
Regulatory Challenges to Implementing a Payment for Environmental Services Program

This article is the second in a two-part series on the Northern Everglades—Payment for Environmental Services Program. The authors look at the challenges of streamlining a permitting process across multiple agencies. The first article, “Designing a Payment for Environmental Services Program for the Northern Everglades” appeared in the July/August 2011 issue of the Newsletter.

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The Northern Everglades—Payment for Environmental Services (NE-PES) Program, a new dispersed water management approach, will pay eligible ranchers in the Northern Everglades for the provision of environmental services of water retention or phosphorus (P) load reduction over a 10-year contract period. In January 2011, the South Florida Water Management District (SFWMD) solicited applications from ranchers prepared to build and operate water management alternatives (WMA) to provide either of those services. Proposals submitted to the first solicitation included an estimate of the service potential (average annual acre-feet of water retention or pounds of P removed). In addition, the proposals included payment requests for the reimbursable capital costs of implementing the WMA (design, permitting, and construction) and an annual service payment to be made each year over the life of the contract. Fourteen proposals were received, evaluated, and ranked and, as this article went to press, the SFWMD is in contract negotiations with the individual rancher-applicants. The final approval of contracts will be made by the SFWMD Governing Board sometime in fall 2011.

A central design feature of the NE-PES Program is the use of time-limited contracts between the state agency-buyer and the rancher-seller specifying an estimated level of service (acre-feet of water retention or pounds of P removed). The contract process differs from the more familiar mechanisms for securing environmental services through payments for the installation of best management practices (BMPs), easements that restrict land use change, and fee-simple land acquisition that removes land from production. Considerations prevailing at the time shaped the preferences of both buyers and sellers for designing the NE-PES Program around contracts.

First, the familiar tools of easements and fee-simple purchase were already in wide use in the watershed in 2003 when discussions began between ranchers and World Wildlife Fund (WWF) about identifying a new PES option in the Lake Okeechobee watershed. The context for these discussions was one of rapidly escalating land prices, which provided another reason for some ranchers to have limited interest in accepting

any restrictions on the use or sale of the land at a future date. Limited term contracts addressed this concern.

Second, expanding fee-simple purchase of land under *Florida Forever*, the state's conservation and recreation lands acquisition program, raised concerns about the ripple effects on the local economy of taking land out of production. Limited-term contracts that made provision of environmental services a ranch profit center would provide incentives for ranchers to manage water differently without having to take it out of production, thereby contributing to the local ranch economy and keeping property on tax rolls.

Third, three state agencies, the SFWMD, the Florida Department of Agriculture and Consumer Services (FDACS), and the Florida Department of Environmental Protection (FDEP), had been charged with implementing the Lake Okeechobee Protection Plan (LOPP). The plan included a multifaceted approach to control urban and agricultural nonpoint sources of pollutants, especially P, entering the lake, including the development of BMPs for agricultural operations and cost-share for implementation of selected BMPs. Additional options, such as paying ranchers to retain water on their land, would be needed to secure the substantial reductions in P loads needed to reach LOPP goals.

Fourth, the LOPP included construction of regional water quality and storage projects by the SFWMD and the U.S. Army Corps of Engineers (the Corps). However, uncertainty about funding and the long lag time between land purchase, construction, and project operation meant that their desired water quality improvements and water storage benefits might not be realized for many years. Contracts could provide an interim strategy for acquiring water management services that could be continued if the contract process proved successful as a complement to regional projects (as well as other strategies) as they came on line in the future.

Fifth, as the most extensive land use and, subsequently, the largest total source of P in the watershed, the cattle industry was concerned that inflexible water quality regulations would be imposed if LOPP goals were not met. At the same time, public- and private-sector interest in the development of “market-like” approaches was at a high level. This interest made it possible to secure funding for pilot projects to explore ways

to make the contracting alternative operational. The Florida Ranchlands Environmental Services Project (FRESP), the six-year pilot project (2005-2011) that informed the design of the NE-PES Program, received funding from state and federal government sources, as well as a private foundation, to field test contract elements and methods for documenting service provision.

The decision to explore the possibility of voluntary and nonpermanent contracts, while addressing the five factors described above, created

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regulatory challenges that do not arise with easements, land purchase, or BMP implementation. In this article, we will discuss the two regulatory challenges encountered during the FRESP pilot phase and describe how they were addressed. The first is establishing a baseline to assure that the payments were for environmental services “above and beyond” protection program requirements (the LOPP was expanded in 2007 to the Northern Everglades and Estuaries Protection Program); and the second is providing regulatory certainty and minimizing program application costs.

ESTABLISHING A BASELINE FOR CALCULATION OF ENVIRONMENTAL SERVICE ELIGIBLE FOR PAYMENT

Establishing a method for calculating the amount of service eligible for payment is a central challenge in designing any PES program. A key concern of the buyer and, by extension, the taxpayer is that program applicants be in compliance with all relevant regulatory requirements; thus, the services being paid for would be above and beyond those requirements. To address this concern, the new NE-PES Program imposes two conditions.

First, to be eligible to submit a proposal to the NE-PES Program for either nutrient removal or water retention services, the landowner must be enrolled in the FDACS BMP program and be verified by the FDACS to be in compliance with the schedule of implementation (subject to available cost-share funding) of those BMPs, and their operation and maintenance if installed.

Second, a method was developed for calculating an environmental service baseline for the area of the ranch included in the water retention WMAs footprint. Only the services offered by the WMA above that baseline would be eligible for payment.² The logic for establishing the baseline began with recognizing that under the FDACS BMP program, ranchers in the Northern Everglades include water-control BMPs in their Conservation Plan (CP) or Notice of Intent (NOI) where technically and economically feasible (See Box).

Not all ranches in the Northern Everglades enrolled in the FDACS BMP program have water-control BMPs. In those cases, the program stipulated a reduction in the estimate of water retention service eligible for payment using the procedure described below, so as to not give NE-PES Program credit for baseline water retention achieved under the BMP program. To define a baseline, the buyer reviewed the water storage produced by Northern Everglades cow-calf operations that included water management BMPs in their CP or NOI. From that review, they calculated the average acre-feet

of storage per acre of wetland and ditch area to be 0.36 acre-feet. The NE-PES Program established the water retention service credited for payment by subtracting the baseline storage amount of 0.36 acre-feet multiplied by the wetland and ditch area within the WMA site from the modeled estimate of the WMAs total average annual water retention. Furthermore, as a result of participation in the NE-PES Program, the water retention baseline established will be maintained in permanence post-contract.

REGULATORY CERTAINTY AND PROGRAM APPLICATION COSTS

The NE-PES Program encourages ranchers to maximize the service of water retention or nutrient load reduction on an area of their ranch. However, building and operating the WMAs for providing the desired environmental services should not have adverse effects on threatened and endangered (T&E) species and wetlands. In fact, the Natural Resources Conservation Service (NRCS) conservation practices that can be combined to make a WMA, absent the NE-PES Program, would have to be permitted or exempted by the SFWMD and be compliant with the Clean Water Act (CWA) §404 permit requirements and federal Endangered Species Act (ESA) protections accorded to T&E species. The contract format and the post-contract regulatory certainty desired by both buyers and sellers meant that multiple state and federal agencies permitting requirements would have to be satisfied. In assisting ranchers in the pilot projects to secure necessary permits, several regulatory challenges were identified that needed to be addressed before the envisioned PES contract program could become a reality.

One challenge was creating a coordinated and streamlined multiagency permitting process, while still assuring that the WMAs were compliant with federal and state wetlands protection requirements and with the ESA. The existing permitting processes, quite reasonably, began with the presumption that a proposed action seeking a permit should be required to avoid and/or minimize adverse consequences on wetlands and T&E species. However, ranchers were concerned about regulatory consequences should the implementation of the WMA result in an increase in endangered species habitat or expand the wetland footprint on the WMA site. If these changes occurred, the ranchers wanted assurances that federal regulations would allow them to return their

A water-control BMP in a Conservation Plan or NOI differs from a WMA. A WMA can be one or a combination of BMPs and other practices that the rancher combines to produce a level of water retention service they then can offer for payment. Water-control BMPs are single practices that are implemented because they are deemed by the rancher to be technically and economically feasible to implement for the offered cost-share.

land and water management practices to pre-contract conditions when their contracts concluded.

To address these concerns during the pilot phase, the FRESP project directors worked with two nongovernmental organizations with expertise on T&E species, the Archbold Biological Station and Defenders of Wildlife, and the NRCS, who assumed the role of federal action agency, to submit a biological assessment (BA) of the pilot project WMAs' impacts on listed species to the U.S. Fish and Wildlife Service (FWS). The BA was used to reduce CWA §404 permitting processing time when FRESP ranchers applied for the Corps' nationwide 27 permits and state wetland permits or exemptions.

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Because there were several agencies (the Corps, the FWS, the NRCS, and the SFWMD) at the state and federal level involved, the review process took many months and resulted in significant transaction costs for the permit applicants and the FRESP project directors working on their behalf. Based on that experience, the FRESP collaborators were concerned that the permitting process used for the pilot projects would not work in a PES program operating at a landscape scale. In particular, FRESP collaborators understood that ranchers would not participate in a program that required significant permit application time and/or cost. State and federal agencies also were concerned about program administration costs and staff time resulting from a scaled-up version of a PES program. In addition, in a scaled-up PES program, the NRCS might not be able to assume the role of federal action agency.

For these reasons, the FRESP collaborators decided to create a streamlined permitting approach to meet wetland permitting requirements that integrated both state and federal wetland and listed species protections. Designing and putting in place the necessary framework and tools for an integrated and streamlined permitting approach became a major activity of FRESP project directors during the five-year pilot phase. The result of that effort was the creation of three sets of tools designed specifically for the NE-PES Program: (1) a joint NRCS and FWS ESA Consultation Guidance Matrix (CGM) for federally listed species in the NE-PES Program area that receive assistance from the NRCS; (2) a regional general permit from the Corps; and (3) the development of state and federal government agency memorandums of understanding (MOUs) and related guidance that identified roles and responsibilities in implementing and permitting the NE-PES Program.

In 2010, the NRCS and the FWS were completing a review of conservation practice effects on federally listed T&E species for the state of Florida for all NRCS-assisted conservation practices. The direct, indirect, and cumulative effects of several hundred individual NRCS conservation practices were categorized in the CGM according to their expected adverse or beneficial effects. Building on that effort, the FRESP team engaged with the local and regional FWS offices to create a NE-PES CGM that identified 14 NRCS conservation practices that likely would be used in a WMA design. The FWS determined that for the eight listed species found on ranch habitat types in the Northern Everglades, WMA construction and operation utilizing these NRCS conservation practices would have “no effect” or were “not likely to adversely affect” T&E species, with the exception of one practice for Wood Storks, which was determined to result in a “beneficial effect.”

Initially, when approached with a request for an NE-PES regional general permit (RGP), the Corps was unable to justify the staff work needed to develop an RGP for a program in the pilot phase. However, over time and with requests by the leadership of the SFWMD and the FRESP project directors the Corps agreed to develop an NE-PES Program RGP. The RGP defines the activities and special conditions protective of wetlands and T&E species (utilizing the CGM) that a participant in the NE-PES Program would have to meet during the construction, operation, and removal of the WMA in order to receive the permit, thereby greatly reducing the time needed for permit review.

Finally, to facilitate the streamlined permitting process, FRESP partners developed an MOU signed by the NRCS, the FDACS, and the SFWMD that identified the roles and responsibilities of each agency in the implementation of the NE-PES Program, including initial site assessments, permitting, construction, and authorization of the reversion plan to return to baseline conditions. The NRCS and the SFWMD prepared a guidance document that reflected agreed-upon wetland hydroperiod enhancement limits for use in WMA design. In addition, another MOU between the SFWMD, the FDACS, and the FDEP reconciled guidelines on state wetland delineation procedures and content, and implementation of the reversion plan that would be followed if a rancher elected to return the WMA to baseline conditions at the end of a contract.

The practical implications of the NE-PES streamlined approach are that ranchers meeting the program eligibility criteria can identify what practices and construction approaches will qualify for the streamlined permitting process and can design the proposed WMA accordingly. In addition, the process clearly establishes the regulatory permission to return to pre-contract conditions that, however, now include maintaining in permanence the baseline water retention.

REFLECTIONS ON PES AND THE REGULATORY PROCESS

The development of the NE-PES Program organized around fixed term contracts had to identify a streamlined approach to accommodate existing regulatory programs. These regulatory programs are directive, e.g., minimum BMP expectations, or are put in place

to prevent adverse environmental outcomes from land and water use decisions, e.g., endangered species and wetlands protections. By intent, these can be called “red light” programs because they are expected to stop, or at least minimize, these adverse effects. However, the NE-PES contracts are paying for environmental services that are above and beyond regulatory requirements, and, at a watershed scale, would surely provide for environmental improvements, including reduced nutrient loads, modulated lake-level fluctuations, shallow groundwater recharge, and expanded habitat for T&E species. For the NE-PES Program, where actions are being taken to increase the provision of environmental services, what was needed was not a red light, but a flashing yellow light (caution and then proceed) permitting process.

There were several reasons why FRESP collaborators were able to create the streamlined (yellow light) permitting processes described above. First, the WMAs envisioned in the NE-PES Program would consist of one practice or combinations of practices selected from a short list that are expected to provide similar environmental benefits, while minimizing impacts. When taken to scale, FRESP collaborators believed the NE-PES Program would result in significant benefits to the larger watershed even if, at the individual site level, there were minor disturbances. With this recognition came the motivation for state and federal regulatory agencies, as well as the NRCS and the FDACS, to support and put in the staff time to develop a more integrated and streamlined permitting process. Finally, the FRESP project directors had the ability to devote time and resources to coordinate and facilitate this multiyear process in order to bring it to successful completion. ■

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ENDNOTES

1. Authors listed alphabetically. No senior authorship is assigned.
2. A baseline is not applicable to nutrient removal service projects because under this approach, ranchers pump public regional water onto their WMA for the purpose of removing nutrients.

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ENDNOTES

1. 33 U.S.C. §1251(a).
2. *See, e.g.*, United States v. Ashland Oil and Transp. Co., 504 F.2d 1317, 1326 (6th Cir. 1974).
3. 33 U.S.C. §1251(a)(1).
4. 33 U.S.C. §1311(a).
5. United States v. Holland, 373 F. Supp. 665, 671-73 (D. Fla. 1974) (discussing legislative history of the Act).
6. 531 U.S. 159, 174 (2001).
7. *See infra* Part III.
8. 547 U.S. 715 (2006).
9. *See infra* Parts I & II.
10. Clean Water Restoration Act of 2009, S. 787, 111th Cong. (2009); Clean Water Restoration Act of 2007, H.R. 2421, S. 1870, 110th Cong. (2007).
11. EPA and Army Corps of Engineers Guidance Regarding Identification of Waters Protected by the Clean Water Act, 76 Fed. Reg. 24479 (May 2, 2011). The proposed guidance is available at <http://water.epa.gov/lawsregs/guidance/wetlands/CWAwaters.cfm>.
12. Nat'l Ass'n of Home Builders v. U.S. Army Corps of Engineers, 699 F. Supp. 2d 209, 215-17 (D.D.C. 2010) (rejecting argument that ditches cannot be “navigable waters” because the term “ditch” is used in the statutory definition of “point source”); Brief of Nat'l Ass'n of Home Builders, *Rapanos v. United States*, 547 U.S. 715 (2006), at 3-12 (Dec. 2, 2005) (claiming that “ditches” may only be considered CWA “point sources,” not “waters of the United States”); Testimony of Duane Desiderio, Staff Vice President for Legal Affairs, Nat'l Ass'n of Home Builders, Hearing of Senate Environment & Public Works Committee: “The Clean Water Act following the recent Supreme Court decisions in *Solid Waste Agency of Northern Cook County* and *Rapanos-Canabell*,” at 28-29 (Dec. 13, 2007) (claiming that *Rapanos* plurality and Justice Kennedy had consensus that “[a]s a general matter ‘navigable waters’ and ‘point sources’ are not the same thing, and normally a feature can not be both”), available at http://epw.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=ab14b9d9-6720-4bf0-98b0-d5b1d1666c94.
13. *See* Advance Notice of Proposed Rulemaking on the Clean Water Act Regulatory Definition of “Waters of the United States,” 68 Fed. Reg. 1991, 1997 (Jan. 15, 2003) (stating that, after *SWANCC*, a “question that has arisen is whether CWA jurisdiction is affected when a surface tributary to jurisdictional waters flows for some of its length through ditches, culverts, pipes, storm sewers, or similar manmade conveyances,” but saying that field staff should—“generally speaking”—protect tributary systems, without saying when they should not, and how man-made conveyances fit into the analysis); *Rapanos*, 547 U.S. at 735-36 (plurality opinion):

The definitions thus conceive of “point sources” and “navigable waters” as separate and distinct categories. The definition of “discharge” would make little sense if the two categories were significantly overlapping. The separate classification of “ditch[es], channel[s], and conduit[s]”—which are terms ordinarily used to describe the watercourses through which intermittent waters typically flow—shows that these are, by and large, not “waters of the United States.”

14. 40 Fed. Reg. 31320, 31321 (July 25, 1975).
15. *Id.*
16. *See* 42 Fed. Reg. 37122, 37144 (July 19, 1977) (promulgating 33 C.F.R. §323.2(a)(3)).
17. *Cf.* United States v. Deaton, 332 F.3d 698, 710 (4th Cir. 2003) (“Although the Corps has not always chosen to regulate all tributaries, it has always used the word to mean the entire tributary system, that is, all of the streams whose water eventually flows into navigable waters.”).
18. 51 Fed. Reg. 41206, 41217 (Nov. 13, 1986).
19. 65 Fed. Reg. 12818, 12823-24 (Mar. 9, 2000).
20. 43 U.S. Op. Atty. Gen. 197 (Sept. 5, 1979); *see also id.* at 200-01:

The term “navigable waters,” moreover, is a linchpin of the Act in other respects. It is critical not only to the coverage of § 404, but also to the coverage of the other pollution control mechanisms established under the Act, including the § 402 permit program for point source discharges, the regulation of discharges of oil and hazardous substances in § 311 and the regulation of discharges of vessel sewage in § 312. Its definition is not specific to § 404, but is included among the Act’s general provisions.

It is, therefore, logical to conclude that Congress intended that there be only a single judgment as to whether—and to what extent—any particular water body comes within the jurisdictional reach of the Federal Government’s pollution control authority. We find no support either in the statute or its legislative history for a conclusion that a water body would have one set of boundaries for purposes of dredged and fill permits under § 404