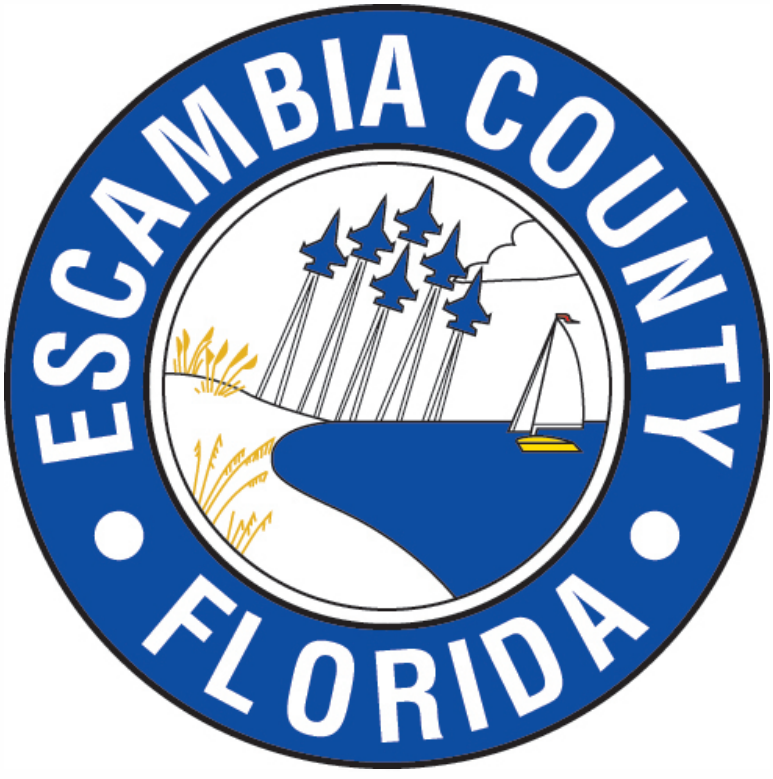
Escambia County Artificial Reef Plan
(v.2009.1)



Escambia County Marine Resources Division

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I. Introduction

Artificial reefs have been intentionally constructed in the marine (Gulf of Mexico) and estuarine (Pensacola Bay System, including Santa Rosa Sound, Big Lagoon, and Perdido Bay) waters of Escambia County, Florida for at least four decades (Turpin, personal observation). In addition, shipping and military endeavors resulted in objects resting on the seafloor and providing habitat for marine life. Initially and primarily, municipalities, organizations, commercial and charter fishing/diving captains, and serious recreational fishers and divers constructed artificial reefs for the purposes of increasing fishing and diving locations. Historically, although relevant laws existed (e.g., Rivers and Harbors Act), artificial reef construction was not regulated. Most artificial reef materials consisted of"materials of opportunity" (e.g., automobile bodies and tires, boat hulls, household appliances, and other "scrap" materials). These materials were placed on the seafloor at locations decided upon by the individual reef builders. Locations of some artificial reefs were kept secret to maintain control over the harvest of fishes from the artificial reefs.

Gradually, regulatory agencies such as Florida Department of Natural Resources and Florida Department of Environmental Regulation (now Florida Fish and Wildlife Conservation Commission and Florida Department of Environmental Protection), US Army Corps of Engineers, National Oceanographic and Atmospheric Administration
(NOAA), and US Coast Guard (USCG) began enforcing federal and Florida laws and policies relating to artificial reef construction. Federal regulations include: Rivers and Harbors Act; and Clean Water Act (CWA), National Fishing Enhancement Act {NFEA). Florida regulations include: Florida Statutes and Florida Administrative Code.

In Florida waters (within 9 nautical miles from shore), permits from Florida Department of Environmental Protection (FDEP) and US Army Corps of Engineers (ACOE) are required for the construction of artificial reefs. In addition, Florida Sovereignty Submerged Lands issues may need to be resolved. In federal waters (9-200 nautical miles from shore), an ACOE permit is required for artificial reef construction. Florida Fish and Wildlife Conservation Commission (FWCC) Bureau ofMarine Fisheries Management manages Florida's Artificial Reef Program. As governmental managers and regulatory authorities became more involved and interested in artificial reef programs and permitting, artificial reef materials became more restrictive. Justifications for increased scrutiny and restriction of artificial reefmaterials can be summarized as: 1) protection of the marine environment; 2) reduction of negative impacts of artificial reef materials to other marine resource uses (oil and gas extraction, trawl fisheries, beach restoration sediment sources); 3) reduce potential of artificial reef materials to wash ashore during storms; and, 4) provide long term marine life habitat instead ofshort term fish aggregation. Moreover, when public funds are expended for artificial reefconstruction, managers strive for the best possible (monetary) ''value" by requiring durable and stable artificial reefmaterials.

Escambia County's participation in public artificial reef construction began in the l970's with the deployment of the "Casino Rubble".. "Three Barges", and "Liberty Ship" artificial reefs. In the mid-1980's, a Marine Recreation Committee was formed by the Escambia County Board of County Commissioners (BCC) for the purpose ofartificial

reef development and other boating-related issues. The Marine Recreation Committee obtained permits for five artificial reef sites (Sites: 7, 15, 20, 21, 22), and constructed over 100 artificial reefs. In 1999., during permit renewal proceedings., it was discovered that a number of artificial reefs may have been deployed outside of the permit areas. Escambia County was issued a request for additional information. No response was provided by the County, therefore the permits expired without reauthorization.

In April 2000, the Escambia County BOCC established the Escambia County Marine Resources Division (MRD) for the purpose of local management of marine, estuarine, and freshwater resources. Re-establishment of an Escambia County Artificial Reef Program has been identified as a major goal of MRD.

This Escambia County Artificial Reef Plan (Plan) is established as a guidance document and planning tool for the implementation of the Escambia County Artificial Reef Program (Program) and the construction of public artificial reefs. The Plan also covers a special subset of artificial reef: "private" or "personal" reefs are those materials obtained and deployed by private citizens (e.g., charterboat operators) under specific authorization by Army Corps of Engineers permit. The locations of the "personal" reefs are not publicized in the Escambia County Public Artificial Reef List.

The goals set forth in the Florida Artificial Reef Plan and National Artificial Reed Plan have been combined and modified into Guiding Principles of the Escambia County Artificial Reef Program: *Access to Safe, Healthy, and Productive Watenvays.*

Escambia County Artificial Reef Program Goals include:

1. **enhance the (primarily sand) seafloor of the marine and estuarine waters of, and adjacent to, Escambia County by the placement of stable and durable artificial reef materials for the purpose of establishing access and creating habitat for reef-associated species of fishes and invertebrates**
2. **increase regional abundance of marine life species via habitat**
3. **reduce negative impacts to natural reefs**
4. **provide fishing and diving opportunities for the residents and tourists of Escambia County**
5. **maintain a list ofpublic artificial reefs on Escambia County website (See Appendix I.)**
6. **increase fishing and diving success, and artificial reef-user satisfaction**
7. **reduce conflicts between artificial reef users and user groups**
8. **enhance the local and state economies via goals 4, 5, and 6**
9. **increase safety ofboaters using artificial reefs via establishment of artificial reef permits close to shore**
10. **increase fuel economy (decrease fuel consumption) via establishment of artificial reef permits close to shore**
11. **maintain, at a minimum, the year 2001 ratio of artificial reefs to registered boats (in Escambia County); net increase of three artificial reefs per year**
12. **establish snorkeling reefs in Gulf and inshore waters to provide access from shore**

II. Artificial Reef Site Permitting

As previously stated, Escambia County's five original permits for the construction of artificial reefs have expired. However, in 1994 FDEP obtained an ACOE permit for "Large Area Artificial Reef Sites (LAARS) in the Gulf of Mexico. Two areas, "Escambia East" and "Escambia West" are located southeast and southwest, respectively, of Pensacola Pass. Although the LAARS were originally intended for the construction of "private" artificial reefs by commercial and charter fishing/diving operators, as well as serious recreational fishers and divers, Escambia County continues to utilize the LAARS for public artificial reef construction.

However, it is the goal of MRD to establish permits for new artificial reef sites. Guiding principles for the establishment of new permits includes:

- **proximity to Pensacola Pass**
- **seafloor characteristics (depth, sediment type, existing natural and artificial reefs)**
- **location of shipping lanes and anchorage areas**
- **jurisdictional issues (e.g., Gulf Islands National Seashore, Aquatic Preserve)**
- **Federal, state, and local regulations**
- **SCUBA Training Standards**

Florida Department of Environmental Protection and US Army Corps of Engineers are the authoritative agencies governing artificial reef deployment Escambia County must obtain permits from these two agencies for artificial reef deployment areas. These agencies have numerous regulations regarding reef site and materials. Other agencies, including US Coast Guard, US Fish and Wildlife Service, National Marine Fisheries Service, Florida Fish and Wildlife Conservation Commission, an(/National Parks Service have various regulations and m,thority to restrict or prohibit artificial reef deployments in certain areas, particularly within Pensacola Bay and within one mile of the barrier islands in the Gulf of Mexico. In addition, the Coastal Zone Management Act (CZMA) requires Florida agencies' concurrence for artificial reef permits issued by Army Corps of Engineers in federal waters.

MRD plans to accomplish the following Artificial Reef Permit activities in Fiscal Year 2008-2009:

1. **Renew Escambia East LAARS for public reef deployments (Application submitted February 2007)**
2. **Renew, Expand and Modify Escambia West LAARS for personal reef deployments (Application submitted February 2007)**
3. **Establish new Permit for Nearshore Fishing and Dive Training Reefs (Submitted September 2008)**
4. **Submit application for Snorkeling Reefs (Submitted September 2008)**
5. **Submit application for "Inshore Artificial Reefs" within Pensacola Bay/Santa Rosa Sound (Submitted September 2008)**

m. Artificial Reef Materials and Construction

Permits (issued by Florida Department of Environmental Protection and US Army Corps of Engineers) for the construction of public artificial reefs contain criteria for allowable artificial reef materials; thus, permit criteria are the primary guidelines for artificial reef construction under this Program. Numerous documents have been published for the purpose of providing guidance for artificial reef construction and the selection of artificial reef materials (i.e., Guidelines for Marine Artificial Reef Materials; Coastal Artificial Reef Planning Guide; Florida Artificial Reef Plan; National Artificial Reef Plan).

The primary factors of consideration in the selection of public artificial reef materials include:

- Permit criteria
- Compatibility with marine environment
- Material density (overall) and configuration
- Stability (tendency of the materials to remain at the deployed location)
- Durability (tendency of the materials to remain intact over time)
- Habitat value (amount of suitable habitat for marine species)

MRD utilizes recognized artificial reef "best management practices", scientific literature, artificial reef agency/organization publications, experience from previous artificial reef experience, and any other credible sources of information when making public artificial reef materials and construction determinations. It is recognized however, that materials may become available for use as artificial reefs for which there is no previous artificial reef experience. In such cases, 'MRD shalt use particular care to ensure that the materials, if deployed, create no harm to the marine environment nor endanger marine life (particularly threatened of endangered species) or human health and safety. Such care shall include: consultation with other artificial reef professionals and regulatory personnel; deployment at greater depths and/or at maximum distances from permit boundaries; modification of the materials configuration. Under certain circumstances.. "pilot projects" may be conducted with a limited number of reef materials to be monitored to answer uncertainties.

Artificial reef materials are carefully selected, with particular attention placed on habitat value and material stability and durability. Concrete materials have proven to be stable and durable, providing "long-term" habitat for reef-associated fauna. Several prefabricated concrete and concrete/steel artificial reef modules are locally available and have been historically utilized for Escambia County artificial reefs. Monitoring results (see Section IV below) continuously yield additional and better information for planning public artificial reef construction. Concrete bridge rubble also has proven to be effective habitat. Individual pieces of concrete of different sizes and dimensions are deployed in a manner resulting in vertical "stacking". Maximizing the vertical dimension (within permit limits) results in greater marine life habitat value (via creation of ledge, overhang, crevice of various dimensions) and maximizes reef resistance to subsidence.

Steel vessels and other structures have proven to provide long-term, stable and durable artificial reef habitat. Reef height and attractiveness to divers are two advantageous reef characteristics often achieved with steel objects. However., care must be taken to assure stability and durability of metals that will rust and corrode over time. Careful cost-benefit comparisons should be performed to make wise artificial reef selection decisions and investments.

Public artificial reef materials should be placed on the seafloor in a planned manner. Decisions regarding reef size, reef material quantity, and reef spacing take into account the goals for each particular artificial reef deployment. User needs should be balanced with habitat requirements of marine life expected to be attracted to the artificial reef. Results of surveys, monitoring, and scientific studies are considered in artificial reef planning. Construction of large artificial reefs capable of simultaneously supporting a number of fishing and/or diving vessels are balanced with the construction of "patch" reefs that may allow users to "spread out".

:rv.tRD works with stakeholders to procure funds for the implementation of this Program. Potential sources of funding for artificial reef construction include:

- Grants
- Vessel registration fees (County portion) *Note: Florida Legislature (via HB7175) prohibited county use of these funds for artificial reef construction in July 2006*
- Civic organizations
- Stakeholders
- Benefactors
- Private industry, especially Fishing/Diving related businesses
- Escambia County Funds

ID.A. MRD Artificial Reef Development Approach

1. Identify and consider stakeholder needs
2. Identify and consider marine life needs
3. Identify and consider funding and other logistical constraints
4. Identify, consider, and initiate applicable reef permit conditions, state/federal regulations...
5. Consult with local, state, and federal artificial reef managers
6. Identify, consider, and select reef materials (reef materials suitability: permit conditions, habitat quality, stability/durability; negotiate price, scope, equipment, methods, performance standards...)
7. Initiate Purchasing Process
8. Select reef site (water depth, distance from shore, distance from other reefs)
9. Verify reef site suitability: seafloor characteristics; clear of natural reefs, historical/ archaeological resources (fathometer scan; visual inspection, if appropriate)
10. Prepare Reef Construction Plan (methods, equipment, communication, logistics, safety, performance standards...)

11. Conduct Pre-Construction Meeting with reef-deployment contractor and all personnel associated with the reef construction (establish communication plans, weather/sea condition criteria., Reef Construction Plan...)
12. On-Site Management of Reef Deployment: Implement Reef Construction Plan
    A. Reef site control (GPS, buoys, anchors, **etc...)**
    B. Communication (sufficient VHF radios for effective communication)
    C. Final materials compliance verification
    D. Deploy materials according to Reef Construction Plan
    E. Verify reef location (GPS) and permit compliance (fathometer scan, underwater visual observation)
13. Post-Deployment Notifications (Permit Forms, FWC Reef Placement Forms, etc...)
14. Public Notification (Press Release, website updates, etc.)
15. Incorporate Reef into long-term underwater visual monitoring (video, reporting, **etc.)**
16. Incorporate underwater monitoring results into Escambia County Artificial Reef Plan and disseminate as appropriate
17. Utilize information gained from underwater monitoring, reef user surveys and feedback, and stakeholder requests to refine and improve Escambia County Artificial Reef Program (i.e., "Adaptive Management")

In addition to the management techniques described above, MRD utilizes the principles of"Adaptive Management" in managing Escambia County Artificial Reef Program. In the present context, adaptive management can be summarized as follows: obtaining the most current and applicable information pertinent to Escambia County Artificial Reef Program, planning artificial reef deployments in consideration of one or more factors/criteria (listed above), controlling reef construction to the greatest degree possible, monitoring reefs and obtaining feedback information to determine the effectiveness of reef construction, and integrating "lessons learned" into future reef planning and construction. The goal of adaptive management is continuous improvement.

MRD utilized the adaptive management approach throughout the construction of the Pensacola Fishing Bridge Reefs and I-10 Bridge Rubble Reefs. Previous MRD bridge rubble reef construction and monitoring experience and knowledge were utilized to plan the 115,000-ton reef construction projects: multiple barge-loads of concrete bridge rubble were deployed at each of the seven 1-10 reefs, spaced approximately 5,000 feet apart. Two artificial reefs were similarly constructed utilizing demolition materials from the Pensacola Fishing Bridge. Spacing between reefs was intended to provide adequate benthic forage area for the anticipated trophic requirements of a large and diverse reef community. Deployment barges were anchored to control the horizontal and vertical reef dimensions throughout construction. MRD utilized GPS and fathometer equipment aboard the MRD vessel to track the horizontal and vertical reef dimensions throughout reef construction. The deployment location of each barge-load of bridge rubble was planned by considering the materials to be deployed (materials type/quantity/dimensions), pre-existing reef dimensions, weather and sea conditions, and permit conditions. Throughout the deployment of each barge-load, MRD conducted

fathometer-scans of the reef, and directed the equipment operators and tug captain to place the reef materials to maximize reef height (within permit limits) but not crush previously-deployed more fragile materials (e.g.., hollow cylinder pilings) with heavier concrete rubble. Knowledge, experience and reef monitoring of the previously-deployed "PENHALL Reefs" (utilizing demolition materials from the US Highway 90 Bridge over Escambia River) was incorporated into various subsequent artificial reefconstruction projects. When sufficient materials (quantity and diversity) are available, construction of large reefs, with maximum vertical relief (within permit conditions) results in large and diverse marine life assemblages. Balancing construction of large reefs and smaller reefs provides a diverse artificial reef inventory to satisfy a wide variety of reef users and marine life.

III.B. "Offshore" Artificial Reefs

For the purposes ofthis Plan, the term "Offshore Artificial Reefs" is used to describe artificial reef materials deployed in the Gulf of Mexico in federal waters (i.e., more than nine nautical miles from shore). These reefs are typically constructed for the purpose of fulfilling Escambia County Artificial Reef Program Goals#: 1, 2, 3, 4, 6, 7, 8 and 11.

Materials for offshore artificial reefs are selected based upon the following characteristics: permit conditions; previous successful use as artificial reefs under similar conditions; marine life habitat attributes (cryptic space quantity and diversity, 'ledge" features, reefheight, etc.). Innovative materials and designs are also considered.

Typical materials previously successfully utilized for offshore artificial reefs include: metal (steel and aluminum) vessels, metal and/or concrete prefabricated artificial reef modules (PARMs), concrete and rock rubble of various sizes, surplus military vehicles and equipment, decommissioned oilfield platforms, and other "materials of opportunity" (e.g., concretejunction boxes).

Offshore artificial reefs provide habitat to various marine vertebrate and invertebrate species (lobster, groupers, snappers, triggerfish, jacks, etc.) of interest to fishers and divers for consumptive and nonconsumptive uses. Thus, offshore artificial reefs provide fishing and diving opportunities for Escambia County residents and visitors, resulting in enhanced quality of life and tourism revenues.

ill.C. "Nearshore" Artificial Reefs

For the purposes of this Plan, the term "Nearshore Artificial Reefs'' is used to describe artificial reef materials deployed in the Gulf of Mexico in state waters (i.e., less than nine nautical miles from shore). These reefs are typically constructed for the purpose of fulfilling Escambia County Artificial Reef Program Goals#: 1, 2, 3, 4, 6, 7, 8, 9, 10 and 11. Although nearshore artificial reefs share many similarities with offshore artificial reefs, there are several important differences. Nearshore water depths and resulting wave climate require additional emphasis on reef stability and durability. Closer proximity to port provides safer access by smaller vessels, and requires lower fuel consumption. Water depths less than 60 feet are required by SCUBA training agencies for student training dives.

Materials for nearshore artificial reefs are selected based upon the following characteristics: permit conditions; previous successful use as artificial reefs under similar conditions; marine life habitat attributes (cryptic space quantity and diversity, 'ledge" features, reef height, etc.). Innovative materials and designs are also considered.

Typical materials previously successfully utilized for nearshore artificial reefs include: metal (steel and aluminum) vessels, metal and/or concrete prefabricated artificial reef modules (PARMs), concrete and rock rubble of various sizes, surplus military vehicles and equipment, decommissioned oilfield platforms, and other "materials of opportunity" (e.g., concrete junction boxes).

Nearshore artificial reefs provide habitat to various marine vertebrate and invertebrate species (lobster, groupers, snappers, triggerfish, jacks, etc.) of interest to fishers and divers for consumptive and nonconsumptive uses. Thus, nearshore artificial reefs provide fishing and diving opportunities for Escambia County residents and visitors, resulting in enhanced quality of life and tourism revenues.

m.D. "Inshore" Artificial Reefs

For the purposes of this Plan, the term "Inshore Artificial Reefs" is used to describe artificial reef materials deployed in state waters. generally inside the Line of Demarcation. With the exception of reefs deployed in the Gulf of Mexico for intended access from shore (e.g., snorkeling reefs), inshore artificial reefs are deployed in estuarine waters (i.e., bays, lagoons, etc.). These reefs are typically constructed for the purpose of fulfilling Escambia County Artificial Reef Program Goals#: I, 2, 4, 6, 7, 8, 9, 10, 11 and 12. Although inshore artificial reefs share many similarities with nearshore and offshore artificial reefs, there are several important differences. Inshore water depths and resulting wave climate may require additional emphasis on reef stability and durability. However, reefs placed within estuaries may be less susceptible to hydrodynamic forces than reefs placed in the Gulf of Mexico. Closer proximity to port provides safer access by smaller vessels, and requires lower fuel consumption. Water depths less than 60 feet are required by SCUBA training agencies for student training dives.

Some inshore artificial reefs may be deployed to provide access from shore or fishing piers or similar structures. Reefs built specifically for snorkeling may require specific regulations for public safety. Inshore reefs may be more heavily-used, therefore user conflicts may be an important issue.

Materials for inshore artificial reefs are selected based upon the following characteristics: permit conditions; previous successful use as artificial reefs under similar conditions; marine life habitat attributes (cryptic space quantity and diversity, 'ledge" features, reef height, etc.). Innovative materials and designs are also considered.

Typical materials previously successfully utilized for inshore artificial reefs include: metal and/or concrete prefabricated artificial reef modules (PARMs), concrete and rock

rubble of various sizes, and other "materials ofopportunity" (e.g., concrete junction boxes).

Inshore artificial reefs provide habitat to various marine vertebrate and invertebrate species (lobster, groupers, snappers, triggerfish, jacks, drum, flounders, porgies etc.) of interest to fishers and divers for consumptive and nonconsumptive uses. Thus, inshore artificial reefs provide fishing and diving opportunities for Escambia County residents and visitors, resulting in enhanced quality of life and tourism revenues. In particular, snorkeling reefs are of particular interest to the diving community for the purpose of providing a diversity of marine life viewing opportunities which, at present, are generally absent in Escambia County waterways. Marine educational opportunities are greatly enhanced via snorkeling reefs.

Inshore artificial reefs constructed in the Gulf of Mexico adjacent to barrier islands require special consideration with respect to design. Extreme hydrodynamic conditions will impact these reefs during tropical and extra-tropical storms. Therefore consideration ofmaterial stability and durability must take precedence over marine life habitat vaJue. Human health and safety must also be of primary concern. Littoral sediment transport
(parallel and perpendicular to shore) play a large role in reef design. As a result of these and other considerations (e.g., potential impacts to threatened and endangered species), materials likely to be deployed as artificial reefs in the Gulf of Mexico adjacent to barrier island beaches will consist of consist of clusters of concrete pilings driven into the seafloor. The pilings, and the spaces between adjacent pilings will provide some habitat for attached and motile marine organisms. These organisms, including brightly colored "tropical" fishes are often present at the concrete pilings supporting local fishing piers in the Gulfduring calm weather. Similarly, during calm weather and water conditions, sufficient underwater visibility provides snorkeling opportunities for the public to view the marine life associated with the artificial reefs. However, due to periodic rough weather events, habitat quality/quantity and utilization (by marine life and the public) are necessarily diminished. In recognition of these and other factors, Escambia County plans to construct artificial reefs adjacent to barrier islands in the more sheltered waters of bays and lagoons.

OLE. "Private" Offshore Artificial Reefs

As previously defined in the Plan, "private" or "persona]" reefs are those reefs deployed by private citizens at their own expense, as authorized by Large Area Artificial Reef Site (LAARS) permit from US Army Corps of Engineers. Although personal reefs must comply with the general permit conditions, there are additional specific requirements which apply to the personal reef builder and to Escambia County MRD. These conditions are found in LAARS Permit (See Appendix IV).

Escambia County staffinspect all materials proposed to be deployed as personal reefs. Escambia County ensures the materials are clean and free ofpollutants or contaminants. Materials composition and thickness (metals), dimensions, weight, and configuration are inspected to ensure with LAARS permit conditions. Digital photographs further

document the proposed reef materials. Inspection results are submitted to regulatory agencies; materials may not be deployed for five (5)"business" days to allow resolution of any agency concerns.Escambia County is required to conduct deployment/post-deployment compliance monitoring on a subset (percentage) of personal reefs to ensure the materials are being deployed within the permitted reef site.Escambia County Artificial Reef Permitting Program Ordinance formally adopted LAARS permit conditions, and established the process, procedures and regulations for personal reef building. Violation of the LAARS permit or ordinance results in forfeiture of issuance of future LAARS authorizations to build personal reefs. A complete description of the Ordinance, process and procedures for personal reefs is provided in Appendix V.

IV. Artificial Reef Monitoring

Artificial reef monitoring is considered an important component of artificial reef management (National Artificial Reef Plan., Stone, 1985).Effective management of a public artificial reef program must include post-construction monitoring. However, monitoring has been interpreted in different ways by different individuals, managers, and agencies. For the purposes of this Plan, artificial reef monitoring will consist of four "Levels". The specific Monitoring Level(s) utilized will be determined by the relevant factors, including: available resources (funding and personnel); relative need for particular or specific information; relative quantity (or potential) of material in question. Information obtained from all forms of artificial reef monitoring is incorporated into MRD application of"Adaptive Management" ofEscambia County Artificial Reef Program.

It is desirable to perform artificial reef monitoring to the fullest possible extent. However, fiscal and/or operational constraints may restrict monitoring to the level(s) deemed necessary or important. To the greatest extent possible,Escambia County will monitor and assess the effectiveness of public artificial reefs.Escambia County MRD artificial reef monitoring goals include:

1. ReefConstruction Monitoring- 'MRD conducts on-site monitoring ofevery public reef deployment (monitor reef location, horizontal and vertical dimensions/spacing, etc.) to ensure the reef is constructed as planned and according to permit conditions. Reef construction monitoring is accomplished via: surface visual observations, fathometer scans, underwater visual observations.
2. Post-Construction Reef Monitoring

2a. Reef Location Verification- MRD conducts fathometer scans of each public artificial reef annually to verify reef position (reef coordinates are maintained in Excel spreadsheet and published on Escambia County website in .pdf files). MRD verifies reef materials meet long-term stability criteria. Absence of materials previously verified may indicate subsidence into seafloor, accidental or deliberate movement by person(s), of movement by hydrodynamic forces (e.g., during tropical storms, hurricanes...). Fathometer scans may also indicate presence of fishes.

2b. Reef Condition Verification- MRD conducts underwater visual observations of approximately IO public artificial reefs annually. Reefs are selected for monitoring based upon various criteria, including: permit requirements; reef materials/type/location; "adaptive management" needs; water depth and other factors.

3. Threatened/Endangered Species- Any observations (surface and/or underwater) of any federal or state-listed species are recorded. Any injured or dead listed species are immediately reported to the appropriate state and/or federal agencies.

4. Reef-user Monitoring- MRD utilizes Reef Report Cards and Personal Reef Users Surveys to obtain stakeholders' satisfaction, catch reports, suggestions, etc. (Surveys are distributed via internet, email, US Mail, and at outreach/education events)

5. Annual Reef Report- MRD compiles an annual (Fiscal Year) written summary of public artificial reef construction and monitoring activities.

Level 1: Geographic Monitoring

Exact coordinates (latitude/longitude and LORAN) of each public artificial reef and permit area boundary will be determined using separate Differential Geographic Positioning System (DGPS) and LORAN receivers. Latitude/lon&itude coordinates are recorded in degrees and decimal minutes (e.g., 30° I2.345'N; 8'11 J2.345'W). To determine with certainty the position of public artificial reefs., after the materials have been located using fathometer, visual certification (via SCUBA or other visual remote equipment) will be accomplished. Plotting of public artificial reefs will be performed utilizing latitude/longitude coordinates from DGPS equipment. Escambia County marine Resources Division maintains an Excel spreadsheet inventory of all public artificial reefs. These data are integrated with Escambia County,s Global Information System (GIS) to plot artificial reefs. The spreadsheet and GIS maps are available to the public via Escambia County Website (www.myescambia.com).

Geographic data are important to certify to permitting agencies that materials are at the designated location(s) and to verify permit compliance. The quality of these data are of the utmost importance to artificial reef users. The information is also important for comparison after storms or other events to determine if the artificial reef has been moved.

Level 2: Artificial Reef Physical Attribute Monitoring

Physical characteristics (e.g., length, width, height, materials type(s), and configuration) of public artificial reefs are measured and recorded using waterproof writing materials and/or underwater photography/videography. Other important data include: water depth, habitat complexity, condition and orientation of materials, and percent of materials that have subsided below the seafloor. (See Underwater Data Sheet in Appendix)

These data are important to determine the stability and durability of the artificial reef materials under consideration. Underwater configuration may also provide information regarding effectiveness of deployment methods. Amount of reef that has subsided into the seafloor may yield information regarding sediment suitability and hydrodynamic forces at that location. Escambia County MRD performs underwater monitoring of public artificial reefs using SCUBA gear. Typically, an initial underwater inspection dives is conducted immediately after each new public artificial reef is constructed. Reef physical

attributes are documented for the purposes ofdetennining the effectiveness ofreef construction/deployment and management, and for comparison with future reef inspections to determine the long-term effectiveness ofthe artificial reefmaterials/design. Reefphysical attribute data may also be combined with Level 3 and Level 4 data to maximize satisfaction of user and marine-life preferences. These monitoring data are an important component of"adaptive management", and allow MRD to strive for continuous improvement in managing Escambia County Artificial ReefProgram.

Level 3: Reef utilization and user satisfaction

Reefutilization and user satisfaction information may be obtained in several ways, each with its advantages and disadvantages. On-site surveys may be conducted on the water while the public artificial reefuser is located at an artificial reef Advantages ofthis approach include: ease ofdetermination ofthe number ofvessels at a particular (and nearby) artificial reef; fish catch information at the specific reefmay be obtained; answers to survey questions are more likely to reflect user's satisfaction while at the reef; and ability to sample users at a predetermined number/variety ofartificial reefs. Disadvantages include high cost ofsurvey due to the need for surveyor to use a boat, vessel-to-vessel communication difficulty, and reefuser may become irritated at the interruption offishing/diving activities.

An alternate approach, ramp-intercept survey, is less expensive and easier to communicate, however, the accuracy ofthe responses may be lower than that ofon-water surveys. Catch information may not allow determination ofspecific catch at specific reef(s); this information, combined with Level 4 data, may help explain some ofthe variation in Level 4 data.

Other sampling methods for artificial reefuser data include "customer satisfaction" surveys conducted by Escambia County Marine Resources Division. These surveys may be conducted by various methods including: direct mail, telephone, and internet.

Reefutilization and user satisfaction information are important to artificial reefmanagers for short and Jong term planning. Reefpreferences and overcrowding may guide decisions for reefmaterials and/or placement. Level 3 data are important for the evaluation ofProgram Goals (#'s: 3,5, and6). On-water surveys have a "public relations" benefit, and artificial reefmanagers may make more confident decisions with knowledge gained in the fie\d.

In September 2008, MRD established the ReefReport Card and Personal Reef User Survey programs. ReefReport Cards and Personal ReefUser Surveys are questionnaires for use by the fishing and diving public to provide data for sound decision making and planning. ReefReport Card and Personal ReefUser Survey are located in the Appendices. Personal ReefUser Surveys are mailed to reetbuilders that successfully complete LAARS personal reef deployments. ReefReport Cards are provided via internet (http://www.myescambia.com/departments/nesd/Marine-ArtificialReefs.php), and paper copies will be provided to the public by MRD at education and outreach functions.

Level 4: Biological Monitoring

Biological monitoring protocols vary widely among artificial reef managers and researchers, probably because of differences in water conditions, habitat/community types, and questions/ hypotheses. A survey ofthe scientific literature is an important step in determination of methodology for a particular biological monitoring study. Thus, it is outside the scope of this Plan to attempt to prescribe protocols.

Whenever possible, biological information are recorded. MRD usually records the presence of commercially/recreationally important fishes and threatened/endangered species observed during Level 2 monitoring dives (See Underwater Data Sheet in Appendix). Although SCUBA divers most often obtain Level 4 data using underwater video or pencil and waterproof paper, remote sensing technology may soon provide reliable methods that are not limited by divers' "bottom time". MRD consults with FWC Artificial ReefProgram staff and artificial reefmanagers in other counties, states, and countries to determine and utilize best management practices regarding artificial reef monitoring.

Although arguably the most difficult and expensive to obtain, Level 4 data are potentially the most valuable in artificia| reef program management. As previously stated, Level 3 (catch) data may explain some of the variation in Level 4 data.

Level 4A: Biological Monitoring- Threatened/Endangered Species

During all monitoring events, evidence of utilization by state or federally Jisted threatened or endangered species will be recorded. Any evidence of injury or mortality to any listed species will be immediately reported to the appropriate agencies (list of contacts in Appendix)

***Oriskany Reef*Monitoring:**

To accomplish the Navy's plan to reef the decommissioned aircraft carrier *Oriskany,* approval was required from the US Environmental Protection Agency (EPA) to sink the ship with approximately 750 lbs of non-liquid polychlorinated biphenyls (PCBs) remaining onboard. The Navy's computer models indicated the remaining PCBs would not exceed the criteria ofthe federal Toxic Substance Control Act for environmental of human health risk. EPA's approval was granted with the condition of requiring Escambia County and Florida Fish and Wildlife Conservation Commission (FWC) to monitor fish tissue concentrations of PBCs from recreationally sought fish collected from Oriskany Reef. Fish collections and fish tissue analyses are ongoing.

V. Compliance with National Fishing Enhancement Act of 1984

US Army Corps ofEngineers permits for artificial reefs require compliance with the National Fishing Enhancement Act (NFEA). The Army Corps of Engineers are required to "ensure that the provisions for siting, constructing, monitoring, and managing the artificial reef are consistent with the criteria and standards established under [NFEA]"

In accordance with NFEA, Escambia County Marine Resources Division established, utilizes, and periodically updates *Escambia Count, Artificial ReefPlan* as the primary guidance document for managing Escambia County Artificial Reef Program. Provisions for "siting" artificial reefs are included in Sections I, II, and III (above). Provisions for "constructing" artificial reefs are included in Section III. Provisions for "monitoring" artificial reefs are included in Sections III and IV. Provisions for "managing" artificial reefs are included throughout the Escambia County Artificial Reef Plan (Sections I-IV).

Escambia County Marine Resources Division (MRD) has managed Escambia County Artificial Reef Program since May, 2000. MRD has managed the deployment of nearly 150,000 tons of artificial reef materials, creating more than 50 new artificial reefs. MRD jointly managed (with Florida Fish and WildJife Conservation Commission and US Navy) deployment of the decommissioned aircraft carrier Ex-Oriskany as the world's largest artificial reef. "MRD strives for continuous improvement in managing Escambia County's Artificial Reef Program.

VI. References and Resources

Although it is outside the scope of this Plan to list all pertinent artificial reef works, those references and resources that are considered "standards,, are used to guide Escambia County's Artificial Reef Program.

Guidelines for Marine Artificial Reef Materials. 1997. Gulf States Marine Fisheries Commission. 117pp.

International Council for the Exploration of the Sea, Journal of Marine Science, 2002. Seventh International Conference on Artificial Reefs and Related Aquatic Habitats.

Coastal Artificial Reef Planning Guide. 1998. Joint Artificial Reef Technical Committee of the Atlantic and Gulf States Marine Fisheries Commissions. 45pp.

NOAA Charts (Nos. 11360, 11382, 11383, 11384, 11378)

Florida Artificial Reef Strategic Plan

National Artificial Reef Plan

National Fishing Enhancement Act of 1984 (P.L. 98-623)

Final Report: Escambia County Artificial Reef Monitoring Project- Site 7 (Turpin, 2001)

An Evaluation of Artificial Reefs after the Influences of Hurricanes and Fishing (Bortone and Turpin, 1997)

Bulletin of Marine Science Vol. 44, No. 2 (March 1989): Fourth International Conference on Artificial Habitats for Fisheries, Nov. 2-6, 1987, Miami, Florida.

Bulletin of Marine Science Vol. 55, Nos. 2-3 (September 1994): Fifth International Conference on Aquatic Habitat Enhancement, Nov. 3-7, 1991, Long Beach, California.

Seaman, W. Jr. 2000. Artificial Reef Evaluation with Application to Natural Marine Habitats. CRC Press, Boca Raton Florida. 246pp.

Seventh International Conference on Artificial Reefs and Related Aquatic Habitats. 2002. ICES Marine Science Symposia, Vol. 217.

Reef Report Card. 2008. Escambia County Marine Resources Division.

Personal Reef User Survey. 2008. Escambia County Marine Resources Division.

Appendix I. Escambia County Public Artificial ReefList

	REEF NAME	Ckd RTurpin	Notes	Depth	Latitude	Longitude	Loran W	Loran Y
1	Oriskany Memorial Reef	18May2006	***Danger! Do Not Enter Ship Interior! Danger!***	212	30 02.555'N	87 00.397'W		
2	Eilene Beard Reef	May 2006	20 concrete pyramids (Walter Marine "coquina" reefs)	93	30 04.415'N	87 12.258'W	13261.7	47040.5
3	Rusty B Reef	May 2005	100tons limerock + 20 "Goliath" reefballs	89	30 04.753' N	87 11.384' W	13271.0	47042.2
4	Pat Donnelly Reef	May 2005	27 "Goliath" reefballs	90	30 04.686' N	87 11.145' W	13273.1	47041.7
5	Admiral Fetterman Reef	June 2006	15 "Superball" Reef balls + 100tons rock rubble	93	30 04.682'N	87 11.878'W	13265.7	47041.9
6	Mayor Whibbs Reef	June 2006	18 "Superball" Reef balls	90	30 04.637'N	87 11.663'W	13267.7	47041.6
7	Ray Jones Reef	June 2005	BuiltJun'05:100ton concrete rubble & 15 GoliathReefballs	90	30° 05.360'N	87° 10.530'W		
8	George Wilkins Reef	June 2005	Built Jun'05: 19 Goliath Reefbalss	90	30° 05.410'N	87° 10.856'W		
9	DonPhillips barge & Parks	Jan 2005	Built Jan05; 120ft barge & 14 merry-go-rounds	100	30 05.750' N	87 10.600' W	13280.0	47047.3
10	PENHALL REEF	Feb. 2002	5700 tons concrete bridge rubble	92	30 05.523' N	87 11.497' W	13270.8	47046.3
11	PENHALL II	May 2003	4500 tons concrete bridge rubble	94	30 05.000' N	87 11.000' W	13275.0	47043.3
12	DKE Knicklebine barge	Feb 2003	117 ft barge with 14 lg. concrete pieces	122	30 01.970' N	87 11.495' W		
13	Mara Reef	June 2004	16 Concrete/steel tetrahedral modules	95	30 05.465' N	87 11.850' W	13267.3	47046.2
14	Celia Reef	June 2004	15 Concrete/steel tetrahedral modules	92	30 05.235' N	87 11.895' W	13266.7	47045.0
15	Santa Rosa Co 05-01	June 2006	15 concrete pyramids (Walter Marine "coquina" reefs)	95	30 04.494'N	87 11.297'W		
16	Santa Rosa Co 05-02	June 2006	15 concrete pyramids (Walter Marine "coquina" reefs)	95	30 04.560'N	87 11.436'W		
17	21 Concr. Reef Modules #2	June 2004	21 concrete reef modules, (I found 4)	95	30 06.257 N	87 07.964 W	13307.5	47049.8
18	21 Concr. Reef Modules #3	June 2004	21 concrete reef modules, (I found 3 + airplane wing)	96	30 05.902 N	87 07.653 W	13309.9	47047.8
19	21 Concr. Reef Modules #4	June 2004	21 concrete reef modules, (I found 5)	91	30 05.831 N	87 08.149 W	13304.9	47047.5
20	BrownBargeMiddleSch.Reef	2004?	1 Goliathball; 5 Palletballs		30 06.512'N	87 11.638'W		
21	School reef	July 2004	Artificial Reefs, Inc. module		30 03.374' N	87 11.932'W		
22	Eternal Reef #1	Aug 2003	2 Palletballs; 3 Bayballs		30 06.474'N	87 08.974'W		
23	Eternal Reef #2	Oct 2004	2 Palletballs; 3 Bayballs		30 05.503'N	87 30.180'W		
24	Eternal Reef #3	Oct 2005	1 Ultraball; 2 Palletballs; 4 Bayballs		30 05.506'N	87 30.101'W		
25	Eternal Reef #4	Oct 2006	1 Ultraball; 5 Palletballs; 2 Bayballs		30 05.506'N	87 30.208'W		
26	Red Snapper WorldChamp.	April 2008	Donated by Red Snapper World Championship Tourney		30 05.785' N	87 25.568' W	13130.0	47048.9
27	Hill-Kelly Dodge Reef	not verified	Donated by Red Snapper World Championship Tourney		30 05.975' N	87 24.939' W	13136.6	47049.8
28	Cox Communications Reef	not verified	Donated by Red Snapper World Championship Tourney		30 06.164' N	87 25.007' W	13136.1	47050.7
29	Pens.FishingForum Reef 5	Oct 2006	Steel Welded 8' -- 10' (L,W,H) Tetrahedron	85	30 05.781'N	87 08.872'W		
30	Pens.FishingForum Reef 1	June 2006	10 ft welded rebar tetrahedron	85	30 06.156'N	87 09.610'W		
31	Pens.FishingForum Reef 2	June 2006	10 ft welded rebar pyramid	85	30 06.100'N	87 09.576'W		
32	MBT Reef	June 2006	20 ft welded rebar reef	85	30 06.053'N	87 09.543'W		
33	Will's Playground	Oct 2006	5/8" to 1" Rebar Welded 10-20" x 10' x 10' structure	85	30 05.650'N	87 08.780'W		
34	Pens.FishingForum Reef 3	Oct 2006	5/8" to 1" Rebar Welded 10-20" x 10' x 10' structure	85	30 05.672'N	87 08.803'W		
35	Pens. FishingForum Reef 4	Oct 2006	5/8" to 1" Rebar Welded 10-20" x 10' x 10' structure	85	30 05.722'N	87 08.844'W		
36	DJ Hooks Reef	Oct 2006	5/8" to 1" Rebar Welded 10-20" x 10' x 10' structure	85	30 05.748'N	87 08.861'W		
37	Ray Jones / Bere' Reef	June 2006	20 ft welded rebar reef	85	30 06.004'N	87 09.500'W		
38	Santa Rosa County Tug	Aug. 2001	damaged by hurricanes		30 05.950' N	87 10.950' W	13277.0	47048.5

	REEF NAME	Ckd RTurpin	Notes	Depth	Latitude	Longitude	Loran W	Loran Y
39	S.R. Co. reefballs SRRB01	July 2004	5 Reefballs (20-50fft spacing)	94	30 05.285' N	87 09.700' W	13288.5	47044.7
40	S.R. Co. reefballs SRRB02	July 2004	5 Reefballs; subsided 40-50%	92	30 05.937' N	87 10.020' W	13286.5	47048.5
41	S.R. Co. reefballs SRRB03	July 2004	5 Reefballs, 1 upside-down; 2 broken	92	30 05.923' N	87 10.050' W	13286.0	47048.2
42	S.R. Co. reefballs SRRB04	July 2004	Only 1 reefball, down in a hole!	99	30 05.941' N	87 10.135' W	13285.2	47048.4
43	S.R. Co. reefballs SRRB05	July 2004	5 Reefballs: 1 broken; 3 on their side	96	30 05.960' N	87 10.210' W	13284.5	47048.5
44	S.R. Co. reefballs SRRB06	July 2004	5 Reefballs (1 on its side)	94	30 06.372' N	87 10.035' W	13286.9	47050.8
45	S.R. Co. reefballs SRRB07	July 2004	5 Reefballs: 1 broken; 3 on their side	95	30 06.389' N	87 10.084' W	13286.4	47050.9
46	S.R. Co. reefballs SRRB08	July 2004	5 Reefballs: 3 broken; 1 on side; subsided>50%	97	30 06.410' N	87 10.151' W	13285.8	47050.9
47	S.R. Co. REEF BALLS?	Aug. 2001	Location confirmed, not materials	96	30 06.410' N	87 10.277' W	13284.6	47051.0
48	S.R. Co. REEF BALLS?	Aug. 2001	Location confirmed, not materials	98	30 06.252' N	87 11.597' W	13271.2	47050.2
49	S.R. Co. reefballs SRRB11	July 2004	5 Reefballs: 2 broken	99	30 06.186' N	87 11.635' W	13270.6	47049.9
50	S.R. Co. REEF BALLS?	Aug. 2001	Location confirmed, not materials	97	30 06.173' N	87 11.645' W	13270.3	47049.7
51	S.R. Co. REEF BALLS?	Aug. 2001	Location confirmed, not materials		30 06.131' N	87 11.665' W	13270.4	47049.5
52	Tenneco Rig	Oct 2001	Dismantled Oil Platform, Jacket Portion	175	29 59.733'N	87 05.111'W	13324.5	47012.7
53	Chevron Oil Rig	June 2004	2 pieces oil rig jacket sit side-by-side(w/in 76' of surface)	137	30 04.244' N	87 02.118' W	13361.9	47037.7
54	Antares	Aug. 1996	Freighter	130	30 00.578' N	87 07.758' W	13299.9	47018.2
55	53 Concr. Reef Modules #1	June 2004	53 concrete reef modules (I found all 53)	91	30 05.986 N	87 07.950 W	13306.9	47048.4
56	Avocet - Site #20 - 5		247' dredge AVOCET	115	29 58.399' N	87 12.630'W	13248.4	47007.2
57	M60 Battle tank 1	June 2004	On right side	107	30 06.685' N	87 11.951' W		
58	M60 Battle tank 2	June 2004	On left side	110	30 06.693' N	87 11.921' W	13267.5	47052.8
59	M60 Battle tank 3	June 2004	75 feet NE of Tank 2	110	30 06.702' N	87 11.901' W	13268.7	47052.7
60	M60 Battle tank 4	June 2004	Good "ledge" under tank	113	30 06.711' N	87 11.873' W	13269.0	47052.7
61	M60 Battle tank 5	June 2004	More subsided	109	30 06.741' N	87 11.804' W	13269.8	47052.9
62	NW Navy YDT14	June 2004	good condition	95	30 05.330' N	87 09.640' W	13289.2	47045.0
63	SE Navy YDT15	MAY 2004	roof gone; wires in pilot house	96	30 05.267' N	87 09.550' W	13289.9	47044.7
64	Tug Born Again	Mar 2007	65' tug & sev. steel pipes; good cond.	95	30 08.222' N	87 14.218' W	13247.5	47060.6
65	Tug Philip	Mar 2007	60' steel tug; fair condition; 20% subsided	97	30 07.973' N	87 13.332' W	13256.3	47059.5
66	5 Concrete Pyramids SS	Mar 2007	very small mark	100	30 08.500' N	87 13.475' W	13255.5	47062.3
67	Kingry barge	Mar 2007	barge upside down on crushed steel tanks;SW end subs.	90	30 09.577' N	87 13.902' W	13252.8	47067.7
68	Tug Herron & LCM	Mar 2007	53' tug buried @ stern; superstr.damaged;51' LCM tomup	92	30 08.187' N	87 13.684' W	13253.1	47060.7
69	Preform concrete units 7JJ	Mar 2007	very small mark	91	30 09.814' N	87 13.713' W	13255.1	47069.3
70	Blackwater bridge rubble	Mar 2007	c.50 concr.pilings(c.35'x2'x2');stacked&scattered	91	30 09.115' N	87 13.575' W	13255.5	47065.6
71	Bayou Chico bridge rubble	Mar 2007	small mark	89	30 09.335' N	87 13.860' W	13253.0	47066.8
72	Pete Tide II	Mar 2007	180' steel vessel; good cond.; faces NNW	102	30 08.760' N	87 14.020' W	13250.5	47063.7
73	5 Concrete Pyramids GG	Mar 2007	very small mark	98	30 08.882' N	87 13.734' W	13253.6	47064.5
74	Battle Tank 7G4	Mar 2007	buried???	81	30 09.087' N	87 14.341' W	13247.7	47065.5
75	Battle Tank 7G2	Mar 2007	Steel battle tank; sitting upright; 10% subsided	82	30 09.671' N	87 14.435' W	13247.7	47068.6
76	Battle Tank 7M1	Mar 2007	Steel battle tank; upside down on left side	85	30 09.431' N	87 14.341' W	13248.2	47067.0

	REEF NAME	Ckd RTurpin	Notes	Depth	Latitude	Longitude	Loran W	Loran Y
77	Battle Tank 7M2	Mar 2007	Steel battle tank; on right side; 20% subsided	85	30 09.375' N	87 14.293' W	13248.6	47066.7
78	Battle Tank 7H	Mar 2007	Steel battle tank; upside down; subsided past turret	91	30 09.190' N	87 14.370' W	13247.6	47065.8
79	Battle Tank 7B	Mar 2007	Steel battle tank; upside down on left side; 15% subsided	92	30 09.370' N	87 14.437' W	13247.2	47067.0
80	Battle Tank 7G3	Mar 2007	Steel battle tank; upside down on left side	84	30 09.610' N	87 14.427' W	13247.6	47068.2
81	Battle Tank 7A	Mar 2007	Steel battle tank; upside down; 20% subsided	83	30 09.738' N	87 14.461' W	13247.6	47068.9
82	Russian Freighter**	Oct 2001	*"San Pablo"*	84	30 11.333' N	87 13.057' W	13263.8	47077.1
83	Bridge Rubble**	Oct 2001	concrete rubble	80	30 13.954' N	87 12.124' W	13278.0	47091.8
84	Oops Barge**	Oct. 2000	Small barge	75	30 13.233' N	87 13.992' W	13257.2	47096.7
85	USS Massachusetts**	Oct 2001	340' battleship	30	30 17.795' N	87 18.720' W	13214.7	47108.6
86	Three Barges**	Oct 2001	3 coal barges	54	30 17.450' N	87 13.257' W	13270.6	47107.9
87	1982 Tex Edwards Barge**	Nov 2001	barge	75	30 16.138' N	87 10.157' W	13306.9	47102.8
88	Liberty Ship Reef**	Nov 2001	Liberty Ship "Joseph L. Meek"	95	30 16.384' N	87 09.574' W	13306.9	47103.0
89	Casino Fishing Reef**		concrete rubble	60	30 18.722' N	87 07.331' W	13333.3	47115.0
90	AP wing T7**	Jul/Aug 2002	Now lays flat/fair/ unknown % subsided	79	30 10.540' N	87 15.397' W	13239.2	47073.0
91	N. Monsanto boxes**	Jul/Aug 2002	Only concrete pilings remain (c.24)		30 12.185' N	87 14.695' W	13248.0	47082.2
92	Tug Sylvia**	Mar 2007	Wheelhouse & upper deck gone/ 20% subsided	82	30 11.100' N	87 14.200' W	13252.1	47076.0
93	PC barge & towers**	Mar 2007	Holes along sides of barge; 2 sets towers	82	30 11.190' N	87 14.070' W	13254.0	47076.4
94	Tug Deliverance**	Mar 2007	Tug midships gone (except engine)	83	30 10.907' N	87 14.618' W	13247.7	47074.9
95	Soule barge & towers**	Mar 2007	Barge is upside-down/ 15% subsided	83	30 10.888' N	87 14.566' W	13247.9	47074.8
96	Navy barge**	Mar 2007	Barge is 12m south of Camel/ 10% subsided	82	30 11.180' N	87 14.750' W	13246.7	47076.3
97	Navy Camel**	Mar 2007	Camel 12m north of barge/10% subsided	82	30 11.194' N	87 14.764' W	13246.6	47076.4
98	Tessie**	Mar 2007	very small mark	77	30 11.637' N	87 14.452' W	13250.3	47078.6
99	ECUA culverts**	Mar 2007	5 Concrete pipes & 2 steel towers/40% subsided	83	30 12.295' N	87 14.370' W	13252.1	47082.1
100	Cluverts L17**	Mar 2007	very small mark	72	30 12.025' N	87 14.299' W	13252.4	47080.8
101	Towers T13**	Jul/Aug 2002	small	76	30 12.389' N	87 14.327' W	13252.6	47082.6
102	Donut**	Jul/Aug 2002	Steel	82	30 10.883' N	87 14.446' W	13245.4	47074.8
103	S. Monsanto boxes**	Jul/Aug 2002	Only concrete pilings remain	75	30 11.856' N	87 14.823' W	13246.7	47079.8
104	I-10 Br. Rubble/ Culverts**	Mar 2007	Bridge rubble & concrete pipes;	80	30 11.768' N	87 14.328' W	13251.8	47079.4
105	5 Towers T4**	Jul/Aug 2002	NW of original deployment		30 11.248' N	87 14.122' W	13253.2	47076.7
106	Concrete Culverts**				30 12.040' N	87 14.330' W	13252.2	47080.6
107	Concrete Culverts**				30 11.770' N	87 14.250' W	13252.3	47079.4
108	FWCEE1		FWC funded 1 Walter Fla Special module		30 03.006'N	87 04.880'W		
109	FWCEE2		FWC funded 1 Walter Fla Special module		30 05.255'N	87 06.781'W		
110	FWCEE3		FWC funded 1 Walter Fla Special module		30 04.598'N	87 08.657'W		
111	FWCEE4		FWC funded 3 ARI Fish Haven modules		30 01.419'N	87 10.195'W		
112	FWCEE5		FWC funded 3 ARI Fish Haven modules		30 05.129'N	87 06.402'W		
113	FWCEE6		FWC funded 3 ARI Fish Haven modules		30 03.278'N	87 05.557'W		

	REEF NAME	Ckd RTurpin	Notes	Depth	Latitude	Longitude	Loran W	Loran Y
114	FWCEE7		FWC funded 2 Goliath Reefballs		30 01.462'N	87 09.373'W		
115	FWCEE8		FWC funded 2 Goliath Reefballs		30 02.931'N	87 05.101'W		
116	FWCEE9		FWC funded 2 Goliath Reefballs		30 05.404'N	87 07.126'W		
117	Fishin' Chix Reef	April 2007	1 concrete "Fish Haven" module	98	30 06.750'N	87 11.247'W		
118	Paolo's Refuge	April 2007	70 pieces concrete junction boxes & pieces	109	30 06.125'N	87 10.595'W		
119	CCA Pensacola Reef	April 2007	1 concrete "Florida Limestone" reef module	93	30 06.730'N	87 11.700'W		
120	ECUA Steel water pipes	April 2007	160 steel water pipes from old Pens. Beach bridge	96	30 05.025'N	87 11.015'W		
121	GulfBreezeSertoma.com	April 2007	7 concrete "Florida Limestone" reef modules	91	30 06.760'N	87 11.515'W		
122	Susan Tay Fruitticher Reef	April 2007	8 concrete "Florida Limestone" reef modules	92	30 03.796'N	87 11.521'W		
123	Pens.BayFishingBridge#1	Dec 2006	8000 tons concrete "Pens Bay Fishing bridge" rubble	85	30 05.900'N	87 09.000'W		
124	Pens.BayFishingBridge#2	Feb 2007	4500 tons concrete "Pens. Bay Fishing bridge" rubble	113	30 06.723'N	87 09.673'W	13290.8	47052.4
125	David Bogan Reef	Feb 2007	I-10 Br Rubble Reef 1 by Tidewater/Skansa/Flat Iron	75	30 06.750'N	87 24.250'W	13144.2	47053.7
126	I-10 Bridge Rubble Reef #2	April 2007	I-10 Br Rubble Reef 2 by Tidewater/Skansa/Flat Iron	78	30 06.700'N	87 25.300'W		
127	I-10 Bridge Rubble Reef #3	August 2007	I-10 Br Rubble Reef 3 by Tidewater/Skansa/Flat Iron	86	30 06.700'N	87 26.300'W		
128	I-10 Bridge Rubble Reef #4	August 2007	I-10 Br Rubble Reef 4 by Tidewater/Skansa/Flat Iron	90	30 06.600'N	87 27.500'W		
129	I-10 Bridge Rubble Reef #5	Oct 2007	I-10 Br Rubble Reef 5 by Tidewater/Skansa/Flat Iron	93	30 06.600'N	87 28.600'W		
130	I-10 Bridge Rubble Reef #6	Dec 2007	I-10 Br Rubble Reef 6 by Tidewater/Skansa/Flat Iron	83	30 06.550'N	87 29.550'W		
131	I-10 Bridge Rubble Small	Dec 2007	I-10 Br Rubble Reef by Tidewater/Skansa/Flat Iron	83	30 05.950'N	87 25.950'W		
132	TDC Reef #1	Sept 2007	Tourist Dev. Council Reef: 50 Walter Marine modules	95	30 03.815'N	87 10.885'W		
133	TDC Reef #2	Sept 2007	Tourist Dev. Council Reef: 3 MC Group "Tall TeePees"	100	30 03.425'N	87 11.633'W		
134	TDC Reef #3	Sept 2007	Tourist Dev. Council Reef: 4 MC Group "Tall TeePees"	95	30 03.157'N	87 11.640'W		
135	George Touart Reef		Donated by Reef Fish Restoration Association	116	30 06.659'N	87 10.839'W		
136	Sea Rest Reef	Sept 2008	Concrete module donated by Sea Rest	100	30 05.858'N	87 10.441'W		
137	Will Davis Reef	Sept 2008	44' shrimpboat + approx. 100 tons concrete rubble	100	30 05.864'N	87 10.510'W		
138	R083001	Sept 2008	6 Walter Marine "Florida Limestone" concrete reef units	100	30 03.386"N	87 11.639'W		
139	R083002	Sept 2008	6 Walter Marine "Florida Limestone" concrete reef units	95	30 03.140'N	87 11.640'W		
140	R083003	Sept 2008	1 Walter Marine "Florida Limestone" concrete reef unit	94	30 03.439'N	87 11.225'W		
141	R083004	Sept 2008	1 Walter Marine "Florida Limestone" concrete reef unit	100	30 03.170'N	87 11.252'W		
142	R083005	Sept 2008	1 Walter Marine "Florida Limestone" concrete reef unit	100	30 02.968'N	87 11.239'W		
143	R083006	Sept 2008	1 Walter Marine "Florida Limestone" concrete reef unit	103	30 02.718'N	87 11.253'W		
144	R083007	Sept 2008	1 Walter Marine "Florida Limestone" concrete reef unit	95	30 03.353'N	87 10.959'W		
145	R083008	Sept 2008	1 Walter Marine "Florida Limestone" concrete reef unit	95	30 03.066'N	87 10.982'W		
146	R083009	Sept 2008	1 Walter Marine "Florida Limestone" concrete reef unit	98	30 02.824'N	87 11.062'W		
147	R083010	Sept 2008	1 Walter Marine "Florida Limestone" concrete reef unit	100	30 02.570'N	87 11.011'W		
148	R083011	Sept 2008	1 Walter Marine "Florida Limestone" concrete reef unit	96	30 02.964'N	87 10.794'W		
149	R083012	Sept 2008	1 Walter Marine "Florida Limestone" concrete reef unit	98	30 02.763'N	87 10.695'W		
150	R083013	Sept 2008	1 Walter Marine "Florida Limestone" concrete reef unit	99	30 02.593'N	87 10.769'W		
151	R083014	Sept 2008	1 Walter Marine "Florida Limestone" concrete reef unit	94	30 03.635'N	87 10.515'W		

	REEF NAME	Ckd RTurpin	Notes	Depth	Latitude	Longitude	Loran W	Loran Y
152	R083015	Sept 2008	1 Walter Marine "Florida Limestone" concrete reef unit	98	30 03.345'N	87 10.550'W		
153	R083016	Sept 2008	1 Walter Marine "Florida Limestone" concrete reef unit	97	30 03.066'N	87 10.546'W		
154	R083017	Sept 2008	1 Walter Marine "Florida Limestone" concrete reef unit	98	30 02.894'N	87 10.494'W		
155	R083018	Sept 2008	1 Walter Marine "Florida Limestone" concrete reef unit	100	30 02.614'N	87 10.524'W		
156	R083019	Sept 2008	1 Walter Marine "Florida Limestone" concrete reef unit	96	30 03.641'N	87 10.218'W		
	** = reefs in "state waters"							

Appendix II. ReefReport Card

Escambia County Marine Resources Division Reef Report Card

Reef Name		Art.or natural reef?		
Reef materials		"Private reef"?		
Date		State waters?		
Number of fishers aboard vesel		Water depth (feet)		
Number of divers aboard vessel		Recreation fishing?		
Time (minutes) fishing		Commerc'l fishing?		
Time (minutes) spearfishing		Dolphins observed?		
Time (minutes) diving (not spearfishing)		Mar.turtle observd?		
Fishes harvested	Species:		Number	
Fishes harvested	Species:		Number	
Fishes harvested	Species:		Number	
Fishes harvested	Species:		Number	
Fishes harvested	Species:		Number	
Fishes harvested	Species:		Number	
Fishes released	***Species:***		***Number***	
Fishes released	***Species:***		***Number***	
Fishes released	***Species:***		***Number***	
Fishes released	***Species:***		***Number***	
Fishes released	***Species:***		***Number***	
Fishes released	***Species:***		***Number***	
Number of other boats on reef				
Reef user satisfaction 1=Lowest; 5=Highest				
Reasons for the score (above)				
Other observations, comments, etc.				
Name of person submitting data (optional)				

May we contact you for additional info? Phone, email, address:

Reef Name		Art.or natural reef?		
Reef materials		"Private reef"?		
Date		State waters?		
Number of fishers aboard vesel		Water depth (feet)		
Number of divers aboard vessel		Recreation fishing?		
Time (minutes) fishing		Commerc'l fishing?		
Time (minutes) spearfishing		Dolphins observed?		
Time (minutes) diving (not spearfishing)		Mar.turtle observd?		
Fishes harvested	Species:		Number	
Fishes harvested	Species:		Number	
Fishes harvested	Species:		Number	
Fishes harvested	Species:		Number	
Fishes harvested	Species:		Number	
Fishes harvested	Species:		Number	
Fishes released	***Species:***		***Number***	
Fishes released	***Species:***		***Number***	
Fishes released	***Species:***		***Number***	
Fishes released	***Species:***		***Number***	
Fishes released	***Species:***		***Number***	
Fishes released	***Species:***		***Number***	
Number of other boats on reef				
Reef user satisfaction 1=Lowest; 5=Highest				
Reasons for the score (above)				
Other observations, comments, etc.				
Name of person submitting data (optional)				

May we contact you for additional info? Phone, email, address:

Please submit via Fax(850-595-3495); Email (rkturpin@co.escambia.fl.us); or Mail (Escambia County Marine Resources Division, 1190 W. Leonard St., Pensacola, FL 32501)

Appendix m. **Personal ReefUser Survey**

Escambia County Personal Reefs User Survey (PRUS)	
The PRUS is being implemented by Escambia County as required by Army Corps of Engineers LArge Area Artificial Reef Site (LAARS) Permit for the deployment of artificial reefs by citizens (LAARS Permit Condition # 12, and Pages 7 & 8 of 8). The information will be compiled and provided to the Corps to document permit compiance. The PRUS is mailed to individuals who have completed LAARS Authorizations. As a recipient of this survey, please fill it out to the best of your knowledge and return it as instructed below. Thank you.	
Survey Date (today's date)	
Name	
Address	
Email	
LAARS Authorization #	
Date deployed	
Materials type	
Water depth	
# times fished reef in the past 12 months	
# times dove reef in the past 12 months	
~~Is reef still there?~~	
# fish harvested from reef in the past 12 months	
Satisfaction Level (1-5)	
Would you build same reef again?	
If not, why not?	
Do you plan to deploy add'l personal reefs?	
Other Comments	
	Thank You for your participation! ***Robert Turpin***
	Please Mail, Fax, or email completed Survey to:
	Escambia County Marine Resources Division
	1190 West Leonard Street
	Pensacola, FL 32501
	Fax 850-595-3495
	rkturpin@co.escambia.fl.us

Appendix IV. Artificial ReefPermit

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
PENSACOLA REGULATORY OFFICE
41 North Jefferson Street, Suite 111
PENSACOLA, FLORIDA 32502-5794

REPLY TO
ATTENTION OF

Regulatory Division
North Permits Branch
199402365 IP-CP MODIFICATION #16
200702978 IP-CP Modification #5

December 22, 2008

Captain Robert Turpin
Escambia County
1190 West Leonard Street
Pensacola, Florida 32501

Dear Captain Turpin:

Reference is made to Department of the Army Permit 199402365 which originally authorized deployment of artificial reef material on two Large Area Artificial Reef Sites located in the Gulf of Mexico south of Escambia County, Florida. By correspondence dated May 21, 2007, the Corps of Engineers (Corps) modified the above referenced permit such that LAARS East would be assigned number 199402365 and LAARS West would be assigned file number 200702978.

On September 22, 2008 the Corps administratively extended the above two referenced permits until December 22, 2008 to allow further evaluation of the county's requested permit modifications. The outstanding items needed for the Corps to complete its evaluation have been detailed through separate correspondence and are still outstanding. The Corps is administratively extending the two permits until April 22, 2009 to allow the requested information to be submitted and the evaluation process to continue.

The permits are hereby extended until April 22, 2009. You should attach this letter to the permit. All of the other conditions, limitations, and stipulations of permit number 199402365 and 200702978 not specifically changed by this modification remain in effect.

BY AUTHORITY OF THE SECRETARY OF THE ARMY:

Paul L. Grosskruger
Colonel, U.S. Army
District Commander

Copy Furnished:
CESAJ-RD-PE

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
PENSACOLA REGULATORY OFFICE
41 North Jefferson Street, Suite 111
PENSACOLA, FLORIDA 32502-5794

REPLY TO
ATTENTION OF:

Regulatory Division
North Permits Branch
199402365 IP-CP MODIFICATION #13
200702978 IP-CP Modification #2

December 6, 2007

Keith Wilkins
Director, NESD
Escambia County
1190 West Leonard Street
Pensacola, Florida 32501

Dear Mr. Wilkins:

Reference is made to correspondence dated September 4, 2007 from Neighborhood and Environmental Services Department requesting an extension of the Department of the Army Permit 199402365 which originally authorized deployment of artificial reef material on two Large Area Artificial Reef Sites located in the Gulf of Mexico south of Escambia County, Florida.

By correspondence dated May 21, 2007, the Corps of Engineers (Corps) modified the above referenced permit such that LAARS East would be assigned number 199402365 and LAARS West would be assigned file number 200702978.

On September 10, 2007 the Corps administratively extended the above two referenced permits until December 22, 2007 to allow further evaluation of the county's requested permit modifications. The Corps' evaluation of the proposed modifications is continueing though it will not be completed by December 22, 2007. The Corps is administratively extending the two permits until April 22, 2008 to allow the evaluation process to continue.

The permits are hereby extended until April 22, 2008. You should attach this letter to the permit. All of the other conditions, limitations, and stipulations of permit number 199402365 and 200702978 not specifically changed by this modification remain in effect.

Thank you for your cooperation with our regulatory program.

BY AUTHORITY OF THE SECRETARY OF THE ARMY:

Paul L. Gross Kruger
Colonel, U.S. Army
District Commander

Enclosure

Copy Furnished:

CESAJ-RD-PE

Permittee: Florida Fish and Wildlife Conservation Commission
Permit No: 19402365 (IP-CP)

DEPARTMENT OF THE ARMY PERMIT TRANSFER REQUEST

PERMIT NUMBER: 199402365 (IP-CP)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. Although the construction period for works authorized by Department of the Army permits is finite, the permit itself, with its limitations, does not expire.

To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below and mail to the U.S. Army Corps of Engineers, Pensacola Regulatory Office, 41 North Jefferson Street Suite 111, Pensacola, Florida 32502-5794.

(TRANSFEREE-SIGNATURE)

(SUBDIVISION)

25 JAN 2007
(DATE)

(LOT) (BLOCK)

Keith Wilkins
(NAME-PRINTED)

1190 West Leonard St
(ADDRESS)

Pensacola, FL 32501
(CITY, STATE, AND ZIP CODE)

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
PENSACOLA REGULATORY OFFICE
41 North Jefferson Street, Suite 111
PENSACOLA, FLORIDA 32502-5794

REPLY TO
ATTENTION OF

Regulatory Division
North Permits Branch
199402365 IP-CP
MODIFICATION #10

November 22, 2006

Robert Turpin
Chief, Marine Resources
Escambia County
1190 West Leonard Street
Pensacola, Florida 32501

John Dodrill
Fish and Wildlife Conservation Commission
620 Meridian Street Box 4-B
Tallahassee, Florida 32399-1600

Dear Messer's Turpin and Dodrill:

On or about April 11, 2006, an agreement was entered into between the U.S. Navy, Florida Fish and Wildlife Conservation Commission (FWC), and Escambia County regarding transfer of the Ex-Oriskany (CVA 34) from the U.S. Navy for deployment as an artificial reef in the Gulf of Mexico south of Pensacola Florida. The deployment would occur within the bounds of the FWC Large Area Artificial Reef (LAARS) under Department of the Army permit number 199402365. Item 2(e) of the transfer agreement stipulates that Escambia County would accept responsibility for the Department of the Army permit from FWC before a request was made for reauthorization of the permit which was to expire on September 22, 2006. By correspondence dated 7 August 2006, Escambia County requested reauthorization of the Department of the Army permit and transfer of the permit from FWC to Escambia County. By correspondence dated 15 September 2006, FWC acknowledged its desire to transfer responsibility for the Department of the Army permit to Escambia County. By correspondence dated September 15, 2006, the Corps of Engineers extended the permit expiration date until September 22, 2007.

The proposed transfer has been evaluated and its anticipated impact on navigation and the environment has been determined to be insignificant. Therefore the Department of the Army permit 199402364 is hereby transferred from the Florida Fish and Wildlife Conservation Commission to the Escambia County Board of County Commission. The enclosed transfer document should be completed and signed by a duly authorized representative of the

Board of County Commission and returned to the letterhead address within 14 calendar days of the date of this letter.

To facilitate pre and post deployment notification the county should immediately begin utilizing the enclosed modified deployment forms.

All of the other conditions, limitations, and stipulations as well as the September 22, 2007 expiration date for permit number 199402365 not specifically changed by this modification remain in full effect.

Thank you for your cooperation with our regulatory program.

BY AUTHORITY OF THE SECRETARY OF THE ARMY:

Paul L. Grosskruger
Colonel, U.S. Army
District Commander

Enclosure

Copy Furnished w/o encl.:

Department of Environmental Protection
160 Governmental Center
Pensacola, Florida 32501

U.S. Department of the Interior
Mineral Management Service
Office of Leasing and Environment
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123-2394

Director, National Imagery and Mapping Agency
Hydrographic Center
Washington, D.C. 20390
ATTN: Code NS12

Director, Office of Marine Recreational Fisheries,
National Marine Fisheries Service
Washington, D.C. 20235

Commanding Officer, United States Coast Guard
Eighth Coast Guard District
501 Magazine Street
New Orleans, La. 70136

Coast Guard Group Mobile
South Broad Street
Brookley Complex
Mobile, Alabama 36615
ATTN: Operations Officer

Coast Guard Marine Safety Office
150 North Royal Street
Post Office Box 2924
Mobile, Alabama 36652-2924

Coast Guard Station Pensacola
21 Slemmer Avenue
Pensacola, Florida 32508

Coast Guard Station Destin
Post Office Box 1289
Destin, Florida 32541

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
Nautical Data Branch
N/CS26, SSMC3, Sta. 7308
1315 East-West Highway
Silver Springs, Maryland 20910-3282

U.S. Fish and Wildlife Service
1601 Balboa Street
Panama City, Florida 32406

National Marine Fisheries Service
3500 Delwood Beach Road
Panama City, Florida 32408-7403

Fish and Wildlife Conservation Commission
Division of Law Enforcement, Florida Marine Patrol
District 5C Field Office
1101 East Gregory Street
Pensacola, Florida 32501

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
PENSACOLA REGULATORY OFFICE
41 North Jefferson Street, Suite 111
PENSACOLA, FLORIDA 32502-5794

REPLY TO
ATTENTION OF

Regulatory Division
North Permits Branch
199402365 IP-CP
MODIFICATION #9

September 15, 2006

Roy Williams
Fish and Wildlife Conservation Commission
620 Meridian Street Box 4-B
Tallahassee, Florida 32399-1600

Dear Mr. Williams:

Reference is made to my recent verbal communication with Jon Dodrill of your agency regarding the Commission's desire to extend the expiration date of Department of the Army Individual Permit 199402365 IP-CP which expires on September 22, 2006. The permit authorizes the deployment of artificial reef material on two Large Area Artificial Reef Sites (LAARS) in the Gulf of Mexico south of Pensacola in Escambia County, Florida.

During my conversation with Mr. Dodrill I acknowledged receipt of a request dated August 7, 2006 by Escambia County to tranfer the LAARS permit from the Fish and Wildlife Conservation Commission to Escambia County. The correspondence from Escambia County also requested certain modifications to the permit involving permit conditions and duration.

In accordance with my conversation with Mr. Dodrill, the Corps hereby request a brief correspondence clarifying if the Commission desires or does not desire to tranfer responsibility for the above referenced Individual Permit to Escambia County. To allow sufficient time for evaluation of the requested permit modification, the Corps will grant a 1 year administrative permit expiration date extension.

The permit is hereby extended until September 22, 2007. You should attach this letter to the permit. All of the other conditions, limitations, and stipulations of permit number 199402365 not specifically changed by this modification remain in effect.

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
PENSACOLA REGULATORY OFFICE
41 North Jefferson Street, Suite 104
PENSACOLA, FLORIDA 32501-5794

REPLY TO ATTENTION OF

Regulatory Division
North Permits Branch
199402365 IP-CP
MODIFICATION #8

May 20, 2003

Roy Williams
Fish and Wildlife Conservation Commission
620 Meridian Street Box MF-MFM
Tallahassee, Florida 32399-1600

Dear Mr. Williams:

Reference is made to the Fish and Wildlife Conservation Commission (FWCC) correspondence dated May 19, 2003 in regards to the Escambia Large Area Artificial Reef Sites (LAARS). In the correspondence FWCC requested the Corps of Engineers (Corps) modify Special Condition 6 of Department of the Army (DA) Permit 199402365. The requested modification would allow transport of reef materials during the period between sunset and sunrise by contractors under hire, employment, or sponsorship of FWCC or Escambia County if FWCC staff or Escambia County Chief of Marine Resources is aboard the transport vessel or companion vessel to monitor the transport and deployment activity. The requested permit modification would not apply to private reef material deployments.

The impacts of the requested permit modification on navigation and the environment have been evaluated and found to be insignificant. The permit is hereby modified in accordance with the following special conditions which replace special conditions 1-12 of the 9 May 2003 permit modification:

1. The materials to be deployed on the Large Area Artificial Reef Sites (LAARS) shall be cleaned and free of pollutants and toxins and composed of: non-productive oil platforms thoroughly clean in accordance with US Coast Guard and US Environmental Protection Agency (EPA) standards, surplus military equipment (1/4 inch or greater in thickness thoroughly clean in accordance with US Coast Guard and US Environmental Protection Agency (EPA) standards, steel hull vessels ballasted and thoroughly clean in accordance with US Coast Guard and US Environmental Protection Agency (EPA) standards,

natural limestone boulders weighing a minimum of 150 pounds each, clean concrete rubble weighing a minimum of 150 pounds each, clean concrete prefabricated reef materials or modules weighing a minimum of 150 pounds each, clean and structurally stabilized steel/aluminum/metal alloy boxes or structures (1/8 inch or greater in thickness) weighing 150 pounds or more.

No reef material shall be allowed to trap marine life, and must be configured, cut or shaped, so as to not function as a fish trap. All materials/structures must be configured and constructed to be stable, durable, and provide habitat. No material whatsoever may be deployed within one-quarter mile of the boundaries of the Large Area Artificial Reef Sites (LAARS). No other materials are authorized by this permit. Materials expressly prohibited include cars and trucks and any parts thereof, white goods (i.e. appliances), shopping carts, bread trays, 55 gal drums, storage or fuel tanks, loose metal materials, plastics, fiberglass, materials that upon inspection by FWCC staff or designated agent are found to be potentially unstable or lack acceptable habitat qualities

2. Any steel hull vessel which will be utilized, as reef material should be prepared for deployment by the removal of all flotation from the vessel and it should be properly cleaned to remove any petroleum product or residue. For vessels with built in petroleum tanks, the closest U.S. Coast Guard (USCG) Marine Safety Office (MSO) should be contacted to allow inspection of the vessel prior to deployment. The vessel should not be deployed until cleared by the USCG.

3. The permittee shall use the attached form (Pages 1 through 6 of 6) entitled Application To Use Florida Fish and Wildlife Conservation Commission (FWCC) Large Area Artificial Reef Sites (LAARS) and implement the procedures specified on the form. This form will be referred to as the "FWCC-LAARS FORM". All coordinates referenced on the form will be provided in degrees and decimal minutes.

4. FWCC staff or designated agent (Escambia County Chief of Marine Resources) shall inspect all artificial fishing reef materials proposed for deployment pursuant to this permit and assure that all materials conform to the materials list, as stated in Special Condition 1. All proposed reef material will be described on sheet 1 of 6 of the FWCC-LAARS FORM. All material to be privately deployed (ie. not deployed or directly funded by FWCC for FWCC sponsored projects or deployed or funded by county government where FWCC and/or county employees are present on the deployment vessel during deployment) will be tagged with numbered tamper proof tags. The tag number and associated materials will be listed on sheet 1 of 6 of the FWCC-LAARS FORM.

5. FWCC staff or designated agent will accomplish Pre-deployment notification by providing completed and signed sheets 1-3 of the FWCC-LAARS FORM by facsimile to the U.S. Army Corps of Engineers Pensacola Regulatory Office (Corps), U.S. Coast Guard (USCG), and Fish and Wildlife Conservation Commission (FWCC) to the following numbers:

Corps	(Pensacola)	850-433-8160	
USCG	(Pensacola)	850-458-5653	ATTN: OFFICER IN CHARGE
	(Destin)	850-244-0045	" "
	(Mobile)	334-441-6169	" "
FWCC	(Pensacola)	850-595-8981	ATTN: Captain Dist. 5C
FWCC	(Tallahassee)	850-922-0463	ATTN: Jon Dodrill

This procedure will be accomplished no later than 5 days prior to departure of vessel from the staging site to allow inspection of materials by the noted agencies. The reef deployment must occur within 30 days of the close of the 5-day inspection period. The notification to the Corps shall be accompanied by either digital or 35mm photographs that clearly show the reef material that is proposed for deployment. At least 24-hours prior to initiating the deployment voyage, the applicant listed on sheet 1 of 6 of the FWCC-LAARS FORM will transmit sheet 4 of 6 of the FWCC-LAARS FORM to the FWCC and Corps and verbally transmit the information on sheet 4 of 6 to Escambia County Marine Resources in accordance with the instructions on sheet 4 of 6.

6. All loading of reef material on to the transport vessel will occur at the staging site referenced on sheet 1 of 6 of the FWCC-LAARS FORM. Loading, transport, and deployment of the reef material will occur between sunrise and sunset, Monday through Sunday of a given week for private reef material deployments. Transport only of reef materials by contractors under hire, employment, or sponsorship by FWCC or Escambia County would be allowed during the period sunset to sunrise if FWCC staff or Escambia County, Chief of Marine Resources is aboard the transport vessel or a companion vessel to monitor the transport and deployment. Loading and deployment of reef materials for FWCC or Escambia County sponsored projects must still occur during the period sunrise to sunset.

7. The transport vessel will carry sheets 1-4 (completed and signed) of the FWCC-LAARS FORM and a full copy of Department of the Army permit number 199402365 (IP-CP). These documents will be provided to any county, state or federal officials upon their request and will serve as a cargo manifest. The forms will provide an itemized listing of the materials being transported for deployment as reef material.

8. This permit expressly prohibits the deployment of reef material on submerged seagrass beds, macroalgae, coral reef, rock outcroppings, rock ledges, rock bottoms, or areas supporting sea fans, sponges, soft coral, and other macroinvertebrates. To ensure that damage to existing resources does not occur, deployments for private reefs will involve a seafloor survey using a vessel mounted fathometer. For deployments on public and sanctuary reefs the seafloor survey will be accomplished by fathometer and/or submersible video equipment whichever is most appropriate for site conditions.

9. Within 48 hours of the transmittal of sheet 4 of 6 of the FWCC-LAARS FORM to the Corps, the applicant listed on page 1 of 6 of the FWCC-LAARS FORM will provide sheet 5 of 6 of the FWCC-LAARS FORM completed and signed to the FWCC and the FWCC designated agent. Within 120 hours of the transmittal of sheet 4 of 6 of the FWCC-LAARS FORM to the Corps, the FWCC will provide copies of the completed and signed FWCC-LAARS FORM sheets 1-5 to the Corps, Minerals Management Service (MMS), and National Oceanic and Atmospheric Administration (NOAA) at the addresses listed on sheet 6 of the FWCC-LAARS FORM..

10. FWCC staff or the Chief of the Escambia County Division of Marine Resources will accompany charter captains and/or private individual fishers offshore to observe deployments on unpublicized private reefs within the LAARS. Such monitoring will be implemented on 20-25% of the unpublicized private reefs deployed within the LAARS.

11. Prior to deployment of private reefs within the "single study area" referenced on page 7 of 8 of the permit drawings, the FWCC will provide the Pensacola Regulatory Office the coordinates for the study area and exhibit the location of the area on pages 3 or 4 of 8 of the permit drawings.

12. The FWCC will accomplish monitoring activities for the LAARS in accordance with pages 7 and 8 of 8 of the permit drawings. Information gained from the monitoring and management will be compiled for review by appropriate agencies upon expiration of this permit or request for extension of this permit.

The time limit for completing the work authorized will expire on September 22, 2006 You should attach this letter and the FWCC-LAARS FORM sheet 1-6 dated 5 May 2003 to the permit. All of the other conditions, limitations, and stipulations of permit number 199402365 not specifically changed by this modification remain in effect.

If you have questions regarding this letter please contact Clif Payne at the letterhead address or at telephone number 850-433-8732.

Thank you for your cooperation with our regulatory program.

BY AUTHORITY OF THE SECRETARY OF THE ARMY:

James G. May

Colonel, U.S. Army
District Engineer

Enclosure

Copy Furnished:

Department of Environmental Protection
160 Governmental Center
Pensacola, Florida 32501

U.S. Department of the Interior
Mineral Management Service
Office of Leasing and Environment
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123-2394

Director, National Imagery and Mapping Agency
Hydrographic Center
Washington, D.C. 20390
ATTN: Code NS12

Director, Office of Marine Recreational Fisheries,
National Marine Fisheries Service
Washington, D.C. 20235

Commanding Officer, United States Coast Guard
Eighth Coast Guard District
501 Magazine Street
New Orleans, La. 70136

Coast Guard Group Mobile
South Broad Street
Brookley Complex
Mobile, Alabama 36615
ATTN: Operations Officer

Coast Guard Marine Safety Office
150 North Royal Street
Post Office Box 2924
Mobile, Alabama 36652-2924

Coast Guard Station Pensacola
21 Slemmer Avenue
Pensacola, Florida 32508

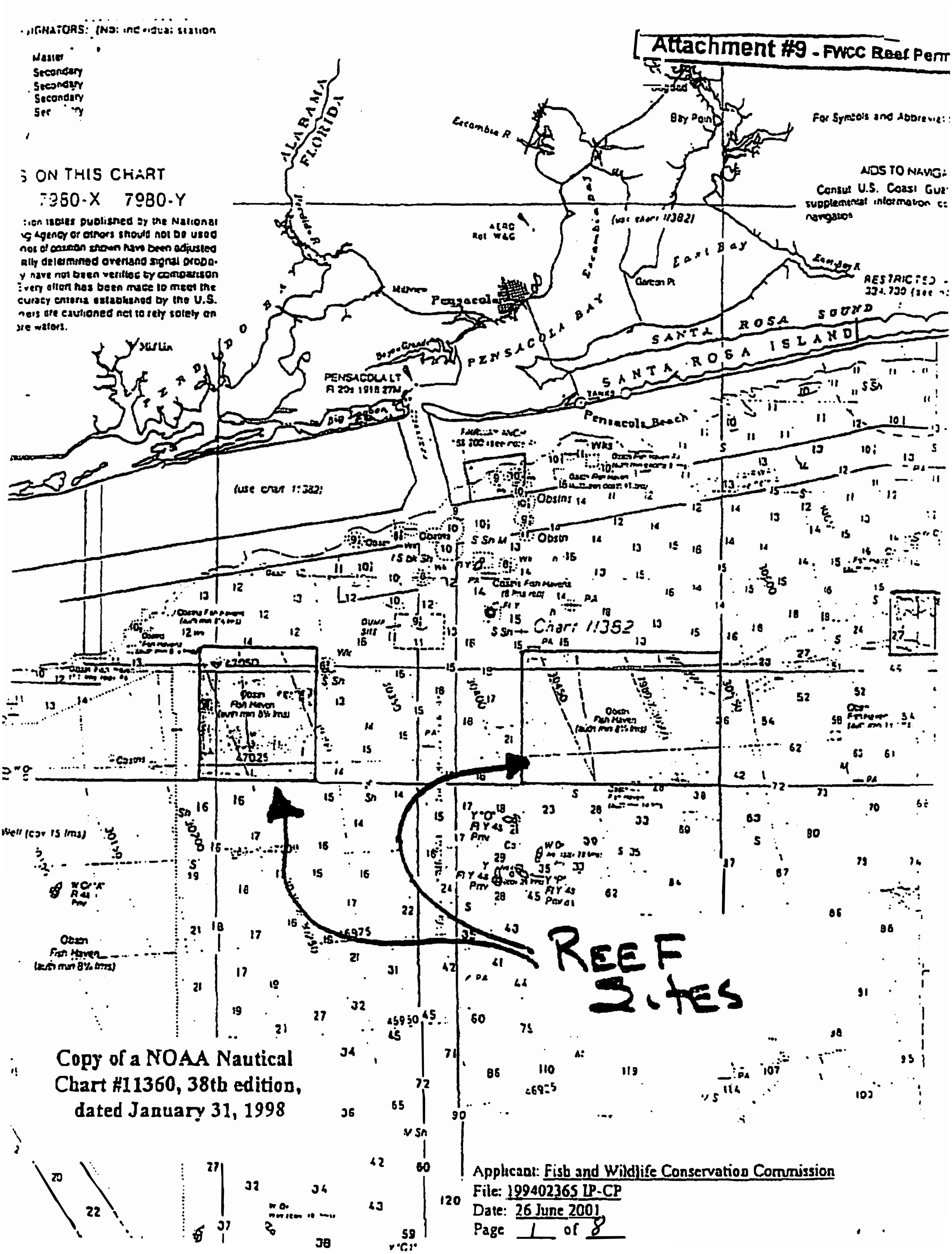
Coast Guard Station Destin
Post Office Box 1289
Destin, Florida 32541

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
Nautical Data Branch
N/CS26, SSMC3, Sta. 7308
1315 East-West Highway
Silver Springs, Maryland 20910-3282

U.S. Fish and Wildlife Service
1601 Balboa Street
Panama City, Florida 32406

National Marine Fisheries Service
3500 Delwood Beach Road
Panama City, Florida 32408-7403

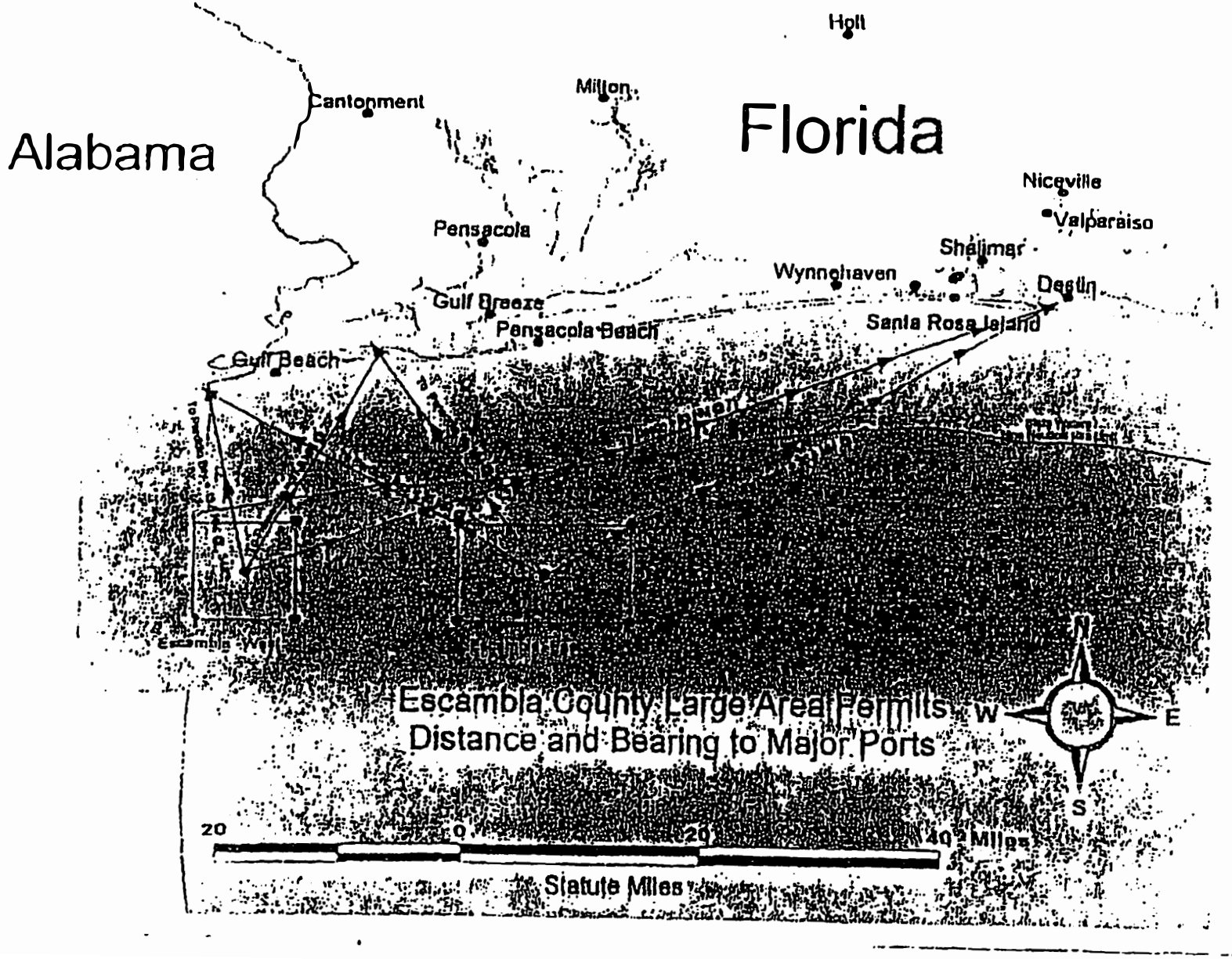
Fish and Wildlife Conservation Commission
Division of Law Enforcement, Florida Marine Patrol
District 5C Field Office
1101 East Gregory Street
Pensacola, Florida 32501



Copy of a NOAA Nautical Chart #11360, 38th edition, dated January 31, 1998

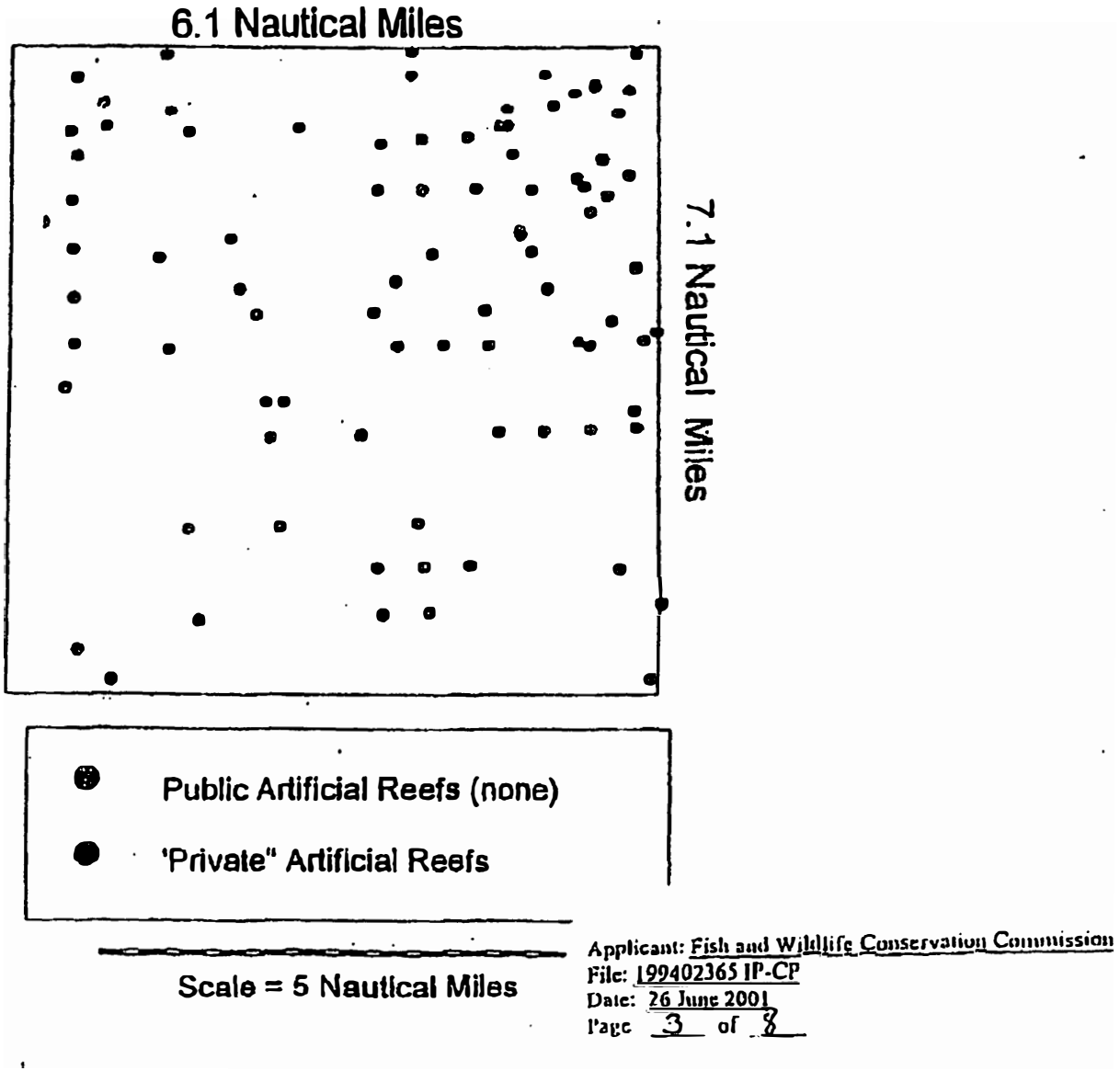
Applicant: Fish and Wildlife Conservation Commission
File: 199402365 IP-CP
Date: 26 June 2001
Page 1 of 8

Escambia County Large Area Permits



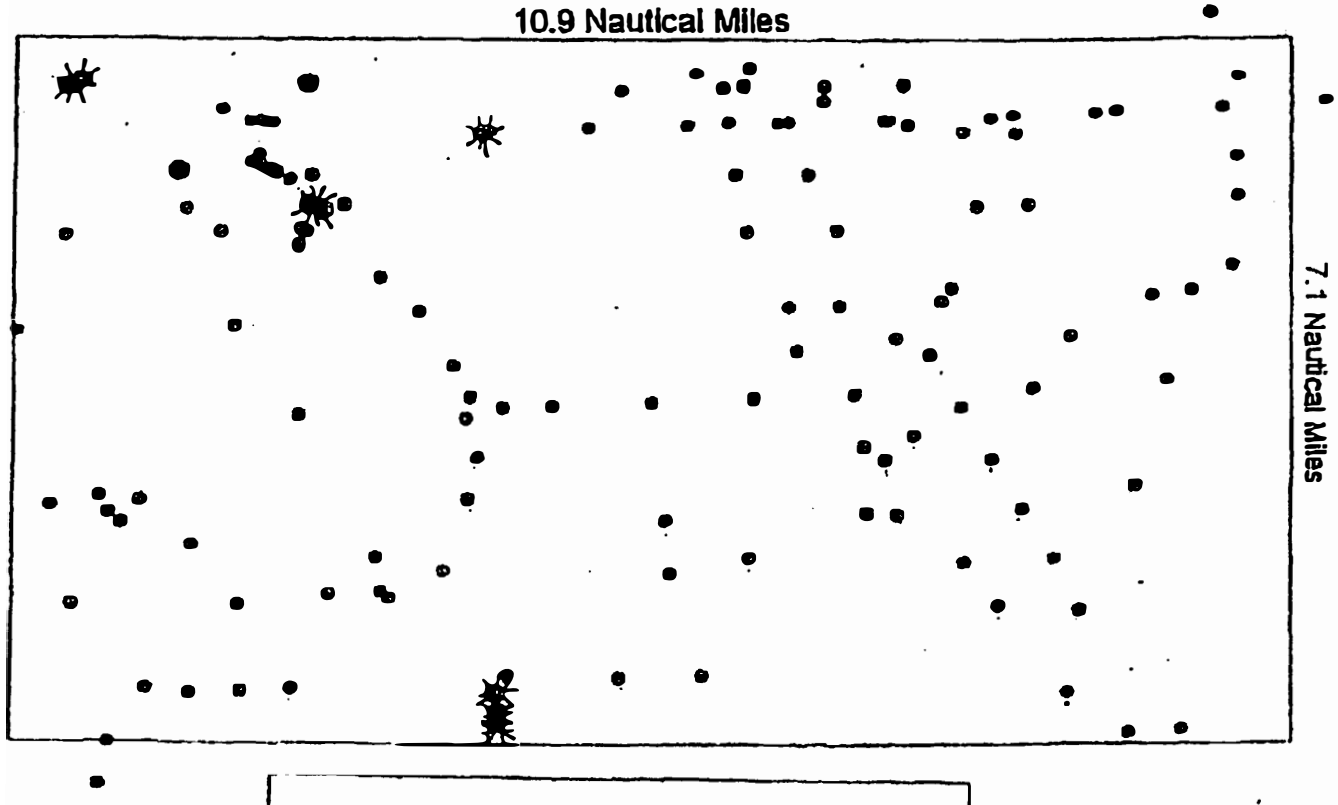
Applicant: Fish and Wildlife Conservation Commission
File: 199702365 IP-CP
Date: 26 June 2001
Page 2 of 8

Artificial reef deployments in
FWCC Escambia West Large Area Permit



Applicant: Fish and Wildlife Conservation Commission
File: 199402365 IP-CP
Date: 26 June 2001
Page 3 of 8

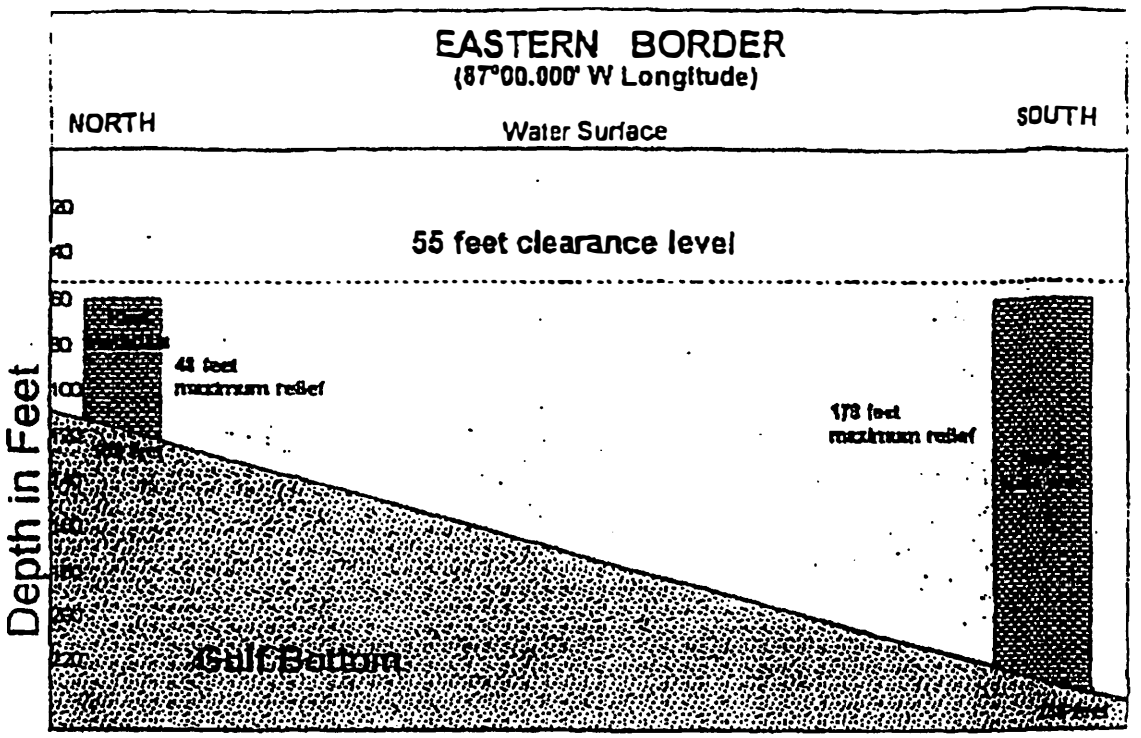
All reef deployments in FWCC Ecambia East Large Area Permit

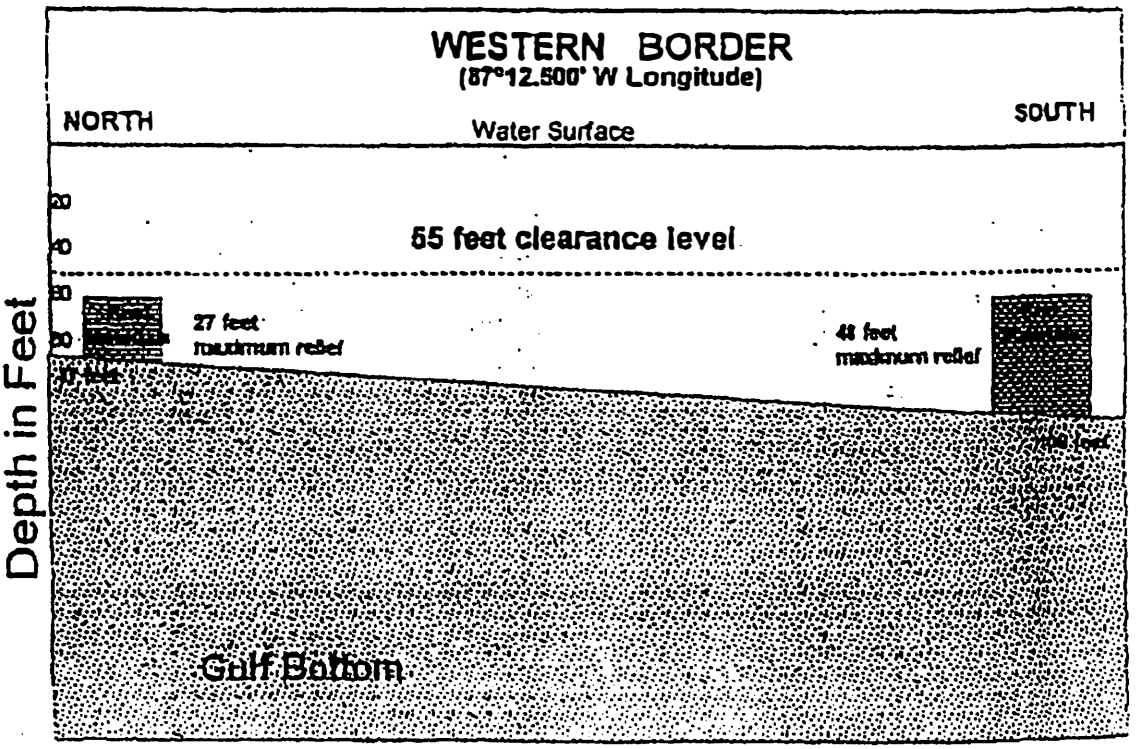


Applicant: Fish and Wildlife Conservation Commission
File: 199402365 IP-CI'
Date: 26 June 2001
Page 4 of 8

FWCC Escambia East Large Area Permit

Cross Sectional view of proposed deployments

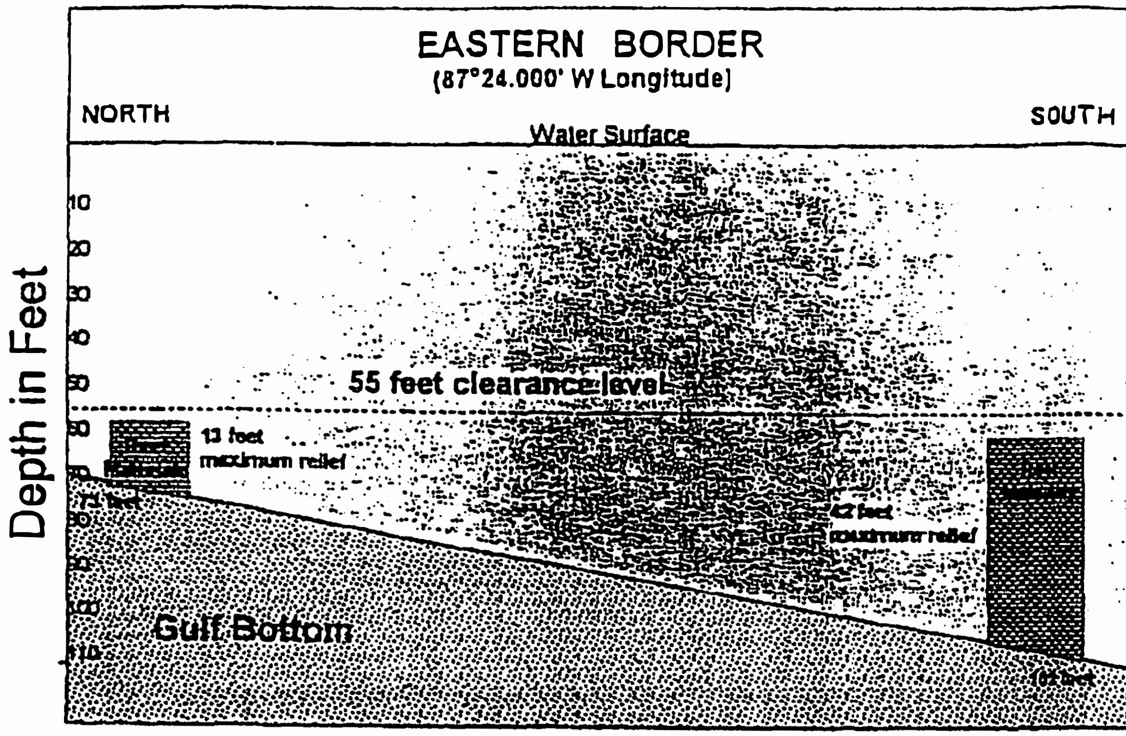


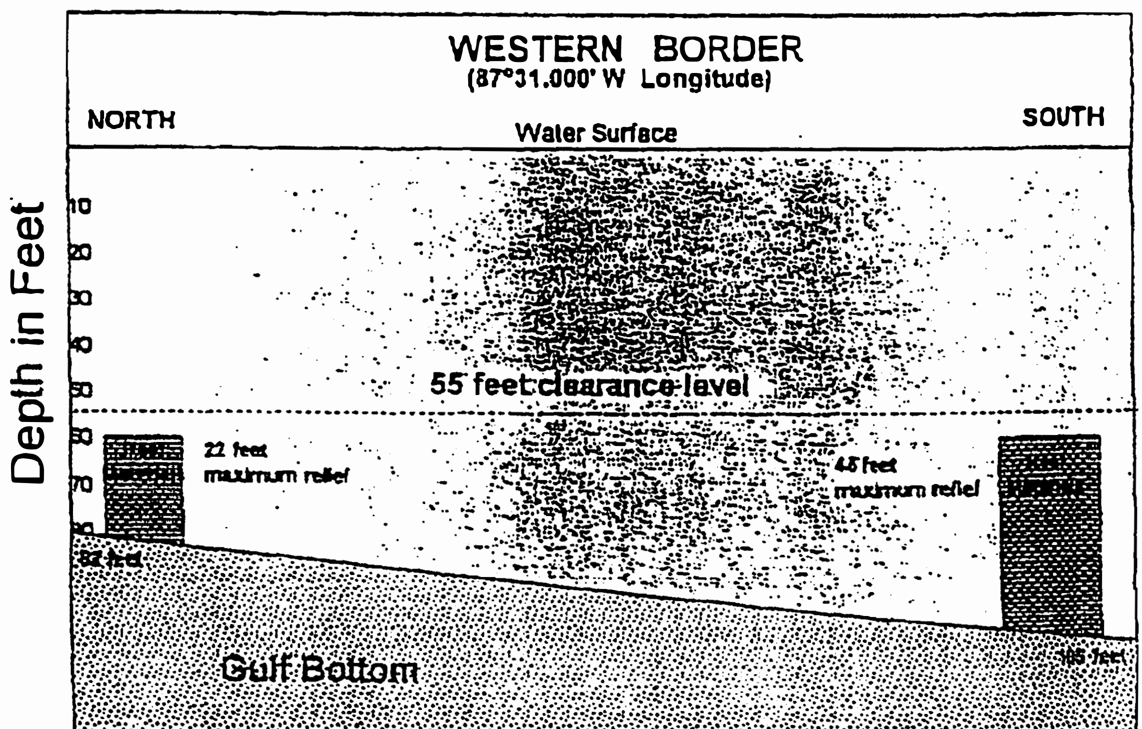


Graphic representation only, Drawings not to scale.

FWCC Escambia West Large Area Permit

Cross Sectional view of possible proposed deployments





Applicant: Fish and Wildlife Conservation Commission
File: 199402365 IP-CP
Date: 26 June 2001
Page 6 of 8

Graphic representation only, Drawings not to scale.

1. Public and Sanctuary Reef Monitoring.

The goals and objectives for public and sanctuary reefs have been described in the response to item II-D. Monitoring of the public and sanctuary reefs will be conducted in a cooperative effort among the FWC Assessment Dive Team, Escambia County staff, local volunteers and hired outside assistance as needed. The establishment of an Escambia County Division of Marine Resources (ESCMR) gives Escambia County a powerful artificial reef management tool to assist the FWC in monitoring and management of the Escambia LAARS as well as other County artificial reef sites. For example, ECDMR received from FWC a $14,000 monitoring grant to ground truth and assess older artificial reef sites inshore of the LAARS in 2000-2001. The County is committed to a cooperative partnership with FWC in the monitoring and management efforts of the LAARS sites.

Compliance monitoring of the correct physical placement at appropriate depths of all publicly funded reefs (both public and sanctuary reefs) will be through an on-site observer who will either be a staff member of the Escambia County Recreation and Parks Department or a FWC staff member.

Physical and biological performance of the public reefs will be conducted through the combined resources of the Escambia County Division of Marine Resources (ECDMR), FWC staff, and additional assistance obtained through monitoring grants to the County. Biological monitoring of fishery resources using point count, total count, or roving diving methodology on 5 selected sanctuary reefs will be conducted beginning one year post deployment in spring, summer, and fall and compared with similar publicly fished structures placed at similar depths and during a similar time frame for a four year period (30 dive events/yr). Ten other examples of selected public reefs which have been deployed for two or more years will be visually inspected for performance on an annual basis. The intent is that all public reefs will be visually inspected at least once every two years, during which structural condition and utilization by marine fish and macroinvertebrates will be assessed. Additionally, after the first year, hook and line fish censuses targeting recreational species will also be made on five additional sanctuary and five comparable public reefs for length/weight comparison purposes (assuming availability of private reef funding).

2. Private Reef Monitoring.

Four aspects of private reef monitoring will take place: 1) monitoring for suitability of material leaving the dock through a formal inspection program; 2) monitoring of representative materials of previously unknown stability, durability or habitat history by setting examples of these materials aside in a study site; 3) pre and post deployment compliance monitoring of selected private reefs through cooperation with the private reef builders.

Examples of representative materials deployed by private fishermen will be placed in a single study area location within the Escambia LAARS and monitored for biological and physical performance on an annual basis.

The Chief of ECDMR, Captain Robert Turpin, will also arrange through charter captains and private individuals to accompany them offshore to observe deployments of representative unpublicized artificial reefs in the LAARS areas. A target number of 20-25% of the annual private pre-deployment trips will be monitored to document development and permit compliance.

Beginning in year #2, and to continue each year thereafter over a five year period, the Chief of ECDMR will also arrange with private reef builders to confirm reported post deployment locations of other randomly selected five sites previously deployed in year #1 or in subsequent years. The intent is to conduct sample spot checks of deployed private reefs to: 1) insure they have been placed in the LAARS ; 2) assess their physical condition in relation to the 10 year longevity goal and 3) obtain feedback from the users on how they feel their private reef sites are performing in terms of meeting their fishing objectives.

For the above post deployment assessments, the two large areas will be divided into one nautical mile square grids. Location of private reefs will be randomly selected from these grids. Arrangements will be made with the user to proceed to the appropriate grid and identify the reef and if possible its current condition. Initial deployments will have been based upon providing coordinates that fell within an agreed upon one square nautical mile grid square within the LAARS areas.

3. Public and Sanctuary Reef Management.

Management will start with planning. On an annual basis, based upon the availability of funding for public reefs, the Chief of ECDMR in consultation with FWC will develop a detailed plan (usually in the form of a grant application) for the construction and deployment of artificial reefs in the LAARS for that year. Ongoing management of existing reefs will include active efforts on the part of the County to solicit feedback from the general public and charter fleet on their experiences with public artificial reef use in these LAARS areas. At the five year conclusion of this proposed re-authorization, a formal user evaluation of this LAARS site will be conducted. Using GIS mapping, the relationships of existing public reefs to each other will be used in determining future locations of public reefs over the next five years as well as the locations of unpublicized sanctuary reefs proposed for placement, depending on the availability of funding.

Management of the public reefs will include provisions for siting of the public reefs in differing locations (water depths) to accomplish public reef objectives 1, 3, 4, and 5. Objective 2 will be accomplished by selecting the materials for public reefs that will provide suitable habitat for target species, with sufficient mass at the proposed water depth to ensure a minimum of 20 year durability and stability.

Management of the sanctuary reefs will include an analysis of previous public reef locations and the general locations of private reefs to determine travel and use patterns. Locations for the siting of sanctuary reefs will be selected so as to minimize their discovery by fishers using public reefs or those using their own private reefs.

Application for Use of
ESCAMBIA-Large Area Artificial Reef Sites
Escambia-LAARS FORM
Pre-Deployment Notification Inspection Request

Name of Applicant_____

Address of Applicant _____

Name and Telephone Number for Point of Contact at Reef Material Staging Site

Name_____ Area Code (___) ___-_____

Address of the Staging Site_____

Name of Captain and Name and Registration # of Transport Vessel_____

Tag Number/ Itemized Description of Reef Material:

_____

_____

_____

How Reef Materials Were Cleaned (if necessary)_____

Proposed Deployment Site #1

Latitude: ___ ° ___.___ ' North Water depth above deployed material _____ feet
Longitude: ___ ° ___.___ ' West Tag Number(s) _____

Proposed Deployment Site #2

Latitude: ___ ° ___.___ ' North Water depth above deployed material _____ feet
Longitude: ___ ° ___.___ ' West Tag Number(s) _____

Proposed Deployment Site #3

Latitude: ___ ° ___.___ ' North Water depth above deployed material _____ feet
Longitude: ___ ° ___.___ ' West Tag Number(s) _____

Proposed Deployment Site #4

Latitude: ___ ° ___.___ ' North Water depth above deployed material _____ feet
Longitude: ___ ° ___.___ ' West Tag Number(s) _____

Proposed Deployment Site #5

Latitude: ___ ° ___.___ ' North Water depth above deployed material _____ feet
Longitude: ___ ° ___.___ ' West Tag Number(s) _____

Coordinates of East LAARS:

Center Point -	Latitude:	30° 03.50' North	Longitude: 87° 06.25' West
Northeast Corner –	Latitude:	30° 07.00' North	Longitude: 87° 00.00' West
Southeast Corner -	Latitude:	30° 00.00' North	Longitude: 87° 00.00' West
Southwest Corner -	Latitude:	30° 00.00' North	Longitude: 87° 12.50' West
Northwest Corner -	Latitude:	30° 07.00' North	Longitude: 87° 12.50' West

Coordinates of West LAARS:

Center Point -	Latitude:	30° 03.50' North	Longitude: 87° 27.50' West
Northeast Corner –	Latitude:	30° 07.00' North	Longitude: 87° 24.00' West
Southeast Corner -	Latitude:	30° 00.00' North	Longitude: 87° 24.00' West
Southwest Corner -	Latitude:	30° 00.00' North	Longitude: 87° 31.00' West
Northwest Corner -	Latitude:	30° 07.00' North	Longitude: 87° 31.00' West

Public Access Statement: In applying for this authorization and by signing below, I understand the ESCAMBIA-Large Area Artificial Reef Sites (LAARS) are open to public access and this authorization does not provide any rights or exclusive private use over those rights or uses of the general public.

Corps Permit Requirements: By signing below I certify that I have received a full copy of and read Corps permit number 199402365 (IP-CP) and agree to abide by its terms and Special Conditions.

Environmental Damage: By signing below I certify the reef material to be deployed will not be placed on submerged seagrass beds, macroalgae, coral reef, rock outcroppings, rock ledges, rock bottoms, or areas supporting sea fans, sponges, soft coral, and other macroinvertebrates. If such were to occur, I agree to be responsible for the removal of the deployed material and for any cost or damages incurred

Signature of Applicant_____

Date _____

Submitted by : _____
Escambia County Staff (print & signature & date)

Deployment Tracking #_____

Re-submittal - Yes or No (circle one)

ESCAMBIA COUNTY Deployment Approval Form

(For Use By County Staff ONLY)

Approved _____ Denied _____

Comments: _____

_____

_____

_____

_____

_____

_____

_____

_____

Certification of Ownership/Maintenance/Liability of Reef Material:

I hereby certify that the Escambia County Board of County Commission accepts ownership of the materials described in this application for approval to use the ESCAMBIA Large Area Artificial Reef Sites. I hereby certify that the Escambia County Board of County Commission accepts responsibility for maintenance of the Large Area Artificial Reef Sites. I hereby certify that the Escambia County Board of County Commission financially possesses the ability to assume liability for all damages that may arise with respect to the ESCAMBIA Large Area Artificial Reef Sites

_____

Escambia County Staff (Printed & Signature & Date)

This deployment authorization is valid until 1159 PM on

_____

(date)

Deployment Tracking #_____

Re-submittal - Yes or No (circle one)

24 - Hour Pre-Deployment Notification

Applicant listed on page 1 of 6 of the ESCAMBIA-LAARS FORM to accomplish the following no less than 24 hours prior to departing on the deployment voyage:

1. Contact Escambia County Marine Resources at (850)595-4395 and verbally provide the below listed information.

2. Provide sheet 4 of 5 (this sheet) of the ESCAMBIA-LAARS FORM by facsimile to the Corps of Engineers Pensacola Regulatory Office at 850-433-8160.

3. USCG (Pensacola) 850-458-5653 ATTN: OFFICER IN CHARGE
   (Destin) 850-244-0845 "
   (Mobile) 334-441-6169 "

Name and Telephone Number for Point of Contact at the Staging Site

Name_____ Area Code (___) ___-_____

Address of the Staging Site_____

Name of Captain and Name and Registration # of Transport Vessel_____

Proposed Date and Time for Departure from Staging Site_____

Deployment Voyage Route _____

Estimated Time of Arrival at Deployment Site #1 _____

Estimated Time of Arrival at Deployment Site #2 _____

Estimated Time of Arrival at Deployment Site #3 _____

Estimated Time of Arrival at Deployment Site #4 _____

Estimated Time of Arrival at Deployment Site #5 _____

Deployment Tracking #_____

Re-submittal - Yes or No (circle one)

Post Deployment Notification

Applicant to submit Post Deployment Notification by facsimile to Escambia County Marine Resources 850-595-3495 w/in 48 hours of transmitting sheet 4 of 6 of the ESCAMBIA-LAARS FORM to the Corps. Escambia County Marine Resources shall provide by facsimile Post Deployment Notification to the Corps w/in 5 days of sheet 4 of 6 of the ESCAMBIA-LAARS FORM being transmitted to the Corps.

Environmental Damage: By signing below I certify the reef material was deployed at the coordinates listed below and was not placed on submerged seagrass beds, macroalgae, coral reef, rock outcroppings, rock ledges, rock bottoms, or areas supporting sea fans, sponges, soft coral, and other macroinvertebrates.

Applicant Name _____
(Print & Signature & Date of Deployment)

Actual Deployment Site #1
Latitude: ___° ___.___' North Water depth above deployed material _____ feet
Longitude: ___° ___.___' West Tag Number(s) _____

Actual Deployment Site #2
Latitude: ___° ___.___' North Water depth above deployed material _____ feet
Longitude: ___° ___.___' West Tag Number(s) _____

Actual Deployment Site #3
Latitude: ___° ___.___' North Water depth above deployed material _____ feet
Longitude: ___° ___.___' West Tag Number(s) _____

Actual Deployment Site #4
Latitude: ___° ___.___' North Water depth above deployed material _____ feet
Longitude: ___° ___.___' West Tag Number(s) _____

Actual Deployment Site #5
Latitude: ___° ___.___' North Water depth above deployed material _____ feet
Longitude: ___° ___.___' West Tag Number(s) _____

Make/Model/Level of accuracy of equipment utilized to determine cordinates and depths
Latitude/Longitude: _____
Depth: _____

Drawing of Configuration of Reef Material Attached:
yes ___ No __ Provide explanation if drawing not provided:
_____
_____

_____
Escambia County Staff (Print & Signature & Date)

DEPLOYMENT CANCELLATION REPORT FORM

To Be Completed Immediately Upon Reaching The Expiration Date Listed on Sheet XX of XX of the LAARS Form

The intent of this document is to notify the below listed agencies and departments that materials authorized for deployment under tracking number _____ will not be deployed.

Date: _____

Printed Name of Applicant:_____

Signature of Applicant : _____

Fax to Escambia County Marine Resources (850) 595-3495
Fax to Florida Fish and Wildlife Conservation Commission (850) 922-0463
Fax to U.S. Army Corps of Engineers (850) 433-8160

Appendix V. Escambia County Artificial Reef Permitting Program Ordinance

BOARD OF COUNTY COMMISSIONERS
Escambia County, Florida

DEPARTMENT: Neighborhood and Environmental Services

FROM: Keith Wilkins, Director

DATE: June 7, 2007

ISSUE: Public Hearing: Artificial Reef Permitting Program Ordinance

RECOMMENDATION:

That the Board take the following action regarding an Artificial Reef Permitting Program Ordinance:

A. Adopt an ordinance of Escambia County, Florida creating Article V, Chapter 102, Sections 102-77 to 102-79, of the Escambia County Code of Ordinances; for the Escambia County Artificial Reef Permitting Program; providing for establishment of artificial reef permitting requirements by Resolution of the Board; providing for severability; providing for inclusion in the code; providing for an effective date;

B. Authorize the chairman to sign the ordinance;

C. Approve a Resolution establishing terms, conditions and procedures regarding authorized areas for construction or nourishment of reef sites, appropriate materials, cleaning and preparation of reef materials, fees and other matters;

D. Authorize the chairman to sign the resolution;

E. Approve the Policy and Procedures to be used by the Marine Resources Division to implement the Artificial Reef Permitting Program;

F. Ratify Transferee Signature of Keith Wilkins, Director, Neighborhood and Environmental Services Department, on the Department of the Army Permit Transfer Request transferring Florida Fish and Wildlife Conservation Commission's Permit No. 19402365 (IP-CP) to Escambia County; and

G. Authorize Escambia County seeking renewal of the permit that expires September 22, 2007.

BACKGROUND:

At it's June 7, 2007, meeting the Board scheduled a public hearing for 5:32 p.m., to consider adopting an Ordinance regarding the Artificial Reef Permitting Program. On November 1, 2001,

BCC: 06-21-2007
RE: Public Hearing: Artificial Reef Permitting Program Ordinance
Date: June 7, 2007

the Board approved a Memorandum of Understanding between the Florida Fish and Wildlife Conservation Commission (FWC) and Escambia County established the county's role in managing personal reef deployments on their behalf. At the January 25, 2007 Committee of the Whole meeting, the Board directed Neighborhood and Environmental Services Department (NESD) to accomplish transfer of the Army Corps of Engineers permit for Large Area Artificial Reef Site from FWC to Escambia County.

BUDGETARY IMPACT:

The Ordinance contains recommended permit fees and penalties.

LEGAL CONSIDERATIONS/SIGN-OFF:

Alison Perdue Rogers, Assistant County Attorney, has reviewed and approved the Ordinance and Resolution as to legal form and sufficiency.

PERSONNEL:

No additional staff is required.

POLICY/REQUIREMENT FOR BOARD ACTION/DISCUSSION:

This action is consistent with the Board's Comprehensive Plan goal "to properly manage and conserve the natural resources of the County..."

IMPLEMENTATION REQUIREMENTS:

Upon adoption of the Ordinance, NESD Marine Resources Division will manage the Escambia County Artificial Reef Permitting Program according Board-approved policies and procedures and Army Corps of Engineers permit conditions.

COORDINATION WITH OTHER AGENCIES/PERSONS:

Escambia County Marine Resources Division will continue coordination with Army Corps of Engineers.

RT/sa
H:\NESD\NESD\BCC Recommendations\Marine Resources\Artificial Reefs\LAARS Ord May07\LAARS Ord public hearing 06 21 07.doc

Attachments

CONCUR:

George Touart, County Administrator

ORDINANCE NO. 2007-29

AN ORDINANCE OF ESCAMBIA COUNTY, FLORIDA CREATING ARTICLE V, CHAPTER 102, SECTIONS 102-77 TO 102-79, OF THE ESCAMBIA COUNTY CODE OF ORDINANCES; FOR THE ESCAMBIA COUNTY ARTIFICIAL REEF PERMITTING PROGRAM; PROVIDING FOR ESTABLISHMENT OF ARTIFICIAL REEF PERMITTING REQUIREMENTS BY RESOLUTION OF THE BOARD; PROVIDING FOR SEVERABILITY; PROVIDING FOR INCLUSION IN THE CODE; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Escambia County has accepted delegation from the U. S. Army Corps of Engineers and the Florida Fish and Wildlife Commission for permitting of artificial reef deployments in Escambia County's designated LAARS areas; and,

WHEREAS, pursuant to this delegation, Escambia County will oversee and permit artificial reef deployments in the permit areas; and,

WHEREAS, designated artificial reefs create habitat for many species of marine life; and,

WHEREAS, marine life is vital for sustaining several commercial and recreational pursuits in Escambia County including fishing, snorkeling, scuba diving and boating; and,

WHEREAS, such activities play a vital role in the local economy, including the tourism industry; and,

WHEREAS, fishing and diving opportunities contribute greatly to the quality of life for Escambia County residents and visitors.

NOW THEREFORE BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF ESCAMBIA COUNTY, FLORIDA:

Section 1. Article V, Chapter 102, Sections 102-77 to 102-79 of the Code of Ordinances of Escambia County, Florida is hereby created to read as follows:

Section 102-77 Short Title.

This ordinance shall be known as "Escambia County Artificial Reef Ordinance," and may be cited as such.

Section 102-78 Creation.

Escambia County hereby establishes an artificial reef program whereby the County, through delegation from the U. S. Army Corps of Engineers and transfer from the Florida Fish and Wildlife Commission, permits and oversees artificial reef deployment and nourishment in those areas established as Escambia County Large Area Artificial Reef Sites (LAARS).

Section 102-79 Procedures.

The Board may establish by resolution the terms, conditions and procedures regarding authorized areas for the construction or nourishment of reef sites, designation of appropriate reef material(s), cleaning and preparation of reef material(s), fees and other matters relating to this section. The resolution may be amended from time to time as required by the permit or the determination of the board.

Section 2. SEVERABILITY.

It is declared the intent of the Board of County Commissioners that if any subsection, clause, sentence, provision or phrase of this Ordinance is held to be invalid or unconstitutional by a Court of competent jurisdiction, such invalidity or

unconstitutionality shall not be so construed as to render invalid or unconstitutional the remaining provisions of this Ordinance.

Section 3. INCLUSION IN THE CODE.

It is the intention of the Board of County Commissioners that the provisions of this Ordinance shall become and be made a part of the Escambia County Code; and that the sections of this Ordinance may be renumbered or relettered and the word "ordinance" may be changed to "section," "article," or such other appropriate word or phrase in order to accomplish such intentions.

Section 4. EFFECTIVE DATE.

This Ordinance shall become effective upon its filing with the Department of State.

DONE AND ENACTED this 21st day of June, 2007.

BOARD OF COUNTY COMMISSIONERS
ESCAMBIA COUNTY, FLORIDA

By: K W White
Kevin W. White, Chairman

ATTEST: ERNIE LEE MAGAHA
Clerk of the Circuit Court

Date Executed
June 22, 2007

BOARD OF COUNTY COMMISSIONERS ESCAMBIA CO. FL (SEAL)

By: Kristi Harris
Deputy Clerk

This document approved as to form and legal sufficiency
By
Title Deputy County Attorney
Date 6/11/07

ENACTED: June 21, 2007
FILED WITH DEPARTMENT OF STATE: June 26, 2007
EFFECTIVE: June 26, 2007

2007-000760 BCC
Jun. 21, 2007 Page 59

RESOLUTION R2007-116

A RESOLUTION PROVIDING FOR AUTHORIZED LAARS (LARGE AREA ARTIFICIAL REEF SITE) AREAS FOR CONSTRUCTION AND/OR NOURISHMENT OF ARTIFICIAL REEFS; DESIGNATING APPROPRIATE REEF MATERIAL(S), CLEANING AND PREPARATION OF REEF MATERIAL(S); ESTABLISHING ARTIFICIAL REEF FEES FOR LAARS AUTHORIZATIONS; ESTABLISHING FINANCIAL SAFEGUARDS FOR DEPLOYMENT AND/OR TOWING OF VESSELS AS REEFS; PROVIDING FOR PROHIBITION OF PARTICIPATION DUE TO NONCOMPLIANCE OF PERMIT TERMS; PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, Escambia County has accepted a transfer from the FWC and delegation from the Department of the Army for responsibility for that Large Area Artificial Reef Site (LAARS) currently assigned Permit (the Permit) #199402365; and

WHEREAS, pursuant to this delegation, Escambia County will oversee and authorize artificial reef deployments in the Permit areas; and,

WHEREAS, artificial reefs create habitat for many species of marine life; and,

WHEREAS, marine life is vital for sustaining several commercial and recreational pursuits in Escambia County including fishing, snorkeling, scuba diving and boating; and,

WHEREAS, such activities play a vital role in the local economy, including the tourism industry; and,

WHEREAS, fishing and diving opportunities contribute greatly to the quality of life for Escambia County residents and visitors.

NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF ESCAMBIA COUNTY, FLORIDA:

Section 1: Permit and Terms: Escambia County is permitted to authorize and oversee artificial reef inspections and deployments for designated LAARS areas, currently assigned Permit Number 199402365. Copies of the Permit and its terms as expressed by the Army Corps of Engineers are attached and incorporated with this Resolution as Exhibit "A" . The terms or conditions of the Permit are subject to change due to requirements of the Department of Army, the courts or other circumstances and such changes are incorporated with this Resolution. The Permit number is subject to change and multiple permit numbers may be assigned to Escambia County jurisdiction and shall be subject to this Resolution.

Section 2. Authorized Area. Escambia County shall only issue authorizations for the construction or nourishment of artificial reef sites within authorized Permit areas. Current authorized LAARS Permit sites are described herein and encompass a total seafloor area of 118 square nautical miles.

EAST AREA

Coordinates of East LAARS:

Center Point –	Latitude:	30° 03.50' North	Longitude: 87° 06.25' West
Northeast Corner -	Latitude:	30° 07.00' North	Longitude: 87° 00.00' West
Southeast Corner -	Latitude:	30° 00.00' North	Longitude: 87° 00.00' West
Southwest Corner -	Latitude:	30° 00.00' North	Longitude: 87° 12.50' West
Northwest Corner -	Latitude:	30° 07.00' North	Longitude: 87° 12.50' West

WEST AREA

Coordinates of West LAARS:

Center Point –	Latitude:	30° 03.50' North	Longitude: 87° 27.50' West
Northeast Corner -	Latitude:	30° 07.00' North	Longitude: 87° 24.00' West
Southeast Corner -	Latitude:	30° 00.00' North	Longitude: 87° 24.00' West
Southwest Corner -	Latitude:	30° 00.00' North	Longitude: 87° 31.00' West
Northwest Corner -	Latitude:	30° 07.00' North	Longitude: 87° 31.00' West

A map illustrating these LAARS Permit sites is attached and incorporated with this Resolution as Exhibit "B".

Section 3. Reef Materials. Escambia County shall only issue authorizations for the construction or nourishment of artificial reef sites using stable materials as authorized in the Permit, which are currently as described below:

Materials shall be free of pollutants and toxins and composed of:

a. Non-productive oil platforms thoroughly clean in accordance with U.S. Coast Guard and U.S. Environmental Protection Agency (EPA) standards.

b. Surplus military equipment 1/4 inch or greater in thickness thoroughly clean in accordance with U. S. Coast Guard and U. S. Environmental Protection Agency (EPA) standards.

c. Steel hull vessels ballasted and thoroughly clean in accordance with U. S. Coast Guard and U. S. Environmental Protection Agency (EPA) standards.

d. Natural limestone boulders weighing a minimum of 150 pounds each.

e. Clean concrete rubble weighing a minimum of 150 pounds each.

f. Clean concrete prefabricated reef materials or modules weighing a minimum of 150 pounds each.

g. Clean and structurally stabilized steel/aluminum/metal alloy boxes or structures (1/8 inch or greater in thickness) weighing 150 pounds or more.

No reef materials shall be allowed to trap marine life and must be configured, cut or shaped, so as not to function as a fish trap. All materials/structures must be configured and constructed to be stable, durable, and provide habitat. No material whatsoever may be deployed within one-quarter mile of the boundaries of the Large Area Artificial Reef Sites (LAARS). No other materials are authorized. Materials expressly prohibited include cars and trucks and any parts thereof, white goods (i.e. appliances), shopping carts, bread trays, 55 gallon drums, storage or fuel tanks, loose metal materials, plastics, fiberglass, or materials that upon inspection by Escambia County staff are found to be potentially unstable or lack acceptable habitat qualities.

Section 4. Cleaning of Reef Materials. All reef material(s) must be properly cleaned before being loaded for transport to a reef site. All inspections must be completed and certification made that the materials have been properly cleaned. Inspections must be performed by qualified County personnel. Inspections of steel-hulled vessels will be accomplished by the United States Coast Guard. Inspection criteria shall include, but may not be limited to, the following items:

(1) All decks, bilges and cargo spaces should be free of oil, other hydrocarbons and toxic residue.
(2) All electrical components that contain PCB contaminants must be removed.
(3) All floatable materials must be removed.
(4) Floatable asbestos insulation must be removed.

Section 5. Artificial Reef Fees. The fee for each authorization for deployment of artificial reef materials shall be Twenty-five dollars ($25.00). If an applicant has failed to deploy authorized artificial reef materials within sixty (60) days of issuance of the authorization and subsequently applies for an authorization to deploy the previously authorized materials, then the Artificial Reef Fee to reauthorize those materials is two hundred dollars ($200.00), in order to help offset necessary staff time.

Section 6: Deployment of Vessels as Artificial Reefs. In order to obtain a permit to deploy and/or tow a vessel, including but not limited to, barges and tug boats, an

applicant must make assurances that protect the County from liability in the event the vessel is purposefully or accidentally deployed outside the Permit areas or is improperly deployed. Such assurances shall include a signed statement of responsibility and liability and, where possible, listing the County as an additional insured on a relevant insurance policy or posting a surety sufficient to address possible deployment errors. Fiberglass hulls are not permissible deployment materials.

Section 7. Monitoring of Reef Deployments. Monitoring shall be carried out by the County staff as required by the Permit.

Section 8. Other Terms and Restrictions. Other terms and restrictions set forth in the Permit shall apply. Administrative policies may be applied by County staff. This Resolution shall be amended from time to time as necessary.

Section 9. Noncompliance. Those individuals determined to be in noncompliance with the terms of the Permit or this Resolution shall be prevented from obtaining authorization for artificial reef materials until such time as the individual comes into compliance. Coming into compliance could mean, for example, reporting coordinates of deployed materials or returning unused authorization tags. However, those who refuse or are unable to come into compliance shall be prohibited from any further participation in the artificial reef program unless it can be demonstrated that the inability to come into compliance is due to circumstances beyond the applicant's control.

ADOPTED this 21st day of June, 2007.

BOARD OF COUNTY COMMISSIONERS
OF ESCAMBIA COUNTY, FLORIDA

By: _____
Kevin W. White, Chairman

ATTEST: ERNIE LEE MAGAHA
CLERK OF THE CIRCUIT COURT

By: _____
Deputy Clerk

SEAL
BOARD OF COUNTY COMMISSIONERS
ESCAMBIA CO. FL

BCC APPROVED 6-21-2007

This document approved as to form
and legal sufficiency
By
Title Deputy County Attorney
Date 6/21/07

Date Executed
6-22-2007