

# SURROUNDINGS



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## NCHRP: Guidelines for Selecting Compensatory Wetlands Mitigation Options



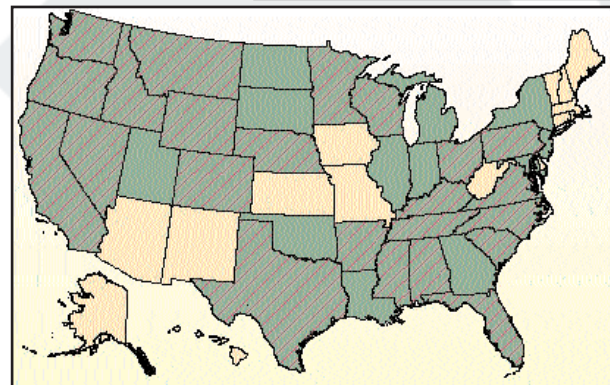
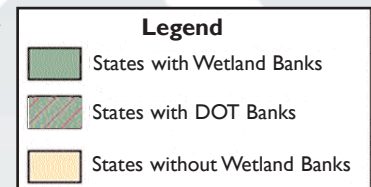
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Mr. Riva is an environmental scientist whose expertise lies in the area of watershed hydrology, landscape ecology, and wetland studies. He recently completed NCHRP's Project 25-16 Guidelines for Selecting Compensatory Wetlands Mitigation Options, which was published in December 2002 as Report 482.

In December 2002, the National Cooperative Highway Research Program (NCHRP) published Report 482 Guidelines for Selecting Compensatory Wetlands Mitigation Options, a two-phase research project led by A.D. Marble & Company to examine the success rates of wetland mitigation options and identify which options are employed by state departments of transportation (DOTs). The impetus behind this project was the dearth of guidance for state DOTs regarding the benefits and potential drawbacks of project-specific and consolidated mitigation. Additionally, the project sought to address a lack of information regarding how states have developed compensatory wetland programs that use a variety of mitigation options.

Completed in September 2001, Phase I of the research involved database, literature, and internet searches, coupled with an agency survey designed to obtain information from state DOT wetland managers concerning their experiences with mitigation options. The results indicated that the success and failure of mitigation sites largely depends on communication between the designer and the contractor as well as the quality of project management. If mitigation goals and site design are not properly given by the manager to the builder, the site, regardless of the mitigation options available, is likely to fail. The most common reason for the failure of early banks is linked to improper hydrology design or engineering (Brunbaugh 1995).

Phase I results also revealed that many state DOTs simply lacked the opportunity to use consolidated options despite the belief that these options, particularly wetland banking, would provide more functional replacement wetlands. This was often attributed to (1) a lack of agency coordination; (2) a restriction of mitigation to specific watersheds, and; (3) the DOTs inability to forecast compensatory wetland needs, reluctance to delay projects, lack of expertise regarding the time and cost required to pursue banking, and the absence of banking or in-lieu fee agreements or guidance.



Wetland Banking in the United States.

Many states have established wetland banks; however, there remains much disparity over the establishment and use of these banks by state DOTs. NCHRP 25-16 survey results suggest that regulatory agency disagreement over the development and use of wetland banks has made it difficult for some DOTs to establish their own banks or purchase credits

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A.D. Marble & Company recognized that this report should focus on addressing these limitations by 1) providing examples of how consolidated mitigation options have been developed; 2) illustrating how consensus among resource agencies and DOTs was reached in the drafting of banking agreements, and; 3) performing case studies of eight state DOT programs with the goal of delineating how these states have established banking programs that employ a variety of options. Case studies focused on the wetland mitigation programs in California, Florida, Louisiana, Maine, North Carolina, Pennsylvania, Washington, and Wisconsin. These case studies demonstrate the variability in the mitigation options utilized across the nation. For example, many New England and Mid-Atlantic states rely primarily on project-specific mitigation, whereas southeastern and west coast states have all developed banks that are used by the transportation agencies. This disparity is also evident in banking agreements reviewed in the report, which define permit conditions, such as the wetland banking service area and long-term management responsibilities.

	CA	FL	LA	ME	NC	PA	WA	WI
<b>Project-Specific Mitigation</b>	X	X	X	X	X	X	X	X
<b>DOT Sponsored Banking</b>	X	X	-	-	X	X	X	X
<b>3<sup>rd</sup> Party Banking</b>	X	X	X	-	X	-	X	-
<b>In-lieu Fee/RMA</b>	-	X	X	-	X	X	-	-
<b>State Legislation Supporting Banking</b>	X	X	X	X	X	Has not been finalized	X	X
<b>Time to Develop Statewide (or DOT-Specific) Banking Agreement</b>	1991 MOA on Banking (timeframe unknown) 1993 MOU on Conservation Banking (timeframe unknown)	No formal banking MOA State Environmental Reorganization Act dictates WMD's to find DOT mitigation	No formal banking MOA	No formal banking MOA	No formal Banking MOA An MOU with WRP took approx. 2 years	2 years for the PENNDOT District 9 MOA 4+ years for the Statewide Banking MOA (still pending)	2 years for DOT MOA (Revised 4yrs later) 4 years for Statewide Banking Rule	2+ yrs for the Mitigation Banking Technical Guidelines (revised in 1997 and 2001)

RMA: Regional Mitigation Areas  
WMD: Water Management District  
MOA: Memorandum of Agreement  
MOU: Memorandum of Understanding

Figure 2. Summary of case study states.

NCHRP Report 482 should prove to be an invaluable tool for DOT wetland managers who are looking to expand their wetland mitigation programs. It is hoped that this project will encourage DOTs to become more proactive in addressing their mitigation needs, to invest in consensus-building among agencies, and to ultimately produce functional wetland mitigation projects whose benefits are maintained for the long term.

Brumbaugh, R.W. 1995. Wetland Mitigation Banking: Entering a New Era? The Wetlands Research Program Bulletin, 5.3/4, United States Army Corps of Engineers Wetlands Research Program. <<http://www.wes.army.mil/el/wrtc/wrp/bulletins/v5n3/trun.html>>  
Internet Resource: <http://www4.txb.org/txb/cxp.nsf/All+Projects/NCHRP+25-16>

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