforms in water depths 400 ft or greater within the 2 mile fairway buffer zone may be considered on a case by case basis, based on historical navigational patterns, (i.e. LOOP), clearance, biological importance and liability concerns.

Amendment III

to

Louisiana's Artificial Reef Plan

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E. Clearance does not exceed 200 ft to maintain optimum biological productivity

F. Other platforms in water depths 400 ft or greater within the 2 mile fairway buffer zone may be considered on a case by case basis, based on historical navigational patterns, (i.e. LOOP), clearance, biological importance and liability concerns.