Local Coastal Management Programs Handbook

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Introduction and Purpose

The Office of Coastal Management (OCM) of the Louisiana Department of Natural Resources (LDNR) is charged with implementing the Louisiana Coastal Resources Program (LCRP) under authority of the Louisiana State and Local Coastal Resources Management Act of 1978 (SLCRMA), as amended (Act 361, La. R.S. 49:214.21 et. Seq.).

This law seeks to protect, develop, and where feasible, restore or enhance the resources of the state's coastal zone. Its broad intent is to encourage multiple uses of resources and adequate economic growth while minimizing adverse effects of one resource use upon another without imposing undue restrictions on any user. Besides striving to balance resource conservation and resource consumption, the policies of the LCRP also seek to resolve user conflicts, encourage coastal zone recreational values, and help determine the future course of coastal development and conservation.

The purpose of this document is to review the ecological incentives, regulatory requirements, and technical procedures for operating an approved Local Coastal Management Program (LCRP) in Louisiana. Parishes with approved Local Coastal Management Programs have assumed responsibility for balancing the use of coastal resources with the protection of those resources. This task requires an understanding of: wetland habitats, wetland functions and values; knowledge of the rules that regulate permitting and compensatory mitigation; and the training and technical proficiency to assess the required compensatory mitigation.

There are many reasons why the proper operation of an approved Local Coastal Management Program is vital to the parish and state. The state has to prepare performance-based reports (Legislative Performance Report and the Coastal Wetlands Conservation Plan Report) for the state legislature and various federal oversight agencies. The performance of our state and local programs can affect our federal funding levels. In addition, the Louisiana Coastal Protection and Restoration Authority and the US Army Corps of Engineers both pursue plans for the protection and restoration of coastal Louisiana. Toward this end Louisiana's comprehensive Master Plan for a Sustainable Coast has been developed. This plan contains significant civil works features, restoration of coastal wetland and non-structural, e.g. legislative, policy and administrative protection and restoration implementation actions.

This handbook will serve as guidance that you can reference as needed so that your parish can successfully implement management of the Local Coastal Management Program in a manner consistent with the state LCRP. It will assist you in enhancing your knowledge on wetland/coastal resource preservation and mitigation protocols.

Legislative History

State Regulations

The Louisiana State and Local Coastal Resources Management Act of 1978

This act, referred to as SLCRMA represents the laws of this state regarding coastal zone management and protection. It included the rules for the creation of:

- The Wetlands Conservation and Restoration Authority within the Office of the Governor;
- The Louisiana Coastal Zone Management Program (CZMP) within the Office of Coastal Management of the DNR.

The CZMP section of SLCRMA provides the state with the authority to establish:

- Local coastal management programs (LCMP),
- Procedure for issuing Coastal Use Permits (CUP),
- Intergovernmental coordination, and
- Procedures for enforcing the CZMP.

Following the enactment of SLCRMA, regulations were written and approved which interpret the law and provide the details of its implementation. The Louisiana Administrative Code Title 42 Part 1 Chapter 7 describes the components of the CZMP including the coastal use guidelines, rules and procedures for CUPs, rules and procedures for mitigation, and the procedures for developing, approving, modifying, and reviewing the LCMPs.

It is the combination of the SLCRMA, the regulations, and other enforceable policies that constitute the Louisiana Coastal Resources Program- Louisiana's federally approved Coastal Zone Management Program under the CZMA. It was officially approved in 1980.

Federal

The Coastal Zone Management Act of 1972 (CZMA)

In order to preserve, protect, develop, and restore this nation's coastal resources, Congress enacted the Coastal Zone Management Act (CZMA) in 1972. Congress felt that the most effective way to ensure these goals were met was to provide the means for individual states to develop coastal zone management programs (CZMPs) to address specific resource concerns and development pressures. States were encouraged to cooperate with federal and local governments and other interested parties to develop policies, criteria, methods, and processes for managing the competing demands for coastal resources and preserving environmental quality. Federal responsibility for the implementation of this act rests with the Department of Commerce. It is administered by the National Oceanographic and Atmospheric Administration's Office for Coastal Management.

To encourage states to develop and implement a CZMP, the Act offers a number of incentives. The first is federal monies, in the form of matching grants, to both create and implement the CZMP. Secondly,

there is flexibility allowed in the management measures and administrative procedures that could be incorporated into a state's program. The third is federal consistency. Relevant activities conducted or permitted by a federal agency with potential impacts to the designated coastal zone of the state must comply with the policies and guidelines of the state program.

The Coastal Wetlands, Planning, Protection, and Restoration Act (CWPPRA), 1990 16 U.S.C. §§ 3951 to 3955

CWPPRA directed that a Task Force consisting of representatives of five federal agencies (Corps, USFWS, USEPA, Department of Interior, and Department of Commerce) and the state develop "a comprehensive approach to restore and prevent the loss of coastal wetlands in Louisiana. CWPPRA establishes general procedures for selection and implementation of Louisiana coastal restoration projects and conservation planning. The Governor's office designated the LADNR to develop a Louisiana Coastal Wetlands Conservation Plan (Conservation Plan) with the goal of achieving no net loss of wetlands in the coastal areas of the state because of developmental activities. The Corps, USFWS, and the USEPA approved the plan. The benefits of the plan are two-fold. Ecologically, implementation of the plan will facilitate the protection of the state's wetlands. Financially, successful implementation of the plan will decrease the state's cost share contribution to CWPPRA restoration projects from 25% to 15%. This is a significant reduction considering the costs of many of the projects.

Through a set of tasks outlined in the Conservation Plan, Louisiana proposes to meet the goal of no net loss of coastal wetlands. Very briefly, these tasks include:

- Ensuring that all permitted activities are properly evaluated and mitigated;
- Offsetting losses associated with unpermitted/unreported losses;
- Developing studies to identify secondary and cumulative impacts;
- Funding state-constructed wetland restoration projects;
- Tracking habitat gains and losses;
- Assuring adequate personnel and funding;
- Expanding existing outreach efforts; and
- Implementing technology sharing strategies

Louisiana is committed to carrying out this plan and all the tasks listed within throughout the period that CWPPRA funds are available.

The Rivers and Harbors Appropriations Act of 1899- Sections 9 and 10

This Act, commonly referred to as the Rivers and Harbors Act, regulates construction in navigable waters of the United States. Section 9 requires United States Army Corps of Engineers (Corps) approval for the construction of bridges, dams, dikes, or causeways over waters of the U.S. State legislatures may authorize this type of development only if the navigable waters lie completely within the boundaries of one state.

Section 10 makes it unlawful to build any obstruction to the navigability of waters of the U.S. without authorization by the Corps. This construction includes but is not limited to wharfs, piers, weirs, and jetties. Section 10 also prohibits excavation or filling of harbors, lakes, canals, or channels of any navigable waters of the US without the recommendation of the Corps.

The Federal Water Pollution Control Act of 1972 (Clean Water Act)

The Clean Water Act (CWA) plays a major role in protecting the quality of the waters within and surrounding the US. For the purposes of wetland management, it is important to be familiar with section 404 and 401 of the CWA. Section 404 authorizes the Corps, acting on behalf of the Secretary of the Army, to issue permits for the discharge of dredge or fill material into the navigable waters of the US at specific locations. These waters include wetlands located inland of the average high tide.

Under provisions of the Clean Water Act (CWA), an applicant for a federal license or permit to conduct any activity that may result in a discharge to navigable waters must provide the federal agency with a Section 401 certification. The certification, made by the state in which the discharge originates, declares that the discharge will comply with applicable provisions of the Act, including water quality standards requirements. In Louisiana the state water pollution control agency is the Department of Environmental Quality (DEQ). DEQ requires state water quality certification (CWA 401 certification) for all Corps of Engineers section 404 permits.

Regulations:

Over the years, there has been much discussion regarding the definition of "Waters of the US." For the purposes of applying section 404 to wetland management, waters of the US include all waters:

- 1. Subject to the ebb and flow of the tide;
- 2. wetlands whose degradation could affect commerce, recreation, fisheries, or industry; and
- 3. wetlands adjacent to other bodies of water of the US.

The Federal Guidance for the Establishment, Use, and Operation of Mitigation Banks, 1995

On November 28, 1995 guidelines regarding wetland mitigation banks were finalized and published in the Federal Register. Five federal agencies participated in the development the guidelines. These were: Department of the Army/Corps of Engineers (Corps), the Environmental Protection Agency (EPA), the US Fish and Wildlife Service, the Natural Resource Conservation Service, and the National Marine Fisheries Service (now NOAA Fisheries).

The state of Louisiana has incorporated most of these guidelines in its regulations authorizing the use of mitigation banks for compensating for wetland loss associated with development (LAC Title 43 Part 1 Chapter 7 §724).

US Army Corps of Engineers Regulatory Guidance Letter 02-2, December 24, 2002

In 2001 the Corps issued a Regulatory Guidance Letter which provided guidelines pertaining to compensatory mitigation. In December 2002, the Corps coordinated with numerous other federal agencies, including the United States Environmental Protection Agency, to re-write and issue an updated Regulatory Guidance Letter. The policies set forth in this letter improve the Corps' ability to meet the federal policy of "no net loss' of wetland values and improve protection for wetland habitats by encouraging a more watershed based approach to wetland mitigation.

2008 Compensatory Mitigation Regulations for Losses of Aquatic Resources

Corps of Engineers: 33 CFR Parts 325 and 332

EPA: 40 CFR Parts 325 and 332

Final regulations governing compensatory mitigation for authorized impacts to wetlands, streams, and other waters of the U.S. under §404 and §10.

Department of Defense and Environmental Protection Agency. April 10, 2008. Compensatory Mitigation for Losses of Aquatic Resources. Final rule. Federal Register. Vol. 73, No. 70: pp. 19594-19705.

The 2008 Mitigation Rule establishes equivalent standards for aquatic resource compensatory mitigation projects regardless of whether they are conducted by mitigation banks, in-lieu fee programs, or permit applicants. These regulations are the definitive directives for Federal Compensatory Mitigation Analysis and have significant bearing on coastal States' mitigation procedures as well.

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Office of Coastal Management (OCM)

Permit Section

The Permit Section is responsible for processing all CUP applications for Uses of State Concern submitted for compliance with the LCRP. One permit staff position is designated to act as an overseer for applicants needing assistance with completing applications or requests for additional information primarily to help individuals not familiar with the permitting process. Additionally, the Joint Public Notice (JPN) service assists permit applicants with application submission. The JPN section is responsible for the receiving and initial processing of all applications received by OCM. A key component of JPN is the day-to-day coordination of application information between OCM, the Corps of Engineers, Louisiana Department of Environmental Quality and other Agencies.

Mitigation Section

During the CUP review process, OCM and LCMP staff work with applicants to ensure that impacts to coastal habitats are avoided and/or minimized. However, sometimes there are unavoidable impacts, from development that destroy wetlands. In such cases, the LCRP's goal of no net loss of wetlands due to permitted activities cannot be accomplished without habitat compensation. The Mitigation Section is responsible for analyzing project impacts and reviewing and approving appropriate compensation for uses of state concern. This means that the ecological value of wetlands that are unavoidably lost due to a permitted activity, must be replaced by the creation of an equal amount of ecological value. Compensatory mitigation can be accomplished via purchase of credits from an approved mitigation bank and/or the state's approved wetland fund; also an individual approved mitigation project may be authorized after its thorough review. The State Mitigation Section reviews the mitigation assessments made by the LCMPs and provides the compensatory mitigation options available. The staff in the Mitigation Section also serves as the interagency liaison for all mitigation bank proposals and represents the Department on the Mitigation Bank Interagency Review Team

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Louisiana Coastal Wetlands Conservation Plan Coordinator

The Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) (U.S. Public Law 101-646, Title III, Section 304) contains a provision of benefit to Louisiana. The law allows for a cost share reduction when the state develops and implements, a Louisiana Coastal Wetlands Conservation Plan. The Louisiana Dept. of Natural Resources OCM prepared the plan and it went into effect in December, 1997. By maintaining the Conservation Plan in place, Louisiana keeps the federal/state cost share match ratio for Breaux Act coastal restoration project funding at 85/15 instead of the default 75/25 federal/state ratio.

To maintain this favorable cost share ratio, the State must ensure that it meets its goals and obligations under the Plan. This is monitored by the three federal oversight agencies (USFWS, USEPA, and USACE). The chief component of the Conservation Plan is an accounting data base that tracks coastal wetland losses allowed by the permitting process and the coastal wetland gains from compensatory mitigation required. The Local Coastal Management Programs play an important role in this accounting of all wetland habitat losses, even if this occurs through activities that are exempt from LCMP regulation; and it is important that assessments of compensatory mitigation habitat gain also be accurate.

Any remaining wetland loss/gain shortfall must be covered by the secondary components of the Conservation Plan, an array of program elements, some of which involve assurances by the State to fund and implement supplementary coastal restoration projects. The State of Louisiana has committed to funding and implementing all of these specific program elements.

Mapping and Support Services Section

This section provides technical services, which includes database maintenance and GIS services for OCM; public information/education outreach activities and handling of funds, budgeting and accounting.

OCM has developed GIS maps and reports of pertinent data sets and critical information within specific distance of each permit application using multiple datasets from LDNR and other various government agencies. This is critical in permit review by identifying issues of concern and assisting in permit research requirements.

Support Services staff maintains the GIS system and enters tabular data. Tracking impacted acreage and habitat unit loss and gain for the Coastal Wetlands Conservation Plan is one of the functions for which the system was designed. The system tracks acres impacted and habitat units lost for each different habitat type for each permit issued by OCM and the LCMPs. It also tracks the habitat units gained through mitigation activities. This allows Louisiana to measure net loss/gain of wetland habitat due to development activities. Additionally, some permits issued with conditions require follow-up and/or monitoring, the database is essential to maintain records of those permits and track the next scheduled review or inspection. The Louisiana State Legislature requires agencies to prepare quarterly performance reports and the performance indicators for OCM that are based on permit and mitigation statistics

Most of the database information and GIS layers are available to the public via the internet as is general information about the program and instructions for applying for a Coastal Use Permit. Use of the computer mapping systems and databases with the digital aerial photography and satellite imagery provide powerful tools to aid in effective coastal management. Other GIS datasets created and maintained by OCM include: sensitive features, mitigation projects, mitigation banks, and marsh management areas.

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Public Information and Education Efforts

OCM's Public Information and Education function is designed to inform and educate the general public, business, and industry about the Office's programs, policies, and functions. Maps, newsletters, and other printed materials are available free to the public. Sometimes materials are developed to assist teachers in their classrooms. OCM staff members are available to give presentations to classes and other groups, and program managers are available on request to meet with persons wanting more information on OCM efforts.

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Local Coastal Management Programs Section

The Local Coastal Management Programs Section provides technical assistance, guidance, and management to parishes in the development, approval, and implementation of local coastal management programs (LCMP). Parishes with a program approved by state and federal agencies may issue permits for uses of local concern in the parish's Coastal Zone.

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Field Services Section

The Compliance and Enforcement Section of the IA/FS Division consist of coastal scientists in field offices (New Orleans, Houma, Lafayette and Lake Charles) and the Baton Rouge headquarters. Along with their primary duties of biological assessment of proposed activities in the coastal zone, they will also monitor permitted activities and accompanying compensatory mitigation as well as unauthorized activities discovered. These duties may be performed in coordination with LCMPs if the LCMP requests assistance.

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Coastal Nonpoint Pollution Control Program

The Coastal Nonpoint Pollution Control Program (CNPCP) was developed, in partnership with the Louisiana Department of Environmental Quality (LDEQ) and other governmental and nongovernmental agencies, to educate Louisiana coastal resources users about available best management measures, and to help reduce pollutants that may impact the coastal waters of Louisiana.

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Coastal and Estuarine Land Conservation Program

The Coastal and Estuarine Land Conservation Program (CELCMP) purpose is "the protection of important coastal and estuarine areas that have significant conservation, recreation, ecological, historical, or aesthetic values, or that are threatened by conversion from their natural or recreational state to other uses, and will give priority to lands which can be effectively managed, protected, and that have significant ecological value."

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Consistency Section

Most of the applications reviewed by OCM are for CUP. Federal agency activities, however, and certain types of private projects are excluded from CUP requirements per se. These activities must, nevertheless, be carried out in a manner consistent with the Louisiana Coastal Resources Program. These applications are reviewed by the Consistency Section.

The authority for Consistency reviews derives from the Coastal Zone Management Act, which requires federal agencies to be consistent with a state's approved coastal management program. This includes activities carried out by the federal government agencies themselves, activities by private companies that occur on federally-owned property such as National Wildlife Refuges, and oil and gas activities in federal waters offshore from Louisiana.

OCM Oil Spill, NRDA and the Regional Restoration Plan

The Oil Spill Section is responsible for planning, response, and Natural Resource Damage Assessment (NRDA) activities resulting from oil spill incidents that occur in the Louisiana Coastal Zone.

Under the Oil Pollution Act (33 USC 2706[b]) and the National Contingency Plan (40 CFR 300.600), certain federal and state agencies and tribal authorities are designated natural resource trustees for trust resources injured by a discharge or substantial threat of a discharge of oil. To guide these efforts, the cooperating parties follow the NRDA process.

The OPA, 33 USC 2701 et seq. and the Louisiana Oil Spill Prevention and Response Act of 1991 (OSPRA), La. Rev. Stat. 30:2451 et seq., are the principal federal and state statutes authorizing federal and state agencies to act as natural resource trustees for the recovery of damages for injuries to natural resources. Collection of restoration project information is undertaken in order to provide information to the Natural Resource Trustee to develop potential restoration alternatives for natural resources injuries.

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Fisherman's Gear

The Fisherman's Gear program reimburses commercial fishermen for losses resulting from damage to vessels and equipment from oil and gas industry infrastructure.

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Wetlands Defined

"The term wetland means areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." (33 C.F.R. § 328.3).

Under the Federal Definition, three wetland criteria must be present for an area to be called a wetland:

- wetland hydrology;
- wetland vegetation; and
- hydric soils.

The State Definition of wetlands at L.A.C. 49: §700 are:

"Wetlands"

1. for the purposes of this Chapter except for §724, open water areas or areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances, do support a prevalence of vegetation typically adapted for life in saturated soil conditions;

2. for the purposes of §724 (as defined in R.S. 49:214.41), an open water area or an area that is inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions, but specifically excluding fast lands and lands more than 5 feet above sea level which occur in the designated coastal zone of the state. Wetlands generally include swamps, marshes, bogs, and similar areas."

Wetland Hydrology

Areas where the presence of water causes anaerobic conditions thus influencing the characteristics of the vegetation and the soil are said to have wetland hydrology. Whether an area demonstrates these characteristics of wetland hydrology depends on the frequency, timing, and duration of the inundation, or soil saturation. Additional characteristics of wetland hydrology include: soil saturation, watermarks on trees, drift lines, sediment deposits, and drainage patterns.

Wetland Vegetation

The prevalent vegetation in wetlands consists of aquatic plants that are typically adapted to inundated or saturated conditions. Hydrophytic (growing in water) species, due to morphological, physiological, and/or reproductive adaptations), have the ability to grow, effectively compete, reproduce, and/or persist in anaerobic soil conditions. Wetland plants are grouped into categories based on the estimated probability that they will occur in a wetland area. Obligate plant species are those that occur almost always in wetlands under normal conditions and rarely in non-wetlands. Facultative wetland plant species will usually occur in wetlands but may also occur in non-wetlands.

Wetland Soils

A hydric soil is a soil that is saturated, flooded or ponded long enough during the growing season to develop anaerobic conditions that support the growth of hydrophytic vegetation.

Coastal Louisiana Wetland Types

Coastal wetlands in Louisiana include tidal salt/brackish marshes, tidal freshwater marshes, cypress swamps, and bottomland hardwoods. Each provides habitat for ecologically and economically important plant and animal species.

Salt/Brackish Marsh

Salt/Brackish marshes border saline water bodies and are subject to regular or occasional flooding by tides. They thrive when the accumulation of sediments is equal to or greater than the rate of land subsidence and where there is sufficient protection from intense waves and storms. Salt marshes rate among the most productive ecosystems in the world rivaling even tropical rainforests in their primary productivity. They are a complex system involving plants, animals, microorganisms, nutrients, and energy exchange.

Coastal Louisiana predominantly experiences river-dominated marsh development. Sediment loads carried by the Mississippi River built the marshes. The first plants to dominate the area were freshwater species. However, as the river shifted its course through geologic time, these marshes were supplied with fresh river water to lesser degrees. They become more and more influenced by the saline waters of the Gulf of Mexico. The cycle of development from freshwater marsh to salt marsh to open water under the constant influence of subsidence is natural. However, it has been greatly speeded up by numerous anthropogenic forces and actions. The long term stability and success of salt marshes depends on the relative rates of sediment accretion and coastal land subsidence. When sediment loads from a river diminish and/or when land subsidence is accelerated the salt marsh will begin to disappear and will be replaced with open water.



Figure 1: Lobes that constructed the present Mississippi River delta, numbered in chronological order of formation.

The vegetation that occurs in coastal marshes typically grows in zones depending on the plants' adaptation to the physical environment. Coastal wetland plant species occurring in south Louisiana's salt marshes include: smooth cordgrass; black needlerush; glasswort; salt grass; sea lavender; salt marsh bullrush; saw grass.

coast- line	low marsh	h	igh marsh		upland	
MHT MSL	Spartina atternitora tall Juncus roemerianus	normerianus roemerianus	Distichlis spicata Saticornia spp.	short Juncus roemerianus	Spartina patens Distichlis spicata	

Figure 2: This is a diagram showing typical zonation of vegetation in the eastern Gulf of Mexico.

Numerous animal species take advantage of the habitat provided by coastal salt marshes. Louisiana's salt marshes support very large populations of wading birds, migratory waterfowl, and songbirds. Larval and juvenile stages of many fish and other vertebrates live in the shallow waters and many mammals utilize the abundant food supplies and shelter offered by the marsh. As the salinity gradient decreases salt marshes transition to brackish marshes and finally to intermediate/fresh marshes.

Tidal Freshwater Marshes

Freshwater marshes are in close enough proximity to the coast to experience significant tidal fluctuations but they are beyond the reach and influence of oceanic salt water. Plant and animal diversity are high as there is no salt stress to limit survival.



Figure 3: Tidal freshwater marshes in Louisiana, on the northern coast of the Gulf of Mexico.

Development of a freshwater marsh requires adequate rainfall, river flow, a flat gradient from the ocean inland, and a significant tidal range. These conditions tend to occur where major rivers meet and spill into coastal waters. Most mature freshwater marshes in southern Louisiana do not show obvious

increase in marsh elevation from low to high marsh and vegetation patterns do not occur in distinct zones. The exceptions to this are the emerging islands of the Mississippi and Achafalaya River deltas. Since these are located closer to the coast, they have a more regular pattern of tidal inundation, exhibit gradients in physical and chemical properties and display more typical plant zonations. (See Figure 4, next page)



Figure 4: Cross section of a typical freshwater tidal marsh in the Atchafalaya Delta, showing elevation changes and typical vegetation.

Hundreds of species of animals take advantage of coastal freshwater wetland habitats. Fish use the area as feeding and wintering grounds. Waterfowl, wading birds, rails, shorebirds and many others depend heavily on the structural diversity of freshwater vegetation, and amphibians, reptiles, and mammals are all closely associated with freshwater marshes.

Cypress/ Tupelo Swamps

Cypress/Tupelo dominated wetlands are an example of a freshwater swamp where woody vegetation dominates and water is present throughout most or all of the growing season. These swamps, though once common throughout the southeastern United States, have been extensively logged due to the trees' strength and rot resistant characteristics. Some researchers have estimated that close to 90% of the cypress swamps found in pre-settlement times have been destroyed. Of those that remain, Louisiana, Florida, and Georgia have most of the remaining timber volume.

The cypress/tupelo swamps common in Louisiana are usually confined to permanently flooded depressions on floodplains such as abandoned river channels or swamps which parallel current rivers. The hydrology of these areas is dominated by runoff from the surrounding uplands and overflow from flooding rivers. The plant communities in these deeper water swamps are adapted to the almost continuously wet environment in which they exist. Bald Cypress and water tupelo trees often grow in association and in the same swamp, although pure stands of either are also common.

Bottomland Hardwoods

Bottomland hardwoods are defined as riparian (adjacent to streams and rivers) forested lowlands, usually on alluvial floodplains, that are periodically flooded by surface water or ground water during the growing season. They cover large areas in the southeastern United States. However, they have and continue to be converted to other uses including agricultural lands and areas used for human settlement.



Figure 5: Extent of bottomland hardwood forests of the southeastern United States.

Similar to the other wetland environments, the vegetation in bottomland hardwoods grows in zones according to the moisture gradient which varies across the floodplain. Those trees adapted to wetter conditions will thrive in the lowest regions while species less adapted to saturated conditions will grow in the higher elevations. The lowest parts of the bottomland are almost constantly flooded and form the cypress tupelo swamps described in the previous section. Above these in elevation, black willow (*Salix nigra*), cottonwoods (*Populuis deltoids*), green ash (*Fraxunun pennsylvaica*), and red maple (*Acer rubrum*) may be found. In higher elevations of the bottomland hardwood forest oaks, ash, elms, maples, and sweetgum (*Liquidambar styraciflua*) can all be found. In the highest elevations, those temporarily or infrequently flooded, oaks and even pines are often present. (See Figure 6) The interface between these zones is not discrete. Changes in dominant vegetation occur along a gradient as some species will overlap in a slowly changing continuum.

	River channel	Natural levee	First Terrace	Swamp	Swamp Second Terrace	
Flooding extent	Continuous flooding	Seasonally temporarily flooded	Intermittently flooded	Semi- permanently flooded	Seasonally temporarily flooded	Seldom flooded
Flooding frequency, % of years	100	11 - 50	51 - 100	~100	11 - 50	1 - 10
Flooding duration, % of growing season	100	2 - 25	>25	~100	2 - 25	<2
Tree species	Submerged aquatics; open water	Sycamore Platanus occidentalis Sweetgum Liquidambar styraciflua American elm Ulmus americana	Overcup oak Quercus lyrata Water hickory Carya aquatica Green ash Fraxinus pennsylvanica Sugarberry Cettis laevigata American elm Ulmus	Bald cypress Taxodium distichum Water tupeio Nyssa aquatica Red maple Acer rubrum Green ash Fraxinus pennsylvanica	Sweetgum Liquidambar styracifiua Willow oak Quercus phellos Water oak Quercus nigra Cherrybark oak Q. falcata var. pagodifolia Swamp chestnut oak Q. michauxii	Upland forest Species

Figure 6: General relationship between vegetation association and floodplain topography, flood frequency, and flood duration of a southeastern U.S. bottom land hardwood forest.

Wetlands Functions and Values?

Wetlands serve as buffers against storm impacts!

Some research has indicated that every mile of vegetated wetlands along the coastline reduces storm surge height by one foot. When wetlands are lost, coastal communities lose the storm surge protection function that wetlands provide. Damages to homes and communities is much more devastating in areas where wetlands no longer exist to absorb the intense amounts of wave energy that often accompany large storms such as hurricanes.

Wetlands provide flood control!

For centuries the Mississippi River flooded its banks supplying fertile soils to its floodplains but also wreaking havoc on surrounding communities. Before the levees were built, the wetlands along the

banks of the river helped to slow and detain the floodwaters lessening the destructive impacts and reducing flood peaks.

Wetlands help prevent erosion!

A decrease in wetland vegetation leads to increases in shoreline erosion and associated coastal problems. In fact, the problem becomes a cycle of ecological devastation as decreases in wetland vegetation contribute to the loss of the valuable sediments needed to hold vegetation in place.

Wetlands protect and enhance water quality!

As mentioned above, wetlands have historically served as ecological traps for sediments preventing them from reaching lakes, bays, streams and other bodies of water. Excess amounts of sediments in these water bodies can adversely impact fish and other wildlife. Wetlands also act as filters for other types of pollutants including nutrients, chemicals, and metals. Wetland plants remove nitrogen and phosphorous (chemicals often associated with fertilizers) from agricultural runoff and urban wastewaters. Finally, the accumulation of water in wetlands can help maintain adequate streamflow in nearby streams during periods of drought.

Wetlands provide habitat for a diverse array of living creatures!

Wetlands are home to hundreds of game and non-game species of mammals, fish, reptiles, birds, and amphibians. Some are listed as threatened or endangered and may become extinct if their habitat is further impacted or impaired. Their survival is linked to preserving and maintaining the productivity of wetlands.

Wetlands are beautiful and exciting places to visit and generate revenue!

Louisiana wetlands provide wonderful recreational opportunities for residents and visitors alike. Hunting, fishing, boating, bird watching, crabbing, and camping are only some of the activities which visitors to wetlands can enjoy. These activities bring large amounts of revenue into the state from hunting and fishing licenses, gear, food, gas, lodging costs, and other sources of income from travel and tourism. Many people living in Coastal Louisiana depend on wetlands for their livelihood, and the unique culture that has developed in the area draws visitors throughout the year.

Wetland Delineation

The U.S. National Wetlands Inventory (NWI) initiated a major mapping project using black and white aerial photography. Although these maps provide important information, in order to determine jurisdictional wetlands for regulatory purposes (must be within a tolerance of less than one meter), an on-site visit is usually required. The Army Corps of Engineers developed several manuals on wetland delineation.

Basic Permit Information

A Coastal Use Permit (CUP) Program has been established by the SLCRMA to help ensure the management and reasonable use of the state's coastal resources. The Coastal Use Permit is the regulatory tool of LCRP and is required for certain types of projects in the Coastal Zone, including: dredge and fill, bulkhead construction, shoreline modification, and other development projects such as marinas, subdivisions, drainage facilities and other infrastructure. The CUP Program requires persons planning public, private, or commercial projects within the coastal zone to apply for authorization prior to construction of any project that is not exempt from regulation. A prime concern of the CUP Program is to regulate activities that may increase the loss of wetlands and aquatic resources, as well as, to reduce conflicts between coastal resource user groups. The rules and regulations governing Coastal Use Permits is found in the Louisiana Administrative code under Title 43, Part 1, Chapter 7 §723.

The LADNR (and the parishes with approved Local Programs) have regulatory jurisdiction over activities which occur in the coastal zone or that affect coastal waters and which occur outside of fast lands (Fast lands—lands surrounded by publicly-owned, maintained, or otherwise validly existing levees or natural formations as of January 1, 1979, or as may be lawfully constructed in the future, which levees or natural formations would normally prevent activities, not to include the pumping of water for drainage purposes, within the surrounded area from having direct and significant impacts on coastal waters.) and below the 5-foot contour or that have significant and direct impacts to coastal waters. Some of the authorizations issued by OCM are for activities that do not negatively impact coastal resources are: No Direct and Significant Impact (NDSI), exempt via the SLCRMA (EXEMPT) and Outside the Coastal Zone (OCZ). None of these authorizations require compensatory mitigation evaluation.

The COE has jurisdiction over Waters of the United States and can issue permits for activities occurring both within and outside of the coastal zone. Sometimes COE jurisdiction and LDNR jurisdiction overlap, for example: when an activity affecting vegetative wetlands is to occur within the coastal zone, below the 5-foot contour, and outside of a fast land. In this case the applicant will need both a COE permit and a CUP. Under other circumstances only the COE will have jurisdiction and the applicant will be exempt from needing a CUP but may have to obtain a COE permit. There can also be situations were a CUP is required but not a COE permit.

What is a COE Programmatic General Permit (PGP)?

Basically the Programmatic General Permit (PGP) is a mechanism that allows the state (OCM) to be the primary regulator of activities having relatively minor impacts to special aquatic sites, including vegetated wetlands. (PGP's are issued by the Corps)

Each of the agencies involved in permitting had an incentive to accept the adoption of PGPs. Federal resource agencies have fewer applications to review, the Corps reduced the personnel time involved in their review of the projects that qualify for PGPs, and OCM acquired the ability to determine mitigation requirements without constant and prolonged consultation with the Corps. The incorporation of PGPs into the permitting process has improved efficiency and benefited the applicant by expediting the issuance of permit authorizations.

There are 2 PGP categories. A PGP 1 may be issued to activities impacting 0.5 wetland acres or less. A PGP 2 generally may be given to activities impacting 2 acres tidal and 3 acres non-tidal.

When the Corps issues a PGP for a local concern permit, it is essentially turning over to you (the LCMP administrator) the responsibility for permitting the activity and requiring mitigation if appropriate. Therefore, it is essential that you notify the Corps analyst ASAP (within 5 days of when you receive a local concern application) as to whether the application will be EXEMPT or not. It is not necessary that you wait to find out whether the application will be a PGP. If an activity is exempt from a CUP the COE cannot issue a PGP because no one is responsible for assuring that mitigation is assessed for potential impacts from the activity. When you determine an application is EXEMPT from your jurisdiction, the Corps then must process the application under a different type of permit.

General Permits

OCM General Permits (GPs) are issued to authorize some of the most routine types of projects which occur in the coastal zone and whose construction requires a permit. GPs are available only for certain and specific categories of activities which are similar in type and nature and which are anticipated to cause minimal adverse impacts when implemented separately or in conjunction with other activities. The majority of OCM GPs authorize the construction of new infrastructure, though some specifically authorize maintenance type activities.

The processing of the GP application and the outcome of the permitted activity are mostly standardized. However, the applicant must conduct the activity in conformance with the standard implementation procedures, the best management practices, and the general and operational conditions on the GP. If the applicant agrees to adjust his project to conform to the GP requirements and conditions (often this entails minimizing impacts up front), the permit and authorization process can be expedited. These applications can be expedited because they have been previously approved (placed on a 30-day public notice) as written.

OCM GPs relevance to the LCMP?

The State's Coastal management regulations authorize the LCMPs to adopt GPs for uses of local concern under their jurisdiction. This will most likely require approval from the parish council, policy jury, president, etc. GPs require public notice before adoption. Please contact OCM for more information about how your parish can adopt and begin using GPs.

General Mitigation Information

LAC Title 43 Part 1 Chapter 7 defines Mitigation: as actions taken by a permittee to avoid, minimize, restore, and compensate for ecological values lost due to a permitted activity. Compensatory Mitigation: is defined as the replacement, substitution, enhancement, or protection of ecological values to offset anticipated losses of ecological values caused by a permitted activity. The mitigation process begins when a permit applicant does everything possible in the planning stage of their activity to avoid or minimize impacts to wetland ecological values. Before compensatory mitigation is assessed the applicant must prepare a needs, alternatives and justification analysis. Alternatives to the project looks at how the resource damage could be avoided or minimized while needs and justification examines if the public interest accrued by the project outweigh the negative resource consequences.

Mitigation Options for Local Concern Applicants

Compensatory mitigation offsets the unavoidable net loss of wetland ecological value expressed as Average Annual Habitat Units (AAHUs). Average annual habitat units are defined as: "the total number of Habitat Units gained or lost as a result of a proposed action, divided by the life of the action. The mitigation project must also be properly located. According to state regulations the criteria for determining whether the project is properly located are as follows:

- The mitigation project should benefit the wetland ecology in the coastal zone.
- should be located in the same hydrologic basin as the impacted site if possible.
- should create the same type of wetland habitat as that being impacted or lost as a result of the
 proposed activity (in-kind). If it is not possible to create the exact same type of habitat in the same
 basin, the mitigation should produce ecological values similar to those lost as a result of the
 development activity as close as possible to the basin impacted. It should also enhance the overall
 wetland ecological values in the watershed.

Most mitigation is satisfied via the purchase of mitigation credits from an approved mitigation bank. The state also has a mitigation fund and purchase of credits may be possible if certain conditions are met. Individual mitigation plans are an option but do require precise detail and prior agency approval.

Applications for activities in the Louisiana Coastal Zone are forwarded to the Corps. ; the Corps often requires mitigation for the same activity. When this is the case, the parish and COE must agree on a mitigation option which is acceptable to both agencies. The parish is required to obtain mitigation for impacts be located within the coastal zone. Therefore the Corps needs to also honor this requirement if at all possible. Every effort must be taken to avoid the possibility of "double mitigation requirement" for the same activity by both agencies if at all possible.

As soon as it is determined that a project will impact vegetated wetlands, work with the applicant to conduct a needs, alternatives, and justification assessment. After it is determined that all feasable alternatives have been considered to avoid or minimize impacts to wetland ecological values a field investigation is performed. It is the LCMP's responsibility to collect all the necessary data needed to

calculate the habitat unit impacts utilizing the Wetland Value Assessment (WVA) habitat evaluation model. Detailed WVA instructions are included in this workbook.

Once the WVA has been calculated for impacts from the proposed project, send a letter to the permit applicant notifying them that in order to process his application they must select a mitigation option. After completion: WVA, LCMP Field Investigation Form and Wetland Parameter Forms are forwarded to the OCM Local Coastal Management Program Coordinator and the OCM Mitigation Section for review and approval. The OCM mitigation section will inform you of the acceptable mitigation options available.

You should will send letters regarding landowner notification rights and mitigation plan approval to the applicant. Samples of both letters are included in the sample letter section and on the OCM Local Coastal Management Programs Web-Page.

You must receive documentation that the mitigation requirement has been fulfilled i.e. a letter from a mitigation bank documenting receipt of a check, or a permit for the mitigation project if one is necessary) before issuing the permit. The parish must develop a monitoring system for mitigation projects for impacts due to Local Coastal Use Permits. The three mitigation options are: mitigation banks, OCM's in-lieu fee fund, and individual approved projects are also options but specific conditions must be met for the to be accepted.

Mitigation Banks

A mitigation bank is a specific plot of land where the sponsor (an individual, corporation, parish, or other organization) has created, restored, enhanced, or protected wetland habitats and values. The sponsor receives credits for the ecological values created by his activities. He then sells these credits to a buyer who needs to mitigate for wetland values lost as a result of their permitted activity. A bank must meet specific pre-determined ecological and financial criteria before credits can be sold.

Mitigation banks benefit the coastal zone by creating large areas of wetlands with high quality wildlife and fish habitat values under long-term management instead of small pockets of isolated wetlands which are difficult to maintain and are often unsuccessful. Wetland mitigation banks benefit the applicant by simplifying the permitting process and removing the burden of management and maintenance of a mitigation project from the applicant.

Proponents of mitigation banks assert that mitigation banks:

- Can create and preserve important habitats and habitat linkages;
- Help minimize piecemeal mitigation projects which limit physical ecological connectedness and are often more prone to failure;
- Take advantage of economies of scale;
- Often compensate for multiple wetland losses;
- Encourage cooperation with private landowners to protect and restore wetlands on their property;

- Increase flexibility in meeting permit requirements;
- Can improve the reliability of efforts to restore and create wetland habitat with proper review and monitoring;
- Often require private/public partnerships which encourages innovative uses of limited resources; and
- Simplify/streamline the permitting process and the regulatory compliance program while achieving conservation goals.

The LCMP is responsible for coordinating with the other agencies involved in permitting and mitigation. For example, it is essential that you notify the Corps analyst ASAP (within 5 days of when you receive a local concern application) as to whether the application will be EXEMPT or not. To avoid requiring the applicant to double mitigate, the LCMP should coordinate mitigation requirements with the COE. However, remember that, according to State rules and regulations and according to the approved LCMP documents, any impacts to wetlands in Louisiana's coastal zone must be mitigated for inside the coastal zone

The LCMP must document and respond to comments made by other state and federal agencies. It is recommended that the LCMP staff work with the applicant to provide additional information if requested by other agencies such as the LDEQ. It is suggested that you develop a working relationship with these agencies. The LCMP's responsibilities to OCM are listed and defined in the Scope of Services of the parish LCMP yearly contract agreement.

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Wetland Value Assessment Methodology (WVA) brief overview

Louisiana state regulations require compensation for any net loss of wetland ecological value that occurs due to a permitted development activity. Anticipated loss of ecological values from development and anticipated gains from mitigation must be quantified as cumulative habitat units (CHUs) and average annual habitat units (AAHUs). The regulations also require that these values be calculated using the Wetland Value Assessment (WVA) Methodology.

The primary purpose of the WVA is to quantify changes in habitat value that are projected to occur as a result of a specific project. The WVA is a habitat community approach to wetland assessment rather than a species oriented approach. It was developed for use in coastal Louisiana wetlands and it requires only readily available data. It is not a particularly difficult assessment method; however, it does require some training and experience in the basic principles of coastal wetland science and habitat. The WVA can be used to evaluate impacts occurring in fresh/intermediate marsh, brackish marsh, saline marsh, bottomland hardwoods, and fresh swamps.

The models used in the WVA were developed under the assumption that the suitability of a coastal wetland to provide fish and wildlife habitat can be characterized, assigned a value, and compared to an optimum value. Variables considered important in characterizing habitat are measured or otherwise

assessed and used to calculate the existing and predicted condition of the wetland area targeted for the development or mitigation project. A Suitability Index (SI) depicts how wetland habitat is assumed to change as the measured value of ONE variable changes. The SI value ranges from 0.0 to 1.0. With 1.0 being perfectly ideal. Once the SI associated with each variable has been determined using the SI graph, then the final wetland habitat suitability index (HSI) can be calculated. A mathematical formula combines the SI associated with each variable into a single value for an overall wetland HSI.

Important terms to remember are:

- Suitability Index (SI): This number represents the extent to which a wetland area is expected to provide habitat value based on the measured value of one specific variable; it is a number between 0 and 1 where 0 indicates no habitat value and 1 indicates optimum habitat value
- Habitat Suitability Index (HSI): This number represents the mathematical combination of all the SIs associated with each variable. It indicates the wetlands overall suitability for providing fish and wildlife habitat values. This number does not have a unit; rather it is a number between 0 and 1 where 0 indicates no habitat value and 1 indicates optimum habitat value
- Average Annual Habitat Unit (AAHU): This is the total number of habitat units gained or lost as a result of a proposed project divided by the life of the project. It can also be calculated by multiplying the HSI by the number of acres impacted.
- Cumulative Habitat Unit (CHU): This is total number of habitat units expected to be gained or lost over the entire life of the project. It is calculated by multiplying AAHUs by project length in years (20 for marsh and 50 for forest).

More detailed information on the WVA is available in the Wetland Value Assessment Methodology and Community Models document included in this handbook.

General Instructions on Filling Out Code Sheets

Required Coding Forms: LCMP Permit, Habitat Impacts, and Habitat Benefits

Use only code sheets that are designated for LCMPs, and always the most recent versions. If in doubt, call IA and ask.

These code sheets will begin with the letters LCMP as in LCMP Permit Coding Form, LCMP Habitat Impacted Form, and LCMP Habitat Benefits Form, Purchase from Bank or Area, etc. The code sheets are transmitted to OCM electronically utilizing the electronic instructions for submitting code sheets and other permitting data contained in this handbook.

The "LCMP - PERMIT CODING FORM" Instructions

Permit coding forms are required for all state and local concern permit applications. For all changes to code sheets (CS), please transmit an updated CS to OCM following the electronic data transmission protocol as contained in this handbook.

LCMP Code Sheet Fields - with brief description.

Prepared By: Name or initials

Date: xx/xx/xxxx

CUP NUMBER: The CUP number is the OCM assigned permit number, nine characters. The first is "P", the next four represent the year (e.g. 2020), and the last four are the sequential application number.

APPLICANT'S NAME: Name of person, company or agency as listed in the application

PARISH: Parish in which the activity will be conducted.

CUBIC YARDS (whole yards): Cubic yardage that will be dredged or the cubic yards of fill (or the sum thereof if the project will involve both activities).

DREDGE AND/OR FILL: This describes the dredge/fill activity. Choose from the six options listed in the LCMP CODING KEY FOR PERMIT CODE SHEET.

PUBLIC NOTICE DATE: Date public notice appeared in the official parish journal.

MISC: Describes the activity for which a permit is being requested. Choose from the list on the LCMP CODING KEY FOR PERMIT CODE SHEET. If the activity defined in the application does not appear on the list, you may enter 99 (other).

H20 BLK: If the project involves water control structures this field should be filled in with a number between 1-9 from the list on the LCMP CODING KEY FOR PERMIT CODE SHEET: If no structure place a 0 in the field.

DEVELOPMENT: Further defines development category. Choose from the list on the LCMP CODING KEY FOR PERMIT CODE SHEET.

APPLICANT TYPE: Individual/Agency/Commercial/etc. Choose from LCMP CODING KEY FOR PERMIT CODE SHEET.

MAJ/MIN: The following activities are examples of MINOR type activities (code as 0)

bulkhead/backfill, private piers, mooring piles or dolphins, rip-rap or revetments, maintenance dredging of individual canal-slip w/o wetland impacts, boat ramps/slips, single family dwellings, small commercial development or subdivision, etc.

As a general rule, if a proposed project falls within the project description of one of OCM's general permits, or the project is of a small/negligible nature you would code the permit as a Minor. Large projects with significant impacts are coded 1 Minor

COMMENCE DATE: Date on which the permitted activity begins

PARISH NUMBER: If your LCMP assigns its own unique number.

PGP STATUS: Note whether this is a PGP category 1 or 2; if it does not qualify as a PGP, put a zero (0). The Corps will provide the PGP status

PARISH STATUS: This field defines the current and/or final condition of the permit.

Choose among the options listed on the LCMP CODING KEY FOR PERMIT CODE SHEET. While most of these are self-explanatory, some might seem counter intuitive.

If your DETERMINATION (see below) is NDSI (no direct or significant impact) or EXEMPT, you should enter a 31 in the STATUS field (Permit issued; no conditions).

If your DETERMINATION is RFD (request for determination) and a CUP will be required, you should enter a 70 in the STATUS field.

If your Determination is RFD (request for determination) and no CUP will be required, enter a 71 in the STATUS field.

If your DETERMINATION is CUP, enter 32 in the STATUS field (Permit issued; conditions).

DETERMINATION: This describes your final decision concerning the application. Choose among the six options listed on the LCMP CODING KEY FOR PERMIT CODE SHEET.

PARISH ISSUE DATE: Enter here the date on which a CUP, authorization letter, or denial is issued.

EXEMPT: If the activity is not exempt, enter a zero (0) here. If it is exempt, choose the reason from the list on the LCMP CODING KEY FOR PERMIT CODE SHEET. If the activity is NDSI, enter a 6.

PARISH WITHDRAWAL DATE: Enter the official date an application was withdrawn

CONSERVATION PLAN: Put a check in the box indicating whether or not an application falls within the Conservation Plan.

COMMENTS: In this field you should enter any additional information you think will be helpful or relevant to you or OCM. For example, you may briefly describe the activity for which a permit is being requested.

The "LCMP - IMPACTED HABITAT FORM" Instructions

The impacted habitat form is required for every permit application you receive and process other outside the coastal zone (OCZ).

Some of the fields on this form are the same as those on the LCMP – PERMIT CODING FORM;

HABITAT CODE: The habitat code uses the Cowardian Classification system. The Cowardian system is hierarchical and includes several layers of detail for wetland classification including: water flow; substrate types; vegetation types and dominant species; as well as flooding regimes and salinity levels. This comes from the GIS Live Map Habitat Layer. Fill out one entire section (2 per form) for each type of habitat that will be impacted.

DRAINAGE BASIN: The drainage basin classifications used for permitting describe streamshed/watershed boundaries. Each basin has a code which you must enter in this field.

Drainage Basin Code

Breton Sound	BS
Pearl River	Pearl
Mississippi River	MR
Lake Ponchartrain	РО
Barataria	BA
Terrebonne	TE
Atchafalaya River	AT
Vermilion-Teche River	TV
Mermentau River	ME
Calcasieu/ Sabine River	CS

DIST'D ACRES PROP (Disturbed Acres Proposed): Write the number of acres of each habitat type that will be impacted according to the initial proposal if pre-application meeting took place.

DIST'D ACRES SUBM (Disturbed Acres Submitted): number of each habitat type impacted in the application.

DIST'D ACRES ISSUED: Number of acres of each habitat type authorized in the permit authorization.

AAHU (Average Annual Habitat Units Lost): [0.00], the number of average annual habitat units you have calculated to be lost for each habitat type affected.

YEARS: Number of years of impact to the habitat due to the project, 50 for Forested/20 for Marsh. This is also the number of years used to calculate CHUs.

CHU LOST (Cumulative Habitat Units Lost):[0.00], the number of cumulative habitat units AAHU*50 for Forested/20 for Marsh type wetlands

MIT REQ'D (Y, N, W): Yes, No, or Waiting. Is mitigation required for each of the affected habitat types? For projects which allow one growing season prior to determination, record a "W" (waiting to assess mitigation). This should be changed to a "Y" or an "N" after assessment.

ACRES MIT. REQ'D: Record here the number of acres which will have to be created to fulfill the compensatory mitigation requirement.

ADD. PERMIT REQ'D: Record "Y" for YES and "N" for NO. Is an additional permit required to perform the mitigation activity?

MIT PROJ CUP/CON NO: Record here the CUP number of the mitigation project used to offset the damages to each habitat type. This can be the same number as the permit authorizing the damages.

COMMENTS: Record here any additional comments you feel may be helpful or relevant

Additional Notes on the Impacted Habitats Form

For projects that are located in the coastal zone but in fast lands, above the 5' contour, or otherwise exempt, you are required to fill out an Impacted Habitat Form with habitat units lost but no mitigation requirement. In the COMMENTS field put EXEMPT followed by the reason (i.e. EXEMPT: house, EXEMPT: fast lands, etc.).

If you have an application for a project with a small area of impact to more than one habitat type, you may have to use best professional judgment to estimate the area of impact to each habitat type.

For any project for which an applicant is given time for the impacted area to recover before a mitigation calculation is completed, enter a "W" in the MIT REQ'D field. Leave ACRES MIT REQ'D blank. After the evaluation complete.

The "LCMP - HABITAT BENEFITS FORM" Instructions

The habitat benefits form is required whenever a permit requires compensatory mitigation. There are Habitat Benefit forms specific to the type of mitigation that will be implemented.

- Purchase from a Mitigation Bank
- Monetary contribution to the Trust Fund or In-Lieu Fee Program
- Creation/ Restoration/Enhancement/Protection and,
- Beneficial Use of Spoil

The LCMP Coordinator will go over these forms in greater detail when they are utilized. In addition, you should also contact the OCM Mitigation Section Supervisor for assistance and be sure to submit to OCM as a draft for any corrections before finalization.

Purchase from a Bank:

Indicate whether the code sheet is the first for the mitigation or whether it is a revision. Consult with the LCMP coordinator and the OCM Mitigation Section Supervisor for assistance to fill out

Follow the instructions include on the form itself to determine Acres Purchase and AAHU and CHU numbers. Compensatory AAHU and CHU should be equal to or greater than the impact numbers.

Monetary contribution to the Trust Fund or In-Lieu Fee Program:

Calculations will be provided by the OCM Mitigation Section Supervisor

Creation/ Restoration/Enhancement/Protection

This sheet is to be used for a project serving as mitigation for another impacting activity and Individual Mitigation Project (IMP). IMP require an extensive review and approval project and will be very rare as they also require a tremendous amount of time and resource investment.

The original Impact activity permit will not require a benefit form. The Mitigation project will require all three code sheets (often the mitigation project itself will have some impacts and it will have to compensate for its own impacts as well as for the permit for which it is serving as mitigation)

Implementation: It will be the LCMP's responsibility to follow up on the habitat creation project to determine whether the project was successful and to calculate the AAHUs actually created or protected by the project. In addition, IMP are monitored for 20/50 years for Marsh/Forested. The terms and conditions of the monitoring plan will be part of the IMP approval process.

Beneficial use of spoil:

Beneficial use of spoil is not an acceptable compensatory mitigation option, per se, but does need to be recorded and kept track of.

General Violation and Enforcement Information

One of the keys to making mitigation projects successful is effective enforcement. Without effective enforcement permit noncompliance will further limit the effectiveness of mitigation to achieve no net loss of wetlands. A local coastal program also monitors for compliance with issued permit conditions and checks the parish area for any unpermitted activities. Monitoring is a critical element of a mitigation program. The parish must ensure that it is kept informed of permit condition compliance and mitigation project success.

The parish can collect monitoring fees as part of mitigation project costs. Violation monies should be collected and rules must be enforced. The money collected can be put toward more monitoring, spot checks, etc. Or if someone is caught in violation, he or she must be required to mitigate for any impacts caused.

Enforcement Procedure for Local Coastal Management Programs when possible violation activities are transferred from the state program

The situation can present itself where the state enforcement field agent will discover activities occurring in the parish of a possible violations nature that might be more applicable for local program processing in lieu of state processing. In such cases the state program will transmit an enforcement reports transfer email to the LCMP

Instructions for responding to enforcement reports sent to LCMP as local concern issues

You will receive an email from one of OCM's Enforcement Analysts that usually contains a field investigation report or other written description on the discovered activity and always contains the <u>OFFICE OF COASTAL MANAGEMENT ENFORCEMENT ROUTING SLIP</u> – example below

It is your responsibility to reply back to the Enforcement Analyst that sent the original email within three weeks of the email date, and the: LCMP Coordinator; Coastal Scientist Supervisor and Coastal Scientist Program Manager in Interagency Affairs working with LCMPs with the following response:

Local Parish Concern (to be completed by the Local Parish)

71	Local Parish Concern; Processing as local, see permit number
72	Local Parish Concern; No violation determined

This response indicates whether your LCMP will pursue the activity as a violation and obtain an LCUP application for the activity and process as an ATF permit (71) or if you have decided that no violation has occurred and you will not pursue the matter any further (72). Be aware, that while it is within your

authority to determine the activity is not a violation, that decision needs to be consistent with State and Parish coastal enforceable policies. If you wish for the state to process this enforcement matter please inform OCM in writing and include any actions taken by your program, an email will suffice.

The following is an example of the complete routing slip:

OFFICE OF COASTAL MANAGEMENT ENFORCEMENT ROUTING SLIP

Reason for Enforcement

Apparent Unauthorized (not permitted) Activity
Activity is apparently not consistent with permit authorization
Permit application indicates unauthorized work
Referral to Enforcement for assessment of Administrative Penalty. Once payment is received, application will be returned to Permits for further processing.
Other:

Information Source

DATE RI	ECEIVED/REPORTED/DISCOVERED:	
CUP #		
Enforce	ment #	
Other:		
	14 General Public:	
	Anonymous:	
	Name:	
	Tel:	
	Address:	

Date and time of call:
Staff answering call:
13 OCM/Permits& Mitigation Staff:
10 OCM Field Staff:
11 Corps Of Engineers:
13/15 Other (agency, public official, etc.):

Site Information

Parish	1:							
Sec:								
T:								
R:								
Lat.	XX°	XX ′	XX.XX "					
Long.	XX°	ХХ ′	XX.XX "					
Possik	ole Viol	ator:						
Telep	hone #							
Addre	ess of v	iolation:						
Descr	iption:							

Reason for Closure of File

No Jurisdiction-Exempt Activity
No Unauthorized Activity – in compliance with permit
Penalty/Mitigation Assessed- Unauthorized Activity Stopped

	Unauthorized Activity stopped pending CUP Authorization
	Referred back to Permits for processing
	Referred to Parish; Local Parish Concern
	Other (specify):
Support	ing Facts:

Local Parish Concern (to be completed by the Local Parish)

71	Local Parish Concern; Processing as local, see permit number
72	Local Parish Concern; No violation determined

Confirmed by Field Inspection Y / N

	Initials	Date Opened	Initials	Closure Date
Permit Supervisor				
Enforcement CRS				
Coastal Scientist Supervisor				
Coastal Scientist Manager				
Administrator				

Instructions for Submitting Code Sheets and Other Permitting Data

Parish Local Coastal Management Program Data Submission to the Louisiana Coastal Resources Program

When submitting LCMP Code Sheets, Wetland Value Assessment (WVA) Models, Public Notices, Field Investigation Forms, and other supporting documentation to the State Program – the proper procedure is to save the file as a .pdf and name it according to the following format:

The P#_, the date of submission, and a brief two to four letter identifier

For example, for the LCMP Code Sheet for P20150001, sent on January 1, 2015: the file name would be:

P2015001_01012015CS

Similarly, for the Habitat Impacts Code Sheet, Public Notice and Wetlands Valuation Assessment sent on January 15, 2015

P2015001_01152015HI P2015001_01152015PN P2015001_01152015WVA

The .pdf data files should be attached to an email and sent to both <u>jon.truxillo@la.gov</u> and <u>donna.thompson@la.gov</u>. The email must be titled with the P# for the file and Parish Data Submission for proper routing. You must send a separate email for each permit number; however, you can attach up to four files for the same P# in one email.

For example, for an email submitting data for P2015001, the subject line of the email would read:

P2015001 Parish Data Submission

Blank LCMP Coding Forms

Permit Coding Form

Impacted Habitat Form

LCMP Coding Keys

LCMP Coding Key for Permit Code Sheet Mitigation Types for Data Base Coding Key

Blank LCMP Habitat Benefits Forms with Instructions

Purchase from a Bank or Area

Creation/Restoration/Enhancement/Protection

Monetary Contribution to Trust Fund or In-Lieu Fee Program Purchase

Beneficial Use of Spoil

OCM Policy and Protocol Memos

Criteria for Determination of No Direct and Significant Impact to Coastal Waters

Determination of Local Concerns

LCMP State/Local Determination Form

Recommendation for New State Determinations

Wetlands Value Assessment Models Workbook

WVA workbook

OCM Approved Mitigation Banks and Mitigation Resources on OCM Web Page

WVA Marsh Parameter Form

WVA Swamp Parameter Form

WVA Bottomland Hardwoods Parameter Form

CWPPRA Examples of Interspersion 2012

Local Coastal Management Program Field Investigation Form

Field Report Form (pdf)

Field Report Form (MS Word)

Incomplete Application Check List

Application Checklist