Wetlands Mitigation and Mitigation Banking in Louisiana

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I. INTRODUCTION

The swamps, bogs, sloughs, marshes, bottomlands, wet meadows, prairies, ponds, seeps, potholes, dune grasses and seabeds of the American landscape are the primary pollution control systems of the nation's waters, and the primary determinants of their water quality. . . . These same wetlands purify and recharge ground water, providing municipal drinking water supplies for towns and cities across the country.¹

More than seventy percent of America's commercial seafood harvest originates in the coastal estuaries.² This translates into an estimated annual value of $3.6 billion and an economic output of $31 billion.³ Louisiana wetlands provide at least half of the nation's seafood production with a value ranging from $2.5 billion to $4 billion per year.⁴ The future of Louisiana's fishing industry depends upon the survival of it's coastal wetlands because "98 percent of the seafood harvested in the Gulf of Mexico relies on those [Louisiana] wetlands during part of their life cycles."⁵ The wetland dependent fishing industry also supplies the state with 90,000 jobs.⁶

¹ Copyright 1999, by LOUISIANA LAW REVIEW.
² Research for this publication was funded in part by the Louisiana Sea Grant College Program, a part of the National Sea Grant College Program, maintained by NOAA, U.S. Department of Commerce. The Louisiana Sea Grant College Program at Louisiana State University is also supported by the State of Louisiana.
³ Editor's Note: The Editor would like to thank Jim Wilkins for his assistance in the production of this comment.
⁵ Id.
⁶ Id.
⁸ Paul Templet of the Louisiana State University Environmental Studies Institute found that Louisiana's fisheries "are worth at least $1 billion per year." The Associated Press, Global Warming Meeting Turns up the Heat on Louisiana, The New Orleans Times-Picayune, December 1, 1997, at A6.
¹⁰ Anderson, supra note 5, at 1B; see also Bell, supra note 4, at B1 (Fishing industry provides 100,000 jobs).
In America today, less than half of the original 215 million acres of wetlands remain. From 1985 to 1995, wetlands disappeared nationally at the alarming rate of 117,000 acres per year. Grady McCallie of the National Wildlife Federation estimates that "[w]e are still losing the equivalent of 12 football fields [every] hour." In the Gulf of Mexico, coastal wetlands continue to be lost at over 32,000 acres per year as a result of changes in upstream watersheds, erosion, and other human activities. In Louisiana, wetlands are disappearing at a rate of thirty-five square miles per year or about one-half acre every ten minutes, representing as much as eighty percent of the nation’s total loss. If the current rate of loss continues, large areas of the Louisiana coastal zone will disappear forcing the relocation of its inhabitants in the near future.

II. WETLANDS REGULATION

Human activities affecting wetlands are regulated by federal and state permit programs. The Federal Clean Water Act Section 404 Permit Program is administered by the Army Corps of Engineers ("Corps"). The Louisiana parallel, the State and Local Coastal Resources Management Act’s Coastal Use Permit Program ("CUP"), is administered by the Louisiana Department of Natural

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7. Houck & Rolland, supra note 1, at 1251.
8. The nation’s average net loss of wetlands from 1985-1995 was 117,000 acres per year which is down from the 290,000 acre annual rate in the previous decade and the 458,000 acres the decade before. Wetlands Loss Slows, But Hasn’t Stopped, supra note 5, at A1. But see Jon A. Kusler, Esq., Association of Wetland Managers, No Net Loss and the Role of Wetlands Restoration/Creation in a Regulatory Context 5 (on file with the author) (stating that wetland loss nationally remains closer to 300,000 acres per year annually).
10. Meeting Our Coastal Challenges (U.S. Fish and Wildlife Service) (on file with the author).
11. Coastal Restoration Policy Developed, La. Coast Lines (The Dep’t of Natural Resources), Dec. 1995 at 2. See also A White Paper, The State of Louisiana’s Policy for Coastal Restoration Activities (Office of the Governor), April 24, 1995 [hereinafter Louisiana’s Policy]; Anderson, supra note 5, at 1B. But other sources report a lower rate of 24 to 25 square miles per year of loss in Louisiana totaling fifty-one percent of the nation’s total loss. Wetlands Loss Slows, But Hasn’t Stopped, supra note 5, at A1; Ferstel, supra note 9, at 3B.
12. Meeting Our Coastal Challenges (U.S. Fish and Wildlife Service) (on file with the author); Coastal Restoration Policy Developed, La. Coast Lines (The Dep’t of Natural Resources), Dec. 1995 at 2.
13. Bell, supra note 4, at B1 (quoting Mark Davis, executive director of the Coalition to Restore Coastal Louisiana).
Resources ("LDNR"), in the statutorily defined Coastal Zone. Restricting activities in wetlands through permit regulation allows the agencies to assess individual impacts on the ecosystem and to prevent those impacts from taking place when necessary.

A. Compensatory Mitigation

Agencies usually require developer/applicants to mitigate the environmental damage resulting from a construction project as a condition of granting a permit to build or develop in a wetland area. Compensatory mitigation is achieved through a process where a permittee restores, creates, or protects another wetland in exchange for, or to replace the one destroyed. "Wetland mitigation banking" is a type of service industry that supplies established wetlands and their associated values that developers may purchase to fulfill the compensatory mitigation requirements of a permit. A wetland created or restored is the "bank." Its ecological values are quantified into "credits" that the developer purchases from the bank. Meeting compensatory mitigation requirements through the purchase of mitigation bank credits is beneficial to the developer who is usually ill-equipped to successfully create such a wetland. The process is also more efficient for regulators because banks consolidate a greater number of permittee's mitigation into one area which can be easily monitored for success.

Mitigation banking as defined by the Environmental Protection Agency ("EPA") is "the restoration, creation, enhancement, and, in exceptional circumstances, preservation of wetlands or other aquatic habitats expressly for the purpose of providing compensatory mitigation in advance of discharges into wetlands permitted under the Section 404 regulatory program." Wetland values, which are created at the bank, are quantified by the Corps, converted into credits, and sold to a developer. Proof of purchase of wetland bank credits satisfies the developer's compensatory mitigation obligations under a permit.

In 1989, before the Ducks Unlimited Sixth International Waterfowl Symposium, then-President Bush announced the goal of "no net loss" for wetlands in the United States. In 1993, President Clinton adopted this same stance on wetland conservation, recognizing the vital ecological and economic importance of wetlands to the nations health and economy. Recently, Vice

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15. Frank E. Skillem, Environmental Protection Deskbook § 8.32 (2d ed. 1995).
President Gore carried the Clinton-Bush directive a step further by calling for a net gain of 100,000 acres of new wetlands by 2005.\(^\text{18}\)

The Clinton Administration’s plan for achieving the “no net loss” goal for wetlands utilizes a concept called “sequencing.”\(^\text{19}\) Sequencing is a process requirement imposed on permit recipients ensuring that the project will first avoid wetland impacts, then minimize any impacts, and finally provide compensatory mitigation for all unavoidable wetland damage.\(^\text{20}\) The mitigation may be accomplished in a number of ways, depending upon the policy of the particular agency issuing the permit, and may involve creating, restoring, or enhancing damaged wetlands.\(^\text{21}\)

In 1992, while national attention focused on the “no net loss” policy promoting mitigation banking, Louisiana enacted Louisiana Revised Statutes 49:214.41 authorizing the creation and use of mitigation banks in Louisiana’s Coastal Zone. The 1995 regulations, promulgated under this 1992 statute, create a preference for using mitigation banks to compensate for wetland loss.

B. Mitigation Banking—An Incentive Approach

There are two competing theories at work behind wetland regulation. One is the traditional “command and control” theory “which specify[es] uniform technologies or performance standards that give little flexibility to regulated firms.”\(^\text{22}\) The other is the under-explored “economic incentive” theory which “provide[s] firms with incentives to look for more effective ways of making sustained environmental progress.”\(^\text{23}\) Mitigation banking is a response to the former, by utilizing the latter. Wetland banking encourages conservation through individual profit motivation.

\(^\text{18}\)\text{Vice President Gore also seeks to reduce the water pollution which has contributed to the “dead zone” off the Louisiana Coast and is calling for two million miles of “buffer strips protecting waters from agricultural runoff by ... 2002.” Mike Dunne, New Wetlands Policy Lifts Hopes of Saving State’s Coastline, The Baton Rouge Advocate, October 28, 1997, at 14B.}

\(^\text{19}\)\text{Memorandum of Agreement Between the Environmental Protection Agency and the Dept’ of the Army Concerning the Determination of Mitigation Under the Clean Water Act Section 404(B)(1) Guidelines, FRL-3732-3, 55 Fed. Reg. 9210 (Dep’t of the Army 1990); Virginia S. Albrecht, Federal Regulation of Wetlands, CA34 ALI-ABA 251, 267 (Aug. 16, 1995).}

\(^\text{20}\)\text{Memorandum of Agreement Between the Environmental Protection Agency and the Dept’ of the Army Concerning the Determination of Mitigation Under the Clean Water Act Section 404(B)(1) Guidelines, FRL-3732-3, 55 Fed. Reg. 9210 (Dep’t of the Army 1990).}


\(^\text{22}\)\text{Robert W. Hahn, Robert N. Stavins, Incentive-Based Environmental Regulation: A New Era from an Old Idea?, 18 Ecology L.Q. 1, 3 (1991).}

\(^\text{23}\)\text{Id.}
Uniform standards are the hallmark of command and control regulations. An agency sets out minimum requirements and applies them uniformly to all regulated parties. Enforcement is accomplished through permitting and sanctions for violations of issued permits. The Federal Section 404 Permit Program is an example of command and control regulation.

The trend in environmental policy is to encourage environmental responsibility through economic incentive based programs. "We need to encourage people to take conservation measures and not feel that in doing so they're slitting their own wrists." Incentive theorists believe that the regulating agency should take into account the relative economic feasibility and reduction capacity of each polluter and set case by case standards while still meeting an optimal pollution goal. Thus, the firm which is able to reduce at a low cost could cut discharges well below the required level. The amount of environmental benefit from this reduction is quantified into credits. A credit represents the difference between the standard set by the agency and the actual discharge. The agency then correspondingly transfers the credit from the seller to the purchaser's account. This process is called credit trading. The amount of environmental benefit over and above the standard, the credit, can be sold at a profit. Credit trading programs are in use with other environmental regulatory programs such as the Clean Air Act.

Only a few economic incentive programs are used in wetlands protection. The Swampbuster and Wetlands Reserve programs enacted under the Food Security Act are incentive and disincentive programs for agriculture, the other is mitigation banking which is part of a "tradable permit system." These economic incentive programs encourage landowners to create, restore, or conserve wetlands on their property by allowing them to make a profit from a land use choice which promotes conservation. "Since more than seventy percent of all wetlands are on private lands and since economic considerations drive most land use decisions," a regulatory approach that offers economic incentives can be more effective than the traditional command and control regulation. This principle

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goal is achieved with a mitigation bank that provides a profitable land use choice while promoting the conservation of wetlands and other natural resources.

Currently, there are no federal laws or regulations governing mitigation banking. However, the EPA and the Corps have issued internal guidelines covering the utilization and creation of mitigation banks. The guidelines advise Corps personnel administering the Section 404 permit program, as well as other agencies with wetland jurisdiction, on the appropriate use of mitigation bank credits in compensating for wetland damage. These guidelines enunciate a policy favoring the use of mitigation banking as a tool for meeting the “no net loss” goal and an option, under appropriate conditions, for mitigation under permit programs. Regulators support the use of mitigation bank credits as compensatory mitigation because the success of the mitigation is pre-determined and the risk of eventual failure is therefore reduced, the higher overall success rate of banked wetlands over individually created wetlands, and the simplicity of monitoring one site rather than multiple individual mitigation projects. The approval is widespread but the degree of reliance on mitigation banking varies among states and different agencies. By placing the highest priority on the use of mitigation bank credits in the 1995 regulations, LDNR has expressed strong support for mitigation banking.

Louisiana’s Fina La Terre was one of the first private-use mitigation banks in the nation. The Fina Corporation foresaw the need for future compensatory mitigation requirements for its oil and gas exploration and production projects. Fina recognized that large wetland areas are less expensive to create and maintain than are successive individual smaller projects and provided for future mitigation by creating one large-scale 7,200 acre wetland. Serving as a wetland bank, Fina La Terre sells fresh, intermediate, and brackish marsh credits to other oil and gas permittees for $50.00 per credit. The Entergy Corporation is planning

33. Id.
34. Id.
35. Beck, supra note 17.
37. Telephone Interview with John Woodard, Surface Manager, Fina La Terre, (March 24, 1997).
38. Id.
39. Id.
40. Id. Seeking to facilitate more efficient permit processing, usually delayed by the approval of mitigation conditions, Tenneco, bought out by Fina in 1988, established this wetland bank on land already owned by the company. Because it was the first such bank in the nation, being established in 1985 before entrepreneurial banks, the goal was to acquire a tool for facilitating permitting to break even, not to turn a profit. Fina La Terre’s life is 25 years, a figure established by negotiation between the agencies and the founders prior to the new regulations, which would have obligated the bank for only 20 years. Given their mission, the fact that the company
to restore and enhance 1,500 acres of saline marsh near Grand Isle. Entergy hopes the marsh will serve as a private and public mitigation bank and from which the company can sell credits for use in the Grand Isle area.

Wetland banks are also created as purely private entrepreneurial businesses. After agency approval of a bank, the credits may be sold to developers for a sizable profit. The Wetland Environmental Team’s (“WET”) project in Georgia is the first example of a strictly entrepreneurial bank. In December of 1992, WET received a permit to restore a 350-acre hardwood swamp. WET purchased a conservation easement from the Trappist Monks at the Monastery of the Holy Spirit and is planning to restore this land to its original swamp habitat. The credits are expensive, six acres worth sold for $90,000. WET estimates that it will generate about $3 million, with much of the profit going to the monastery which owns the land.

Additionally, In August of 1993, the Florida Wetlandsbank firm created the first commercial, private-public bank, a 345-acre bank which is owned by the city of Pembroke Pines. Florida Wetlandsbank leases the property from the city for $7,000 per acre and in 1995 sold sixty-eight acres worth of credits to home builders and commercial developers for approximately $40,000 per acre. Pembroke Pines, will receive a restored wetland, a park with a boardwalk, and picnic areas from the bank as part of the deal.

already owned and managed the land, and the mere 25 year obligation, overhead is naturally low and the value is passed on to their customers, subject to periodic review by the management, of course.

41. Telephone interview with Randy Williams, Environmental Specialist, Entergy Services, Inc. (on file with the author). Mr. Williams estimates that the permit for the saline marsh bank will be granted in early 1998 at which time the phased in bank will have approximately fifty percent of it’s estimated 200-300 credits available for sale at around $10,000 per credit. Because Entergy is restoring and enhancing the marsh rather than creating it, the credits will not be granted on a one to one ratio. Under the WVA formula enhanced and restored wetlands create a lower value per acre than created and functioning wetlands. Thus the ratio of exchange will be closer to a five to one rate. Thus, for its 1,500 acres effort, Entergy may receive about 300 credits for use and sale.

42. Id.
44. Id.
45. Id.
46. Id.
47. Id.
48. Id. at 13.
III. A COMPARISON OF LOUISIANA’S WETLANDS LEGISLATION TO THE FEDERAL CWA SECTION 404 PROGRAM

A. The Legislative Directive

The State and Local Coastal Resources Management Act ("SLCRMA"), authorizes the LDNR to regulate activities in the Coastal Zone which have a direct and significant impact on coastal waters or wetlands.\(^4\) The Coastal Management Division of the LDNR administers Louisiana’s wetland permit program, the Coastal Use Permit Program ("CUP"), authorized by SLCRMA.\(^5\) Mitigation banking in Louisiana was sanctioned by the legislature in 1990 in connection with the CUP Program by amendment to Louisiana Revised Statutes 49:214.41. This amendment included a mandate that LDNR promulgate regulations requiring mitigation for CUPs and include rules for the creation and use of mitigation banks in the Coastal Zone.\(^6\)

B. Jurisdictional Differences

A Coastal Zone project requiring a Section 404 permit from the Corps will also require a state CUP from the LDNR (unless the activity falls into one of the state exceptions).\(^7\) However, there are geographical and technical differences in the coverage of each program. The state program is broader in relation to “activities” it covers. The CUP is required for all activities which have “direct and significant impacts on coastal waters.”\(^8\) The federal Section 404 permit is only required for activities involving discharge of dredge or fill material.\(^9\) The Corps exempts certain activities related to farming, maintenance, and activities with minor impacts on wetlands.\(^10\) The LDNR exempts similar activities.

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\(^5\) Louisiana actually has two separate statutory programs for protecting wetland resources. The other, the Coastal Wetlands Conservation and Restoration Program (CWCERP), authorizes the implementation of protection, enhancement, and restoration for coastal wetlands through the Coastal Vegetated Wetlands Conservation and Restoration Plan. The plan is implemented through the Legislature’s annual allocation of money from the trust fund and federal matching funds. La. R.S. 49:213.6-214.1 (1998).
\(^8\) The Coastal Zone is a geographic limitation on the jurisdiction of the programs. The Coastal Zone boundary is very particularly defined in Louisiana Revised Statutes 49:214.24. Any activity proposed to be conducted in the Coastal Zone which is considered to be a “use of concern” requires a state CUP.
\(^10\) The Corps interpretation of the phrase “discharge of dredged or fill material” was officially expanded in 1993 to include activities having the effect of “destroying or degrading” wetlands which prior to 1993 did not require permitting (i.e. draining). Corps RGL 93-3 (Sept. 13, 1993).
\(^11\) Clean Water Act § 404, 33 U.S.C. § 1344, Section (f) expressly exempts six categories of activities involving the discharge of dredged or fill material from regulation. These exemptions correspond to the USDA wetland regulatory programs under the FSA and generally include a) normal
activities including agriculture, aquaculture, emergency measures, forestry, recreational hunting and fishing, and maintenance of existing structures, as long as the activity does not have a "direct and significant impact on coastal waters." The Louisiana regulations, like the Section 404 single family housing exemption, allows for the construction of a single family home without a CUP, but Louisiana also allows a narrow exemption for the construction of a camp and for minor dredge and fill activity "necessary for the structure itself and for the installation and maintenance of septic or sewerage facilities."

The federal program is broader with respect to geographical jurisdiction. The prohibition against "discharge of dredged or fill material into the waters of the United States," as interpreted, extends to all wetlands. The federal program makes no exceptions. Once an area is designated as a wetland, the Corps has jurisdiction. However, the state program exempts wetlands which are five-feet above mean sea level, and "fastlands," and is confined to the statutorily defined Coastal Zone.

Farming, silviculture, and ranching; b) maintenance activity, including emergency reconstruction of flood and erosion control structures; c) construction and maintenance of farm ponds or irrigation ditches; d) construction of temporary sedimentation basins; e) construction or maintenance of farm roads and temporary mining roads, under best management practices to protect the flow and integrity of waters and the aquatic environment. A catch-all provision under (f)(2) warns that any discharge of dredged or fill material into the navigable waters for the purpose of bringing an area of the waters into a use to which it was not previously subject, impairing circulation or flow, or reducing the waters reach, will be required to have a permit.

56. La. R.S. 49:214.34 (1998). The regulatory exemptions are found at Louisiana Administrative Code 43:1.723(B); Section (B)(2) requires that if any of these excepted activities will "result in discharges into coastal waters, or significantly change existing water flow into coastal waters," then the person must notify LDNR, and warns that if any of these activities do result in "a significant impact on coastal waters, the department may conduct [an] investigation," and require a CUP if a "direct and significant" impact will result to coastal waters.


59. Id.

60. "Fastlands" are "lands surrounded by publicly owned, maintained, or otherwise validly existing levees, or natural formations, as of the effective date of this Subpart or as may be lawfully constructed in the future, which levees or natural formations would normally prevent activities, not to include the pumping of water for drainage purposes, within the surrounded area from having direct and significant impacts on coastal waters." La. R.S. 49:214.23(9) (1998).

61. The Coastal Zone boundary is particularly defined in Louisiana Revised Statutes 49:214.24.
C. Louisiana Deviates from the Federal Rules

Both the Louisiana statute and the Federal Guidance incorporate "sequencing" language into the regulatory definition of "mitigation." The EPA Policy Guidance Document states that mitigation is "sequentially avoiding impacts, minimizing impacts, and compensating for remaining unavoidable impacts." Similarly, Louisiana's statute 214.41(A)(3) defines "mitigation" as "all actions taken by a permittee to avoid, minimize, restore, and compensate for ecological values lost due to permitted activity." Also, the Louisiana statute recognizes all of the federally recognized forms of "compensatory mitigation," (restoration, creation, enhancement or preservation).

However, one should not be misled by the similarities. The EPA Policy Guidance Document states that "mitigation means sequentially avoiding impacts, minimizing impacts, and compensating for remaining unavoidable impacts." The term "unavoidable" in the quoted text, absent from the Louisiana statute, references the EPA's "practicable alternatives" test which prohibits permitting wetland activity if an alternative site, or less damaging alternative method of construction is available. In fact, the test creates a presumption that a "practicable alternative" does exist for non-water dependent projects. Lacking the term "unavoidable," the Louisiana statute expresses a relaxed form of the federal sequencing requirement because it does not require the applicant to exhaust all alternatives to avoid the damage to a wetland or overcome the non-water dependent project presumption. Additionally, the EPA Policy Guidance Document, supra note 32, at 58607.

63. EPA Policy Guidance Document, supra note 32.
66. EPA Section 404(b)(1) Guidelines create the "Practicable Alternatives" test. These Guidelines prohibit permitting the discharge of dredged or fill material if a practicable alternative exists to the proposed project which would have a less adverse impact on the aquatic ecosystem, as long as the alternative does not have other significant environmental impacts. 40 C.F.R. § 230.10(a).

The alternative site or project is "practicable" if it is capable of achieving the developer's purpose, considering project costs, technical, and logistical factors. 40 C.F.R. § 230.3(q). The Guidelines create a presumption that a practicable alternative does exist for non-water dependent projects proposed for wetland areas. 40 C.F.R. § 230.10(a)(3). It is rebutted by showing that a "no less environmentally harmful alternative" site which is not a wetland is available, or an alternative construction technique (which does not require a discharge of material into an aquatic site) is practicable.

67. Under Section 404 compensatory mitigation is defined as "the restoration, creation, enhancement, or in exceptional circumstances, preservation of wetlands and/or other aquatic resources for the purpose of compensating for unavoidable adverse impacts" (emphasis added). 26 Envtl. L. Rep. 35632; 60 Fed. Reg. 58605, 58607 (Nov. 28, 1995). Likewise, under Louisiana Revised Statutes 49:214.41(A)(1) "compensatory mitigation means replacement, substitution, enhancement, or protection of ecological values to offset anticipated losses of those values caused by permitted activity."

In addition to the practicable alternatives test, the Section 404 program incorporates the "significant degradation" analysis. 40 C.F.R. § 230.10(b)(4)(c). This is a type of before and after assessment.
disfavors "preservation" of existing wetlands. However, Louisiana’s statute places "protection" of existing wetlands on equal footing with the other forms of mitigation. The EPA disfavors preservation as a method of wetlands conservation because preservation usually does not contribute to the "no net loss" goal. With preservation, no new wetland values are gained to offset the loss caused when wetlands are destroyed by permitted development. The EPA will, under certain circumstances, accept the preservation of a wetland for mitigation requirements even if that wetland is threatened with an immediate impending risk of destruction.

Louisiana, however, allows a permittee to mitigate loss by the preservation of an existing wetland without the threshold requirement that the wetland be threatened with immediate destruction. The Louisiana statute includes provisions with no counterpart in the federal system. These provisions give the landowner the right to choose the location of the mitigation project and include for a variance exception from the required mitigation.

IV. THE NEW LOUISIANA REGULATIONS

A. A New Policy

During the notice and comment period, the LDNR stated in a memorandum: "we all must recognize that the concept of mitigation credit areas will not work unless the LDNR, state advisory agencies, the Corps, and federal advisory agencies are in synchrony...." It seems that the LDNR envisioned the creation of a wetland mitigation program in harmony with the federal and other state permitting programs. With Louisiana Revised Statutes 49:214.41, the

of the project, including the off-set effect of the implemented mitigation. This determination takes into account factors including the effect on human health through municipal water supplies, fish, shellfish, wildlife, and the entire food chain as well as recreational, aesthetic and economic values. Because the initial permit decision takes into consideration the benefits of the mitigation project, in order for that assessment to be accurate there should be relative certainty about the success of a mitigation project. This is one of the reasons mitigation banking is being promoted, it provides more assurances that the mitigation will actually replace losses because the success of the project is predetermined as opposed to an individual project which may or may not, in the end, be successful. Thus, relying on the developer to insure successful mitigation is more speculative than relying on a banker because a banker has more experience, a greater investment and is operating under more stringent regulations and monitoring than the individual project developer.

68. EPA Policy Guidance Document, supra note 32, at 58608.
70. EPA Policy Guidance Document, supra note 32, at 58609.
71. Id.
73. La. R.S. 49:214.41(C) and (E) (1998).
74. LDNR, Memorandum to commenting parties, at 10 (Nov. 28, 1992) (on file with the author).
legislature directed the LDNR to develop and adopt regulations requiring mitigation for permitted activities in the coastal zone.\textsuperscript{75}

The LDNR’s “ultimate goal [in writing the new regulations was] to develop a mitigation approach that would support long-term wetland conservation efforts and also complement state, federal, local, and private efforts to conserve wetlands, while making the permitting process more predictable and eliminating the unnecessary permitting delays.”\textsuperscript{76} However, two factors frustrated LDNR’s effort to create the harmonized program envisioned by the drafters: First, operating under the landowner veto and the variance procedure offered in the statute significantly limited the LDNR’s ability to conform Louisiana’s mitigation priorities to the federal Section 404 program;\textsuperscript{77} second, these regulations are the product of a three year evolution spanning two different administrations and included extensive commenting procedures on each of four drafts from several state advisory agencies, the Corps, federal advisory agencies, landowners, environmental groups, local governments, development interests, industry, and the general public.

B. The Old “Band-Aid” Approach

Prior to the drafting of Louisiana’s new mitigation and mitigation banking regulations, Louisiana Administrative Code 43:1.724, the mitigation selection procedure was inconsistent, sometimes non-existent, and largely discretionary. “Some of the general permits did not require mitigation . . . . We were many times attempting to mitigate for a half acre at this location, [and] half an acre at that location. We called it a haphazard approach, a kind of band-aid approach to mitigation.”\textsuperscript{78} One of the ways to combat this inefficient approach was “to come up with a system where [LDNR] could, either by utilizing mitigation banks, or by utilizing a monetary formula, . . . group that mitigation,” so that “a more effective, more long lasting, better for the ecosystem type mitigation” resulted, instead of “mitigating for each little half acre project” separately in

\begin{itemize}
\item \textsuperscript{76} See LDNR, supra note 74, at 2.
\item \textsuperscript{77} Louisiana Revised Statutes 49:214.41(C) and (E) contain provisions for a variance procedure and the landowner veto. See infra text accompanying notes 124-129. Section (C), the variance provision, allows certain classes of activities to be permitted without requiring mitigation when the “overriding public interest” of the project outweighs the value of mitigation. Section (E) grants to a landowner the right to refuse to allow a mitigation project to be placed on his land. Because this right of refusal effectively grants the power to veto the mitigation project when the permittee and LDNR, or the Corps, have negotiated an on-site mitigation project, it is referred to as the “landowner veto.”
\item \textsuperscript{78} Interview with Quin Kindler, author of La. Admin. Code 43:1.724 (October 31, 1996) (on file with the author).
\end{itemize}
different locations. Additionally, it was uncertain whether the mitigation required was actually off-setting the loss.

For a lot of the small permits we were not going through the habitat evaluation procedure where we said you have x number of units of loss and the mitigation will produce x number of units to off-set [the loss]. It was more like we're loosing a couple of acres over here, we think that if we put in a plug on an oil and gas canal that would off-set the loss, or if we put in a water control structure, we think that will off-set the loss of two acres, without any quantification on either side.80

To address the inconsistencies, a habitat evaluation model was created "that basically gives the procedure for quantifying the losses and quantifying the potential gains from mitigation. To a large degree, it was a matter of setting up an accounting system tallying losses and gains."81 The regulations establish a standardized procedure, "whereas before, it was 'I think this is good enough,' or 'collectively the agency views this as being sufficient,' and there really was no standard. It was a weak spot [mitigation requirements] ... in the permitting process."82

The type, degree, and cost of compensatory mitigation varied tremendously. A one acre project right here, and a one acre project [in a different location], with pretty much the same type of habitat, one [permittee] was required to plug a well to compensate for that acre, or ten acres of loss, and on the other permit, it might be to plant 100 or 200 feet of shoreline, or a mile of shoreline ... [when both were] actually causing the same amount of damage. But, the mitigation that [was] required may have been vastly different, ... in terms of the type, degree, and how much it cost.83

For an applicant certainty and fairness was the main concern. Applicants were frustrated with the puzzling discrepancies between mitigation requirements, which varied so remarkably between applicants, on substantially similar projects.84 The LDNR intended to remedy this inequity by standardizing the procedures.85 The LDNR, the Corps, other agencies, and the applicant each sought a different procedure and "the mitigation process, determining compensatory mitigation consume[d] ... 90 percent of the amount of time it took to process the

79. Id.
80. Id.
81. Id.
82. Id.
83. Id.
84. Id.
85. Id.
Thus, the LDNR sought to develop standard procedures, in order to reduce the amount of overall time it took for a permit to be processed. The LDNR chose to standardize the procedures by assessing losses and gains in habitat units. They implemented the Wetland Value Assessment Methodology (WVA) system to replace all of the ecological values lost, no matter how small.

Two policies predominated, decreasing mitigation-related delays and the promotion of the use of more effective and efficient mitigation procedures. However, to reach these goals, the LDNR prioritized the “options” for compensatory mitigation in the opposite order from the EPA/Corps, despite the fact that the LDNR recognized early in the drafting process that “reducing mitigation-related delays can only be accomplished if [the] LDNR, the Corps, state and federal advisory agencies [together] formulate a reasonable and structured approach for arriving at acceptable mitigation.”

C. The Creation of a Mitigation Bank

The 1995 LDNR regulations govern the creation and use of mitigation banks from establishment through the life of the bank, up to fifty years. Mitigation banks are approved and created by a Memorandum of Agreement, a type of contract between the banker and the agencies. This agreement sets forth the particulars of the operator’s obligations, including what type of wetland he will create, restore, enhance, or protect, the construction or enhancement plan, the obligations for maintenance and long term security, etc.

The process begins by submitting either a proposal or a permit application which indicates the intent to establish a bank. The LDNR then determines the acceptability and appropriateness of establishing the bank according to specific factors. Approval procedures are extensive and involve interaction with the Corps, U.S. Fish and Wildlife Service, and other commenting agencies at every level of the process. Processing and review fees are assessed along the way.

The regulations set up a tiered approach to classification of mitigation banks. There are corresponding requirements for security and long term maintenance that differ for each class. The classification system is based on what scientists

86. Id.
87. Id.
88. Id.
89. See LDNR, supra note 74, at 14.
93. These include the operator’s history with environmental compliance, his ability to operate and maintain a bank, the proposed bank’s potential environmental benefits, and its consistency with other wetland protection or enhancement programs. La. Admin. Code 43:1.724(F)(2) (1998).
know about the success rates of created or restored wetlands of different types. The greater the success rate of a particular type of habitat, the lower the risk of failure. For instance, a hardwood swamp bank is considered one of the lowest risk banks because the habitat is vigorous, once established it requires no maintenance and is virtually perpetual. The regulations correlate monetary security, legal security, and credit freedom with the risk factor associated with each classification of bank. Critics of mitigation banking warn of the potential for sham banks where “after all the credits are sold, the entrepreneurs who create the mitigation banks will simply move on to the next project, ignoring the question of ongoing maintenance.” In such a case, responsibilities for ongoing maintenance and monitoring to keep the wetland alive years after the profit has been absorbed would fall on the tax payers. This concern is more relevant to the type of bank allowed to sell credits up front, before the wetland is established and functioning. Other widely debated concerns include the method of valuing wetlands destroyed, the quantification of credits, and the ratio of exchange. Some advocate a one to one ratio; one unit of value is established as replacement for one destroyed. Others, acknowledging the speculation inherent in valuing wetlands, advocate a higher exchange such as a two to one, or three to one exchange, leaving room for error. A more fundamental debate continues on whether functioning wetlands can even be created that actually replace any true functions of natural wetlands. Another concern is whether the regular reliance on mitigation bank credits would concentrate wetland habitats in certain smaller areas while depleting them in others, harming the wildlife dependent on the widely dispersed wetlands.

The first category is the “phased-in” type of bank. This is actually the intermediate risk classification but requires no monetary security. However, it is subject to the legal security of a conservation servitude. The LDNR

97. Banking on Wetlands, supra note 43.
99. Id.
100. Id.
103. The EPA Guidance on Mitigation Banking requires safeguards for the approval of a bank which include a conservation easement for “perpetuity,” deed transfer, or deed restriction. Louisiana, by contrast, only requires a twenty year servitude for marsh banks and a fifty year servitude for forested banks.

In Louisiana, there is a public policy against tying up land for long periods of time. Thus the Section 404 MOA, or contract by which the banker is obligated to a negative servitude on his property forever, could be subject to the challenge of “unlawful cause.” In such a case, after the credits are expended and the banker finds a more profitable use for the land, he can simply allow the servitude to prescribe for nonuse, or breach the MOA with the defense that it is void as against public policy.

It is unclear whether a negative servitude will begin to prescribe by nonuse with only one act inconsistent with the servitude, or if it requires multiple acts to commence the running of
will release credits to this banker for sale incrementally over the life of the project based on periodic reviews of the habitat.\textsuperscript{104}

The second classification is the "low risk" bank. With these banks, one hundred percent of the credits are released for sale when the bank becomes "operational." The monetary security is required for only five years, and the standard conservation servitude protects the area for the life of the bank.\textsuperscript{105} Banks in this category do not require maintenance or operation and involve habitat types, like hardwood swamps, with proven success rates.\textsuperscript{106}

The third is the "high risk" category, intended to address fragile marshlands and allowing the release of only twenty-five percent of the credits in the first two years of operation. The remaining seventy-five percent of the credits will be released in the third year of operation, after review for functioning.\textsuperscript{107} The security for this category is more demanding than the other two. It requires a cash or surety bond in an amount sufficient to cover any maintenance or remediation over the life of the bank.\textsuperscript{108} Additionally, along with the standard conservation servitude, the banker choosing this category must provide for a mechanism by which the LDNR will have the legal authority to take over the bank in the event that the banker fails to uphold his end of the Memorandum of Agreement.\textsuperscript{109}

D. Mitigation Bank Credits

1. Quantification of Credits and Debits

Determining the "functional value" of a wetland is a daunting task. Because there are different assessment techniques employed by different experts, controversy over which of these assessments is the best is likely and a lack of uniformity certain.\textsuperscript{110} In Louisiana, the regulations require the application of the Wetland Value Assessment Methodology, or "WVA," formula.\textsuperscript{111} In adopting this particular formula, the LDNR found it to be "user-friendly."\textsuperscript{112} Commentators from the conservation groups found the formula inadequate for the same reason the LDNR found it superior.

The LDNR selected the WVA because the formula relies on three factors it considers most relevant in wetlands assessment, vegetated wetlands, and habitat
of fish and wildlife communities. However, because it does not consider other functions, such as flood control values, sedimentation, ground water recharging, etc., the conservation groups found it inadequate. The LDNR and the Corps operate under the assumption that if the wetland appears to be functioning in the major three areas, vegetation, fish, and wildlife, this is indicative of the health of all other functions. Because the legislation authorizing the regulations only mandates consideration of the three factors, vegetative, fish, and wildlife functions, the LDNR met its mandate in selecting this formula.

2. Use of Mitigation Bank Credits

The regulations allow CUP permittees to use mitigation bank credits as compensatory mitigation when the LDNR is provided with written evidence that credits have been purchased from an approved mitigation bank. A mitigation bank is approved once the following conditions have been met: 1) The mitigation bank operator has paid his establishment fee; 2) The MOA, binding the operator to a plan of creation and establishment, maintenance obligations, and long term security obligations, has been signed by the agencies and the operator; 3) the operator has provided evidence that his security requirements have been met; 4) the construction and operation measures creating the wetland bank contained in the MOA have been fully implemented, (or at least the initial phases of the measures have been implemented, if the bank is to be the phased-in type of bank).

The LDNR will keep a running balance of total credits for each mitigation bank. Each time a permit applicant purchases credits for mitigation the agency will correspondingly reduce the credits available from the bank by that amount. Credits are only acceptable for permit projects occurring within the territorial “boundary” of the bank, a geographical operating limit set by the agency in the MOA. In addition, a permit applicant must purchase bank credits which comply with Section J of the new regulations, “Selecting Compensatory Mitigation.” This requires the LDNR to “ensure that the selected compensatory mitigation, in order of priority, [mitigation bank credit, individual project, and then monetary contribution],” is “sufficient” (of equivalent habitat value under WVA), “properly located,” and “accomplished by the most desirable available/practicable option.”

114. See LDNR, supra note 74, at 3.
115. Interview with Quin Kindler, supra note 78.
V. INCOMPATIBILITY

The new regulations were intended to address the "shortcomings" of the prior mitigation system. Although the LDNR may have successfully addressed some of the inadequacies in the prior Louisiana mitigation analysis, one unfortunate consequence is the widening of the gap between the Louisiana and the federal wetland permit programs. Because the systems overlap, most developers in the Coastal Zone must have both a Louisiana CUP and a Corps 404 permit to conduct any activity in a Louisiana wetland. The potential consequences of incompatible overlapping systems range from permit or project delays and duplicative mitigation to the permanent loss of wetland habitat within a basin, with cumulative detrimental effects on the entire coastal ecosystem.

A. Problems Created by Statute

The Louisiana mitigation statute, Louisiana Revised Statutes 49:214.41, includes two separate provisions, Sections (C) and (E), with no counterpart in the federal program. Section C provides for a variance procedure exempting certain activities from mitigation requirements. Section E grants to a landowner the right to refuse a mitigation project on his land.

1. Section E: The Landowner "Veto" Provision

This provision is referred to as the landowner "veto" because it grants a landowner the right to reject a compensatory mitigation project on his land even if the LDNR, or the Corps, has approved an on-site project as a permit condition. Section E states:

The owner of the land on which a permitted activity is to occur shall have the option of requiring on-site or off-site compensatory mitigation on his property, notwithstanding any geographical limitation otherwise required by the regulations adopted by the secretary, provided that the secretary determines that the proposed mitigation is acceptable and sufficient.

The landowner, by the express language of the statute, may reject the placement of the mitigation project on his land and force the project to be placed elsewhere, even though state and federal agency regulations would otherwise require such

122. See LDNR, supra note 74, at 1.
123. Developers will also need a state water quality permit in most instances. However, discussion of Louisiana’s water quality control law and permit process is outside the scope of this paper.
a creation to be on-site, or at least within the same basin.\textsuperscript{125} It is common in south Louisiana for the permit applicant to be a lessee rather than the landowner. When this is the situation, a landowner may be unwilling to allow the permittee to burden his land with the mitigation project, most likely due to the ongoing conservation responsibilities which would then restrict future use of the land.\textsuperscript{126} In that instance, there may be no other available land, within the same basin,\textsuperscript{127} to conduct the required mitigation project.

The only check on the landowner’s power of placement is the last phrase of Section E, which allows the veto “provided that the secretary determines that the proposed mitigation is acceptable and sufficient.”\textsuperscript{128} Notice that the legislature did not include any directive that the secretary approve the “placement” or “location” of the mitigation. The statute only requires that the LDNR approve the type of measure, (i.e. the creation of five acres of saline marsh). Neither does the statutory definition of “mitigation” include considerations of location or proper “placement.”\textsuperscript{129} Thus, if the LDNR approves the “mitigation” method, for example, a five acre saline marsh, the placement of that marsh is subject to the veto of the landowner despite the needs of the particular ecosystem which may require that wetland functions be replaced where they were lost.

\subsection{2. The Variance Provision}

The statute authorizes the granting of variances for compensatory mitigation when an activity has a “clearly overriding public interest” and performing mitigation would make the project “impracticable.”\textsuperscript{130} In Louisiana Revised Statutes 49:214 section A(4), “overriding public interest” is defined:

\begin{itemize}
  \item [\textsuperscript{125}] \textit{EPA Policy Guidance Document, supra} note 32. The regulatory requirement that replacement wetlands be within the same basin, or watershed, is founded in scientific proof of the negative effects of off-setting the natural ratio of wetland to upland areas in a given geographical area. Flood water control, water quality controls, wildlife habitat, ground water recharging, and other vital functions are lost to the area when the wetland is destroyed with potentially dangerous effects. The same is true in reverse; when wetlands are created in areas where they do not naturally occur, the projects often fail, and nature’s balance is upset with detrimental consequences for that ecosystem.
  \item [\textsuperscript{126}] A created, restored, enhanced, or preserved wetland mitigation project requires a conservation servitude and ongoing maintenance responsibilities. \textit{La. Admin. Code 43:1.724(F)(7)} (1998).
  \item [\textsuperscript{127}] Louisiana has nine drainage basins, equivalent to a watershed, which contain an interconnected system of wetlands. Scientific evidence has shown that these wetlands are functionally important parts of the overall drainage system in each basin. The Corps and the LDNR prefer to replace the wetlands lost in each basin, so that the replaced values are as geographically close to the original site as possible and no important functions are lost to the basin.
  \item [\textsuperscript{128}] \textit{La. R.S. 49:214.41(E) (Supp. 1998)}.
  \item [\textsuperscript{129}] \textit{La. R.S. 49:214.41(A)(3) (Supp. 1998)}: Mitigation means “all actions taken by a permittee to avoid, minimize, restore, and compensate for ecological values lost due to a permitted activity.”
  \item [\textsuperscript{130}] \textit{La. R.S. 49:214.41(C) (Supp. 1998)}. 
\end{itemize}
Overriding public interest means that the public interest benefits of a given activity clearly outweigh the public interest benefits of compensating for wetland values lost as a result of the activity, as in the case of certain mineral extraction, production and transportation activities or construction of flood protection facilities critical for protection of existing infrastructure.\textsuperscript{131}

This illustrative list is dangerous because it could be interpreted broadly to include any activities of oil and gas industry service providers and could be extended beyond just the oil and gas extraction and transportation permittees. The language of the statute could allow other permittees involved in any type of mineral extraction, energy providing service or similar public service to claim unmitigated wetland losses.

The volume of oil and gas extraction activities impacting wetlands is already high. If the variance provision were interpreted expansively to include related industry activities, the variance exception could swallow the mitigation rule. Even under the narrowest interpretation, allowing the oil and gas industry to conduct extraction, production, and transportation activities without being responsible for mitigation, would remove from the mitigation process some of Louisiana's most troublesome subjects. Oil and gas industry activity is one of the most costly industries for coastal wetlands. In order to conduct exploration, extraction, and transportation of oil and gas in a wetland, wide pathways must be cut to allow rigs and barges to maneuver. This activity is usually done under a permit where the LDNR decides the least harmful route and demands mitigation for the remaining impacts. However, every time this activity is permitted some damage is done to the habitat whether it be from the saltwater intrusion caused by opening canals, killing the vegetation, fish, and wildlife, or from the resulting erosion caused by the loss of vegetation and altered waterflow. If anything, these activities should be restricted if Louisiana is to save the remaining wetlands and rebuild those that have been lost. New Orleans District Corp Commander Colonel William L. Conner says that dredging of navigation and oil field access canals, wave and boat erosion and the leveeing of the Mississippi River are the main causes of marsh loss in Louisiana.\textsuperscript{132}

"Louisiana's wetlands losses are blamed on a variety of causes, but two of the biggest culprits, experts say, are canal-building for navigation and oil-and-gas exploration purposes, and a rapid rise in sea level along the coast."\textsuperscript{133}

\begin{itemize}
  \item \textsuperscript{131} La. R.S. 49:214(A)(4) (Supp. 1998) (emphasis added).
  \item \textsuperscript{132} William L. Conner, Finding Solutions, Not Theories, For Wetlands Loss, the New Orleans Times-Picayune, July 10, 1997, at B6.
  \item \textsuperscript{133} The sinking of wetlands soils resulting from both natural causes and the extraction of oil, gas and other minerals exacerbate the problems caused with sea level rise. Wetlands Losses are Down, But Not Over, supra note 5, at A18.
  Such problems may only get worse because scientists studying global warming predict that the oceans may rise up to three feet as greenhouse gasses cause the climate to change. If this does occur,
B. LDNR Regulatory Additions

The LDNR somewhat diminished the danger of the variance exception by adding a public notice procedure into the regulations.\textsuperscript{134} By adding the safeguard of a public hearing to the notice of reasons required by the statute, the drafters ensured that the discretionary decision to grant a variance would at least be subject to community comment. Additionally, in response to the “landowner veto” provision in the statute, the LDNR incorporated into the new regulations a pre-existing option. The monetary contribution can be used in lieu of an individual project if a landowner exercises his veto power.

1. The Monetary Contribution Option

As a flexible option, the LDNR may accept monetary contributions in lieu of an implemented mitigation project.\textsuperscript{135} However, as beneficial as this may be to the LDNR, because the federal program does not take such a flexible approach, the permittee may end up with duplicative mitigation requirements. For example, to receive a CUP permit, a permittee could contribute money to the LDNR as mitigation (because the landowner vetoed his on-site project and there are no in-kind mitigation bank credits available). However, he may still be required to perform an individual mitigation project elsewhere for the Corps under Section 404. It is unclear if the Corps’ policies would be flexible enough to accept a project implemented some time later by the LDNR with the permittee’s monetary contribution as current compensatory mitigation for the Section 404 permit.

The Corps would apply the “in-lieu-fee mitigation arrangements” procedures found in the federal guidelines to determine if the monetary contribution would satisfy the EPA compensatory mitigation requirements.\textsuperscript{136} This provision states that arrangements “wherein funds are paid to a natural resource management entity for implementation of either specific or general wetland . . . development projects . . . do not typically provide . . . a clear timetable for the initiation of mitigation efforts.”\textsuperscript{137} Even though the Corps would attempt to avoid imposing duplicative mitigation on a permittee, the Corps may only consider the permittee’s mitigation responsibilities satisfied by the monetary contribution to the LDNR if it finds that the arrangement “meet[s] the requirements that would otherwise apply to an offsite, prospective mitigation effort and provides adequate

\begin{enumerate}
\item Louisiana’s coast could be eliminated and the marshlands where fish, shrimp and other Gulf Coast seafood spawn could disappear into the Gulf. The Associated Press, Global Warming Meeting Turns up Heat on Louisiana, supra note 4, at A6.
\item EPA Policy Guidance Document, supra note 32, at 58613.
\item Id.
\end{enumerate}
assurances of success and timely implementation.\textsuperscript{138} Additionally, "a formal agreement between the sponsor and the agencies, similar to a banking instrument, is necessary to define the conditions under which its use is considered appropriate."\textsuperscript{139} The state could become obligated for the private developer's mitigation under the Corps' "in lieu fee arrangements" analysis. Therefore, by allowing the developer to make a monetary contribution to the LDNR as mitigation, the LDNR, in effect, may be accepting the permittee's legal responsibility to the Corps for compensatory mitigation on a project. It is risky for a state public agency to substitute itself for a private developer in a legal obligation to the corps.

The ultimate result of these differing provisions is uncertainty for the permittee, project delays, a risk of duplicative mitigation, delayed mitigation implementation, and possibly a denial of a permit. Thus, the landowner in effect has the statutory right to delay, if not to totally veto, an entire project. The permittee will not be allowed to conduct the activity he plans if the Corps refuses to grant the Section 404 permit even if the LDNR has granted the CUP permit, because both permits are necessary.

2. Additional Procedural Requirements for Variances

The Corps and the EPA guidelines do not allow for variances and creates a risk that a variance will be granted under the CUP but the permittee will still have to mitigate under Section 404. The necessity of the variance provision is dubious, considering that the federal system lacks such a procedure. In other words, if the EPA and the Corps do not envision a project with such overwhelming public interest that it is worth unmitigated wetland loss, should Louisiana? In light of the absence of such an allowance in the federal program, and the unclear policies which motivated the Louisiana Legislature to include the variance exception in the statute, maybe this portion of the statute should be separately repealed. One of the first drafts of the statute did not allow any exception to the mitigation requirement.\textsuperscript{140} It expressly stated that "[i]n no case shall compensatory mitigation, at a level sufficient to replace the ecological values of the wetlands lost as a result of the permitted activity, be considered infeasible."\textsuperscript{141} Why the final statute compromised the strict requirement is unclear.\textsuperscript{142}

\begin{itemize}
\item[138.] Id.
\item[139.] Id.
\item[141.] Id.
\item[142.] One assumption is that the oil and gas lobby in the state legislature is responsible for this provision. It could not have been in the Corps because the Corps has authority of its own under the Rivers and Harbors Act to dredge or fill as is necessary to maintain the waterways in a navigable condition and to maintain levee systems.
\end{itemize}
Since Louisiana has the monetary contribution option, it would seem that there should not be an instance when mitigation measures would render a project impracticable.\footnote{143} If it is impracticable for a developer to create a wetland to replace the one he is impacting, he can simply make a contribution to the LDNR and the agency will create one elsewhere. It has become as easy as “pay to the order of” to secure a permit in Louisiana. This regulatory option obviates the need for the variance procedure.

On the other hand, the variance procedure can be seen as a limitation on the discretion of the secretary. In order to allow a permittee to go without completely mitigating for losses, he must go through the variance procedure. If nothing else, the procedures will make getting out of mitigation a publicly scrutinized event and improve the LDNR’s accountability for the exception.

3. Incentives for Mitigation Banking

a. Section 404

Mitigation banking has some proven benefits which are worth encouraging,\footnote{144} however, the concept is relatively new. Accordingly, the EPA and Corps have proceeded with caution\footnote{145} in encouraging mitigation banking by

\begin{footnotesize}
\begin{enumerate}
\item \footnote{143} “Impracticability” is decided by balancing the economic, practical, and technical aspects of a proposed project. For instance, if an area is geographically inappropriate for an on-site mitigation project, if the construction or maintenance of a project would be economically or technically infeasible, or if the length of time to complete a project is an issue, instead of granting a variance due to the impracticability of mitigation, the secretary can accept a monetary contribution as mitigation. Thus, if mitigation bank credits and an individual mitigation project are both unavailable or impracticable, the monetary contribution is available.

\item \footnote{144} The benefits of banking include pre-destruction replacement, the contract or banking instrument ensures monitoring and long term liability, and locating all mitigation for an area in one location saves agency resources and personnel field time for monitoring projects. With a bank, an agency may check on the functioning of one site and ensure that a multitude of permittees mitigation projects are functioning. Without a bank, each permittee has a separate project in a separate location and monitoring all of these little projects can be a personnel and resources nightmare for an agency. Interview with Quin Kindler, supra note 78.

\item \footnote{145} Critics of mitigation banking warn of the potential for sham banks that “after all the credits are sold, the entrepreneurs who create the mitigation banks will simply move on to the next project, ignoring the question of ongoing maintenance.” Banking on Wetlands, supra note 43. In such a case, responsibilities for ongoing maintenance and monitoring to keep the wetland alive years after the profit has been absorbed would fall on the tax payers. This concern is more relevant to the type of bank allowed to sell credits up front, before the wetland is established and functioning. Other widely debated concerns include the method of valuing wetlands destroyed, the quantification of credits, and the ratio of exchange. Some advocate a one to one ratio, one unit of value is established as replacement for one destroyed. Others, acknowledging the speculation inherent in valuing wetlands, advocate a higher exchange such as a two or three credits or units to one exchange, leaving room for error. More fundamentally debated is the issue of whether functioning wetlands can even be created in a way which actually replaces any true functions of natural wetlands. Another concern is whether the regular reliance on mitigation bank credits would concentrate wetland habitats in
\end{enumerate}
\end{footnotesize}
allowing the use of wetland bank credits only after strict sequencing. Sequencing emphasizes the conservation of the natural conditions or re-creation of those conditions at the site where they were lost. This goal is further expressed by the preference for on-site, in-kind mitigation. The EPA guidance accepts bank credits only “when on-site compensation is either not practicable or use of a mitigation bank is environmentally preferable to on-site compensation.” In other words, the federal agencies’ goals are to preserve the habitat and functions on the site itself and to restore the functions to that watershed.

However, if a developer cannot practicably restore the same kind of habitat and functions in the same place they are destroyed then the EPA methodically seeks the most environmentally beneficial option.

In choosing between on-site mitigation and use of a mitigation bank, careful consideration should be given to the likelihood for successfully establishing the desired habitat type, the compatibility of the mitigation project with the adjacent land uses, and the practicability of long-term monitoring and maintenance to determine whether the effort will be ecologically sustainable, as well as the relative cost of mitigation alternatives.

If several small areas will be destroyed, as with a linear project, or if the impact is de minimus, as with a nationwide permit, “use of a mitigation bank to compensate . . . is preferable to on-site mitigation.” For the developer who cannot mitigate on-site, the Corps prefers a credit purchase, from a mitigation bank that is located in the same watershed as the permit site, over an individual off-site project. Circumstances may warrant a combination of on-site and off-site mitigation projects to compensate for the values lost.

b. Louisiana CUP

Louisiana encourages banking with less caution than the EPA and Corps. The new regulations offer three categories of compensatory mitigation options to a permittee with different and more flexible requirements. The LDNR prefers the purchase of mitigation bank credits, then individual mitigation projects, and finally, monetary contributions. Because of the potential for certain smaller areas while depleting them in others, harming the wildlife dependent on the widely dispersed wetlands. Id. However, the EPA and LDNR have addressed most of these issues in the Guidance on Mitigation Banking, and with the Louisiana regulations on mitigation banking.

147. 60 Fed. Reg. 58605, 58607.
149. Id.
150. Id.
151. Id.
152. Id.
a landowner veto, it may be impossible or impracticable to restore wetland values
on-site. The procedure for selecting compensatory mitigation also places
limitations on the site selection process.

The procedure requires the LDNR to "ensure that the selected compensatory
mitigation, in order of priority" is "sufficient (of equivalent habitat value under
the WVA)," "properly located," and "accomplished by the most desirable avail-
able/practicable option." The most favored option then is the purchase of
in-kind credits from a "properly located" bank. To be properly located, the
bank must have "an anticipated positive impact" on the Coastal Zone, "be on-site
if the opportunity exists," and "contribute" to the health of the basin. These
guiding factors are broad, vague, and too poorly defined to provide objective
criteria for selecting mitigation, especially if compared to the precise and
comprehensive language used by the EPA to enumerate which factors should be
relied upon for selecting mitigation.

Combining the choices for mitigation with these guiding factors, the LDNR's
preferred option is unrealistic—the use of mitigation bank credits from a bank
located on the landowner's property which is itself the site of the permitted
activity. It is hard to believe this situation would occur very often, as it seems
that a permittee would rarely be developing on the property of a mitigation bank.
Because Louisiana's coast is mostly private land and a great deal of permits are
issued to oil and gas company-lessees, the permittee will commonly not be the
landowner. If the landowner is not also a wetland banker, and does not want
mitigation on his property then the LDNR will prefer the permittee to mitigate
by off-site mitigation bank credit purchase. This option will also see little
use due to the limited access to mitigation banks and the limited amounts and
kinds of credits available.

153. Id.
156. Id.
159. The Entergy Corporation has begun the process of restoring and enhancing a 1,500 acre
saline marsh which it hopes will be approved as a mitigation bank. *See supra* note 41. The marsh
is near Grand Isle and Entergy hopes to be offering credits for sale next year. Id. Currently though,
only Fina La Terre is offering credits for sale. In the Coastal Zone there are a wide variety of
wetland types, each ideally requiring in-kind replacement, yet only three types of marsh wetlands
have replacement credits in stock. Fina La Terre supplies fresh, intermediate, and brackish marsh
credits and has already expended a third of the total credits available. Interview with John Woodard,
*supra* note 37. Fina La Terre's 7,200 acres are divided between fresh, intermediate, and brackish
marsh and its service area is confined to a certain geographical boundary. The boundary for Fina
La Terre is Hydrological unit 5, an area between Bayou Lafourche and the Atchafalaya. The Entergy
bank, if ever approved, will offer only a limited number of salt water marsh credits that will also be
However, in the Coastal Zone there are 2,516,249.70 total acres of marshland, 945,571.92 of which
are fresh, 490,250.02 are saline, 369,210.73 intermediate, and 754,537.61 acres of brackish marsh.
Relaxing sequencing requirements could create a broader market for entrepreneurial banks by allowing a more flexible approach to the permit process. The flexibility could promote the Louisiana policy of "establish(ing) a proper balance" between industry or developer interests and the conservation of industry-dependent natural resources. By relaxing sequencing requirements, Louisiana would open the market to off-site mitigation services and create a better market for entrepreneurial banks. Relaxing sequencing and prioritizing the use of banks could foster the mitigation banking business, and therefore meet one goal of the new regulations. Thus, in theory, Louisiana has created an economic incentive for a market-driven private conservation effort to supplement the agency regulatory command-and-control approach. Under these regulations, a new wetlands regulatory environment may result, fostering the mitigation banking industry.

However, several obstacles remain which deter the development of a mitigation banking industry in Louisiana, even though the mitigation regulations have created an incentive for mitigation bank use. One such hurdle is the rate of subsidence of the Louisiana coast line. Currently, Louisiana's coastal marshes are disappearing at a rate of thirty-five square miles per year. A long-term investment in a wetland creation or restoration that may just wash away is a risky proposition. Additionally, the geography of the Louisiana coast is well-suited for marshlands and ill-suited for bottomland hardwood swamps; hardwood swamps are the most successful type of mitigation bank. They are relatively low-risk investments with a high rate of return. They require little or no maintenance and once established are virtually perpetual. Marshland banks cost more to implement and require continuing maintenance. The life of a marshland

LDNR, Habitat Data for Coastal Louisiana (1993). In light of these figures, Fina La Terre's 7,200 acres is only enough to mitigate for less than .00286% of the total. Because Entergy merely plans to restore and enhance an existing saline marsh, a resulting bank will not be allowed to use a full acre per acre credit ratio; consequently, a potential 1,500 acre bank may only hold 300 credits, only a portion of which will be offered to the public to mitigate for saline marsh permits. In addition to marshland acres, the Coastal Zone supports 1,318,497.40 acres of forested wetlands with no replacement credits available. Id. Fina La Terre credits will only be acceptable for a tiny percent of all coastal zone wetlands and the Entergy bank's credits, if ever available, will only be suitable for saline marsh replacement values. See supra note 41. This leaves permittees impacting all other wetland types in the coastal zone relegated to either individual projects, wetland areas, or a monetary contribution as compensatory mitigation. See La. Admin. Code 43:1.724(F)(5) (1998). With the regulatory preference for the purchase of mitigation bank credits, Louisiana needs more mitigation banks.

160. "The state must act immediately to conserve, restore, create, and enhance vegetated wetlands in coastal Louisiana while encouraging use of coastal resources and recognizing that it is in the public interest of the people of Louisiana to establish a responsible balance between development and conservation. Management of renewable coastal resources must proceed in a manner that is consistent with and complementary to the efforts to establish a proper balance between development and conservation." La. R.S. 49:213.1.C (Statement of intent) (Supp. 1998).


162. See Louisiana's Policy, supra note 11.
is shorter and it is somewhat fragile in comparison to a hardwood bank. Thus, because the coastal zone is well-suited to the least profitable type of bank and ill-suited to the most profitable type of bank, it is less likely that entrepreneurs will take the risk of investing in mitigation banks in the coastal zone, despite the regulatory inducement.

4. The Risk of the "Buy-a-Permit" System

With an emphasis on restoration of the wetland on-site, the Corps “practicable alternatives test” ensures strict adherence to sequencing and allows the use of mitigation bank credits only if the on-site project is impracticable or the mitigation bank credits are environmentally preferable. However, there is a caveat from the EPA: “[i]t is important to emphasize that applicants should not expect that establishment of, or purchasing credits from, a mitigation bank will necessarily lead to a determination of compliance with applicable mitigation requirements, . . . or as excepting projects from any applicable requirements.” Under Section 404 rules, an applicant must use all means available to avoid all impacts to wetlands, and after the Corps is satisfied that no practicable alternative exists, the Corps will consider mitigation for unavoidable impacts. This strict sequencing approach is a safeguard against the undesirable effect that mitigation conditions could overly influence the permit process; a risk that relaxation of sequencing requirements could create.

The risk created by relaxed sequencing is that the proposed project may be considered in light of mitigation plans involving either the advance purchase of mitigation bank credits or an advance monetary contribution to the LDNR. That risk may mean that a permittee will be able to “purchase a permit,” allowing destruction of a wetland without the environmental impacts being in fact timely and/or fully mitigated. This circumstance seems paradoxical. The goal of the regulations is to streamline the process and ensure that losses are compensated for in actual wetland value replacement. Because mitigation banking was the most attractive option in light of these concerns, it was given preferential treatment in the regulations. One of the greatest advantages of mitigation banking is that the mitigation is in place prior to construction. This ensures actual replacement and prevents a temporal loss of habitat from occurring. A time lag in replacing the habitat can be detrimental to the overall watershed health. Because flood control, rare and endangered species habitat, water quality controls, and other functions are lost when the permitted activity takes place, if the compensating mitigation is not done previous to, or concurrent with, the destruction, these values are lost for some period of time. However, due to the

164. Id. at 58611.
165. Id. at 58607.
166. See Interview with Quin Kindler, supra note 78.
167. Id.
situation in Louisiana, the theoretical benefit of prioritizing the use of mitigation banks may produce the opposite result.

When these regulations are applied to a permittee destroying saline marsh acres in Louisiana, he has no bank to purchase credit from, and if an individual project is vetoed or impracticable, a monetary contribution would be the most efficient, and likely the favored option. However, because the regulations do not place a time frame, or other limitation, on the LDNR creation of the actual mitigation project, the monetary contribution option, could produce temporal habitat and watershed function loss and may not satisfy the Corps' "in lieu fee arrangement" procedures. After money has been accepted, the regulations do not ensure that the habitat will be replaced at all, much less replaced timely and within the same basin. It is certainly possible, if not likely, that the contribution will be used to further the overall coastal restoration plan with little consideration of the particular site that was destroyed for which the money was contributed.

The ease of the monetary contribution option, used by the LDNR for years, does create a risk that monetary contributions, more than the credit purchase option, will unduly influence the permit approval process, especially considering that the final regulations are without limiting provisions. The failure of the regulations to address safeguards ensuring the dedication of funds to specific projects creates a reasonable expectation of some deficiencies, particularly in the area of temporal habitat loss.

Specifically, the regulations in Section 724(I)(21) direct the secretary to select a project for the use of the funds contributed after the comments of interested agencies are received, and then use that money to implement the selected measure. This provision does not state that the particular site, the same basin, or even the same kind of wetland is even a factor to be considered. It neither addresses the temporal habitat loss issue, nor limits the secretary's discretion. For instance, it does not indicate whether the money can be pooled to create a larger cumulative project, whether the contribution may be used to support the overall coastal restoration plan, or whether the selection procedures from Section 724(J) also apply to the secretary's selection of a project.

Considering that the LDNR included the monetary contribution option as a way to "group" smaller projects and make monitoring more efficient, the intent must have been to allow the secretary to pool the contributions and begin large...
projects, or establish wetland “areas,” once enough money is collected.\textsuperscript{72} Grouping may involve considerable delay, increasing the temporal habitat loss and could take some projects out of the basin. The regulation should include a more specific set of procedures declaring the LDNR duty and discretion.

\section*{VI. Implementing the 1995 Regulations}

Under Section 404, the Corps must require an on-site mitigation project when practicable.\textsuperscript{73} In Louisiana, if the landowner exercises his veto, the required impracticability may result. If so, the next option under the EPA guidelines is off-site in-kind mitigation within the same watershed.\textsuperscript{74}

Therefore, under both the EPA guidelines and the Louisiana regulations, if the landowner exercised his veto and the permittee were required to purchase or lease land away from the site to perform mitigation, and the overall project costs were unreasonably increased by this added expense, or if no other land within the basin was available for an individual project, it could then be argued that an individual mitigation project would be “impracticable.” Both systems would then resort to the third option. However, under the federal system the third option is the purchase of mitigation bank credits, Louisiana’s first option. In the Louisiana Coastal Zone, this is only an option for marsh replacement mitigation credits. With any other wetland type then, under the 404 program, the individual project is the permittee’s only option; however, under the CUP, the permittee may make a monetary contribution as compensatory mitigation.

Thus, even though the process is made easier under the CUP, by including the monetary contribution option, it has become more complicated overall for the applicant. He now must negotiate two contradictory mitigation regulations, the federal and state systems, and possibly comply with both by performing separate acts of mitigation. This duplicative mitigation is most likely when an applicant opts to make a monetary contribution to the LDNR because this may not be accepted by the Corps as sufficient mitigation. The Corps requires strict sequencing and requires the applicant to provide compensatory mitigation in advance of discharges into wetlands permitted under Section 404.\textsuperscript{75} The Corps would apply the “in-lieu-fee mitigation arrangements” procedures to determine if the monetary contribution would satisfy Section 404 compensatory mitigation requirements and the LDNR would have to provide “assurances of success and timely implementation,” and “a formal agreement . . . to define the conditions under which its use is considered appropriate.”\textsuperscript{76} A monetary contribution in
advance to the LDNR for the implementation of project at some unstated point in the future may not fit the bill.

Part of this problem is created in the statute by the landowner provision that forces the permittee and the regulators to work around the landowner’s preference. The other part of the problem is created by the priority for mitigation banks and the option for a monetary contribution offered by the state regulations alone. Louisiana’s black letter rules, as a whole, are incompatible with the federal system.

However, both the LDNR and the Corps work very closely in practice to meet the differing needs of each system. On paper, the regulations may require something specific, yet agency personnel, in order to grant a permit, may compromise. This flexibility is theoretically beneficial, ensuring that permitted losses are mitigated under sound scientific principals. However commendable this process, compromise of regulatory requirements by agency personnel should not be condoned, much less necessary. Agency efficiency and resources would be better utilized if legislators would make it possible for the LDNR to conform its program to the Federal Section 404 program such that mitigation requirements and options are uniform within Louisiana’s Coastal Zone.

VII. CONCLUSION

Incompatibility that causes conflicting requirements creates the risk of inadequate protection of critical wetlands. In order to address the incompatibilities produced by the mitigation statute, the Louisiana Legislature should amend Louisiana Revised Statutes 49:214.41 to remove the landowner veto and variance provisions. These provisions cause many problems, only one of which is unnecessary interference with the agency’s ability to carry out its duty to protect natural resources. Their removal would allow the regulations to more closely conform to the federal program.

However, if the landowner provision were to be removed from the statute the monetary contribution provision would have less utility. The LDNR could require on-site mitigation in keeping with the greater ecological benefit of mitigating in-kind and on-site.

Even with an amendment removing the landowner veto, the LDNR preference for mitigation banks over individual on-site projects will still have to be addressed. The priority given to mitigation bank credits is apparently due not only to the difficulty of requiring on-site mitigation because of the landowner veto provision, but also the higher success rate of mitigation banks, the lack of agency resources to monitor widely dispersed individual projects, and a desire to spur the mitigation banking business in Louisiana as a conservation and economic tool. If the landowner provision were to be removed from the statute, it is likely that the LDNR would still prioritize compensatory mitigation options in an order that fosters mitigation banking.

Given the present high rate of erosion, the LDNR may be overly optimistic and unrealistic. The regulations cannot work as envisioned because on-site, in-
kind, or at least within the same basin replacement of lost wetlands is preferred, ideally with mitigation bank credits. However, credits are only available for marshland mitigation. There is very little hope for the appearance of a variety of banks in the coastal zone with the rate of subsidence so high, and with the oil and gas industry continuing to utilize canals for oil and gas extraction and transportation which exacerbates the subsidence problem.

The variance procedure provision in the statute should be removed because it is unnecessary in light of the monetary contribution option offered in the regulations. With the elimination of the variance procedure, and the retention of the monetary contribution option, the LDNR can require a monetary contribution when the overwhelming public interest of a project makes it worth carrying out but preservation of the affected wetlands is impracticable.

The monetary contribution option and the mitigation bank credit option are conceptually attractive for the agency. The acceptance of either bank credits or a monetary contribution serves the needs of the LDNR by meeting the agency's needs for efficiency, uniformity, long term control, and ease of monitoring; however, the regulations need some additional work. Adding safeguards to the monetary contribution option could eliminate the risk of the buy-a-permit system. Alternatively, the LDNR could implement strict sequencing procedures applicable to all Louisiana projects and use the monetary contribution option in place of the variance for "extenuating circumstances." For projects with "overriding public interest," the monetary contribution option could be a type of quid pro quo subject to the public notice and comment procedures. Additionally, if the Corps uniformly accepts projects carried out by the LDNR with the monetary contribution for the Section 404 permits, the risk of duplicative mitigation would be reduced, if not eliminated. In sum, the LDNR should adopt clear policy to address temporal habitat loss, grouping of smaller contributions to create large projects, placement rules or reference to the permittee's placement rules, limits on the secretary's discretion, and long-term security for the secretary-implemented monetary contribution projects.

Because Louisiana is home to an abundant forty percent of the nation's coastal wetlands, they are taken for granted.\(^{177}\) Our economy is dependent upon both the oil and gas industry and the fishing and seafood industry and each are dependent upon the wetlands. The Louisiana Legislature is performing a balancing act among conflicting conservation and development interests: the economic interests of the oil and gas industry, private landowner interests, and fishing and agricultural industry interests. By concentrating on juggling these political interests, rather than focusing more fundamentally on protecting human health and natural resources, the political machine misses the big picture. In other words, without the natural resources which support these industries, there will be nothing left to balance and juggle. The variance procedure and the landowner veto are special interest provisions that undermine the effectiveness

\(^{177}\) Louisiana Coastal Law, Louisiana Sea Grant Newsletter (April 1989).
of the mitigation requirement and demonstrate the Louisiana Legislature’s apathy about its responsibility to the rest of the nation for the preservation of forty percent of the nation’s coastal wetlands.

Louisiana should do what most states do when creating a regulatory program that supplements a federal one. Louisiana should conform the CUP mitigation requirements to the federal standards. Substantially conforming Louisiana’s CUP program to the federal Section 404 program would be beneficial to permittees, regulators and overall wetland management efforts. Uniformity among the state and federal system would increase predictability and certainty, decreasing project delays and increasing the potential for coefficient efforts in meeting the national “no net loss” goal. By streamlining the procedures, agencies would be able to cooperatively share resources, save taxpayer money, and increase wetland protection.

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