Regulating Watershed Restoration: Why the Perfect Permit Is the Enemy of the Good Project

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TABLE OF CONTENTS

I. INTRODUCTION ........................................................................... 52
II. REASONS FOR REGULATING RESTORATION ......................... 52
   A. Ensuring Review of Environmental Impacts .......................... 53
   B. Providing Opportunities for Public Participation ................. 53
   C. Creating a Permit Shield for the Permittee ......................... 54
III. REALITIES OF RESTORATION: EXAMPLES FROM THE EVERGLADES .................................................. 55
   A. Dredge and Fill Permits .................................................... 56
   B. NPDES Permits ................................................................. 57
   C. Everglades Forever Act Permits ........................................ 62
   D. Aquifer Storage and Recovery Permits ............................... 63
   E. Problems of Permit Compliance ........................................ 65
      1. Unexpected Events and Permit Modifications ............... 65
      2. Revision to Water Quality Standards ......................... 66
IV. THE RANGE OF REGULATORY OPTIONS ............................... 68
   A. Exemptions and De Minimus Permits ................................. 69
   B. General Permits .............................................................. 71
   C. Variances ........................................................................ 73
   D. Project-Specific Statutory Permitting Criteria .................... 74
   E. Comprehensive Legislation .............................................. 76
      1. Amend the Clean Water Act to Exempt Restoration ....... 76
      2. Create a Single State Watershed Restoration Law ........ 76
V. CONCLUSION ............................................................................. 78

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I. INTRODUCTION

Water resource restoration projects have become essential components of public policy due to the ecological connection between land and water and the economic benefits.1 Ironically, despite the resulting improvements to water quality, flood control, water supplies, and natural resources, watershed restoration projects can be subjected to the same types of environmental regulations that were designed for industrial activities and other intense land uses. In many ways, this type of regulation of restoration is beneficial, providing due process and adequate review of environmental issues. However, through the regulatory process, the law of unintended consequences emerges, and environmental protection laws and regulations can actually hamper implementation of important environmental restoration efforts.

This article explores the problems of regulating watershed restoration, especially in the Florida Everglades. Part II discusses the reasons for regulating watershed restoration. Part III explores the consequences, based on examples and experiences of the South Florida Water Management District in its effort to obtain permits for the Everglades restoration. Part IV then considers the range of options available for regulating watershed restoration projects, and Part V provides the author’s recommendations and conclusions.

II. REASONS FOR REGULATING RESTORATION

At first, the concept of regulating environmental restoration seems oxymoronic. Why use laws to protect the environment from projects designed to protect or benefit the environment? Because Florida’s history is spotted with well-intentioned projects that had severe environmental impacts—from the construction of the canal systems carving up the Everglades to the channelization of the Kissimmee River to the Cross-Florida Barge

   [T]he Everglades ecological system not only contributes to South Florida’s water supply, flood control, and recreation, but serves as the habitat for diverse species of wildlife and plant life. The system is unique in the world, and one of Florida’s great treasures. The Everglades ecological system is endangered as a result of adverse changes in water quality, and in the quantity, distribution and timing of flows, and, therefore, must be restored and protected.
   Everglades Forever Act, FLA. STAT. § 373.4592(1)(a) (2001).
As a result, there is a clear need for environmental regulation—even for watershed restoration projects.

A. Ensuring Review of Environmental Impacts

To avoid unintentionally creating environmental problems at the federal level, Congress passed the National Environmental Policy Act (NEPA) in 1974, requiring an environmental impact statement to be conducted for projects with potential environmental consequences. Environmental permitting laws and regulations take an additional step, ensuring that permitted projects meet established standards, by requiring compliance with permit conditions. These types of review ensure adequate analysis of environmental issues, and in theory prevent governmental entities from implementing measures that adversely impact the environment.

B. Providing Opportunities for Public Participation

Through the environmental permitting process, the permittee and the interested members of the public also ensure compliance with the well-established principles of due process in administrative law requiring notice and the opportunity to be heard. Typically, the development of an environmental permit involves a public comment period or a workshop to openly discuss the project and its requirements. In some cases, pursuant to Florida’s Administrative Procedures Act, parties whose substantial interests are affected will file petitions to administratively challenge proposed agency decisions.


7. See, e.g., FLA. ADMIN. CODE ANN. r. 62-620.510(10)–(14) (2000). These types of public hearings and workshops can also be conducted pursuant to NEPA, 42 U.S.C. § 4321 (2000), during the development of an environmental impact statement.

8. FLA. STAT. ch. 120 (2001).
actions. This gives the permittee and the public an opportunity to question whether a regulatory agency has met its burden, and whether the permit provides "reasonable assurances"—the legal standard typically used for environmental permits—that the requirements of law will be met.

C. Creating a Permit Shield for the Permittee

Another benefit of the environmental permitting process is its creation of a "permit shield," an assurance that compliance with the permit constitutes compliance with the law, and a freedom from future liability related to any pollutants regulated by that permit. Although not without its opponents, this concept is an outgrowth of the basic principles of good faith reliance and prosecutorial discretion. It has been formally codified in some state and federal environmental laws, and has been upheld in court. Notably, the federal Clean Water Act and Florida's National Pollutant

9. § 120.569.
12. Some environmental groups criticize this concept, however, fearing that permits themselves will become the law and that environmental protection could be undermined. See, e.g., MISSOURI COALITION FOR THE ENVIRONMENT, 1998 ENVIRONMENTAL BRIEFING BOOK: A GUIDE FOR THE STATE LEGISLATURE ch. 8 (1998).
13. See Shell Oil Co. v. Envtl. Prot. Agency, 950 F.2d 741, 762 (D.C. Cir. 1991). "[A]n agency's decision not to prosecute or enforce, whether through civil or criminal process, is a decision generally committed to an agency's absolute discretion." Id. at 763 (quoting Heckler v. Chaney, 470 U.S. 821, 831 (1985)).
14. See, e.g., 45 Fed. Reg. 33,290, 33,312 (May 19, 1980) (establishing RCRA permit shield rule, and stating that EPA "will not take enforcement action against any person who has received a final RCRA permit except for noncompliance with the conditions of that permit"); 30 TEX. ADMIN. CODE § 122.148 (2002).
15. See Shell Oil, 950 F.2d at 762.
Discharge Elimination System (NPDES) rules both state that compliance with an NPDES permit constitutes compliance with the law, thus giving the permittee a permit shield.

Thus, the issuance of an environmental permit provides significant benefits to the permittee by clearly defining the objectives and standards which need to be met by the project. The permit benefits the holder by allowing the permittee to move forward with fewer concerns about litigation due to enforcement measures or citizen suits, so long as the permittee complies with those terms. This protection is useful even in the area of environmental restoration, because despite their positive attributes, even environmental restoration projects can be challenged.

III. REALITIES OF REGULATION: EXAMPLES FROM THE EVERGLADES

While governmental entities are traditionally thought of as the permitting agency, sometimes they become the permittee. Construction of a watershed restoration project, like any other construction project, is subject to environmental regulation. In those cases, the value of the permit shield becomes readily apparent. Indeed, the experience of the South Florida Water Management District (Water Management District) with the Everglades restoration effort demonstrates the difficulties that occur when rules of law meet laws of nature.

In 1994, after many years of litigation over the Everglades restoration, the Everglades Forever Act (EFA), was passed to provide a roadmap for

17. FLA. ADMIN. CODE ANN. r. 62-620.301 (2000); FLA. ADMIN. CODE ANN. r. 62-650.300 (1999). The Florida rules do provide exceptions to the permit shield in four instances: 1) when the permittee is not in compliance with the permit; 2) when the permittee provides false information; 3) when the permittee fails to provide information; or 4) when the permittee violates the operating requirements for a wastewater facility. FLA. ADMIN. CODE ANN. r. 62-600.740 (1999).

18. E.I. Du Pont de Nemours & Co. v. Train, 430 U.S. 112, 138 n.28 (1977) [hereinafter Du Pont] (interpreting the clean water act to provide a permit shield to permittees, protecting them from permit changes); United States v. Frezzo Bros., Inc., 602 F.2d 1123, 1128 (3d Cir. 1979).

19. See Du Pont, 430 U.S. at 118 n.28.


the restoration effort. The EFA required the implementation of the Everglades Construction Project (ECP).\textsuperscript{23} The ECP is one of the largest environmental restoration projects ever undertaken,\textsuperscript{24} and includes the construction of over 40,000 acres of marshlands in agricultural areas north of the Everglades, known as Stormwater Treatment Areas (STAs).\textsuperscript{25} The marshes use natural vegetation to filter excess nutrients, especially phosphorus, from upstream agricultural discharges before those waters reach the Everglades.\textsuperscript{26} Ironically, the construction and operation of the STA marshes, which are a critical component of the Everglades restoration effort, have been delayed by the permitting requirements of environmental laws.

A. Dredge and Fill Permits

Pursuant to section 404 of the federal Clean Water Act, the Water Management District's construction of the STAs needed a dredge and fill permit from the United States Army Corps of Engineers (Corps).\textsuperscript{27} The situation was ironic, since these wetland protection provisions of the federal Clean Water Act were being used to regulate the construction of new wetlands on previous agricultural lands. Further adding to the irony, decades of discharges from those same lands had been unregulated by the Clean Water Act due to agriculture's exemption from that law.\textsuperscript{28}

The 404 permit for the ECP would prove unique, because instead of focusing upon STA construction, the federal 404 permits issued to the Water Management District included operating conditions regulating the water quality of discharges—an issue normally reserved for federal National Pollutant Discharge Elimination System (NPDES) permitting.\textsuperscript{29} In support

\begin{itemize}
\item \textsuperscript{22}FLA. STAT. § 373.4592 (2001).
\item \textsuperscript{23}§ 373.4592(4).
\item \textsuperscript{24}§ 373.4592(1)(h).
\item \textsuperscript{27}United States Army Corps of Engineers, Permit No. 199404532 (Mar. 13, 1997).
\item \textsuperscript{28}33 U.S.C. § 1342(l)(1) (2000); 40 C.F.R. § 122.3 (2001).
\item \textsuperscript{29}See id.
\end{itemize}
of this unprecedented action, the record of decision for the 404 permit explained that since water quality issues had not yet been clearly addressed by an NPDES permit, the Corps was exercising its authority to protect the public interest. The Corps eventually conceded that operational issues were best addressed by federal NPDES permits, and agreed to modify its initial draft permit to include a condition stating that the permit would "eliminate duplicate, conflicting, or unnecessary terms" to conform with the NPDES permits.

Until those NPDES permits were in place, the Corps' conditions required a substantial research and monitoring program to continue. Concerns over the sweeping scope of the 404 permit even reached the Florida Legislature, which held hearings on the subject, calling the Corps' District Engineer to testify. Ultimately, the legislature passed a law creating a Joint Legislative Committee on Everglades Oversight to monitor permitting issues related to the Everglades. But the Water Management District was still left holding an unprecedented 404 permit as its reward for constructing a massive environmental restoration project.

B. NPDES Permits

The anticipated NPDES permits regulating the operation of the Everglades Construction Project proved just as complicated and controversial as the 404 permit that authorized the project's construction. Pursuant to the Clean Water Act, NPDES permits regulate the addition of a pollutant to navigable waters from a point source discharge. Initially, the District argued that the STAs did not fit this criteria, because STAs were non-point sources that added pollutants to waters of the United States. Rather, STAs were non-point source stormwater systems that removed pollut-

33. See id.
34. See generally Bush Signs Law to Help Restore Everglades, ST. PETERSBERG TIMES (Fla.), May 17, 2000, at 5B.
35. Ch. 97-258, § 1, 1997 Fla. Laws 4604 (codified at Fla. STAT. § 11.80 (2001)).
36. Notably, the Water Management District never signed the 404 permit. See United States Army Corps of Engineers, Permit No. 199404532 (Mar. 13, 1997).
Furthermore, the District argued that the STAs, which treated agricultural waters, also deserved the benefit of the agricultural exemption from NPDES regulation. The United States Environmental Protection Agency (EPA) concluded that these interpretations of the NPDES rules were not applicable to the high-profile Everglades restoration effort. Instead, EPA informed the District's counsel that even though the STAs removed pollutants, they were treatment systems that actively "collected" pollutants, and, therefore, fell within NPDES review. Rather than continue a history of litigation in the Everglades, and given the Corps' expansive interpretations of its 404 permits, the Florida Department of Environmental Protection (Florida DEP) and the Water Management District agreed to process NPDES permits for the STAs, although Florida Governor Jeb Bush would later insist that the permits be issued by the state, and not the federal government.

Having lost the struggle over whether an NPDES permit was needed, the Water Management District then sought to limit the scope of the permit. In the past, courts ruled that NPDES permits should not hold a permittee responsible for the pollutants already existing in the watershed, concluding that "[c]onstituents occurring naturally in the waterways or occurring as a result of other [upstream]... discharges [did] not constitute...

38. See Memorandum from Paul Nettleton, Attorney, to Barbara Markham, General Counsel, South Florida Water Management District (Nov. 29, 1993) (on file with author).
39. Id.
40. Id.
41. Id.
42. Memorandum from Thomas K. MacVicar, Deputy Executive Director, and Barbara A. Markham, General Counsel, South Florida Water Management District, to South Florida Water Management District Governing Board Members (Dec. 6, 1993) (on file with author). See also Comm. to Save the Mokelumne River v. E. Bay Mun. Util. Dist., 13 F.3d 305 (9th Cir. 1993).
43. See Letter from Jeb Bush, Governor of Florida, to Carol Browner, Administrator, United States Environmental Protection Agency (Feb. 28, 1999) (on file with author) and Letter from Carol Browner to Jeb Bush (Mar. 8, 1999). The Florida DEP administers a federally-approved NPDES program pursuant to an interagency agreement and in accordance with state administrative codes. See National Pollutant Discharge Elimination System Memorandum of Agreement Between the State of Florida and the United States Environmental Protection Agency, Region 4 (May 1, 1995) (on file with author).

Although the issue had remained unresolved prior to the Governor's intervention, the debate over NPDES permitting actually began in 1993 when the Water Management District's Governing Board agreed to apply for its first NPDES permit for the Everglades Nutrient Removal project, the prototype STA. See MacVicar and Markham Memorandum, supra note 42.
an addition of pollutants." Florida DEP rules for the NPDES program specifically acknowledge this reality through regulations governing "pollutants in intake water." The Florida DEP did not apply this "pass-through" pollution concept to the Water Management District's discharges.

Instead, to obtain its NPDES permits, the Water Management District was required to provide the Florida DEP with reasonable assurances that its STA discharges were not likely to cause pollution and that the discharges would comply with applicable rules and regulations. For a project that was substantially improving water quality, proving that it would "not discharge or cause pollution" should have been an easy task. But in reality, that evaluation required the Florida DEP to consider: 1) whether the discharges will meet numeric or narrative water quality criteria for individual chemical constituents; 2) whether the discharges will interfere with the designated uses and classifications of the receiving waterbody; and 3) whether the discharges meet anti-degradation requirements. Thus, application of NPDES permitting rules to the Everglades proved particularly difficult because the STAs only improve conditions and did not completely solve all the water quality problems in the watershed.

In the Everglades ecosystem, phosphorus is a critical water quality parameter, because phosphorus enrichment in the watershed can cause significant changes to the ecosystem. At the time that the Water Management District sought its NPDES permits, the water quality criterion for phosphorus in the Everglades was a narrative standard preventing "imbalance of flora and fauna," although rulemaking was imminent to

44. E.g., Appalachian Power Co. v. Train, 545 F.2d 1351, 1377 (4th Cir. 1976).
46. r. 62-620.320(1).
47. r. 62-620.320(2).
48. r. 62-620.320(1).
52. See S. FLA. WATER MGMT. DIST., supra note 25.
53. See § 373.4592(1)(d) (legislative finding that Everglades contains excessive phosphorus). See also S. FLA. WATER MGMT. DIST., supra note 25 (evaluating ecological effects of phosphorus enrichment in the Everglades); Letter from John H. Hankinson, Jr., Regional Administrator, Region IV, United States Environmental Protection Agency, to Billy Cypress, Chairman, Miccosukee Tribe of Indians of Florida (May 23, 1999) (on file with author) (approving tribal water quality standards).
54. FLA. ADMIN. CODE ANN. r. 62-302.530 (2002). The standard is currently under revision, and in accordance with the Everglades Forever Act (EFA), sections 373.4592 and
develop a new numeric criterion for phosphorus. While research suggested that the number would later be ten parts per billion (ppb), as already recommended by the Florida DEP, and as indicated in the state’s Everglades Forever Act, the STAs were only designed to achieve fifty ppb.

Despite being a substantial improvement over existing water quality, fifty ppb was not good enough for the Clean Water Act and its NPDES permits. Until the Florida DEP had reasonable assurances that the state’s water quality criteria would be met, permits could not be issued, and the treatment systems could not be operated. Eventually, after nearly two years of interagency negotiations, the Water Management District, the Florida DEP and the United States EPA all agreed on an NPDES permit for STA-1 West. The STA-1 West permit was issued in conjunction with an administrative order acknowledging that phosphorus water quality criterion would not be met, and allowing the District until 2006 to comply with all water quality standards in accordance with the state’s Everglades Forever Act. This approach was authorized by the federal Clean Water Act, and was based on the concept of a compliance schedule. Unfortunately, under federal law, compliance with an administrative order provides less of a permit shield for the permittee than compliance with a permit, thereby

373.4592(4) of the Florida Statutes. The Florida Environmental Regulation Commission will establish a numeric criterion for phosphorus in the Everglades no later than December 31, 2003.

55. See § 373.4592(4)(d).
56. Evidence suggests that changes in Everglades flora and fauna are seen at levels as low as ten parts per billion. See S. Fl. Water Mgmt. Dist., supra note 25.
58. § 373.4592(4)(e).
59. Additional treatment technologies capable of reaching lower levels of phosphorus are also part of ongoing research. See § 373.4592(4)(d), (9)(j).
61. Florida Department of Environmental Protection, NPDES Permit No. FL0177962 (1999). Additional NPDES permits will be needed, or already have been developed, for STA-2, STA-3/4, and STA-5.
63. § 373.4592(10).
65. Whereas administrative orders issued by the Florida DEP are final agency action, subject to review under Chapter 120 of the Florida Statutes, they are not considered final.

http://nsuworks.nova.edu/nlr/vol27/iss1/4
exposing the permittee to the potential for more liability and litigation over violations of water quality standards.66 In fact, fear of an administrative challenge to the permit and administrative order was so pervasive that the Florida Legislature enacted an expedited process for challenging Everglades-related permits.67

Thus, in the end, the District and other agencies spent hundreds, if not thousands, of staff hours to develop an incomplete permit that would require future modifications and that did not even create an adequate permit shield. Adding insult to injury, the District's environmental restoration project was classified as "industrial" and charged significant permitting fees.68 Perhaps most significantly, the permit will eventually hold the District responsible for achieving water quality standards, despite the fact

agency action under federal law and therefore do not provide a permit shield. See Laguna Gatuna, Inc. v. Browner, 58 F.3d 564 (10th Cir. 1995); S. Ohio Coal Co. v. Office of Surface Mining, Reclamation and Enforcement, 20 F.3d 1418 (6th Cir. 1994); S. Pine Assoc. v. United States, 912 F.2d 713 (4th Cir. 1990).

66. Despite the successful negotiation of and compliance with an administrative order, permittees could still face enforcement actions and citizen suits for violations of water quality standards and the federal Clean Water Act. See United States v. Avatar Holdings, Inc., 1995 WL 871260 (M.D. Fla. 1995) (stating government may seek enforcement of water quality violations even after negotiating administrative order); Wash. Pub. Interest Research Group v. Pendleton Woolen Mills, 11 F.3d 883 (9th Cir. 1993) (holding citizen suits may be brought against a permittee alleging violations of the federal Clean Water Act even if USEPA is content with an existing administrative order).

Under Florida law, however, an administrative order is a final agency action. 1800 Atl. Developers v. Dep't of Envtl. Regulation, 552 So. 2d 946 (Fla. 1st Dist. Ct. App. 1989); Booker Creek Pres., Inc. v. Mobil Chem. Co., 481 So. 2d 10 (Fla. 1st Dist. Ct. App. 1985).


68. A quick look at the bottom line clearly demonstrates how NPDES permitting is misapplied to environmental restoration projects. Despite their benefits, these STAs, which cleanse agricultural runoff from rainfall, were classified as industrial wastewater publicly owned treatment works (POTW). Fla. Admin. Code Ann. r. 62-620.200(21) (2001). This conclusion was reached by process of elimination, because the treatment facilities were not domestic wastewater treatment facilities. r. 62-620.200(15). Unfortunately, this apparently unavoidable conclusion had other consequences, because industrial discharge facilities must pay application processing and operating fees. See Fla. Stat. §§ 403.087(6)(a), 403.0885(1) (2001), and Fla. Admin. Code Ann. r. 62-620.310(5) (2000), 62-4.050 (2001), 62-4.052 (2002). As a result, the Florida DEP may charge the Water Management District over $30,000 per year in administrative fees for the privilege of building and operating facilities that clean up waters flowing into the Everglades. The first STA was assessed a fee of $5,800 per year by the Florida DEP. See Florida Department of Environmental Protection Bureau of Finance and Accounting, Invoice No. 1411 (Dec. 2, 1999).
that all the pollutants generated by upstream agricultural activities were exempt from regulation under the Clean Water Act. All these problems are a product of the obvious reality that NPDES permitting regulations were simply not designed for watershed restoration projects.

C. *Everglades Forever Act Permits*

Compared to the problems of federal permitting, the permitting process under Florida law was simple for the Everglades Construction Project. Through the Everglades Forever Act (EFA), the Everglades Construction Project was mandated, funding mechanisms were provided, and regulatory mechanisms were established. Unlike federal law, which treated the Water Management District's environmental restoration projects no differently than an industrial factory, the EFA established an alternative approach to regulating watershed restoration.

In the EFA, a special set of permits was established for the Everglades Construction Project, with criteria designed to meaningfully regulate the watershed restoration project. These permits were in lieu of other environmental permits that would normally apply. Instead of requiring absolute compliance with the narrative phosphorus criterion, the EFA permits required the STAs to achieve reasonable performance and "design objectives." Instead of looking only at the quality of waters at the discharge point, the EFA permits require the quality of waters discharged from the STAs to be "of equal or better quality than the inflows." Instead of applying strict mitigation criteria for wetland impacts, the EFA acknowledged the fact that the Everglades Construction Project was actually constructing wetlands, and required the "minimiz[ation of] wetland impacts, to the maximum extent practicable." Finally, the EFA required assurances

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70. FLA. STAT. § 373.4592(4)(a) (2001).
71. § 373.4592(6)–(8).
72. § 373.4592(9)–(10).
73. See infra Part I.A.
74. See also infra Part III.D.
75. § 373.4592(9)(c).
76. § 373.4592(9)(h)(1).
77. § 373.4592(9)(h)(2).
78. § 373.4592(9)(e)(3).
that the "STAs [did] not pose a serious danger to the public health, safety, or welfare." 79

So far, this state permitting process has produced four permits for STAs, with hundreds of pages of conditions and appendices. Each one includes substantial reporting requirements, which are being met through the annual publication of the Water Management District's Everglades Consolidated Report. 80 Thus, even the EFA permitting process, custom tailored for the Everglades Construction Project, had its drawbacks and difficulties. 81 So the fundamental question remains: whether the complexity and rigors of permitting watershed restoration are truly necessary, or whether an alternative and more simplistic approach can be found?

D. Aquifer Storage and Recovery Permits

While the EFA presents an example of moderately successful state regulation of watershed restoration, the future of state regulation of Aquifer Storage and Recovery (ASR) systems is not as bright. During the 2000 session of the Florida Legislature, a huge debate erupted over the permitting of ASR systems. These systems can help manage the fluctuations of water levels in a natural system by injecting excess surface waters deep underground for storage, which would allow for later recapture of the waters in times of drought or need. 82 By injecting freshwater into the saline Florida aquifer, an underground freshwater bubble is created. 83 The proposed legislation 84 would have authorized these projects, which are an essential water storage component of the Comprehensive Everglades Restoration Plan.

79. § 373.4592(9)(h)(3).
80. See, e.g., S. FLA. WATER MGMT. DIST., supra note 25.
81. Although the EFA permitting criteria was designed especially for the Everglades Construction Project, it still had limitations—especially because dissolved oxygen levels in the outflow discharges from the STAs were, on occasion, lower than inflows. However, since the problem was a result of natural fluctuations in marsh environments, EFA permits were issued by the Florida DEP with another administrative order establishing special conditions to monitor dissolved oxygen and ensure environmental protection. See, e.g., Everglades Forever Act, Permit No. 503074709, Florida Department of Environmental Protection, Administrative Order No. AO-002-EV (Apr. 23, 1999).
However, absent treatment of the surface waters, ASR technology was not expected to be able to meet the requirements of the federal Safe Drinking Water Act \textsuperscript{86} nor the associated state regulations governing underground injections. \textsuperscript{87}

One major concern with ASR was that biological organisms, including coliform bacteria in the surface waters, would be injected into the aquifer. \textsuperscript{88} However, these organisms were expected to die-off once injected into the oxygen-deficient waters. \textsuperscript{89} Based on that scientific expectation, the Florida Legislature proposed a bill to allow a zone of impact provided that there was no adverse risk to human health. \textsuperscript{90} After initially passing the House and Senate, the bill was later reconsidered, and public concerns with the scientific uncertainties of ASR led to the bill's death. \textsuperscript{91}

Those public concerns may prove wise, and the effort to expedite permitting of ASR may have been premature. However, in the meantime, the Water Management District's efforts to implement experimental ASR facilities will be significantly burdened. Despite the fact that ASR technology is designed for surface waters and is never intended to be used for consumption, it will be subjected to the very same regulatory framework usually reserved for drinking waters. \textsuperscript{92} In addition, once the ASR waters are discharged from the ASR system back into their original surface waters, they could also face NPDES permitting problems if they are considered a point source discharge of pollutants into waters of the United States. \textsuperscript{93} Thus, as


\textsuperscript{86} 42 U.S.C. § 300(h) (2000).

\textsuperscript{87} See Fla. ADMIN. CODE ANN. r. 62-528 (2001).

\textsuperscript{88} Fla. SB 854 (2001).

\textsuperscript{89} Id.

\textsuperscript{90} Id.


\textsuperscript{92} See Fla. ADMIN. CODE ANN. r. 62-528 (2001).

\textsuperscript{93} Perhaps the most significant problem ahead for ASR is the potential for regulation of nutrients. Consider, for example, an ASR well near Lake Okeechobee, which is widely recognized as being impacted by phosphorus. Currently, the Florida DEP is implementing Total Maximum Daily Loads (TMDLs) in the region, and has adopted a TMDL of forty ppb. for Lake Okeechobee. As of the writing of this article, that standard is not being met, and
difficult as the 2000 Legislative Session was for ASR advocates, their problems may have just begun.

E. Problems of Permit Compliance

Even when watershed restoration projects are able to obtain permits, it simply signals the beginning of a new series of regulatory problems. Once the exposure to an Administrative Procedures Act challenge passes, the next task of complying with existing permit conditions—sometimes an extraordinarily difficult task—begins.

1. Unexpected Events and Permit Modifications

For the Water Management District, a perfect example of the difficulties of permit compliance was the NPDES permit for the Water Management District’s Everglades Nutrient Removal (ENR) Project—the prototype for the STAs. That permit required mercury monitoring. According to the permit conditions, the district was required to monitor mercury accumulation in fish trapped inside mesh cages. Unfortunately, due to the lower dissolved oxygen levels and the inability of the fish to search for food, the fish died when confined in those cages, making compliance with the permitting conditions impossible. Similarly, the ENR project required the monitoring of atmospheric deposition in order to evaluate the amount of phosphorus coming from rainfall and dust. Once again, nature made the monitoring efforts extremely difficult because wading birds often perched

indeed, water quality standards in the region are not anticipated to be met until at least 2015. See FLA. STAT. § 373.4595 (2001). If the Water Management District withdraws phosphorus-laden waters from a tributary to Lake Okeechobee and injects those waters into an ASR well, regulatory problems could occur.

94. United States Environmental Protection Agency, NPDES Permit No. FL0043885 (July 1, 1997).
95. Id.
96. Id. at Conditions 22–23.
97. Letter from Ronald Bearzotti, Staff Environmental Analyst, South Florida Water Management District, to Roy Herwig, Enforcement Division, Region IV, United States Environmental Protection Agency (Oct. 30, 1997). Letter from Roosevelt Childress, Surface Water Permits Section, Region IV, United States Environmental Protection Agency, to C. Alan Hall, Ecosystems Restoration Department, South Florida Water Management District (Mar. 9, 1998).
98. EPA, supra note 94 at Conditions 22–23.
and defecated upon the ground-level collectors.\textsuperscript{99} Efforts to use airborne buckets atop poles and towers encountered similar contamination problems with high-flying vultures and nesting cormorants.\textsuperscript{100} As a result of these types of unexpected events, environmental permits for watershed restoration projects can require frequent modification, which, in turn, creates administrative burdens for both the permitting agency and the permittee.

Even when agencies anticipate the unexpected, permitting problems can still occur. For example, the absence of knowledge surrounding environmental restoration projects is problematic in the context of environmental permitting, where regulatory certainty—or at least reasonable assurances—is essential. The EPA, Army Corps of Engineers, and the Florida DEP have all issued permits to the Water Management District with long lists of monitoring requirements just to make sure that environmental problems will not occur, and with the promise to remove those monitoring requirements after collecting a year or more of data or after new information becomes available.\textsuperscript{101} While this approach seems reasonable, it is also resource intensive, and substantial modifications of a permit can trigger another window of opportunity for legal challenges.\textsuperscript{102}

2. Revision to Water Quality Standards

Another major problem to permit compliance is presented when state water quality standards are revised. As mentioned above, in Florida, the current state water quality criterion for phosphorus is a narrative standard preventing an imbalance of flora and fauna.\textsuperscript{103} However, on December 31, 2006, a numeric water quality criterion for phosphorus in the Everglades will

\textsuperscript{99} Interview with Larry Grosser, Staff Environmental Scientist, and Larry Fink, Mercury Program Manager, South Florida Water Management District, West Palm Beach, Fla. (Mar. 9, 2000). \textit{See also} \textit{Atmospheric Deposition into South Florida: Measuring Net Atmospheric Inputs of Nutrient}, Symposium, South Florida Water Management District (Oct. 20-22, 1997).

\textsuperscript{100} Interview with Larry Grosser and Larry Fink, supra note 99.

\textsuperscript{101} \textit{See}, e.g., Florida Department of Environmental Protection, Permit No. 0126704 (Sept. 29, 2000) (regulating STA-2, with Specific Condition 29 allowing removal of parameters from the monitoring table after one year of data is collected); \textit{see also infra} Part II.B.


take effect. This new criterion will be established either by the State of Florida, through the Environmental Regulation Commission,\(^{104}\) or, if the state fails to adopt a criterion, by the EFA, as a default phosphorus criterion of ten ppb.\(^ {105}\) In either event, the Water Management District will be required to meet for all discharges to the Everglades by December 31, 2006.\(^ {106}\)

Unfortunately, only one technology—chemical treatment—has been identified that is capable of reaching the low levels of phosphorus that may be needed for the Everglades, and the costs and chemical by-products of that technology may make it impracticable to implement.\(^ {107}\) But the Clean Water Act (CWA) generally does not recognize practicability; rather, the CWA simply says that water quality standards must be met.\(^ {108}\) Thus, despite the fact that the Everglades Construction Project has been able to dramatically reduce phosphorus levels flowing into the Everglades,\(^ {109}\) if it cannot achieve the new state water quality criterion, then the facility will be in violation of its permit.\(^ {110}\) At that point, the regulatory agencies and Water Management District will be back to the beginning—wrestling with how to apply the strict requirements of NPDES permitting rules to the realities of watershed restoration.

\(^{104}\) See FLA. STAT. § 373.4592(4)(e) (2001) (requiring establishment of a numeric standard for phosphorus in the Everglades); see also FLA. STAT. § 403.804 (2001) (providing the Environmental Regulation Commission with standard-setting authority).

\(^{105}\) See FLA. STAT. § 373.4592(4)(e).

\(^{106}\) See Administrative Order, supra note 62.; see also § 373.4592(10).

\(^{107}\) See S. FLA. WATER MGMT. DIST., supra note 25.

\(^{108}\) See § 373.4592(10).

\(^{109}\) See S. FLA. WATER MGMT. DIST., supra note 25.

\(^{110}\) Once effluent limits are established in a permit, the CWA does not allow subsequent permits to contain less stringent effluent limits. 33 U.S.C. § 1342(o)(1) (2000); 40 C.F.R. § 122.45(l)(2) (2001). This concept of “antibacksliding” in the Clean Water Act means that there is very little room for error when it comes to the regulation restoration and the establishment of discharge limits. While there are exceptions when new information becomes available, see, e.g., 33 U.S.C. § 1342(o)(2)(B)(i) (2000); 40 C.F.R. § 122.45(l)(2)(I)(B)(l) (2001), exceptions are very narrowly construed by EPA, and the agency’s interpretations are generally granted great deference by the courts. See U.S. ENTVL. PROT. AGENCY, NPDES PERMIT WRITERS’ MANUAL, § 10.3.1 (illustrating with examples 1 and 2 that even new information leading to changes in water quality standards might not justify changes to effluent limits and that changes are only allowed when the effluent limits become more stringent.); see Citizens to Preserve Overton Park v. Volpe, 401 U.S. 402 (1971).
IV. THE RANGE OF REGULATORY OPTIONS

As the Water Management District's experience with the regulation of the Everglades restoration demonstrates, watershed restoration projects can present unique regulatory problems, requiring special solutions. These problems will continue as the federal, state, and local governments continue to implement the Central and South Florida Project Comprehensive Review Study, known as the "Comprehensive Everglades Restoration Plan" or CERP.111 That project, which will be jointly implemented by the Water Management District and the United States Army Corps of Engineers, will include dozens of environmentally beneficial projects—restoring Lake Okeechobee and other Florida lakes, lagoons, and estuaries; improving delivery of waters to Everglades National Park, reducing salt water intrusion into the aquifer, and otherwise protecting and improving water, fish, and wildlife resources in the Everglades.112

CERP is an even more ambitious undertaking than the Everglades Construction Project. And while the objective of both of these projects may be to eventually achieve compliance with water quality standards, environmental restoration of the massive Everglades watershed takes time. Indeed, the Everglades Forever Act, passed in 1994, codified a twelve-year implementation schedule with two phases. First, from 1999 to 2003, the District is required to construct the STAs, designed to achieve interim improvements in water quality standards.113 Later, additional treatment technologies may be constructed as necessary to achieve all water quality standards by December 31, 2006.114 This implementation schedule accounted for scientific uncertainty, research needs, and the practicalities of spreading the costs of the Everglades restoration over time.115

Unfortunately, and as all of the above examples show, environmental permitting laws do not appreciate the uncertain nature of watershed restoration projects.116 Of course, in an ideal world, all water quality standards would be met. But the reality is that seventy percent of the

111. See Final Impact Statement, supra note 85.
112. Id.
115. See § 373.4592(1)(g)–(h) (showing legislative findings that a reasonable approach to Everglades restoration required implementation of immediate and long-term efforts).
waterbodies in the United States are impaired. While some form of regulation of environmental restoration projects in the Everglades may be needed to ensure adequate environmental protection and to preserve due process, the current methods are crude, burdensome, and highly inefficient. In fact, in the opinion of the author, the past regulatory efforts in the Everglades have succeeded solely due to the creativity of well-meaning agency officials. Alternative approaches, including exemptions, general permits, variances, and new legislation must be explored.

A. Exemptions and De Minimus Permits

Exemptions from environmental permitting requirements are frequently found in state and federal environmental laws. The federal Clean Water Act and its regulations specifically exempt certain discharges, such as the controversial exemption for agricultural discharges.117 At the state level, the Florida DEP and regional Water Management Districts also have the ability to issue exemptions from environmental regulations for certain projects.118 These "de minimus" exemptions are for activities which are determined to have only minimal or insignificant individual or cumulative adverse impacts on water resources.119

Exemptions and de minimis authorizations could be used for some watershed restoration projects. Theoretically, the de minimus exemption in Florida law could be used for many environmental restoration projects since these types of projects should not have any significant individual or cumulative adverse impacts on the water resources; rather, they should have environmental benefits. Indeed, this type of exemption was repeatedly used for the construction of a temporary pump station in south Dade County,

119. § 373.406(9).
where waters were being diverted to protect the endangered Cape Sable Seaside Sparrow.\textsuperscript{120}

Project-specific exemptions have also been passed in Florida legislation. For example, Florida's Everglades Forever Act granted the Everglades Construction Project a clear exemption from certain permitting requirements of Florida law.\textsuperscript{121} In addition, due to the immediate need for Everglades restoration, the district was empowered to begin construction on the STAs prior to obtaining construction permits through final agency action.\textsuperscript{122} In the 2000 session, the Florida Legislature even passed a special exemption for environmental restoration or water quality improvement projects on agricultural lands.\textsuperscript{123}

The use of exemptions for environmental restoration projects, however, should be exercised with caution. In the case of the Everglades Construction Project, the legislature already had a copy of the proposed engineering design documents for the project when it passed the Everglades Forever Act,\textsuperscript{124} and the engineering designs were developed with the cooperation of Florida and federal agencies, along with numerous public interest groups. In such cases, where the project details and benefits are already well defined, where the public interest in the project is high, where the need for action is imminent, and where public input and support has already been obtained, a legislatively granted exemption from environmental permitting is clearly the quickest and most efficient way to ensure implementation of the project.

The exemptions, however, have consequences as well. First, even though an environmental restoration project may be in the public interest, the need for immediate implementation must be balanced with the public interest

\begin{footnotes}
\footnote{120. See Emergency Authorization to Operate the S-332B and S-332D Pump Stations and Construct the Accelerated C-111 Project Features, Florida Department of Environmental Protection, Office of General Counsel, Case Nos. 00-0889 and 99-2242, Sixth Amended Emergency Final Order (Mar. 28, 2002). For more information on the efforts to save the endangered Cape Sable Seaside Sparrow, see Keith W. Rizzardi, \textit{The Everglades in Jeopardy: A Drama of Water Management and Endangered Species}, 27 FLA. ST. U. L. REV. 349 (2000).}
\footnote{121. \textsc{Fla. Stat.} \textsection 373.4592(9)(b) (2001).}
\footnote{122. \textit{Id.}}
\footnote{123. \textsection 373.406(9). This exemption, however, is more akin to a general permit, as discussed \textit{infra} Part IV.B., because it requires a case-by-case review and a determination that the activity will have "minimal or insignificant individual and cumulative adverse impact on the water resources of the state." \textit{Id.}}
\footnote{124. See \textsection 373.4592(2)(f) (incorporating by reference the engineering designs). \textit{See also} BURNS & MCDONNELL, \textsc{Everglades Protection Project Conceptual Design} (Feb. 15, 1994).}
\end{footnotes}
Through the permitting process, projects are given a degree of public scrutiny they may not otherwise obtain, and, as a result, defects may be discovered and remedied before they lead to unanticipated consequences. Absent an opportunity for public participation, opponents of the project may continue to contest the project, creating new roadblocks until they obtain their opportunity to be heard. Second, creative attorneys may attempt to claim exemptions for their projects simply to avoid environmental regulation, so exemptions should be narrowly written. Finally, it may seem inappropriate for governmental agencies to exempt themselves from the laws that are applied to the rest of the public. In the case of the Water Management District, an agency known for the issuance of environmental permits to developers and other permitees, an exemption from environmental permitting for its own projects creates a perception of a double standard. Thus, while exemptions from environmental permitting provide a potential solution to some of the problems created by the regulation of restoration, it is a solution that should be used sparingly.

B. General Permits

Occasionally, environmental permitting programs provide for a streamlined review, not quite an exemption, but not a comprehensive permit with project-specific conditions either. Instead, these “general permits” provide a process for authorizing projects with limited environmental impacts and avoiding unnecessary duplication of regulatory control. For example, the United States Army Corps of Engineers’ dredge and fill permitting program, also administered pursuant to the Clean Water Act, includes a “nationwide permit” to authorize discharges of dredged or fill material that will have minimal adverse effects on the aquatic environment. This nationwide permit, which has been frequently modified, and which also

125. See DEBORAH STONE, POLICY PARADOX Pt. II (1997) (discussing the tension between equity and efficiency in the development of public policy).
126. See, e.g., 33 C.F.R. § 322.2(f) (2001); FLA. ADMIN. CODE ANN. r. 40E-40.042 (2002).
has been subject to controversy and debates, provides a streamlined approval process for small-scale projects, including dredge and fill projects affecting less than ten acres. Similarly, Florida’s Water Management Districts administer Environmental Resource Permitting programs, which include a series of general permits for minor projects such as road resurfacing, dock maintenance, mosquito control, underground cables, and utility infrastructure. One general permit, in fact, is specifically designed for environmental restoration efforts implemented by the Florida DEP. The general permit pre-approves projects that do not significantly impede navigation and that provide vegetative stability to areas subject to erosion.

While general permits may provide a greater degree of regulation for projects than exemptions, their use should also be limited for environmental projects. General permits typically include predetermined permit conditions and, as a result, are unlikely to be able to address all the uncertainties associated with environmental restoration projects. The general permit for Florida DEP’s environmental restoration activities, for example, only authorizes a few types of environmental restoration projects that are implemented in accordance with other statutes. Furthermore, general permits may be subject to some of the same critiques as exemptions, including insufficient public review and unfair special treatment of government, although to a lesser degree. Thus, while general permits may be an excellent approach for regulating small-scale environmental

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131. See, e.g., FLA. ADMIN. CODE ANN. r. 40E-400 (2001).

132. See r. 40E-400.485.

133. r. 40E-400.485(3)(a).

134. r. 40E-400.485(3)(b). A similar noticed general permit is available to water management districts for environmental restoration or enhancement efforts. FLA. ADMIN. CODE ANN. r. 62-341.485 (2002).

135. Consider, for example, the difficulty of developing a general permit that would address the uncertainties related to ASR implementation. See infra Part III.D.

136. r. 40E-400.485(2).
restoration projects, they are not an ideal solution for regulating large ones. Larger projects, such as the Everglades restoration, require increased regulatory flexibility while also granting an appropriate degree of public scrutiny to ensure adequate environmental review and public support.  

C. Variances

Variances provide a third tool for the regulation of environmental restoration. These variances require the regulatory agencies to conclude that the particular project presents a special situation, warranting a deviation from the otherwise applicable requirements. Additionally, both state and federal laws already allow variances for some water-related projects.

At the federal level, the NPDES permitting program authorizes multiple types of variances, allowing a permittee to deviate from otherwise applicable effluent limitations that would regulate its discharges. These variances can authorize discharges that do not comply with otherwise applicable effluent limits due to “fundamentally different factors” or “non-conventional pollutants,” provided that best available technologies are used. For some ecosystems, including the Chesapeake Bay, Great Lakes, Long Island Sound, and Lake Champlain, the Clean Water Act even includes custom-tailored provisions.

Variances are available in Florida law as well. Water resource laws allow the Florida DEP to grant variances from laws and regulations where there is no available method of pollution control, where compliance needs to be measured over a period of time, or to relieve hardship for a period of up to twenty-four months. The state Administrative Procedures Act even includes a broad provision empowering agencies to grant relief from regulations where application of the rule creates a substantial hardship or violates principles of fairness.

State and federal variance provisions like the ones above could be applied to environmental projects. But again, as with regulatory exemptions

137. See Stone, supra note 125, at 287–382 (discussing the tension between flexibility and precision in the establishment of administrative rules).
139. See, e.g., 40 C.F.R. § 122.21(n), pt. 125(D) (2001). At the state level, the Florida DEP implements NPDES compliance schedules based upon section 403.0885 of the Florida Statutes.
140. 40 C.F.R. § 125.31 (2001).
143. § 120.542(2).
and general permits, variances have limitations. As noted above, variances are often allowed for only a limited period of time. Watershed restoration projects, however, though they may provide substantial benefits for an unlimited period of time, might never achieve the desirable goal of full compliance with existing standards. In some cases, such as the ECP, where the ultimate goal for 2006 is compliance with all water quality standards in the Everglades, a variance for a defined period of time may be the appropriate solution. But in other cases, when improvements will be made immediately but no further modifications are expected, variances may be an imperfect mechanism for regulating restoration.

D. Project-Specific Statutory Permitting Criteria

A fourth way to resolve the problems of regulating restoration uses a case-by-case approach. Through project specific legislation, simplified and specially-tailored regulatory programs can be created. Indeed, over the past ten years, the Florida Legislature has passed numerous laws providing alternative regulatory procedures for environmental restoration efforts, including the Everglades, Florida Bay, Kissimmee River, Lake Apopka, and most recently, Lake Okeechobee. Similarly, at the federal level, historic examples of project-specific legislation include the Tennessee Valley Authority Act, and the Colorado River Salinity Control Act.

These project-specific laws can be narrowly tailored to meet the needs of each project. The regulatory requirements in the EFA, as explained in Part III.C above, were designed specifically for the permitting of the STAs. Custom-made legislation was developed for CERP as well, including the Comprehensive Everglades Restoration Plan Regulation Act. Demonstrating awareness of the difficulties of regulating restoration, the Florida Legislature and Governor enacted sections 373.1501 and 373.1502, creating a two-step process for the regulation of CERP. First, the Water Management District and Florida DEP must conduct an initial evaluation of CERP projects during the development phase, and determine with reasonable certainty that the

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144. § 373.4592.
145. § 373.4593.
147. § 373.461 (2001).
148. § 373.4595.
projects could be permitted and operated as proposed.\textsuperscript{151} Later, when the project is ready to be implemented, the project must be permitted, and reasonable assurances are required that the project will achieve design objectives, and will not pose serious danger to public health, safety, or welfare.\textsuperscript{152} But the most significant clause in the Comprehensive Everglades Restoration Plan Regulation Act states that "[s]tate water quality standards will be met to the maximum extent practicable. Under no circumstances shall the project component cause or contribute to violation of state water quality standards."\textsuperscript{153}

This provision is remarkable in that it explicitly accepts non-conformance with state water quality standards, a permitting concept that has been upheld by Florida courts.\textsuperscript{154} Indeed, the concept of achieving compliance with water quality standards to the maximum extent practicable was recognized as providing additional flexibility to the reasonable assurances concept, considering the limitations of time, money, staff resources, technology, and information,\textsuperscript{155} although it does not provide unbridled discretion to exceed or violate state water quality standards.\textsuperscript{156} The question remains, however, whether Florida's use of this "maximum extent practicable" concept for CERP will be accepted by the United States Environmental Protection Agency and the federal government as consistent with the Clean Water Act.

This piecemeal approach to environmental restoration can be effective, but is obviously labor intensive. Agencies and legislators work together to craft new laws, which are then reshaped and debated in the legislature, before finally being codified and implemented. The process also increases the number of laws on the book—reversing Florida's recent efforts to reduce laws and regulations.\textsuperscript{157} These problems are compounded when mistakes are made during the legislative process, requiring "glitch bills" in subsequent years.\textsuperscript{158} Even the custom-made Everglades Forever Act permitting process

\textsuperscript{151.} FLA. STAT. § 373.1501(4)(c) (2001).
\textsuperscript{152.} § 373.1502(3)(b).
\textsuperscript{153.} § 373.1502(3)(b)(2).
\textsuperscript{155.} Miccosukee Tribe, 98 EL FALR 119, at 7, 16.
\textsuperscript{156.} Id. at 18.
\textsuperscript{158.} Id.
generated the need for remedial legislative efforts. So, like all the other options for regulating restoration, project-specific statutes have their problems and limitations.

E. Comprehensive Legislation

The final option for regulating watershed restoration would be a programmatic solution. In the opinion of this author, reforms are needed in both federal and Florida law. Through these reforms, greater efficiency in permitting of watershed restoration projects could be achieved without unnecessarily burdening the implementing or regulatory agencies, while adequate due process and project scrutiny could be preserved.

Ultimately, watershed restoration projects raise four major concerns: impacts to water quality, water supplies, flood control, and natural resources such as watershed habitat. Permitting at both the state and federal levels could be simplified to ensure that these four basic concerns are understood, and that the projects will not adversely impact them.

1. Amend the Clean Water Act to Exempt Restoration

At the federal level, Congress should amend the Clean Water Act to exempt watershed restoration activities from regulation. After all, if agriculture—widely recognized as a major source of non point source pollution—does not warrant federal scrutiny, then neither does a project that improves water quality, flood control, water supply, and associated natural resources. If a state chooses to undertake a watershed restoration project, and develops an adequate permitting regime for the project, then no additional federal permits should be needed.

2. Create a Single State Watershed Restoration Law

At the state level, instead of addressing the problem on a project-by-project basis, Florida should pass a new state law with new criteria governing the permitting of watershed restoration projects—a sample proposal follows this article as Appendix B. Any state legislation should address each of the four major watershed concerns: water quality, water supplies, flood control, and natural resource projection. In addition, the state

159. See, e.g., ch. 99-11, §1, 1999 Fla. Laws 533, 534–35 (amending section 403.088 of the Florida Statutes to modify administrative orders process and the rights of parties to challenge EFA permits).
law should address four basic principles that can be learned from experiences in regulating the Everglades.

First, it must provide criteria for what a watershed restoration project is, and what it must achieve. For example, the proposed project must be primarily for environmental improvements to a watershed, even if it does not achieve absolute compliance with law. Watershed restoration also must not include any project that adversely impacts natural resources or third parties. Limiting the definition of watershed restoration projects to those projects undertaken by governmental entities could ensure that projects are implemented for a public purpose as opposed to private projects, which might simply be seeking to characterize themselves as watershed restoration to escape more rigorous environmental scrutiny.

Second, the legislation should provide the public with its opportunity to be heard. The intense interest in the Everglades demonstrates that projects should not escape all regulatory review. However, reasonable criteria would help focus the scope of future litigation.

Third, the legislation should require reevaluation of the project and its success. Adaptability is essential to watershed restoration projects, where the decision-making process requires trial and effort, monitoring, and feedback.\textsuperscript{160} Indeed, the concept of "adaptive management" is increasingly recognized by natural resource protection agencies.\textsuperscript{161} Periodic performance assessments will ensure that the watershed restoration project remains beneficial to the public, and does not become another Florida case study on the law of unintended consequences.\textsuperscript{162}

Finally, the concept of adaptability fits neatly with the concept of doing the maximum extent practicable—the standard that should be embraced for watershed restoration. As discussed above, this standard is already used in Florida law for the Everglades restoration.\textsuperscript{163} But this concept is found in the Clean Water Act as well, which regulates urban stormwater through a program known as MS\textsuperscript{4}—short for municipal separate storm sewer systems. Rather than requiring absolute compliance with all state water quality standards, MS\textsuperscript{4} permits "require controls to reduce the discharge of pollutants to the maximum extent practicable."\textsuperscript{164}

\textsuperscript{161} See, e.g., Coleman, supra note 116, at 186.
\textsuperscript{162} See infra Part II.A.
Admittedly, this is a substantial departure from the rigorous pollution control requirements imposed upon the pulp and paper mills and other industrial facilities that can be found throughout Florida and the United States. But there is an important difference between those facilities and watershed restoration projects—whereas industrial facilities have the potential to generate pollution, watershed restoration projects simply wrestle with the pollution that was already generated elsewhere upstream. Thus, the rigorous use of strict water quality standards in environmental law should be reserved for potential sources of pollution. The law should recognize common sense, and authorize watershed restoration projects that represent the maximum extent practicable to protect water quality, water supplies, flood control, and natural resources.

V. CONCLUSION

The regulation of watershed restoration is an ironic necessity. It is ironic because environmental laws, designed to protect the environment, are being applied to projects designed to improve and protect the environment. However, it is also a necessity to ensure adequate protection of natural resources, to avoid unintended consequences, and to ensure due process for the public and the permittee. Therefore, it is the duty of the regulatory agency to find a balance that provides reasonable regulation without over-regulating.

This article has exposed some of the problems of using environmental laws to regulate restoration by demonstrating that inflexible enforcement of absolute standards only creates unwelcome barriers to worthy public projects. Exemptions, variances, and project specific legislation may all be useful tools in certain situations, but a comprehensive, programmatic approach may be the best way to find the appropriate regulatory balance. Of course, it will also have detractors. Environmental groups are likely to object to any measure that accepts any amount of pollution. But such purist objections would obscure reality. Environmental permits, developed to protect the environment, are creating a needless maze of regulation for watershed restoration projects. Permitting an imperfect restoration project that achieves partial improvement is certainly better than the grossly inefficient, usually all-or-nothing, approach of existing environmental laws.

Sometimes, the perfect is the enemy of the good.165 In the context of regulating watershed restoration, the maximum extent practicable is good

165. Voltaire, Dictionnaire Philosophique, “Le mieux est l’ennemi de bien.”
enough. The United States Congress and the Florida Legislature—and indeed, the rest of the nation—should act accordingly.
APPENDIX A.

Diagram of the Everglades Construction Project.
APPENDIX B.
Proposed Florida Legislation

Be It Enacted by the Legislature of the State of Florida:
Section 1. This bill is entitled the “Florida Watershed Restoration Policy Act.”
Section 2. Sec. 403.08, Florida Statutes, is created to read:

(1) FINDINGS.
   (a) The Legislature finds that watershed restoration projects have substantial public benefits to water quality, water supply, flood control and natural resources, even though projects may also produce other short-term and incidental adverse impacts, such as construction impacts.
   (b) The Legislature finds that permitting requirements of Chapters 373 and 403 can present substantial regulatory obstacles to these otherwise beneficial watershed restoration projects, and that it is in the public interest to reduce these obstacles to enable efficient and reasonable regulation and implementation of these projects.

(2) DEFINITIONS. For purposes of this section:
   (a) Watershed Restoration Projects include projects undertaken by an agency for the primary purpose of improving environmental conditions in a watershed, including wetland construction, hydropattern improvements, stream or river bank improvements, and other similar projects designed to benefit water quality, water supplies, flood control, and natural resources.
   (b) Agency includes all political subdivisions of the state.

(3) WATERSHED RESTORATION ENVIRONMENTAL IMPACT STATEMENTS. In lieu of the permitting requirements of Chapters 373 and 403, except for permits issued under delegated or approved federal programs, agencies implementing watershed restoration projects may submit a watershed restoration environmental impact statement to the Secretary that contains:
   (a) a description of the project, including location, current environmental conditions, and proposed physical alterations;
   (b) resources needed to implement the project, availability of those resources, and a projection of the future availability of the resources;
   (c) anticipated maintenance of the project, and consequences of failing to adequately maintain the project; and
   (d) a description of the design objectives of the project, including an evaluation of the benefits and consequences of the project, reasonable alternatives to the project, and the consequences of not implementing the project.
(4) PERMITTING OF WATERSHED RESTORATION PROJECTS.

(a) The Secretary shall permit the watershed restoration project if the environmental impact statement provides reasonable assurances that:

(1) water quality, if impacted, is substantially improved when compared to pre-project conditions, except that naturally-occurring reductions in water quality constituents may be authorized if the water quality improvements substantially outweigh any adverse water quality impacts and if the decreases are not likely to impact public health, safety or welfare;

(2) water supplies, if impacted, are enhanced, and are not likely to produce adverse effects on legally existing users resulting from the project;

(3) flood control, if impacted, is enhanced, and adverse flooding impacts are not likely to result upon upstream, downstream or otherwise hydrologically-connected privately-owned properties;

(4) natural resources, including native flora and fauna, if impacted, are beneficially affected by the project, and those beneficial effects substantially outweigh any incidental adverse effects that result;

(5) the watershed restoration project contains a program for maintaining, monitoring and evaluating the environmental effects of the watershed restoration, including benefits and adverse impacts to water quality, water supply, flood control and natural resources, as applicable; and

(6) the goal of watershed restoration is achieved to the maximum extent practicable, and is otherwise in the public interest.

(b) Any watershed restoration project permitted by the Secretary shall be required to substantially conform with the environmental impact statement, and shall implement the monitoring and evaluation program as described in the environmental impact statement, the results of which shall be reported to the Secretary on an annual basis.

(c) If monitoring and evaluation of the watershed restoration project demonstrate unanticipated adverse impacts that are not in accordance with subsection (3) above, then the Secretary shall require the agency to supplement the environmental impact statement with additional information to provide reasonable assurances in accordance with subsection (3) above, and if the project is substantially modified, then the Secretary shall issue a revised watershed restoration project permit that includes additional permit conditions, as appropriate.

(5) Notice of watershed restoration projects permits shall be published in the Florida Administrative Weekly by the agency implementing the
project, and shall otherwise be in accordance with and subject to Chapter 120, *Florida Statutes* and Title 28, *Florida Administrative Code*.

(6) In cases where the department is the agency implementing a watershed restoration project, the permit will be issued by the water management district with jurisdiction over the location of the project.