

CHAPTER 6 COORDINATION AND COMPLIANCE WITH ENVIRONMENTAL REQUIREMENTS

This chapter documents the USACE coordination and compliance efforts with regard to environmental laws, regulations, policies, rules, and guidance.

6.1 ENVIRONMENTAL COORDINATION AND COMPLIANCE

This section lists the Federal and State laws, regulations, policies, and executive orders that the LCA Comprehensive Study must be in compliance with.

6.1.1 Federal Laws, Regulations, Policies, And Executive Orders

The LCA Comprehensive Study is in compliance with the following Federal laws, regulations, policies, and executive orders:

Table 6-1 Federal Environmental Laws, Regulations, Policies, and Executive Orders.	
Abandoned Shipwreck Act of 1988 Archeological and Historic Act of 1974 Bald Eagle Act Clean Air Act, as amended Clean Water Act of 1977, as amended Coastal Zone Management Act, as amended Coastal Barrier Improvement Act of 1990 Endangered Species Act of 1973, as amended Estuary Protection Act Environmental Justice (Executive Order 12898) Farmland Protection Policy Act Federal Water Project Recreation Act, as amended Fish and Wildlife Coordination Act, as amended Floodplain Management (Executive Order 11988) Food Security Act of 1985 Land & Water Conservation Fund Act of 1965, as amended	Magnuson-Stevens Conservation and Management Act of 1996, as amended Marine Protection, Research, and Sanctuaries Act of 1972 Migratory Bird Habitat Protection (Executive Order 13186) National Environmental Policy Act of 1969, as amended National Historic Preservation Act of 1966, as amended Prime and Unique Farmlands, 1980 CEQ Memorandum Protection and Enhancement of the Cultural Environment, 1971 (Executive Order 11593) Protection of Wetlands (Executive Order 11990) River and Harbor and Flood Control Act of 1970 Water Resources Development Acts of 1976 and 1990 Wild and Scenic River Act, as amended

6.1.2 State Laws And Policies

The LCA Comprehensive Study is in compliance with the following State of Louisiana laws:

Table 6-2 State Environmental Laws	
Air Control Act Archeological Treasury Act of 1974, as revised Louisiana Coastal Resources Program Louisiana Natural and Scenic Rivers System Act	Protection of Cypress Trees Water Control Act Louisiana Threatened and Endangered Species and Rare & Unique Habitats

6.1.3 LCA Comprehensive Study Compliance With Environmental Laws

Full compliance with the above laws, regulations, and executive orders will be accomplished upon review of this PEIS by appropriate agencies and the public, and the signing of a Record of Decision.

6.1.3.1 Clean Water Act - Section 404(b)(1)

The USACE is responsible for administering regulations under Section 404(b)(1) of the Clean Water Act 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 would be closely coordinated with the USACE-MVN Regulatory Branch and/or the Environmental Planning and Compliance Branch throughout planning and design phases.

6.1.3.2 Clean Water Act- Section 401 Water Quality

A copy of this PEIS will be provided to the Louisiana Department of Environmental Quality (LDEQ) for programmatic review of potential Section 401 impacts. As individual projects selected to implement the LCA Program are further conceived and designed, that phase of the program would also be fully coordinated with the LDEQ Office of Environmental Services.

6.1.3.3 Coastal Zone Management Consistency

It is anticipated that the LCA Comprehensive Program, 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 the LDNR). The overall goals and methods outlined in the LCA Program document 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 Program are further conceived

and designed, that phase of the program would also be fully coordinated with the state Coastal Zone Management Program.

6.1.3.4 Fish And Wildlife Coordination Act Report

The USFWS has been a collaborative partner in the LCA Comprehensive Study process with many different experts on birds, mammals, amphibians, and reptiles actively participating on the various LCA Comprehensive Study teams (see chapter 1) 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 PEIS.

6.1.3.5 Threatened And Endangered Species Act Coordination

See also section 3.13, Threatened and Endangered Species. As individual projects selected to implement the LCA Program are further conceived and designed, that phase of the program would also be fully coordinated with the USFWS and NOAA Fisheries for threatened and endangered species under their respective jurisdictions.

6.1.3.5.1 *Louisiana State Threatened And Endangered Species And Rare And Unique Habitats Coordination*

See also section 3.13, Threatened and Endangered Species. As individual projects selected to implement the LCA Program 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.

6.1.3.6 Essential Fish Habitat (EFH)

See also section 3.12, Essential Fish Habitat. The NOAA Fisheries has been a collaborative partner in the LCA Comprehensive Study process. Experts on various marine organisms, as well as EFH, have contributed to the documentation and analysis of potential impacts. These efforts would continue after an LCA Comprehensive Restoration Plan is selected. As individual projects selected to implement the LCA Program are further conceived and designed, that phase of the program would also be fully coordinated with NOAA Fisheries.

6.1.3.7 Clean Air Act - Air Quality Determination

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

6.1.3.8 Historic & Cultural Resources

See also section 3.17, Historic and Cultural Resources. As individual projects selected to implement the LCA Program are further conceived and designed, that phase of the program would also be fully coordinated with the State Historic Preservation Officer (SHPO).

6.1.3.9 Prime And Unique Farmlands

See also section 3.2, Soils. The NRCS has been a collaborative partner in the LCA Comprehensive 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 Comprehensive Restoration Plan has been selected. As individual projects selected to implement the LCA Program are further conceived and designed, that phase of the program would also be fully coordinated with the NRCS regarding Prime and Unique Farmlands.

6.1.3.10 Migratory Bird Habitat Protection

Executive Order 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.

6.1.3.11 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 Executive Order 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.

Executive Order 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 comprehensive coastwide 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 comprehensive restoration effort would be more relevant to particular groups or communities. 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 comprehensive coastwide restoration program could potentially affect minority or low-income populations.

The LCA Comprehensive Study project delivery team (PDT) recognizes the need to consider potential EJ issues throughout the entire LCA Comprehensive 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 final array of LCA Comprehensive Plans are currently being developed. Although restoration measures and their general locations are discussed as part of the LCA Comprehensive 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 measure.

Given that the LCA Comprehensive 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 PEIS, (4) solicit input on potential EJ issues, and (5) commit to fully reviewing any potential EJ issues during the NEPA assessment of specific LCA measures.

On 24 January 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 study team also teleconferenced with EJ experts from the USEPA's Region 6 office in Dallas, Texas. The objective of this meeting was to begin informing and sensitizing PDT members to EJ issues.

In addition, as part of the NEPA process, the PDT has held numerous public meetings, during which attention was paid 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 affects.

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 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. Accordingly, the PDT requests comments pertaining to potential EJ issues associated with the LCA Comprehensive Study programmatic report/PEIS.

In summary, the PDT is committed to ensuring that any potential EJ issues are addressed as this coastal restoration 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 Comprehensive Study process in general.

6.2 CONSISTENCY OF THE LCA PROGRAM WITH OTHER EFFORTS

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. But 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 Comprehensive Study Program 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.
- Make the LCA Comprehensive Study Plan a model that others can emulate.

6.2.2 Ensuring Consistency Between Development And Coastal Protection And Restoration

Nowhere is the economy and the environment more inextricably linked than in coastal Louisiana, which supports the Nation's largest port and second largest fishery. Louisiana provides almost one third of the total oil produced in the U.S., while also providing critically important habitat for millions of birds, mammals, and fish. Louisiana's coastal wetlands are in many ways the very foundation of the region's economy and have important economic implications for the Nation as well. Indeed, the economic future of coastal Louisiana and important sectors of the U.S. economy may very well depend on the outcome of coastal protection and restoration efforts.

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 Comprehensive Study 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.

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 made to date as a result of the formation of an interagency collocated restoration team housed within the USACE-MVN. These proposed action items are intended to be a starting point for developing the processes and mechanisms needed to move towards greater consistency.

6.2.3 Need For Consistency

6.2.3.1 Consistency With CWWPRA

All the plans in the final array are consistent with and complementary to the CWPPRA. That act was passed in 1990 and sets up a Federal/State Task Force to prepare a plan to protect and restore Louisiana's disappearing coastal ecosystem. This plan was completed in 1993, was improved in the Coast 2050 Plan, and served as part of the basis for development of the LCA Comprehensive Study measures, projects, and final array of plans.

CWPPRA provides about \$50 million per year to construct coastal wetlands projects. With limited funding and loss coastwide, CWPPRA has concentrated on smaller scale projects

distributed across the coast. In contrast, the final array of plans in the LCA Comprehensive Study 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. The final array of plans in the LCA Comprehensive Study would be expected to create and preserve approximately 365,000 to 577,000 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, and highway construction, and others. All of these activities can, to varying extents, harm wetlands. At the largest scale, it is possible for individual development projects to directly undermine coastal restoration efforts. Whereas, 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. It is, however, unreasonable 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. This would be accomplished by the LCA PDT partnering with Federal and state regulatory programs to implement innovative science-based and scale-appropriate methods and tools that would be used to further minimize adverse impacts to Louisiana's coastal wetlands.

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. Such losses include direct impacts from the placement of the levee and borrow areas; and indirect and secondary effects from modified hydrology and induced development. Ironically, such impacts can further reduce the natural storm protection 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 is, therefore, to increase structural protection where needed while, at a minimum, not decreasing the natural protection and other important functions and values provided by wetlands. MVN 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 local, statewide, and national economies. Nevertheless, 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. MVN 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.

MVN 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, it 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 would no doubt be necessary to ensure the vitality of this critical economic asset. As with hurricane protection measures, we would need to develop ways to ensure that future navigation projects avoid and minimize wetland losses as much as possible, while at the same time maximizing the beneficial use of dredged material for restoration activities.

6.2.4 Proposed Action Items

6.2.4.1 Regulatory Programs

The interagency PDT that developed the final array of plans for the LCA Comprehensive Study recognizes the importance of ensuring that regulated activities within the coast do not undermine or run counter to Louisiana coastal restoration efforts. To that end, once an LCA Comprehensive Study Plan has been selected, the PDT, working with the USACE and the state, proposes to:

- Continue reviewing permit applications to minimize potential conflicts with the LCA Comprehensive Study 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 Comprehensive Study 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 Comprehensive Study plan.
- Review options for increasing protection of vulnerable areas.

6.2.4.1.1 *Continue Reviewing Permit Applications To Minimize Potential Conflicts With The LCA Comprehensive Plan*

During the review of permit applications for projects affecting areas within the LCA Comprehensive Study Plan boundary, the PDT would work with the USACE and the state to help 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 below). 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 Comprehensive Study 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 final array of LCA Comprehensive Study Plans 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 Comprehensive Study Plan implementation process, no matter what plan is selected, could enable better assessment of how wetland permit decisions might impact wetland functions within a given basin and coast-wide.

Accordingly, the LCA PDT proposes to utilize the best available science tools to assess the potential cumulative effects of the Federal regulatory permit program within the boundary of whichever LCA Comprehensive Study Plan is selected. The cumulative effects of all individual and general permit decisions and associated compensatory mitigation would be evaluated every two years. Individual permit proposals that would result in potentially significant direct, indirect, and/or cumulative impacts to waters of the U.S., including wetlands, or that would otherwise directly or indirectly substantially reduce and/or jeopardize the function or value of the Restoration plan, 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 will 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 LADNR 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 15 August 2003 with Honora Buras, LDNR). “This procedure is as follows: if a proposed project is within 1/4 of a 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 compensatory mitigation is critical to the overall success of the CWA Section 404 program. If done properly, compensatory mitigation can offset lost wetland functions, thereby greatly reducing 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 50 active or pending mitigation areas in the USACE-MVN alone. Unfortunately, high permit review workloads hamper the USACE-MVN’s ability to effectively monitor and track ongoing and completed compensatory mitigation areas.

Given the importance of effective compensatory mitigation to ensuring that regulated activities do not run counter to restoration efforts, the PDT would review opportunities to help support mitigation projects within the boundary of whatever LCA Comprehensive Study Plan is selected. 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 Comprehensive Study 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 PDT would support the establishment of private, entrepreneurial mitigation banks that complement the whatever plan is selected by helping to identify mitigation bank sites that are consistent with the selected plan, and assisting in the conceptual design of such banks.

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 PDT would work closely with USACE 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 should 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 PDT 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 Comprehensive Study Plan*

It is also important to ensure that the regulatory program expedites the permitting of public or private restoration activities that are fully consistent with the principles and specific measures of whatever plan is selected as the LCA Comprehensive Study Plan. Coordination between regulatory officials and members of the PDT would help identify activities that are fully consistent. Once identified, every effort should be made to expedite permit processing for such activities, including using information developed for the LCA Comprehensive Study Plan, when it is selected, to help address environmental assessment needs for the particular project. It may even be possible to develop a general permit for a specific class of activities that, again, are fully consistent with whatever plan is selected as the LCA Comprehensive Study 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, which 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 such 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/her property or restrict future activities at the restoration site. Obviously, such measures 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, that landowner would in turn be willing to consider some restrictions on future activities.

As the development of the plans in the final array and ultimately the selection of a plan 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 PDT recognizes the importance of ensuring that hurricane protection efforts are consistent with coastal restoration efforts. To that end, the team proposes to:

- Develop guiding principles for ensuring consistency between hurricane protection and coastal restoration.
- Assess whether on-going and future hurricane protection projects are consistent with the LCA Comprehensive Study 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 key project design and citing issues in advance.

6.2.4.2.2 *Assess Whether On-Going And Future Hurricane Protection Projects Are Consistent With The LCA Comprehensive Study During The National Environmental Policy Act (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, once it is selected, the LCA Comprehensive Study Plan in particular. Accordingly, the PDT recommends having 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 final array of LCA Comprehensive Study plans 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 LCA Comprehensive Study 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 citing 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 two 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, and 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 such 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 PDT 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 PDT 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 PDT 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. There are many instances, however, 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 Main Report proposes a program similar to the Continuing Authorities Section 204 of the WRDA 1992 to further the beneficial use of dredged material above and beyond that currently done under MVN dredging maintenance program. Funding for the cost could be provided by the LCA project funds and be cost-shared with the non-Federal sponsor. Execution of this program could be coordinated between the CRT and the MVN Operations manager.

6.2.4.3.3 *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, New Orleans District Projects

The proposed consistency action items focus on regulatory activities and future and ongoing hurricane protection and navigation projects. The PDT acknowledges that in some instances it could 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. Similarly, it is also recognized that there are other USACE activities (beyond hurricane protection, navigation, and the regulatory program) that could have implications with respect to coastal restoration efforts (e.g., Continuing Authorities Projects). These other activities should also be reviewed and modified where necessary and practicable to ensure consistency with coastal restoration. Accordingly, the PDT 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 this review, the PDT would recommend any and all modifications that are necessary and practicable to improve consistency with coastal restoration efforts.

6.2.5 Rare And Unique Designations Of Habitats

The PDT would fully coordinate with the Louisiana Department of Wildlife and Fisheries for threatened and endangered species and rare and unique habitats under their jurisdiction.

6.2.6 Coastal Zone Management Act

The Coastal Zone Management Act (CZMA) was enacted in 1970 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 NOAA in September 1980 and began implementation on 1 October 1980, and is administered by the LDNR, Coastal Management Division.

The relevant citations and specific language are reproduced below, but 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 non-concurrence. 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 draft environmental impact statement (EIS), 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 (reintroduction) 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, and continued coordination as the plan evolves assures that the specific elements are consistent with the state program prior to their construction.

It is anticipated that the LCA Comprehensive Study Program, 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 Comprehensive Study Program document 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 Comprehensive Study Program are conceived and designed, that phase of the program would also be fully coordinated with the state management program pursuant to state and Federal Consistency provisions.