

# Enhancing Wetland Protection Through Improved Avoidance and Minimization

BY SANDRA NICHOLS

*While a great deal of information is available about wetlands compensation, little is known about the first two steps in the mitigation process—avoidance and minimization. These requirements are significant elements of wetlands protection in the federal program and many state programs, and they have the potential to be applied much more effectively.*

Despite efforts to restore and protect wetlands, wetlands remain exposed to potential development. Wetland permitting programs are among the important tools used by the federal and state governments to protect these important resources in the United States. The federal wetland permitting program under the Clean Water Act (CWA) requires a permit for dredge and fill activities in a substantial portion of the nation's wetlands. Many states have also established their own permitting programs.

The federal program and all of the state permitting programs require mitigation of authorized impacts to wetlands. Mitigation is not simply compensating for losses, however. The U.S. Environmental Protection Agency's wetland permitting regulations, known as the §404(b)(1) Guidelines, define mitigation as a sequence of three steps:

- (1) Applicants must first attempt to *avoid* siting projects in wetlands by conducting an alternatives analysis.
- (2) Next, they must consider the methods to *minimize* the impacts of the proposed project on wetlands.
- (3) Finally, the applicant must *compensate* for any unavoidable impacts.

In Fiscal Year 2003, 43,549 acres of required wetland mitigation was required nationwide, compensating for 21,412 acres wetland impacts (ELI 2005). This was accomplished through compensatory restoration, enhancement, creation, and preservation. Permittees did more than half of the compensatory mitigation themselves, while mitigation banking accounts for nearly one-third of all mitigation. In-lieu-fee programs and other forms of compensatory mitigation account for only a small percentage of the wetland mitigation. Information about compensatory mitigation has given regulators an understanding of the impacts of

regulatory requirements, helping to improve the overall effectiveness of compensatory mitigation programs. Currently, however, there are no comprehensive data available for evaluating the success of avoidance and minimization requirements.

Avoidance and minimization provide the first line of wetlands protection. Given the potential for these requirements to enhance wetlands protection, their impact on preventing damage to wetlands should be evaluated and assessed.

## Avoidance

The federal §404 program and every state wetlands regulatory program except Florida's expressly require the analysis of alternatives to avoid wetlands and efforts to minimize impacts as parts of the permitting process. EPA's §404(b)(1) Guidelines establish the environmental criteria by which the Corps evaluates dredge and fill permit applications. Central to the Guidelines is the fundamental requirement of an alternatives analysis—the first step in the mitigation sequence: "...[N]o discharge of dredge or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the environment, so long as the alternative does not have other significant adverse environmental consequences." Thus, applicants must demonstrate that for any discharge or fill activity there is no alternative site for the proposed project that has less adverse environmental impacts. By approving permits only for the "least environmentally damaging alternatives," the Corps avoids impacts.

For proposed discharges to special aquatic sites such as wetlands, the Guidelines provide a more stringent test for avoidance that applicants must pass, with two presumptions: that an alternative site that is not a special aquatic site exists and that such a site will experience less adverse environmental impacts on the aquatic ecosystem. Permit approval may only be granted if the applicant can rebut one of these presumptions, demonstrating that the project has no practicable alternative that is less environmentally damaging. Even if the applicant rebuts one of the presumptions, the applicant must still conduct an alternatives analysis to find the least environmentally damaging practicable alternative.

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Because the project purpose is central to conducting the alternatives analysis, defining the purpose of the project is a key step. Under the federal program, the applicant defines the project purpose but the Corps must review it.

The states allocate the responsibility for defining project purpose in different ways. Michigan and Wisconsin are the only states whose written procedures expressly require the agency to define the purpose of the project for the alternatives analysis. Twelve states require the applicant to define the project purpose for the alternatives requirement: Connecticut, Indiana, Maine, Maryland, Minnesota, New Hampshire, New Jersey, New York, North Carolina, Oregon, Rhode Island, and Virginia. The remaining states do not define who is responsible for defining the project purpose.

In the federal and most of the state programs, the alternatives that must be considered are those that are practicable. If an alternative is practicable, it must be available. In the federal pro-

grams ecosystem by evaluating the technical requirements of the project and the potential impacts on the site.

#### **Assessment of Avoidance and Minimization**

Although regulators, scientists, practitioners, and managers have focused significant attention on evaluating and improving compensatory mitigation, little is known about the effectiveness of avoidance and minimization—the analytical steps intended to protect the wetlands from impacts before accepting compensation as a substitute. Two reports from the Environmental Law Institute, *The Federal Wetland Permitting Program: Avoidance and Minimization Requirements*, and *State Wetland Permitting Programs: Avoidance and Minimization Requirements*, document the history and current status of avoidance and minimization requirements in the federal and state wetland programs. The reports show that 27 years of administrative opinions, regulatory guidance, and legal opinions have clarified the process and stan-

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## **Twenty seven years of administrative opinions, regulatory guidance, and legal opinions have clarified the process and standards for avoidance and minimization, but there are still areas of weakness in the way the requirements are interpreted.**

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gram, availability of less environmentally damaging sites must be considered at the time that the project proponent purchased the property at issue. Six states have raised the availability standard by requiring applicants to demonstrate efforts to overcome obstacles to alternatives. Maryland's nontidal program, Minnesota, and Oregon consider efforts to overcome obstacles to alternatives sites (such as seeking zoning variances) as a factor in the permit decision, and Pennsylvania, Rhode Island, and Virginia actually require the applicant to demonstrate such efforts. Illinois requires such a demonstration from either the state wetland regulatory agency or the applicant.

#### **Minimization**

After the least environmentally damaging project alternative has been chosen, minimization of impacts must be considered. The minimization requirement can be found in the Guidelines' mandate that "appropriate and practicable steps" be taken to minimize potential adverse impacts to the aquatic ecosystem before a discharge can be permitted. The federal Guidelines list examples of how the unavoidable impacts may be minimized, as do the procedures and requirements in Minnesota, Ohio, Oregon, and Virginia. For higher quality wetlands, for example, Ohio requires the applicant to show that appropriate and practicable steps have been taken to minimize potential adverse impacts on the wet-

lands ecosystem by evaluating the technical requirements of the project and the potential impacts on the site.

At a roundtable discussion on assessing and improving avoidance and minimization, held at the Environmental Law Institute on November 27, 2007, several expert practitioners and regulators discussed examples of success and need for improvement. Many wetland conservationists are concerned about the attitude with which avoidance and minimization are undertaken during the permit application review process. While the letter of the law may be expressed in correspondence and official documents, they fear that the requirements are not applied rigorously and uniformly. "What shows up in guidance on the Corps District websites may not correspond to the signals actually being sent to the applicants," said Jan Goldman-Carter, Wetlands Counsel at the National Wildlife Federation. "The signal is often that there are these hoops to jump through. Basically, you're going to get your permit."

Other wetland conservationists are concerned about the confusion surrounding the definitions of avoidance and minimization—to some, avoidance means never developing in a wetland. They are concerned that the requirements never result in projects actually being moved from wetlands, they only alter the impacts. "There is no avoidance, only minimization and compensation," said Arthur Feinstein, of the Sierra Club, speaking particularly of

federal permitting in California. "Applicants simply submit alternatives analysis saying there are no practicable alternatives and they don't have to avoid."

Those in the private sector, though, explain there are many steps taken prior to the application phase that should be considered as avoidance and minimization. "Before the applicant walks in the door with the application, the applicant has already engaged in business planning," said Peggy Strand of the Venable Law Firm. "Permit applicants take steps to avoid and minimize impacts, such as choosing to span a wetland rather than fill it, in order to reduce their regulatory burden," Strand explained. "The regulatory system doesn't capture all of the avoidance and minimization that occurs in the private planning." Such choices are not apparent and thus are not easily assessed as part of an evaluation of the results of avoidance and minimization requirements.

One issue that has broad implications for the results of avoidance and minimization requirements is who has the burden of proof for showing compliance with the regulations. In the federal program, although the burden of proof for satisfying these steps rests with the permit applicant, the Corps must rely upon its own analysis in making a finding of compliance or non-compliance with the Guidelines. Where the applicant provides information that is insufficient to determine compliance, the Corps must deny the permit. If the regulatory agency approves a permit request without verifying the information, the applicant can simply assert that there is no practicable alternative, thereby satisfying the avoidance requirement without having to make a change to the proposal.

Another problem concerns how the project purpose is defined. For example, in the federal program and several of the state programs, there are regulatory consequences to a finding that a proposed project is water dependent. In the federal program, if a project proposed for a wetland is water dependent, then the presumption that there is an available non-wetland alternative site does not apply and the applicant need only go through the standard alternatives analysis. Of the states that require a water-dependency analysis, only a few base permit review decisions and alternatives reviews on whether the project is found to be water dependent.

Another cause for concern among permit applicants is predictability. Applicants find that the inconsistent standards and processes of the different Corps Districts can make permitting more complicated. However, one Corps District—Norfolk—has set a clear standard with very detailed minimization guidelines for stormwater projects, as part of its incorporation of Low Impact Development (LID) techniques into minimization. "Norfolk is ahead of the curve but other districts are looking at the Norfolk LID policy," said Strand.

Minimization can also be problematic for selection, design, and implementation because there is no clear way of choosing which methods of minimization should be prioritized, especially given the varying economic costs of these choices. "Avoidance is the way you eliminate impacts. After that, everything is second best," said Feinstein. Without clear guidance on what to prioritize for minimization, such as protecting habitat values versus

other wetland functions, there is no way to assure the rational outcomes. Further, the criteria for choosing minimization methods should be based on some larger-scale planning, such as a watershed-level plan.

Maryland has been particularly detailed in its wetland protection requirements, which the private sector appreciates for its predictability. A statewide programmatic permit exempts projects of under 1-acre in size, and an official map establishes wetlands of special state concern that cannot be impacted. "When a client comes to see me about a project in Maryland, the first step is to get the project under the cap, and then we look at how to avoid wetlands of special state concern," said Larry Lieberman, of Holland and Knight. "Data shows the loss of small amounts of wetlands."

## Conclusion

Although avoidance and minimization requirements are significant elements of wetlands protection in the federal and many state programs, they have the potential to be applied much more effectively. As Goldman-Carter explained, "The earlier in the process, for avoidance and minimization, the better. And there must be transparency." Providing detailed, quantitative and qualitative information about avoidance and minimization during the public notice period in permit review could be one way to accomplish this transparency. Further, to enhance the application of avoidance and minimization, regulators and others should evaluate the impacts avoidance and minimization have on how projects are implemented, in contrast with how the projects may have been initially proposed. The success of avoidance and minimization in wetlands conservation must be made more visible to the public. The more the avoidance and minimization requirements are applied to frame project proposals and to evaluate site restrictions and the true universe of possible alternative sites and designs, the more these regulatory requirements will contribute to the protection of wetlands. ■

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## REFERENCES

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