

CHAPTER 6 COORDINATION AND COMPLIANCE WITH ENVIRONMENTAL REQUIREMENTS

This chapter documents the coordination and compliance efforts regarding statutory authorities including: environmental laws, regulations, Executive Orders (EO), policies, rules, and guidance. Consistency of the LCA Plan with other efforts is also described.

6.1 ENVIRONMENTAL COORDINATION AND COMPLIANCE

As reported in the *Federal Register* volume 69, number 180, on September 17, 2004, the USEPA rated the LCA draft PEIS (DPEIS) as LO – Lack of Objections; having no objections to the selection of the Tentatively Selected Plan of Action, and fully supporting the primary restoration strategies.

Following completion of the final PEIS (FPEIS), the Assistant Secretary of the Army for Civil Works will issue a written Record of Decision (ROD) concerning the proposed action. The ROD will be issued within a framework of laws, regulations, and EOs. These authorities establish regulatory compliance standards for environmental resources that pertain directly to USACE management of water resources development projects, or provide planning guidance for the management of environmental resources. Relevant Federal statutory authorities and EOs are listed in **table 6-1**. Relevant State of Louisiana statutory authorities are listed in **table 6-2**.

6.1.1 Compliance with Statutory Authorities

Full compliance with statutory authorities will be accomplished upon review of the FPEIS by appropriate agencies and the public and the signing of a ROD. Tiering from and Programmatic updates to the FPEIS will be made in individual future decision documents and their associated NEPA compliance documents (EAs and EISs).

6.1.1.1 Clean Water Act – Section 404(b)(1)

The USACE is responsible for administering regulations under Section 404(b)(1) of the Clean Water Act (CWA) and other Federal authorities. Potential project-related impacts subject to these regulations would be evaluated on a project-by-project basis. Individual restoration plan project components' compliance with Section 404(b)(1) of the CWA would be closely coordinated with the District's Regulatory Branch and/or the Environmental Planning and Compliance Branch throughout planning and design phases. Section 401 of the CWA would be closely coordinated with the LDEQ.

Table 6-1
Relevant Federal Statutory Authorities and Executive Orders
(Note: this list is not complete or exhaustive.)

<p>Abandoned Shipwreck Act of 1987 American Indian Religious Freedom Act Antiquities Act of 1906 Archeological Resources Protection Act of 1979 Archeological and Historical Preservation Act Bald Eagle Protection Act Clean Air Act Clean Water Act Coastal Barrier Improvement Act of 1990 Coastal Barrier Resources Act of 1982 Coastal Wetlands Planning, Protection, and Restoration Act Coastal Zone Management Act of 1972 Comprehensive Environmental Response, Compensation, and Liability Act Consultation and Coordination with Indian Tribal Governments (EO 13175) Emergency Planning and Community Right-to-Know Act of 1986 Emergency Wetlands Restoration Act of 1986 Endangered Species Act of 1973 Environmental Quality Improvement Act of 1970 Estuary Protection Act Farmland Protection Policy Act Federal Actions to Address Environmental Justice in Minority Populations & Low-Income Populations (EO 12898) Federal Facilities Compliance Act Federal Land Policy and Management Act of 1976 Federal Water Pollution Control Act of 1972 Federal Water Project Recreation Act of 1965 Fish and Wildlife Conservation Act of 1980 Fish and Wildlife Coordination Act Flood Control Act of 1944 Floodplain Management (EO 11988) Food Security Act of 1985 Greening of the Government Through Efficient Energy Management (EO 13123) Greening of the Government Through Leadership in Environmental Management (EO 12148) Greening of Government Through Waste Prevention, Recycling, and Federal Acquisition (EO 13101) Historic Sites Act of 1935 Historical and Archeological Data-Preservation Invasive Species (EO 13112)</p>	<p>Land & Water Conservation Fund Act of 1965 Magnuson-Stevens Fishery Conservation and Management Act of 1996 Marine Mammal Protection Act of 1972 Marine Protection, Research, and Sanctuaries Act of 1972 Migratory Bird Conservation Act Migratory Bird Treaty Act Migratory Bird Habitat Protection (EO 13186) National Environmental Policy Act of 1969 National Historic Preservation Act of 1966 Native American Graves Protection and Repatriation Act Noise Control Act of 1972 North American Wetlands Conservation Act Pollution Prevention Act of 1990 Prime and Unique Farmlands, 1980 CEQ Memorandum Protection and Enhancement of the Cultural Environment, 1971 (EO 11593) Protection and Enhancement of Environmental Quality (EO 11991) Protection of Children from Environmental Health Risks and Safety Issues (EO 13045) Federal Compliance with Pollution Control Standards (EO 12088) Protection of Cultural Property (EO 12555) Protection of Wetlands (EO 11990) Recreational Fisheries (EO 12962) Resource Conservation and Recovery Act of 1976 Rivers and Harbors Act of 1899 River and Harbor and Flood Control Act of 1970 Safe Drinking Water Act Submerged Land Act Toxic Substances Control Act Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646) Water Resources Development Acts of 1976, 1986, 1990, and 1992 Water Resources Planning Act Watershed Protection & Flood Prevention Act Water Pollution Control Act Amendments of 1961 Wild and Scenic River Act Wilderness Act</p>
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Table 6-2 Relevant State Statutory Authorities (Note: this list is not complete or exhaustive.)	
Air Control Act Archeological Treasury Act of 1974 Louisiana Coastal Resources Program Louisiana Natural and Scenic Rivers System Act	Louisiana Threatened and Endangered Species and Rare & Unique Habitats Protection of Cypress Trees Water Control Act

6.1.1.2 Clean Water Act – Section 401 Water Quality

A copy of the FPEIS will be provided to the LDEQ for programmatic review of potential CWA Section 401 impacts. As individual projects selected to implement the LCA Plan are further conceived and designed, that phase of the program compliance with Section 401 would also be fully coordinated with the LDEQ Office of Environmental Services.

6.1.1.3 Coastal Zone Management Consistency

The LCA Plan, being a large and complex program with a great many component projects still in the conceptual stage, would best be served by a phased consistency approach (personal communication with the LDNR). The overall goals and methods outlined in the LCA Program would be coordinated with LDNR during the planning stage, and submitted for consistency review, once the preferred alternative has been identified. As individual projects selected to implement the LCA Plan are further conceived and designed, compliance of that phase of the program with the Coastal Zone Management Act of 1972 (CZMA) would also be fully coordinated with the state's Coastal Zone Management Program.

6.1.1.4 Fish and Wildlife Coordination Act – Report

The USFWS has been a cooperating agency and collaborative partner in the LCA Study process, with various experts on birds, mammals, amphibians, and reptiles actively participating on the various PDTs and contributing to the documentation and analysis of potential impacts by the various alternatives. A Fish and Wildlife Coordination Act Report is contained in appendix B of this FPEIS. A Fish and Wildlife Coordination Act Report would be required for all future individual projects and feasibility studies that would tier from this programmatic statement.

In their programmatic Fish and Wildlife Coordination Act Report (FWCAR) for the LCA Ecosystem Restoration Study the USFWS concurred with the findings of the LCA Study. The FWCAR recommendations state – *“Given the substantial adverse future impacts to coastal wetlands and their associated fish and wildlife resources that are expected to occur under future without-project conditions, the USFWS strongly supports authorization and implementation of the TSP (LCA Plan) as it would provide the greatest level of sustainable benefits to Louisiana's nationally significant coastal fish and wildlife resources.”* The October 6, 2004, Fish and Wildlife Coordination Act Report (FWCAR) is included as Appendix B6 to this FPEIS.

The FWCAR also contained several recommendations for coordination and planning consistency under the LCA Plan. These recommendations are presented below.

1. *In accordance with the January 2003 Partnership Agreement for Water Resources and Fish and Wildlife between the Service and the Corps, sufficient continuous funding should be provided to the Service to fulfill our responsibilities under Section 2(b) of the Fish and Wildlife Coordination Act throughout post-authorization engineering and design studies for demonstration projects, participation in the Science and Technology Program, Near-Term Plan (NTP) projects, and planning and evaluation for long-term project feasibility studies. To facilitate that level of cooperation, the Service intends to negotiate an LCA-specific Memorandum of Agreement with the Corps (similar to that used for Florida's Everglades Restoration study) soon after the NTP is authorized.*

In accordance with the January 2003 Partnership Agreement for Water Resources and Fish and Wildlife between the USFWS and the USACE, the District would continue to provide funding required by the USFWS to enable their full participation throughout future detailed planning and post-authorization engineering and design studies, and to fulfill their reporting responsibilities for the LCA Plan component features under Section 2(b) of the Fish and Wildlife Coordination Act. Additionally, the District in cooperation with the USFWS, Lafayette Field Office, would draft and execute an LCA-specific Memorandum of Agreement detailing the operating guidelines for negotiating transfer funds (similar to those used for the Comprehensive Everglades Restoration Plan) and to facilitate and expedite the USFWS future involvement.

2. *Under provisions of Section 7 of the ESA of 1973, as amended, the Service will also assist the Corps and any other Federal agencies responsible for funding or implementing selected projects and/or plans to ensure that they will neither jeopardize the continued existence of threatened and endangered species, nor adversely modify any designated critical habitat. The required consultations will be accomplished on a project-by-project basis, and will tier from the current programmatic consultation, details of which are contained in the Programmatic Environmental Impact Statement (PEIS) for the NTP. In keeping with the consultation requirements of the ESA, informal and formal (if needed) consultation must be completed before the Record of Decision for the NTP and PEIS can be signed. The Service (via the Department of the Interior's August 2004 letter) has concurred with the Corps' determination that the TSP is not likely to adversely effect any currently listed threatened or endangered species or designated critical habitat for which the Service has consultative jurisdiction.*

Under provisions of the ESA, the District would continue to accomplish the required consultations on a project-by-project basis, and would tier from the current programmatic consultation, details of which are contained in the FPEIS for the LCA Plan. Further, in keeping with the consultation requirements of the ESA, informal and formal (if needed) consultation would be completed before the Record of Decision for the LCA Plan and PEIS can be signed.

3. *The Corps should coordinate closely with individual refuge managers prior to conducting any work on a National Wildlife Refuge, in conformance with the National*

Wildlife Refuge System Improvement Act of 1997. Such coordination will be essential to the timely completion of the Service's determination that the proposed work will/will not be compatible with the purposes for which those refuges were established, and to secure any appropriate permits that may be required. Likewise, LCA activities occurring on State-administered Wildlife Management Areas or refuges should also be fully coordinated with the Louisiana Department of Wildlife and Fisheries.

Under provisions of the National Wildlife Refuge System Improvement Act of 1997, prior to initiating implementation of an LCA Project that would potentially affect any NWR, the District would, contact the appropriate Refuge Manager to determine if the proposed project constitutes a "refuge use" subject to a compatibility determination. If required to determine the anticipated impacts of any proposed use, the District would provide sufficient data and information to document any short-term, long-term, direct, indirect, or cumulative impacts on NWR resources. Compatibility determinations would include a public review and comment period before issuance of a final decision by the Service. To facilitate such contacts, the Louisiana Field Office would be contacted at (337) 291-3100. Likewise, the District would fully coordinate with the LDWF for those LCA Plan activities occurring on state-administered Wildlife Management Areas or refuges.

4. Because of the uncertainties regarding some of the currently proposed habitat prediction methodologies, and because many details regarding the design, operation, and associated effects of the TSP are not yet available at the current programmatic level of planning, the USFWS cannot complete their evaluation of the individual TSP features' effects on fish and wildlife resources, nor can they entirely fulfill their reporting responsibilities under Section 2(b) of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) for each of those features. Therefore, extensive additional Service involvement during subsequent detailed planning, engineering, design, and construction of specific project measures, along with more-definitive project information that will be available during those planning phases, will be required so that we can fulfill our responsibilities under that Act. Additionally, improvements in the hydrologic and desktop models will be needed to predict environmental impacts and benefits of individual plan features, as indicated in our previous draft Fish and Wildlife Coordination Act Reports (Paille and Roy 2003, Grouchy and Paille 2004). Additionally, the USFWS states that the proposed Science and Technology Program should give high priority to refining the land gain/loss and habitat change models to enable determination of and evaluation of project-level effects and facilitate completion of FWCA reporting.

The District intends to maintain the integrity of the collocated team which will afford the USFWS the ability to be intensively involved during subsequent detailed planning, engineering, design, and construction of specific LCA Plan restoration features, and provide more-definitive project information that would be available during those planning phases, in an effort to provide sufficient information to the USFWS to fulfill their responsibilities under Section 2(b) of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq). Additionally, the LCA Science and Technology Program would give high priority to improvements in the hydrologic and desktop models that would better enable prediction of potential environmental

impacts and benefits of individual plan features and the program manager will ensure that the S&T Office resolves any outstanding issue, or concerns regarding models or evaluation process in cooperation with the participating agency (including USFWS).

5. The USFWS has actively participated throughout the formulation and evaluation of the LCA coastwide alternatives and the selection of near-term restoration features, the large-scale studies, and the potential demonstration projects that comprise the TSP. USFWS involvement and input includes the preparation of three previous draft Fish and Wildlife Coordination Act Reports (Paille and Roy 2003a, and 2003b, and Grouchy and Paille 2004); a letter listing threatened and endangered species within coastal parishes (Appendix A of the FWCAR); assistance in preparation of the draft Biological Assessment for Comprehensive Plan effects on threatened and endangered species; a May 11, 2004, letter affirming our continued participation as a Cooperating Agency in accordance with the implementing regulations of the National Environmental Policy Act of 1969; and concurrence with the District's programmatic "not likely to adversely affect" threatened and endangered species determinations (via an August 23, 2004, Department of the Interior letter). Those documents are incorporated into the FWCAR by reference, and should be considered as integral components of the administrative record for the forthcoming final PEIS and LCA Study Report.

Under provisions of the NEPA, ESA, and the Fish and Wildlife Coordination Act, and because they are integral components of the administrative record, the District has included (see appendix B) the three previous draft FWCAR (Paille and Roy 2003a, and 2003b, and Grouchy and Paille 2004); the letter listing threatened and endangered species within coastal parishes (Appendix A of the FWCAR); the draft Programmatic Biological Assessment for the Comprehensive Plan effects on threatened and endangered species; the May 11, 2004, letter affirming the USFWS continued participation as a Cooperating Agency; the August 23, 2004, Department of the Interior letter of concurrence with the District's programmatic "not likely to adversely affect" threatened and endangered species determinations; and the October 6, 2004 FWCAR in Appendix B6 of the FPEIS as integral components of the administrative record for the forthcoming final PEIS and LCA Study Report.

6. For purposes of maximizing synergistic wetland restoration benefits within the eastern Terrebonne Basin critical needs area, the post-authorization studies for the proposed Small Bayou Lafourche Diversion Project should, to the maximum extent possible, incorporate key Grand Bayou-area features of the Convey Atchafalaya River Water to Northern Terrebonne Basin Project.

The District working with other federal and non-federal agencies will evaluate the synergistic effects of other features at the LCA Plan or projects and actions of others during the specific feasibility level evaluation and make adjustments to project implementation accordingly.

6.1.1.5 Threatened and Endangered Species Act – Compliance and Coordination

As individual projects selected to implement the LCA Plan are further conceived and designed, that phase of the program compliance with the Threatened and Endangered Species Act would be fully coordinated with the USFWS and NMFS for threatened and endangered species under their respective jurisdictions. Should any threatened or endangered species be sighted within any work area, the USFWS Lafayette, Louisiana Field Office and/or the NMFS Baton Rouge, Louisiana and St. Petersburg, Florida Field Offices would be contacted immediately. The use of recommended primary activity exclusion zones and timing restrictions would be utilized, to the maximum extent practicable, to avoid project construction impacts to any threatened or endangered species or their critical habitat within the study area. The District will continue to closely coordinate and consult with the USFWS and the NMFS regarding threatened and endangered species under their jurisdiction that may be potentially impacted by the proposed action. See also sections 3.13, Threatened and Endangered Species and 4.12 Threatened and Endangered Species.

6.1.1.5.1 *Louisiana State Threatened and Endangered Species and Rare and Unique Habitats Coordination*

As individual projects selected to implement the LCA Plan are further conceived and designed, that phase of the program would also be fully coordinated with the Louisiana Department of Wildlife and Fisheries for threatened and endangered species and rare and unique habitats under their jurisdiction. See also section 3.13, Threatened and Endangered Species.

6.1.1.6 Essential Fish Habitat

NMFS has been a cooperating agency and collaborative partner in the LCA Study process with experts on various marine organisms, as well as Essential Fish Habitat (EFH), contributing to the documentation and analysis of potential impacts. These efforts would continue after an LCA Plan is selected. As individual projects selected to implement the LCA Plan are further conceived and designed, that phase of the program compliance with the Magnuson-Stevens Fishery Conservation and Management Act of 1996 would be fully coordinated with NMFS. See also section 3.12, Essential Fish Habitat.

6.1.1.7 Clean Air Act – Air Quality Determination

As individual projects selected to implement the LCA Plan are further conceived and designed, that phase of the program compliance with the Clean Air Act would be fully coordinated with the Air Quality Section of the LDEQ. See also section 3.20, Air Quality.

6.1.1.8 Historic and Cultural Resources

As individual projects selected to implement the LCA Plan are further conceived and designed, that phase of the program compliance with the National Historic Preservation Act and all other

pertinent statutes would also be fully coordinated with the State Historic Preservation Officer (SHPO). See also section 3.17, Historic and Cultural Resources.

6.1.1.9 Prime and Unique Farmlands

The NRCS has been a cooperating agency and collaborative partner in the LCA Study process with experts on various soils, vegetation, and agriculture aspects contributing to the documentation and analysis of potential impacts. These contributions would continue after an LCA Plan has been selected. As individual projects selected to implement the LCA Plan are further conceived and designed, that phase of the program compliance with the Farmland Protection Policy Act and the Prime and Unique Farmlands, 1980 CEQ Memorandum would be fully coordinated with the NRCS. See also section 3.2, Soils.

6.1.1.10 Executive Order 13186 – Migratory Bird Habitat Protection

EO 13186 proclaims the intent to support the conservation of previous migratory bird conventions by integrating bird conservation principles, measures, and practices into agency activities and by avoiding or minimizing, to the extent practicable, adverse impacts on migratory bird resources when conducting agency actions. Migratory birds are of great ecological and economic value to the United States and to other countries. They contribute to biological diversity and bring tremendous enjoyment to millions of Americans who study, watch, feed, or hunt these birds throughout the United States and other countries.

This order requires that environmental analyses of Federal actions required by the NEPA or other established environmental review processes evaluate the effects of actions and agency plans on migratory birds, with emphasis on species of concern. In addition, each Federal agency shall restore and enhance the habitat of migratory birds, as practicable.

6.1.1.11 Executive Order 12898 – Environmental Justice

Environmental justice (EJ) can be traced to Title VI of the Civil Rights Act of 1964:

No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

On February 11, 1994, the President issued EO 12898 regarding Federal actions to address EJ in minority populations and low-income populations:

Each Federal agency shall analyze the environmental effects, including human health, economic, and social effects, of Federal Actions, including effects on minority communities and low-income communities, when such analysis is required by the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. section 4321 et seq.

EO 12898 is designed to focus Federal attention on the environmental and human health conditions in minority communities and low-income communities. The order is also intended to

promote non-discrimination in Federal programs substantially affecting human health and the environment, and to provide minority communities and low-income communities access to public information on, and an opportunity for public participation in, matters relating to human health or environmental planning, regulations, and enforcement.

Any restoration plan for Louisiana has the potential to affect people living along the coast. Moreover, there is always the possibility that some environmental changes resulting from a restoration effort would be more relevant to particular groups or communities than to others. For example, potential changes in fisheries would more likely be of immediate and direct interest to people who rely on those resources for income and/or subsistence. It is possible, therefore, that the design and implementation of a coast wide restoration program could potentially affect minority or low-income populations.

Potential EJ issues would be considered throughout the entire LCA Study process, from study initiation through project implementation and monitoring. However, identifying potential EJ issues requires a level of detail that is not available at the programmatic level at which the LCA Plan is currently being developed. Although restoration features and their general locations are discussed as part of the LCA Study report, the exact location, design, and operation of such features are subject to considerable change, depending on the outcome of future feasibility study and environmental review. Thus, at the programmatic level, there is only a general discussion of potential project impacts. Without further detail and specificity, it is neither possible nor appropriate at this point to try to identify particular populations or communities that might be disproportionately affected by a particular restoration feature.

Given that the LCA Study planning effort is currently at the programmatic stage, it was determined that the best course of action relative to EJ was to (1) sensitize the PDT to EJ issues in Louisiana, (2) look and listen for potential EJ concerns during the NEPA process (particularly during the public hearings and comment period), (3) discuss the issue in general as part of the DPEIS, (4) solicit input on potential EJ issues, and (5) commit to fully reviewing any potential EJ issues during the NEPA assessment of specific LCA Plan restoration features.

On January 24, 2003, the PDT met with Dr. Beverly Wright, founder and director of the Deep South Center for Environmental Justice at Xavier University. During this meeting, the PDT also teleconferenced with EJ experts from the USEPA's Region 6 office in Dallas, Texas. The objective of this meeting was to inform and sensitize PDT members to EJ issues.

As part of the NEPA process, the PDT held numerous public and scoping meetings, during which attention was given to any potential EJ issues. During these meetings, information was made available to the public to help assist in the identification of potential concerns, including potential EJ issues. Members of the PDT have also continued to look for potential EJ issues during development of the programmatic plan and the assessment of its potential effects.

Reviewing potential EJ issues at the project-specific level is arguably the most important step the PDT can take towards addressing potential EJ concerns. While the LCA Study process is not yet at the project-specific level, it is not too early to begin identifying potential EJ issues that should be more closely reviewed in the future. The District is committed to ensuring that any potential

EJ issues are addressed as implementation of the LCA Plan proceeds. As part of this process, we encourage any interested parties to participate by informing us of potential concerns and by participating in the LCA Plan process in general.

6.1.1.12 Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646)

All real estate interests acquired for construction of the LCA Project will be in accordance with the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act), as amended in 42 USC 4601-4655, and the Uniform Regulations contained in 49 C.F.R. Part 24. The Uniform Act sets forth procedures for the acquisition of private property for public use and specifically requires that the acquiring agency appraise the real property interests it wishes to acquire and provide the owner a written summary of the basis for the amount established as just compensation. The Real Estate section of the Main Report outlines a proposed acquisition plan for this project.

6.1.1.13 Executive Order 13112 – Invasive Species

On February 3, 1999, EO 13112 was signed to prevent the introduction of invasive species and provide for their control and to minimize the economic, ecological, and human health impacts that invasive species cause by establishing the National Invasive Species Council. The EO requires that a Council of Departments dealing with invasive species be created. Currently there are 10 departments and agencies on the Council of Departments.

The LCA Program shall pursue the duties set forth in EO 13112 in consultation with the Invasive Species Council, consistent with the Invasive Species Management Plan, and in cooperation with stakeholders, as appropriate, and, as approved by the Department of State, when Federal agencies are working with international organizations and foreign nations. The LCA Plan would be consistent with EO 13112 and shall, to the extent practicable and permitted by law:

1. *identify such actions;*
2. *subject to the availability of appropriations, and within Administration budgetary limits, use relevant programs and authorities to: (i) prevent the introduction of invasive species; (ii) detect and respond rapidly to and control populations of such species in a cost-effective and environmentally sound manner; (iii) monitor invasive species populations accurately and reliably; (iv) provide for restoration of native species and habitat conditions in ecosystems that have been invaded; (v) conduct research on invasive species and develop technologies to prevent introduction and provide for environmentally sound control of invasive species; and (vi) promote public education on invasive species and the means to address them; and*
3. *not authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species in the United States or elsewhere unless, pursuant to guidelines that it has prescribed, the agency has determined and made public its determination that the benefits of such actions clearly outweigh the potential harm caused by invasive species; and that all feasible and prudent measures to minimize risk of harm will be taken in conjunction with the actions.*

6.2 CONSISTENCY OF THE LCA PLAN WITH OTHER EFFORTS

This section outlines key challenges with respect to ensuring consistency between development and coastal restoration. It then describes proposed action items for reducing conflict between the two. Some of the proposed action items represent new initiatives, while others describe or build upon ongoing efforts to improve consistency. For example, the proposals to enhance internal and external coordination would build upon the significant progress already made as a result of the formation of an interagency collocated restoration team housed within the District. These proposed action items are intended to be a starting point for developing the processes and mechanisms needed to move towards greater consistency.

6.2.1 Finding the Balance

In coastal Louisiana we are trying to find the balance between economic development and coastal restoration and protection. We must address both our economic and environmental needs, which are inextricably linked and yet often in conflict. This is a challenge facing restoration efforts across the country, from California to the Chesapeake Bay and the Everglades. However, this challenge is perhaps greatest in coastal Louisiana for the simple fact that we live and work in and among the same wetlands we rely on and need to protect. How we confront this challenge will not only be critical for our future, but it may also serve as an example for other restoration efforts around the country. The LCA Plan has set the following goals for consistency with other programs:

- Instill confidence in the taxpayers and decision-makers that we have the solutions for ensuring both a healthy economy and a sustainable coast.
- Set the standard for balancing coastal restoration and development.

6.2.2 Ensuring Consistency Between Development, Coastal Protection, and Restoration

Perhaps, nowhere are the economy and the environment more inextricably linked than in coastal Louisiana. Louisiana's coastal wetlands support the Nation's second largest fishery and provide critical habitat for a vast array of wildlife, while at the same time helping to protect navigation and energy infrastructure critical to the Nation's economy. The loss of Louisiana's coastal wetlands threatens these important economic assets, as well as the millions of people who live and work in coastal Louisiana. Thus, protecting Louisiana's coastal wetlands is essential for ensuring a vital state economy, while also protecting important sectors of the Nation's economy.

Development activities - from navigation improvements and hurricane protection to residential and commercial construction - can harm the coastal environment. Yet, such activities are critical for a vital economy in coastal Louisiana and beyond. The challenge is to ensure that economic development does not undermine the wetlands and coastal ecosystems that are also intrinsic to long-term economic vitality. A moratorium on growth in the coastal zone is not the solution, nor is "business as usual."

We must be able to address critical societal needs such as hurricane protection, navigation, and economic development in a way that is, at a minimum, consistent with coastal restoration and protection efforts. Indeed, Section 303(d) of the CWPPRA mandates consistency for some important activities:

Consistency.---(1) In implementing, maintaining, modifying, or rehabilitating navigation, flood control or irrigation projects, other than emergency actions, under other authorities, the Secretary, in consultation with the Director and the Administrator, shall ensure that such actions are consistent with the purposes of the restoration plan submitted pursuant to this section.

Despite efforts to address this important provision, it is acknowledged by many stakeholders that a more thorough, comprehensive, and balanced effort is needed to ensure consistency across the coast. It is further recognized that once an LCA Plan is selected and approved, it would be the appropriate vehicle for beginning such an effort.

While growth will continue to occur, it must be done in a way that avoids and minimizes wetland impacts as much as possible. Federal and state actions affecting the coastal environment need to reflect the fundamental premise that it is less expensive and more effective to prevent wetland loss, than it is to repair the damage. The challenge is to find balance between economic growth and wetland protection. While consistency between economic development and coastal restoration should be sought in every instance, it may be possible in some cases to go even further by devising ways to make such activities complement each other.

6.2.3 Need for Consistency

The following subsections describe the need for consistency between the LCA Plan and the CWPPRA, regulatory programs, hurricane protection, and navigation.

6.2.3.1 Consistency with CWPPRA

The LCA Plan is consistent with, and complementary to, the CWPPRA, which was passed in 1990 and established a Federal/State Task Force responsible for the development of a plan to protect and restore Louisiana's disappearing coastal ecosystem. The CWPPRA Plan was completed in 1993, was improved in the Coast 2050 Plan, and served as part of the basis for development of the LCA Plan.

CWPPRA provides about \$50 million per year to construct coastal wetlands projects. With limited funding and loss coast wide, CWPPRA has concentrated on small-scale projects distributed across the coast. In contrast, the LCA Plan focuses on larger projects that would generally work at an ecosystem scale. From its inception until 2001, the CWPPRA program has built projects that are estimated to restore or preserve over 156,500 acres by 2050.

There is a need for both small and large projects to restore the coast and CWPPRA's contribution is significant. Thus, CWPPRA has a continuing contribution to make to coastal restoration.

6.2.3.2 Regulatory Programs

The Federal Government and the State of Louisiana share regulatory responsibility for a broad range of public and private development activities that take place in and around coastal wetlands. These activities include residential and commercial development, oil and gas extraction, highway construction, and others. All of these activities can, to varying degrees, harm wetlands. At the largest scale, it is possible for individual development projects to directly undermine coastal restoration efforts. In addition, some of the smallest scale development activities can add incrementally to the cumulative loss of coastal wetlands.

Future development activities will continue to adversely impact Louisiana's coastal wetlands. However, it is both unreasonable and undesirable to place a moratorium on future human development. Although existing regulatory programs have reduced wetland losses from development, Louisiana's unique coastal wetland loss problems necessitate further efforts to ensure effective protection of these resources. Consistent with the long-standing Federal regulatory policy of no net loss of wetlands, the District, partnering with Federal and state regulatory agencies, would implement the actions presented below to further avoid and minimize adverse impacts to Louisiana's coastal wetlands.

Special attention will be paid to identifying ways to avoid and minimize potential impacts through the use of environmentally appropriate development approaches. For example, the construction of new highways can have significant direct, indirect, and cumulative wetland impacts. However, the use of environmentally appropriate design and construction techniques can greatly reduce potential adverse impacts. Specifically, the use of so-called "end-on" highway construction has been used to greatly reduce the environmental impacts of highways in coastal Louisiana. End-on is a construction technique devised to work from the decks of the structures, building each section of the bridge from the top of the last completed section and using heavy cranes to push each section forward one bay at a time. The cranes can also be used to position steel platforms, drive in support pilings, and lay deck slabs, alternating this procedure between each bay (USEPA 2004). Identifying and employing such environmentally sensitive techniques will be critical for protecting Louisiana's valuable coastal wetlands, while also meeting important economic and safety needs.

6.2.3.3 Hurricane Protection

As a result of ongoing wetland loss, communities across coastal Louisiana are increasingly at risk from tropical storms and hurricanes. Currently, there are a number of large-scale hurricane protection projects in the planning stages. While in many cases such further protection is needed, levee projects can result in significant wetland losses if not sited, designed, and operated correctly. These losses can include direct impacts from the placement of the levee and borrow areas; and indirect and secondary effects from modified hydrology and induced development. Such impacts can further reduce the natural storm protection that wetlands provide.

Many communities in coastal Louisiana are very much in need of increased hurricane protection. Fortunately, techniques and approaches do exist for avoiding and minimizing wetland impacts when developing hurricane protection projects. In some cases, it may even be possible for

hurricane protection levees to complement wetland protection efforts. The challenge, therefore, is to increase structural protection where needed while, at a minimum, not decreasing the natural protection and other important functions and value provided by wetlands. The District is studying the following new or expanded hurricane protection and flood protection projects: "West Bank," "Morganza to the Gulf of Mexico," "Donaldsonville to the Gulf of Mexico," "Mississippi River Levees and Berms," "Vermilion River Bridges and Culverts," "Alexandria to the Gulf of Mexico," and "The Lower Atchafalaya Basin Reevaluation Study."

6.2.3.4 Navigation

Efficient and effective navigation in and through coastal Louisiana is critical to the local, state, and National economies. However, the creation, expansion, and ongoing maintenance of navigation channels can and has had significant impacts on wetlands. Such impacts include the direct loss of wetlands from channel excavation, enlargement, and maintenance, and indirect losses from hydrologic modification, salinity intrusion, and increased wake-induced erosion. The continued loss of coastal wetlands can threaten the integrity, safety, and efficiency of existing navigation routes and the communities and industries they serve. The District is currently studying the deepening of the following existing navigation channels: "Mississippi River Ship Channel;" "Houma Navigation Canal;" "Acadiana-Gulf of Mexico Access Channel;" "Chene, Boeuf, and Black Navigation Channel;" and "Calcasieu Ship Channel."

The District uses hopper dredges to maintain only the near-shore channel reaches of Southwest Pass, MRGO, and the Calcasieu River Navigation Channel. In the last two channels, the dredge removes material and places it adjacent to the removal site so it is still in the littoral drift. In the first channel, the dredge removes sediments from the coastal system and disposes it in deeper water offshore sites. This removal of material from the coastal littoral system reduces the sustainability of nearby barrier headlands and adjacent marshes. Navigation projects can, however, offer opportunities to use dredged material beneficially for restoration purposes (e.g., marsh creation).

Upgrading our navigation system is necessary to ensure the vitality of this critical economic asset. We need to develop ways to ensure that future navigation projects avoid and minimize wetland losses as much as possible, while simultaneously maximizing the beneficial use of dredged material for restoration activities.

6.2.4 Proposed Action Items

The following subsections describe proposed action items for consistency of the LCA Program with regulatory programs, hurricane protection projects, navigation projects, and other USACE Mississippi Valley Division, New Orleans District projects.

6.2.4.1 Regulatory Programs

It is important to ensure that regulated activities within the coast do not undermine or run counter to Louisiana coastal restoration efforts. To that end, once an LCA Plan has been selected, the District, working with the state, proposes to:

- Continue reviewing permit applications to avoid and minimize potential conflicts with the LCA Plan.
- Use best available science tools to assess the environmental effects of the regulatory program.
- Consider the effects of restoration projects during the review of permit applications.
- Further enhance the effectiveness of compensatory mitigation.
- Encourage private mitigation banks that support LCA Plan objectives.
- Enhance internal coordination.
- Encourage and support wetland-planning efforts.
- Expedite the regulatory review of public and private activities that are fully consistent with the LCA Plan.
- Review options for increasing protection of vulnerable areas.

6.2.4.1.1 *Continue Reviewing Permit Applications to Avoid and Minimize Potential Conflicts with the LCA Plan*

During the review of permit applications for projects affecting areas within the LCA Plan boundary, the District, working with the state, would work to avoid and minimize any potential conflict with coastal restoration efforts. Specifically, permit applications would be reviewed to ensure that regulated activities: (1) do not undo or substantially reduce the beneficial effects of any existing restoration project(s), and (2) do not prevent or unduly restrict future coastal restoration projects. These determinations would be made through enhanced internal and external coordination (see section 6.2.4.1.6, Enhance Internal Coordination). In addition, comments from landowners, commenting agencies, and the general public regarding the potential effects of proposed projects on restoration activities would be fully considered during the permit review process. Where necessary and appropriate, permits would contain conditions for minimizing potential conflict with the LCA Plan, once a plan is selected.

6.2.4.1.2 *Use Best Available Science Tools to Assess the Environmental Effects of the Regulatory Program*

Understanding the direct, indirect, and cumulative effects of wetland permit decisions is critical for determining whether the regulatory program is achieving the CWA Section 404 goal of no net loss of wetland functions. However, it continues to be technically challenging to assess the landscape-level effects of multiple wetland impacts. The science tools being developed as part of the LCA Plan could potentially help examine the effects of permit decisions, particularly with respect to cumulative impacts. Specifically, the modeling, monitoring, and other technical evaluations that would be an important part of the LCA Plan implementation process could enable better assessment of how wetland permit decisions might impact wetland functions within a given basin and coast wide.

Accordingly, the District proposes to use, where appropriate and available, LCA Program science tools to assess the potential cumulative effects of the Federal regulatory permit program within the boundary of the LCA Study area. Individual permit proposals that would result in potentially significant direct, indirect, and/or cumulative impacts to waters of the U.S. would be evaluated on a project-by-project basis. However, the review of specific permit applications

would not be delayed while science tools are being developed. Rather, such tools would be used in the regulatory program only when they become available and their use would not unduly delay project review.

6.2.4.1.3 *Consider the Effects of Restoration Projects During Permit Review Process*

The review of permit applications would take into account the effects that existing restoration projects may have on the wetlands and other aquatic resources at issue. All things being equal, wetland areas that benefit from coastal restoration efforts would be healthier, more productive, more sustainable, and provide greater functions than comparable areas where no such restoration has occurred. This increased functional capacity would be acknowledged and considered as part of the CWA Section 404 permit review process, particularly with respect to the analysis of alternatives and the determination of compensatory mitigation. Additionally, Federal, state, and local support for protection and restoration of coastal Louisiana would be fully considered during the public interest review for all permit applications within coastal Louisiana.

The LDNR Office of Coastal Restoration and Management's existing procedures to identify potential regulatory and restoration conflicts would continue to be utilized to support the goals of the LCA Program (personal communication August 15, 2003, with Honora Buras, LDNR). The following describes the existing procedures:

If a proposed project is within ¼ mile from either an active restoration project or a proposed restoration project, Coastal Management Division (CMD) submits a request to Coastal Restoration Division (CRD) to review the proposed activity with regard to its potential effect on the restoration project. If CRD's review determines that the proposed project would interfere or have adverse effects on a restoration project, then CMD informs the applicant and requires that the applicant communicate and coordinate with CRD. A CMD authorization is not issued until CRD has indicated that it has no objections to the proposed project.

6.2.4.1.4 *Further Enhance the Effectiveness of Compensatory Mitigation*

Effective mitigation of unavoidable wetland impacts is critical to the overall success of the CWA Section 404 program. If done properly, compensatory mitigation can offset lost wetland functions, and greatly reduce the chances that specific activities authorized under CWA Section 404 could be counter to or inconsistent with the coastal restoration efforts. Despite progress, however, it is recognized that compensatory mitigation does not always guarantee full replacement of wetland functions. To enhance the effectiveness of compensatory mitigation, on December 24, 2002, the USACE and USEPA, in conjunction with other Federal agencies, issued the "National Wetlands Mitigation Action Plan," which contains 17 actions designed to improve mitigation performance in a number of areas.

The "National Wetlands Mitigation Action Plan," along with associated policy guidance, emphasizes the importance of effective tracking and monitoring of compensatory mitigation projects. This is particularly true in Louisiana, where there are over 90 active, closed, or proposed mitigation areas in the District alone. Unfortunately, high permit review workloads

limit the District's ability to effectively monitor and track ongoing and completed compensatory mitigation areas.

Given the importance of effective compensatory mitigation in ensuring that regulated activities do not run counter to restoration efforts, the District would review opportunities to help support mitigation projects within the boundary of the LCA Study area. Such support could, for example, include the incorporation of compensatory mitigation projects within the monitoring framework used for whatever plan is selected, along with other efforts to share technical expertise and scientific tools.

6.2.4.1.5 *Encourage Private Mitigation Banks that Support LCA Plan Objectives*

Mitigation banking has the potential to benefit both the environment and the regulated community. Mitigation banks can provide larger, more ecologically valuable, and more manageable wetland areas than piecemeal, permit-by-permit compensatory mitigation efforts. Mitigation banks can also be sited and designed to take into account the special needs of a particular watershed or hydrologic basin. For the developer, mitigation banking offers a quicker, simpler, and more predictable way to address compensatory mitigation requirements. If sited, designed, and operated properly, specific mitigation banks could complement coastal restoration efforts. For example, a marsh creation bank might be sited in the influence area of a river re-introduction project such that the bank becomes more sustainable, while also resulting in increased nutrient and sediment retention within the given basin. The District would support the establishment of private, entrepreneurial mitigation banks that complement the LCA Plan by helping to identify mitigation bank sites that are consistent with the selected plan, and assisting in the conceptual design of such banks. Consistent with longstanding CWA Section 404 policy, compensatory mitigation will be used only after potential adverse impacts to wetlands have been avoided to the maximum extent practicable.

6.2.4.1.6 *Enhance Internal Coordination*

Effective coordination is critical for ensuring that activities authorized under CWA Section 404 do not conflict with coastal restoration efforts. The LCA PDT would work closely with District personnel responsible for reviewing CWA Section 404 permit applications to help identify cases where proposed development projects might affect existing restoration projects or could have the potential to interfere with future restoration efforts. This coordination has begun; however, further dedication of staff resources is needed for full and effective coordination. Additionally, staff and managers from the regulatory and coastal restoration offices would meet periodically to review on-going and future projects, identify potential conflicts, and further develop strategies for ensuring consistency.

6.2.4.1.7 *Encourage and Support Wetland-Planning Efforts*

Wetland planning can increase certainty for the regulated community, enhance wetland protection, reduce conflict, and expedite permit processing for environmentally acceptable projects. In the context of CWA Section 404, such planning often entails the identification and functional assessment of wetland resources in a given geographic area. This information is then

used to identify areas that are generally suitable for development, along with areas that are generally not suitable for development. Local officials and private parties can then use the results to help identify appropriate future development locations. The information can even be used to develop specific regulatory tools, such as general permits for certain activities in appropriate locations, mitigation banks, and additional protection measures for valuable sites.

Wetland planning efforts are resource intensive in the short-term. Therefore, wetland planning is often most appropriate in areas where high growth rates threaten particularly valuable wetland resources. To be successful, such planning efforts must have strong local involvement and support. In recognition of the potential benefits of wetland planning, the District would support wetland planning efforts in areas that are critical to coastal restoration and where there is strong local support for such planning. The ultimate success of such planning depends upon the extent to which the outcome is embraced and supported by the local community, along with local, state, and Federal sponsors.

6.2.4.1.8 *Expedite the Regulatory Review of Public and Private Activities that are Fully Consistent with the LCA Plan*

It is also important to ensure the regulatory program expedites the permitting of public and/or private restoration activities that are fully consistent with the LCA Plan. There is currently a nationwide permit Number 27 that authorizes restoration, enhancement, and creation of tidal, nontidal, and riparian wetlands. Also, the District on May 1, 1998, announced a Programmatic General Permit that provides expedited authorization of certain wetland restoration activities (excluding CWPPRA Projects) within the Louisiana coastal zone specifically designed to have a beneficial effect on wetlands and/or aquatic resources such as backfilling of artificial channels, terracing in open water areas, and planting of appropriate wetland species to restore degraded wetland habitats. Wetland restoration activities not authorized by nationwide or general permits may nevertheless be fully consistent with the LCA Plan, and should, therefore, be expedited as much as possible. Coordination between regulatory officials and members of the LCA PDT would help determine when restoration proposals are fully consistent with the LCA Plan. For restoration proposals that are consistent with the LCA Plan, efforts would be made to expedite permit processing by making available information developed for the LCA Plan to help address environmental assessment needs for the particular project. It may even be possible to develop a general permit designed for a specific class of activities that are fully consistent with the LCA Plan. Such a regulatory tool would help encourage and expedite environmentally beneficial projects.

6.2.4.1.9 *Review Options for Increasing Protection of Vulnerable Areas*

In some cases, it may be possible for activities allowed under the existing regulatory program to undermine the beneficial effects of restoration projects. For example, there is much concern that certain logging activities that fall under the CWA Section 404(f) silvicultural exemption could in some cases undermine efforts to restore coastal swamp. Using public monies to restore vulnerable areas could be questionable, unless there is some way to increase the protection of the area so that activities that would undermine restoration efforts are precluded.

Tools for increasing the protection of vulnerable areas include acquisition and conservation easements/servitudes. Such approaches rely first and foremost on the willingness of the landowner to sell his property or restrict future activities at the given site. Obviously, such measures would also increase the cost of restoration efforts, and should only be used where existing laws may not adequately protect potential restoration areas. In such cases, it would be hoped that in return for public funding of restoration of a landowner's property, the landowner would in turn be willing to consider some restrictions on future activities.

As the development of the LCA Program planning process continues, the PDT would work closely with interested stakeholders to review tools for increasing protection of vulnerable areas.

6.2.4.2 Hurricane Protection Projects

The District recognizes the importance of ensuring that hurricane protection efforts are consistent with coastal restoration efforts. To that end, the PDT proposes to:

- Develop guiding principles for ensuring consistency between hurricane protection and coastal restoration.
- Assess whether ongoing and future hurricane protection projects are consistent with the LCA Plan during the NEPA review of such projects.
- Use best available science tools to assess environmental effects of hurricane protection projects.
- Enhance internal and external coordination.
- Seek opportunities to develop hurricane protection projects that complement coastal restoration.

6.2.4.2.1 *Develop Guiding Principles for Ensuring Consistency Between Hurricane Protection and Coastal Restoration*

To help ensure consistency between hurricane protection and coastal restoration efforts, the PDT would collaborate with interested parties (including environmental interests, landowners, state, and local government, other Federal agencies, and business interests) to develop guiding principles regarding the ecologically appropriate design, siting, implementation, and operation of hurricane protection projects in coastal Louisiana. Building upon the USACE's environmental operating principles, the hurricane protection guiding principles would emphasize the need to avoid and minimize wetland impacts to the maximum extent practicable, and to ensure that such projects do not interfere with or preclude restoration projects. The guiding principles would also emphasize the benefits of building upon the upland/wetland interface and/or existing levees. In addition to the issue of avoiding direct wetland impacts, the guiding principles would address the need to avoid hydrologic modifications that could result in indirect and secondary wetland losses. The guiding principles would then be applied, as appropriate, to ongoing and future hurricane protection projects. The guiding principles have the potential to both enhance consistency and expedite project reviews by addressing, in advance, key project design and citing issues.

6.2.4.2.2 *Assess Whether Ongoing and Future Hurricane Protection Projects are Consistent with the LCA Plan During the NEPA Review of Such Projects*

The NEPA review of ongoing and future hurricane protection projects is the appropriate venue for assessing whether such projects are consistent with coastal restoration in general, and the LCA Plan in particular. Accordingly, it is recommended to have a section in all relevant NEPA documents, that evaluates whether, and the extent to which, the particular project is consistent with coastal restoration. As necessary, such NEPA documentation would also examine alternatives for making the project more consistent, and if possible, complementary with coastal restoration. Among other benefits, this would provide the public and decision makers with a better opportunity to participate in efforts to ensure consistency between hurricane protection and coastal restoration on a project-by-project basis.

6.2.4.2.3 *Use Best Available Science Tools to Assess Environmental Effects of Hurricane Protection Projects*

As with the wetland regulatory program, fully understanding direct, indirect, and cumulative environmental effects of proposed hurricane protection projects is essential for avoiding, minimizing, and offsetting any potential adverse effects. Yet, assessing the landscape-level effects of large-scale hurricane protection projects continues to be technically challenging. The science tools being developed for the LCA Plan could potentially help examine the effects of such projects, particularly with respect to cumulative impacts. These tools might also assist in designing hurricane protection projects in a way that complements coastal restoration efforts. However, the review of specific projects should not be held while the LCA Plan science tools are under development. Rather, such tools would be used only when they are available and their use would not unduly delay project review.

6.2.4.2.4 *Enhance Internal and External Coordination*

Hurricane protection projects often involve challenging technical and social issues. The siting and design of hurricane protection levees affects the safety and viability of coastal communities into the future, and can have broad, landscape-level impacts on the coastal environment. Developing effective hurricane protection, while also protecting and restoring the coastal environment, requires a wide range of expertise and extensive teamwork. Better internal and external coordination is needed to more effectively meet these goals. Internally, representatives of the PDT would participate in all hurricane protection projects, to ensure consistency with existing and future restoration projects. In seeking public comments on proposed hurricane protection projects, the PDT would help provide the public with information regarding ongoing and future restoration efforts in the project area. The PDT would fully consider all input regarding how such restoration efforts might be affected by the proposed hurricane protection project.

6.2.4.2.5 *Seek Opportunities to Develop Hurricane Protection Projects that Complement Coastal Restoration*

In some case, it may be possible to design hurricane protection projects so that they facilitate or enhance restoration efforts. For example, the USACE is currently conducting a feasibility study regarding the Donaldsonville to the Gulf Hurricane Protection Project. As part of this study, the USACE has the ability to review opportunities to facilitate future restoration projects by restoring the natural hydrologic regime in the Barataria Basin. To the extent that such complementary solutions can be identified, the public stands to benefit from both improved structural hurricane protection, and the natural protection provided by coastal wetlands (along with other important wetland functions). The enhanced coordination and guiding principles discussed above could be used to help identify such solutions.

6.2.4.3 Navigation Projects

As with regulatory and hurricane protection activities, there is a need to ensure consistency between navigation projects and coastal restoration. To that end, the District proposes to:

- Develop guiding principles for ensuring consistency between navigation and coastal restoration.
- Use best available science tools to assess cumulative effects of navigation projects (see above).
- Increase beneficial use of dredged material.
- Enhance internal and external coordination.

6.2.4.3.1 *Develop Guiding Principles for Ensuring Consistency Between Navigation and Coastal Restoration*

To help improve coordination between navigation projects and coastal restoration efforts, the District would collaborate with interested parties (including navigation interests, landowners, state and local government, other Federal agencies, businesses, and environmental organizations) to develop guiding principles regarding ecologically appropriate approaches for navigation improvement projects in coastal Louisiana. The guiding principles would emphasize the need to avoid and minimize wetland impacts, and to ensure that such projects do not interfere with or preclude restoration projects. In addition to the issue of avoiding direct wetland impacts, the guiding principles would address the need to avoid salinity increases and hydrologic modifications that could result in indirect and secondary wetland losses. The guiding principles would then be applied, as appropriate, to ongoing and future navigation improvement projects.

6.2.4.3.2 *Increase Beneficial Use of Dredged Material*

The District fully recognizes the value of using dredged material for beneficial projects such as marsh creation. Given that many areas in coastal Louisiana are sediment deprived, we should take advantage of every opportunity to use dredged material from navigation projects to help bring new sediments into the coastal environment in the form of created marsh and other environmental features. However, there are many instances when budgetary and related policy

constraints limit the extent to which dredged material can be used beneficially for coastal restoration purposes. In such cases, additional funds from another source could cover the incremental cost of using more of the dredged material for marsh creation or other environmental projects. The LCA Plan proposes a program similar to the Continuing Authorities Section 204 of the Water Resources Development Act 1992 to further the beneficial use of dredged material above and beyond that which is currently being done under the District's dredging maintenance program. Funding could be provided by the LCA Program funds and be cost-shared with the non-Federal sponsor. Execution of this program could be coordinated between the PDT and the District's Operations Manager.

6.2.4.3 *Enhance Internal and External Coordination*

Further internal and external coordination is needed to ensure consistency between navigation projects and coastal restoration efforts. Internally, a representative of the PDT would participate fully in all navigation improvement projects to ensure consistency with existing and future restoration projects. In seeking public comments on proposed navigation improvement projects, the PDT would help provide the public with information regarding ongoing and future restoration efforts in the project area, and would fully consider all input regarding how such restoration efforts might be affected by the proposed navigation project.

6.2.4.4 Other Mississippi Valley Division, New Orleans District Projects

The proposed consistency action items discussed above focus on regulatory activities and future and ongoing hurricane protection and navigation projects. In some instances it would also be appropriate to review the extent to which the maintenance and operation of existing projects are consistent with coastal restoration activities, and recommend changes to such projects, where necessary and practicable, to ensure consistency with restoration efforts. As part of the proposed LCA Study, the USACE would review the management of the Old River Control Structure (as part of a long-term study), address wetland loss associated with the Mississippi River to the Gulf Outlet, reevaluate the existing Davis Pond and Caernarvon Diversions, and increase the beneficial use of material dredged as part of the maintenance of existing navigation projects. It is also recognized that there may be other USACE activities (beyond those mentioned previously) that could have implications with respect to coastal restoration efforts (e.g., Continuing Authorities Projects). These other activities would also be reviewed and modified, where necessary and practicable to ensure consistency with coastal restoration. The District would support the review of any and all existing, ongoing, and future USACE projects, where such review is necessary to minimize a potential conflict with coastal restoration or where there is an opportunity to have such projects complement coastal restoration efforts. Based on such a review, recommendations for any and all modifications that are necessary and practicable to improve consistency with coastal restoration efforts would be made.

6.2.5 *Rare and Unique Designations of Habitats*

The District would fully coordinate with the LDWF for threatened and endangered species and rare and unique habitats under the state's jurisdiction.

6.2.6 Coastal Zone Management Act

The CZMA was enacted in 1972 to develop a national program to manage competing uses of and impacts to coastal resources, through the approved management programs of individual participating states. The CZMA Federal consistency requirement mandates that Federal agency activities be consistent to the maximum extent practicable with the enforceable policies of the approved state management program. The Louisiana Coastal Resources Program (LCRP) was approved by the NMFS in September 1980 and began implementation on October 1, 1980, and is administered by the LDNR, CMD.

The relevant citations and specific language are reproduced below. In summary, a Federal agency must review any activity it proposes for consistency with the approved state program, and then present that conclusion and supporting information to the state for review and concurrence or nonconcurrence. The Federal review must include all reasonably foreseeable direct and indirect, secondary, and cumulative impacts to coastal resources.

Coordination between state and Federal agencies, particularly for large, complex projects or programs, should occur at an early stage. Usually this would be during the preparation of the DPEIS, before the Federal agency reaches a significant point in its decision making and while there is still time to modify the activity. 'Coordination' does not necessarily refer to the formal Consistency Determination, rather, the Federal and state agencies should communicate as to the proposed project plans and how they can best meet the requirements of the coastal management program.

In cases where the proposed Federal activity is complex or dependent upon future developments, the need for early coordination can be met through the use of a 'phased consistency.' In brief, a phased consistency is prepared in stages over the planning life of the project. Initially, a Consistency Determination is submitted once the broad scope of the project has been established. As specific elements of the project are refined or additional information is developed, supplemental Consistency Determinations are prepared at a level of detail appropriate for those components.

As an example, a major freshwater diversion project may undergo initial design that lasts several years. The proposed location, size, operating parameters, and many other details may be identified in a general way relatively early in the planning, but as planning proceeds and specific problems and opportunities are encountered, the plan is modified. Consistency coordination at the earliest stages ensures that the overall concept would meet with state agency approval. Continued coordination as the plan evolves would assure that the specific elements are consistent with the state program prior to their construction.

It is anticipated that the LCA Plan, being a large and complex program with a great many component projects, still in the conceptual stage, would best be served by the phased consistency approach (personal communication with Mr. Jeff Harris, LDNR). The overall goals and methods outlined in the LCA Main Report and this FPEIS would be coordinated with LDNR during the planning stage, and submitted for consistency review once the preferred alternative has been identified. As each of the individual projects selected to implement the LCA Plan are conceived

and designed, that phase of the program would be fully coordinated with the state management program pursuant to state and Federal consistency provisions.