

Congress Hands the Corps a New Set of Orders on Mitigation

BY MELISSA SAMET

Last November, Congress passed the Water Resources Development Act of 2007, overturning a presidential veto. As described below, the Act imposes strict new mitigation requirements for U.S. Army Corps of Engineers civil works projects and makes environmental protection, restoration, and mitigation central components of a new national policy on water resources project planning.

Congress has handed the U.S. Army Corps of Engineers (Corps) a new set of orders on mitigation. The Water Resources Development Act (WRDA) of 2007 establishes minimum mitigation standards and a detailed mitigation planning process that should dramatically improve mitigation for Corps civil works projects.¹

To modernize the rest of the Corps' project planning process, the WRDA 2007 also requires the Corps to update its antiquated planning principles and guidelines (the P&G), which direct the Corps' selection of project alternatives.² The P&G have not been updated since they were written in 1983, and among other problems, they do not account for the important services and values provided by healthy rivers, streams, and wetlands.

To ensure that Corps projects are based on the best possible science and economics and are developed only after a full and unbiased evaluation of alternatives, the WRDA 2007 also establishes standardized independent review of costly or controversial Corps projects.³ Independent review is desperately needed to improve the quality of Corps studies recently reviewed by the U.S. Government Accountability Office (GAO) that were so flawed they could "not provide a reasonable basis for decision-making."⁴

As some of the most biologically productive natural ecosystems in the world, wetlands provide crucial wildlife habitat for millions of migrating waterfowl, shorebirds, and other species as well as recreation and enjoyment to millions of Americans who visit wetland areas each year. Wetlands also provide essential services that will become even more important as the earth's climate continues to change, bringing more severe floods and droughts to communities across the country. These services include filtering pollutants from water, recharging aquifers, acting as carbon sinks, and absorbing and slowing the release of storm runoff. The U.S. Environmental Protection Agency (EPA) reports that a single acre of wetland can store 1 to 1.5 million gallons of floodwater. Wetlands save an estimated \$30 billion plus in annual flood damage repair costs in the continental United States alone.⁵

By helping to ensure that Corps projects protect—instead of damage—the nation's rivers, streams, and wetlands, full imple-

mentation of the WRDA 2007 reforms will be a boon to communities across the country that need these resources to thrive.

The Corps Has Not Complied With Its Longstanding Mitigation Requirements

Like all federal agencies, the Corps must comply with section 404 of the Clean Water Act and the Clean Water Act 404(b)(1) Guidelines. Since at least 1980 when the Guidelines were enacted, the Corps has been required to minimize the adverse impacts of its own projects on the nation's waters to the maximum extent practicable. This requires the Corps to first avoid impacts, then minimize impacts, and finally to implement compensatory mitigation to offset any damage that cannot be avoided.⁶

Congress imposed additional mitigation requirements on the Corps through the Water Resources Development Act of 1986. WRDA 1986 requires the Corps to submit a "specific plan to mitigate fish and wildlife losses" with every project the Corps recommends to Congress, unless the Corps finds that the project would cause only "negligible adverse impacts to fish and wildlife."⁷ It also directs the Corps to carry out in-kind mitigation for impacts to bottomland hardwood wetlands, and to implement all mitigation prior to, or concurrently with, project construction.⁸

In 1990, Congress told the Corps that it had to do more to address wetland losses caused by its own projects. WRDA 1990 established a statutory "interim goal of no overall net loss of the Nation's remaining wetlands base, as defined by acreage and function, and a long-term goal to increase the quality and quantity of the Nation's wetlands, as defined by acreage and function" for the Corps' civil works program.⁹ At least on paper, the Corps took that directive to heart and its internal guidance states that adverse impacts to wetlands are to be "fully mitigated."¹⁰

Regrettably, the Corps' compliance with these important mandates can only be described as abysmal. According to the GAO, the Corps did not even bother to prepare mitigation plans for almost 70 percent of the projects it constructed between 1986 and 2001.¹¹

The only legal justification for not having a mitigation plan is a finding by the Corps that the project will cause only "negligible adverse impacts." But it is simply not plausible that 70 percent of Corps projects would cause only negligible harm. No reasonable person could suggest that the construction and operation of locks,

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dams, and training structures, and the repeated dredging and water level manipulation, required to turn a free flowing river into a navigation channel could cause only negligible impacts. And, the Corps' own guidelines make it clear that the environment will be harmed by "practically all flood control projects."¹²

Even a cursory look at Corps projects makes it clear that the Corps is not complying fully with its mitigation mandates. For example, the Corps did not prepare a mitigation plan for the American River Watershed Flood Plain Protection Plan, a project that EPA said was so environmentally destructive that it "must not proceed as proposed." Neither the Boston Harbor Navigation Improvements and Berth Dredging project nor the John T. Myers and Greenup Lock Improvements project had mitigation plans even though EPA told the Corps that each of those projects would have "significant environmental impacts."¹³ The Corps' San Francisco District recently refused to include mitigation for a proposed project in northern California that would have destroyed 100 acres of wetlands. According to the Corps, it would not require mitigation for the Bolinas Lagoon project because it would be too expensive and could not take place close to the project site.¹⁴

Where the Corps does propose mitigation another set of problems comes into play. Corps studies often identify only the amount of mitigation that will be undertaken, while leaving all mitigation planning for a later date. It is impossible to evaluate the potential for mitigation success or calculate the true cost of implementing that mitigation without a mitigation plan.

The Corps also often proposes mitigating impacts to wetlands, streams, and riparian habitat with fewer acres of more common terrestrial habitat. This out-of-kind mitigation by definition cannot replace lost wetland functions, and cannot meet the Corps' statutorily mandated goal of no net loss of wetland acres.

The Corps also makes little effort to evaluate whether its mitigation efforts are working. As of November 2000, the Corps'

Vicksburg District—which covers portions of Arkansas, Louisiana and Mississippi—had carried out no mitigation monitoring at all for the many civil works projects in that District.¹⁵ While the Vicksburg District recently started a mitigation monitoring program, the data being collected is not sufficient to determine whether functional replacement is actually occurring.

In at least some situations, the Corps looks only to the amount of money it has spent to determine mitigation "success." The Corps advised GAO that "the point at which 50 percent of mitigation is completed occurs in the fiscal year in which the Corps district office's cumulative expenditures toward the mitigation plan total at least 50 percent of the estimated cost of these activities."¹⁶

A very recent example of flawed Corps mitigation planning can be seen in the Corps' proposal for the notorious Yazoo Backwater Pumping Plant project in Mississippi. The Corps has acknowledged that this project would drain and damage at least 60,700 acres of wetlands. EPA, the U.S. Fish and Wildlife Service, and an independent hydrology assessment have shown that the Corps is grossly underestimating the actual wetland impacts. In 2000, EPA said the project would drain and damage more than 200,000 acres of ecologically significant wetlands. Despite this damage,

the Corps has limited its mitigation to planting tree seedlings on 10,662 acres of frequently flooded agricultural lands, with no requirements to ensure that those lands have wetland hydrology. Specific plans will not be developed until mitigation lands are purchased, and monitoring will be limited to initial visual inspections followed by remote sensing techniques.¹⁷

Even if it were theoretically possible to mitigate wetland losses at this scale, the Corps' proposal certainly would not do so. Since the Corps has not actually proposed any wetlands mitigation it cannot replace the wetland functions that would be lost through the project. Even if the Corps' proposal somehow mi-



Navigation projects typically cause significant adverse impacts. Lock and Dam #5 and Levee Construction at the Red River Waterway. Photo courtesy of the U.S. Army Corps of Engineers.

raculously created 10,622 acres of wetlands, it would still result in an 82 percent loss of wetlands. There are countless other problems with this project and EPA has properly taken the rare step of initiating a Clean Water Act §404(c) veto of the Yazoo Pumps.

In reality, the Corps has been imposing far more stringent mitigation requirements on private developers than on itself. And, unfortunately, even the more stringent mitigation requirements under the Corps' regulatory program are alarmingly far from achieving the goal of no net loss of wetlands.¹⁸ The "actual amount of wetland impacts offset is only about 20 percent, meaning that the section 404 permitting program has been fostering an 80 percent net loss of wetlands."¹⁹

The New Mitigation Requirements of WRDA 2007

Congress finally said enough, and in November 2007 passed a Water Resources Development Act that imposes strict new mitigation requirements for Corps civil works projects. It also makes environmental protection, restoration, and mitigation central components of a new national policy on water resources project planning.²⁰

WRDA 2007 establishes minimum standards for civil works project mitigation, defines the elements that must be included in mitigation plans, requires the Corps to monitor civil works mitigation until ecological success is achieved, and requires the Corps to consult yearly with state and federal resource agencies on the progress being made for each civil works mitigation plan.²¹

Notably, these new mitigation requirements must be satisfied for *all* new and ongoing Corps project studies. The new mitigation requirements will also kick in anytime the Corps is required by the National Environmental Policy Act to prepare a supplemental environmental impact statement or supplemental environmental assessment, or anytime the Corps conducts a general reevaluation report or other internal reevaluation, for a project that has already been approved by Congress.

Minimum Mitigation Standards

Corps water projects are now statutorily required to meet, at a minimum, the same mitigation standards that the Corps requires of other governmental entities and private parties under the Clean Water Act §404 program. The Council on Environmental

Quality reports that under the §404 program, the Corps requires "a ratio of more than two acres of mitigation for every acre of permitted impacts to wetlands."²² As a result, this should be the minimum amount of mitigation required for the civil works program as well.

But WRDA 2007 goes much further. It explicitly requires the Corps to mitigate for the same or greater ecosystem values than those lost to the project. In addition to implementing in-kind mitigation for damage to bottomland hardwood wetlands, the Corps now must mitigate impacts to other habitat types "to not less than in-kind conditions, to the extent possible."²³

Detailed Planning

WRDA 2007 dictates the items that must be addressed in Corps mitigation plans. Each Corps mitigation plan now must include:



Digging up construction material for the Corps' Mississippi Mainline Levee Enlargement Project in Mississippi. More than 5,450 acres of wetlands will be dug up in this way to construct this flood protection project. Photo courtesy of Melissa Samet.

- the type, amount, and characteristics of the habitat being restored, a description of the physical actions to be taken to carry out the restoration, and the functions and values that will be achieved;
- the ecological success criteria, based on replacement of lost functions and values, that will be evaluated and used to

determine mitigation success;

- a description of the lands and interest in lands to be acquired for mitigation, and the basis for determining that those lands will be available;
- a mitigation monitoring plan that includes the cost and duration of monitoring, and identifies the entities responsible for monitoring if it is practicable to do so (if the responsible entity is not identified in the monitoring plan it must be identified in the project partnership agreement that is required for all Corps projects); and
- a contingency plan for taking corrective action in cases where monitoring shows that mitigation is not achieving ecological success as defined in the plan.

Long Term Monitoring and Consultation

The law now requires the Corps (or a delegated entity) to continue monitoring mitigation *until* the monitoring demonstrates that the ecological success criteria established in the mitigation plan have been met. WRDA 2007 also requires the Corps to consult yearly on each project with the appropriate federal agencies and the states on the status of the mitigation efforts. The consultation must address the status of ecological success on the date of the consultation, the likelihood that the ecological success criteria will be met, the projected timeline for achieving that success, and any recommendations for improving the likelihood of success.

Mitigation Reporting

WRDA 2007 also requires the Corps to report to Congress each year on the status of its civil works mitigation.²⁴ The mitigation status report must provide mitigation information—including the results of its yearly mitigation consultations—for all projects that are under construction, all projects that have undergone or completed construction but for which mitigation has not been completed, and all projects for which construction funding is requested for the next fiscal year. The status report is to be submitted with the President's proposed budget request for the Corps, and must be made available to the public, including on the internet.

The Corps has already missed its first mitigation status report deadline and appears to have made little progress in implementing the new mitigation requirements. But this new provision holds the best hope for improving compensatory mitigation for any unavoidable environmental damage caused by Corps projects.

Conclusion

It is essential that the Corps fully implement the full suite of reforms established by WRDA 2007. The nation can no longer afford poor project planning, destructive projects, and lax mitigation efforts at the hands of the Corps. Our rivers, streams, and wetlands are far too important to all of us. ■

ENDNOTES

1. Water Resources Development Act of 2007, Pub. L. No. 110-114, Nov. 8, 2007 (WRDA 2007) §2036. The mitigation provisions have been codified at 33 U.S.C. §§ 2283, 2283a, and 2317b.
2. WRDA 2007 §2031, codified at 42 U.S.C. §1962-3
3. WRDA 2007 §2034, codified at 33 U.S.C. §2343.
4. U.S. Government Accountability Office, *U.S. Army Corps of Engineers, Observations on Planning and Project Management Processes for the Civil Works Program*, GAO-06-529T, Mar. 2006. The GAO found that recent Corps studies could not be relied on because they were "were fraught with errors, mistakes, and miscalculations, and used invalid assumptions and outdated data." *Id.*
5. See Lois J. Schiffer & Jeremy D. Heep, *Forests, Wetlands and the Superfund: Three Examples of Environmental Protection Promoting Jobs*, 22 IOWA J. CORP. L. 571, 590 (1997) (citing NATIONAL AUDUBON SOCIETY, VALUING WETLANDS: THE COST OF DESTROYING AMERICA'S WETLANDS 24-27 (1994)).
6. The Clean Water Act 404(b)(1) Guidelines state clearly that they apply to the Corps' civil works program. 40 C.F.R. § 230.2(a).
7. 33 U.S.C. §2283(d).
8. *Id.* §§ 2283(a) and (d).
9. *Id.* § 2317(a)(1).
10. U.S. Army Corps of Engineers, ER 1105-2-100 (Apr. 22, 2000), Appendix C at 6-17. Each District Commander is to "ensure that adverse impacts to wetland resources are fully mitigated."
11. U.S. General Accounting Office, *U.S. Army Corps of Engineers: Scientific Panel's Assessment of Fish and Wildlife Mitigation Guidance*, GAO-02-574, May

2002, at 4. The Corps provided the GAO with mitigation planning information for 150 projects that the Corps says were authorized between the Water Resources Development Act of 1986 and September 30, 2001, and that received construction appropriations. Only 47 of those projects (or just 31 percent) included mitigation plans. *Id.*

12. U.S. Army Corps of Engineers, ER 1105-2-100 (Apr. 22, 2000) at E-89.
13. The list of projects without mitigation plans identified in the May 2002 GAO study *U.S. Army Corps of Engineers Scientific Panel's Assessment of Fish and Wildlife Mitigation Guidance* (GAO-02-574) was provided to American Rivers by the U.S. Army Corps of Engineers. EPA gave the Corps' environmental impact statement for the American River Watershed Flood Plain Protection Plan a rating of EU2. EPA gave the Boston Harbor Navigation Improvements and Berth Dredging Project and the John T. Myers and Greenup Lock Improvements environmental impact statements an EO2 rating. The criteria for these ratings, which include the quotes referenced in the text, are described at <http://www.epa.gov/compliance/nepa/comments/ratings.html> (last visited March 20, 2008).
14. Specifically, the Corps concluded that it would not mitigate for the loss of 100 acres of jurisdictional wetlands because: (1) on-site mitigation is not physically possible; (2) there are no acceptable potential mitigation sites close to the project site and off-site mitigation would be inconsistent with County policies; (3) mitigation would be so expensive that it would prevent the Corps from proceeding with the project; and (4) loss of salt marsh habitat cannot be mitigated because no mitigation is planned. Draft Environmental Impact Statement, Bolinas Lagoon Ecosystem Restoration Project, San Francisco District (July 2002) at 4-15 to 4-16. This project is currently being reformulated due to strong opposition from the public and the state of California.
15. U.S. Army Corps of Engineers, Vicksburg District, Nov. 7, 2000, response to Freedom of Information Act Request No. 00-60 submitted by Melissa Samet, Earthjustice, requesting information and data on the Corps' wetlands monitoring program in the Vicksburg District.
16. U.S. General Accounting Office, *U.S. Army Corps of Engineers Scientific Panel's Assessment of Fish and Wildlife Mitigation Guidance*, GAO-02-574, May 2002, at 4 n.2.
17. U.S. Army Corps of Engineers, Final Yazoo Backwater Area Reformulation Report and Final Supplement No. 1 to the 1982 Yazoo Area Pump Project Final Environmental Impact Statement (2007), Appendix 1 Mitigation. The mitigation also might include some use of water control structures to establish winter waterfowl habitat on a small percentage of the mitigation acres.
18. NATIONAL RESEARCH COUNCIL, COMPENSATING FOR WETLAND LOSSES UNDER THE CLEAN WATER ACT (2001), at 2.
19. R. Eugene Turner et al., *Count It by Acre or Function—Mitigation Adds Up to Net Loss of Wetlands*, NAT'L WETLANDS NEWSL., Nov.-Dec. 2001.
20. WRDA 2007 §2031, codified at 42 USC 1962-3.
21. WRDA 2007 §2036. These provisions have been codified at 33 U.S.C. §§2283, 2283a, and 2317b.
22. COUNCIL ON ENVIRONMENTAL QUALITY, CONSERVING AMERICA'S WETLANDS 2006: TWO YEARS OF PROGRESS IN MEETING THE PRESIDENT'S GOALS, App. B at 22 (Apr. 2006).
23. 33 U.S.C. §2283(d).
24. *Id.* §2283a.