

Volume 2 | Issue 2 Article 3

1991

Constraints upon Development in Environmentally Sensitive Areas: Regulation of Wetlands, Streams, and Floodplains in Pennsylvania

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CONSTRAINTS UPON DEVELOPMENT IN ENVIRONMENTALLY SENSITIVE AREAS: REGULATION OF WETLANDS, STREAMS, AND FLOODPLAINS IN PENNSYLVANIA*

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^{*} Another version of this Article appeared in a publication of the Pennsylvania Bar Institute entitled What Every Real Estate and Business Lawyer Needs to Know About Environmental Law (1990).

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The presence of environmentally sensitive features on or near a site can have a significant impact upon the type and scope of development that may be permitted there. In some locations, construction and certain uses may be precluded altogether because of their adverse impact on these features. It is, therefore, crucial that the presence of these features be investigated and taken into consideration at various stages of a real estate transaction.

Although there are many environmentally sensitive features which can be heavily regulated, the most common of these in Pennsylvania are wetlands, bodies of surface water, and floodplains. Accordingly, this Article will focus upon the regulatory requirements applicable to these features, focusing primarily on wetlands.¹

In New Jersey, projects located in the State coastal area are regulated heavily and often require separate permits under the Coastal Area Facility Review Act, N.J. Stat. Ann. §§ 13:19-1 to 19-17 (West 1979) and regulations adopted thereunder, N.J. Admin. Code, tit. 7, §§ 7E-1.1 to 7E-3.30 (1990). Most development located in the New Jersey Pinelands Region will require approval pursuant to the Pinelands Protection Act, N.J. Stat. Ann. §§ 13:18A-1 to 18A-29

^{1.} Additional requirements may also be applicable to projects located in or near other environmentally sensitive areas. These include, *inter alia*, (1) the coastal zone, which is basically comprised of coastal waters and adjacent shoreland influenced by the tides (in Pennsylvania these areas include the tidally flowed areas of the Delaware River and the shorefront of Lake Erie); (2) the habitat of rare, threatened or endangered species; (3) waterways designated as wild or scenic by either the state or federal government; and (4) areas in or near federal wildlife refuges, national parks or national monuments.

I. THE CHARACTERISTICS OF WETLANDS AND THEIR REGULATION

A. Value of Wetlands

Wetlands come in many varieties, including tidal marshes, swamps, bogs, lowland or floodplain forests, seeps, and wet meadows. Wetlands are commonly associated with a stream, lake, or pond, but can often simply be an isolated wet area.

Wetlands have been singled out for special protection by both the state and federal government because of their value to water pollution control, wildlife, and the natural hydrologic cycle. In facilitating pollution control, wetlands naturally purify water through a variety of physical and biological processes. For example, as polluted water flows through a wetland, sediment is trapped, heavy metals are immobilized, nutrients are taken up by vegetation, and even nitrogen can be removed.

Wetlands are also of critical importance to wildlife. The Council on Environmental Quality has stated of wetlands that "[n]o ecosystem is more essential to the survival of the nation's fish and wildlife." Wetlands provide diverse sources of food, access to water, and habitat for many animal species. Because wetlands tend to follow streams, they provide "corridors" through which wildlife can freely move under cover. They also provide "edge" and "transitional" habitat—diverse areas where vegetation typical of both wet, mesic, and dry lands can be found in close proximity—which maximizes the types and variety of food and cover. Consequently, the protection of wetlands is critical to the preservation of many species of plants and animals.

Finally, wetlands play an essential role in the hydrologic cycle. Specifically, they provide a natural mechanism for flood control, because water spreads out and is slowed as it flows through wetlands. Wetlands also represent an important interconnection between surface and groundwater. Wetlands are often important recharge areas where groundwater is replenished. When wetlands are replenished, groundwater emerges from seeps and springs and feeds surface water. Because of the interconnection between surface and ground water, development in wetlands and

⁽West 1990), and regulations adopted thereunder, N.J. Admin. Code tit. 7, $\S\S$ 50-1.1 to 50-7.11 (1987).

^{2.} United States Council on Environmental Quality, Environmental Quality: the Ninth Annual Report of the Council on Environmental Quality 316 (1978).

other discharges of pollutants into wetlands can threaten groundwater quality by introducing pollutants directly into groundwater.

B. Identification of Wetlands

"Wetlands" are specifically defined by the United States Army Corps of Engineers (Corps) in regulations adopted under section 404 of the federal Clean Water Act:

The term "wetlands" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.³

An almost identical definition of the term appears in United States Environmental Protection Agency (EPA) regulations providing guidelines for issuing section 404 permits,⁴ and in the Pennsylvania Department of Environmental Resources' (DER) chapter 105 regulations.⁵

Thus, the definition requires either inundation or saturation sufficient to support a predominance of hydric vegetation under normal circumstances. In determining whether a particular site is a wetland under this definition, state and federal agencies will look to three factors:

- (1) hydric soils, which include both saturated soils and floodplains or inundated soils;
- (2) hydrologic studies, which determine whether there is a high water table or the region is periodically inundated; and
- (3) hydrophytic vegetation.6

In many cases, however, one or more elements may be absent, and a wetland's presence may be inferred from the other

^{3. 33} C.F.R. § 328.3(b) (1989). The Army Corps of Engineers will hereinafter be referred to as "Corps."

^{4. 40} C.F.R. § 230.41 (1988). The federal Environmental Protection Agency will hereinafter be referred to as "EPA."

^{5. 25} PA. CODE § 105.1 (1990). The Pennsylvania Department of Environmental Resources will hereinafter be referred to as "DER."

Hydrophytic vegetation is vegetation which is adapted to life in watersaturated conditions.

elements.7

The precise method now prescribed by the Corps for identifying a wetland is set forth in the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (Manual).8 The Manual lists hydric soils and species of hydrophytic vegetation, describes how to determine whether there is a predominance of such vegetation,9 and describes methods to be used when one or more of the indicators is ambiguous or absent. For example, in a plowed field, soils will be disturbed and natural vegetation will not be present. Because the regulatory definition requires consideration of "normal circumstances," other issues may be considered to determine what the characteristics of the field and its soils might have been had it not been for the plowing.

The presence and extent of wetlands on any particular site cannot be accurately determined without a site visit by a biologist or other environmental scientist with experience in wetlands delineation. ¹¹ Typically, for the purpose of obtaining approvals, one will retain an expert who will place flagged stakes along the wetlands line. This line will then be confirmed by the Corps or DER, the stakes will be surveyed, and the line placed on a wetlands map.

Although a site visit by a qualified expert is required at some point, there are also secondary sources that may be consulted to determine whether a particular piece of property may contain wetlands. The United States Fish and Wildlife Service (Service) has prepared a National Wetlands Inventory (NWI). Based upon

^{7.} See infra notes 9 & 10 and accompanying text.

^{8.} FEDERAL MANUAL FOR IDENTIFYING AND DELINEATING JURISDICTIONAL WETLANDS (1989)) (document No. 0240101-00-683-8) [hereinafter 1989 MANUAL]. The Corps, the Soil Conservation Service, the U.S. Fish and Wildlife Service and the EPA are currently re-examining the 1989 MANUAL and have proposed to amend it. 56 Fed. Reg. 40446 (1991) (proposed August 14, 1991). This proposal has elicited significant adverse comment. The 1989 MANUAL has also been adopted by DER as the method to be used to identify and to delineate wetlands. 25 Pa. Code § 105.451(b), adopted, 19 Pa. Bull. 4612 (Oct. 28, 1989). In its comments objecting to the proposed revisions to the 1989 MANUAL, Pennsylvania officials have indicated that they intend to retain the 1989 MANUAL in its current form even if the proposed revisions are adopted.

^{9.} Some species of vegetation can live *only* in wetlands (wetlands obligates), some species prefer wetlands but can live in uplands (wetlands facultative), some live equally well in wetlands or uplands (facultative), some can live in wetlands but prefer uplands (facultative uplands), and still others can live only in uplands (uplands obligates).

^{10.} See Manual, supra note 8, at 4.23.

^{11.} The term "delineation" as used in this Article refers to the process of identifying on a map the precise location of a wetland.

satellite data and aerial photography, the NWI identifies probable wetlands areas on U.S.G.S.¹² Quadrangle maps. If an area is identified as a wetland on an NWI map, it almost certainly is a wetland; however, many wetland areas are not reflected on these maps. For additional information, each county has a County Soil Survey which identifies soil types. These soil surveys can be used to determine whether any soils identified as hydric¹³ by the National Technical Committee for Hydric Soils (NTCHS) are present on the property.

C. State and Federal Regulation of Wetlands—No One Stop Shopping

In order to protect and to promote the value of wetlands, development in and around wetlands is regulated by the Corps and the EPA pursuant to sections 301, 401 and 404 of the federal Clean Water Act. ¹⁴ The Corps is responsible for issuing permits, while the EPA possesses broad enforcement and veto power over the permitting process. ¹⁵ Many states also independently regulate development in or near wetlands. For example, DER independently regulates such development pursuant to regulations which have been adopted through the Pennsylvania Dam Safety and Encroachments Act-(DSEA), ¹⁶ the Pennsylvania Clean Streams Law

^{12.} These initials refer to "United States Geologic Survey."

^{13.} Hydric soils are defined as "soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part." See Manual, *supra* note 8 at 2.6 (citing U.S.D.A. Soil Conservation Service, 1987).

^{14. 33} U.S.C. §§ 1311, 1341, 1344 (19). The core text of section 301 of the Clean Water Act, entitled "Effluent Limitations," is as follows: "Except as in compliance with this section and sections 302, 306, 307, 318, 402, and 404 of this Act [33 U.S.C. §§ 1312, 1316, 1317, 1328, 1342, 1344], the discharge of any pollutant by any person shall be unlawful." *Id.* § 1311(a) (referred to in text as section 301). Section 401, entitled "Certification," states in pertinent part:

Any applicant for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate,...that any such discharge will comply with the applicable provisions of sections 301, 302, 303, 306, and 307 of this Act [33 U.S.C. §§ 1311, 1312, 1313, 1316, 1317].

Id. § 1341(a)(1) (referred to in text as section 401). Section 404, entitled "Permits for dredged or fill material," states in pertinent part: "The Secretary may issue permits, after notice and opportunity for public hearings for the discharge of dredged or fill material into the navigable waters at specified disposal sites." Id. § 1344(a). (referred to in text as section 404).

^{15.} See infra notes 46-48, 53 and accompanying text.

^{16.} Pa. Stat. Ann. tit. 32, §§ 693.1 to 693.27 (Supp. 1991).

(CSL),¹⁷ and several other acts. The Pennsylvania regulations appear in chapter 105 of DER's regulations.¹⁸

Although the Clean Water Act includes provisions that allow the delegation of the section 404 permit system¹⁹ to a state so that the state can issue the federal permits pursuant to its own program,²⁰ the section 404 program has not been so delegated in Pennsylvania.²¹ When a state has not been delegated the authority to issue section 404 permits, and has its own wetlands regulatory program, two permits are required in order to develop in a wetlands area. Moreover, the Clean Water Act specifically authorizes states to impose more stringent requirements. Therefore, state requirements for permits are often more stringent than the federal requirements, and the state requirements are not preempted.²²

While state and federal programs are independent, there are a number of important similarities. Wetlands are often defined and delineated identically,²³ and therefore federal and state programs regulate similar activities—notably the discharge of fill material into wetlands. There are, however, significant differences in the two programs. Permit requirements are often applied and waived in different circumstances; and substantive criteria often differ.

Although there is usually no such thing as "one stop shopping" when one seeks to develop in a wetlands area, the Pennsylvania DER and the Corps have developed a joint permit application system which simplifies the process to some extent.

IL. REGULATION OF WETLANDS: INITIAL CONCERNS

A. Regulated Activities in Wetlands-Discharge of Fill Material

As previously noted, both the Commonwealth and the federal government regulate development in and around wetlands through a permit system. Although these permit systems and

^{17.} Pa. Stat. Ann. tit. 35, §§ 691.1 to 691.1001 (1977 & Supp. 1989).

^{18. 25} Pa. Code § 105 (1987).

^{19.} For a description of the section 404 permit process, see 33 C.F.R. §§ 320, 323, 325, 328, 330 & 337 (1990).

^{20. 33} U.S.C. § 1344(g)-(i). Michigan is the only state that has been authorized to issue federal permits pursuant to section 404.

^{21.} This is also true in New Jersey. However, New Jersey is working towards delegation through implementation of the newly enacted Freshwater Wetlands Protection Act, N.J. Stat. Ann. §§ 13:19-1 to 19-17 (West 1979).

^{22. 33} U.S.C. § 1344(t).

^{23.} See 19 Pa. Bull. 9612 (Oct. 28, 1989) (adopting 25 Pa. Code § 105.451).

their requirements differ, as discussed at greater length below, both permit systems are directed at a similar range of activities in wetlands.²⁴

Both DER's chapter 105 regulations and the Corps' regulations adopted under section 404 of the Clean Water Act regulate the discharge of fill material into wetlands or into other "waters of the Commonwealth" or "of the United States." Both Pennsylvania's regulations and the federal regulations broadly define the "discharge of fill material" to include, *inter alia*:

[F]ill that is necessary to the construction of any structure in any regulated waters . . . any structure or impoundment requiring rock, sand, dirt, or other material for its construction . . . site-development fills for recreational, industrial, commercial, residential, and other uses . . . causeways or road fills . . . and . . . dams and dikes. ²⁶

By way of example, the following aspects of a project would constitute discharge of fill material into wetlands and other waters:

- (1) Dams or dikes,
- (2) any utility intake or outfall structures or underwater lines,
- (3) road crossings over streams and wetlands,
- (4) retention and detention basins in streams and wetlands.
- (5) any earth moving within wetlands or a stream,
- (6) parking areas in wetlands or streams,
- (7) riprap²⁷ in streams and wetlands, and
- (8) buildings or structures of any kind.

^{24.} Technically, only "discharges" into wetlands are regulated, but often such activities as pushing soil around with a bulldozer in a wetland, or constructing a building on a wetland, result in "discharges" into wetlands and are therefore regulated. See infra notes 27 & 28, and accompanying text.

^{25.} See infra notes 28-32 and accompanying text.

^{26. 25} PA. CODE § 105.1 (definition of "Discharge or Fill Material"); see also, 33 C.F.R. § 323.2(f) (1989).

^{27. &}quot;Riprap" is defined as "a foundation or sustaining wall of stones or chunks of concrete thrown together without order . . . on an embankment slope to prevent erosion." Webster's Ninth New Collegiate Dictionary (9th ed. 1983).

III. THE FEDERAL PERMIT SYSTEM FOR WETLANDS PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT

A. Legal Basis of the Permit Requirement

The Clean Water Act generally prohibits the discharge of any pollutant without an appropriate permit.²⁸ Discharge of a pollutant is defined to mean a discharge of a pollutant into "navigable waters,"²⁹ which is, in turn, defined as "the waters of the United States."³⁰ As discussed previously, fill material is considered a pollutant.³¹ Discharges of fill materials into the "waters of the United States" are authorized only after a permit is issued by the Secretary of the United States Army pursuant to section 404 of the Clean Water Act.³²

The term "wetlands" is not mentioned or defined in the Federal Clean Water Act. Instead, the courts,³³ as well as the regulations adopted and administered by the Corps,³⁴ have defined the term "waters of the United States" to include all waters and adjacent wetlands, the use, degradation or destruction of which could affect interstate or foreign commerce.³⁵ In holding that discharges of fill and other pollutants into wetlands are regulated under the Clean Water Act, the courts have found that Congress intended to extend its jurisdiction to the full extent permitted under the commerce clause of the United States Constitution and to include within the term "waters of the United States" all wetlands associated with those waters.³⁶ This intent is reflected in the Corps' present regulations.³⁷

^{28. 33} U.S.C. § 1311(a).

^{29.} Id. § 1362(12).

^{30.} Id. § 1362(7).

^{31.} Id. § 1362(6).

^{32.} Id. § 1344.

^{33.} United States v. Holland, 373 F. Supp. 665, 673-677 (M.D. Fla. 1974); see also Natural Resources Defense Council v. Callaway, 392 F. Supp. 685, 686 (D.D.C. 1975).

^{34. 33} C.F.R. § 328 (1989).

^{35.} Id. § 328.3(a). See United States v. Riverside Bayview Homes, Inc., 474 U.S. 121, 123 (1985).

^{36.} See United States v. Riverside Bayview Homes, Inc., 474 U.S. 121 (1985); National Wildlife Federation v. Laubscher, 662 F. Supp. 548, 549 (S.D. Tex. 1987); but see Tabb Lakes Ltd. v. United States, 30 Env't Rep. Cas. (BNA) 1510 (4th Cir. 1989) (Corps' assertion of jurisdiction over wetlands used by migratory birds, in absence of regulations specifying this use, was invalid in absence of formal rule-making).

^{37.} See National Wildlife Federation v. Laubscher, 662 F. Supp. 548, 549 (S.D. Tex. 1987); but see Tabb Lakes Ltd. v. United States, 30 Env't Rep. Cas.

The Corps' regulations define a discharge of fill material to include the following:

[W]ithout limitation . . . placement of fill that is necessary for the construction of any structure in a water of the United States; the building of any structure or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or roadfills; dams and dikes; . . . property protection and/or reclamation devices such as riprap . . . ; fill for structures such as sewage treatment facilities; [and] intake and outfall pipes. 38

Such discharges of fill material into wetlands require a permit under the Corps' regulations.

B. Prerequisites to Issuance of a Federal Permit

Although section 404 permits are issued by the Corps, the Clean Water Act requires involvement by the EPA, the affected state, and the United States Fish and Wildlife Service. As discussed below, the Fish and Wildlife Service must be consulted, EPA guidelines must be followed, all permits must be supported by a state water quality certification, and the EPA retains a veto power.

1. Section 401 Certification

Even where a state has not been delegated the authority to administer the section 404 program, state involvement in permitting is required by section 401 of the Clean Water Act.³⁹ Section 401 prohibits the issuance of *any* permit under the Clean Water Act, including a section 404 permit, unless the state in which the

⁽BNA) 1510 (4th Cir. 1989) (Corps' assertion of jurisdiction over related wetlands use by migratory birds only, in absence of specification in regulations specifying this use, invalid in absence of formal rule-making).

^{38. 33} C.F.R. § 323.3(f) (1989).

^{39. 33} U.S.C. § 1341. Pennsylvania applicants must apply to the DER Bureau of Water Quality for section 401 certification, and the EPA regulations, set forth in 40 C.F.R. § 121, apply for evaluating such applications. See City of Harrisburg v. Commonwealth Dep't of Envtl Resources, EHB No. 88120F (October 6, 1988), (aff'd, Pa. Commw. Ct., W.L. 87452 (June 26, 1990)) (at issue was extent of DER's power to deny 401 certification in order to protect wetlands). The Harrisburg decision may be affected by regulations that have recently been approved by the Environmental Quality Board, but have not been finally promulgated or published. See seciton IV-D, infra.

discharge originates issues a certification (401 Certification) that the discharge authorized by the proposed permit will comply with a number of other sections of the Clean Water Act and all applicable state water quality standards.

The Clean Water Act provides that if the state refuses or fails to act "within a reasonable period of time (which shall not exceed one year)," the certification requirement will be deemed waived. The Corps' regulations further shorten this period and presume a waiver if the state fails to act within sixty days. If the discharge will affect the water quality in a water body in a second state, both section 401 and the Corps' regulations require that the second state be notified and be given an opportunity to comment. Public notice and comment is also required.

2. Review and Comment by the Fish and Wildlife Service

Section 404(m) of the Clean Water Act also requires that the Corps notify the "Secretary of the Interior, acting through the Director of the United States Fish and Wildlife Service" of any application for a section 404 permit.⁴² The Service must be given ninety days within which to comment on any such application. The Fish and Wildlife Coordination Act⁴³ independently requires any federal agency that proposes to control or to modify any body of water to consult with the U.S. Fish and Wildlife Service and the head of the appropriate state wildlife agency.⁴⁴

Through both section 404(m) and the Coordination Act, the U.S. Fish and Wildlife Service, the Pennsylvania Fish Commission and the Pennsylvania Game Commission are all given an opportunity to review and to comment upon an application for a section 404 permit. These agencies do not have a veto power. However, the Corps' regulations provide that the Corps "will give full consideration to the views of those agencies on fish and wildlife matters in deciding on the issuance, denial, or conditioning of individual or general permits." 45

^{40. 33} U.S.C. § 1341(a)(1). The one-year time period begins running after the state receives the request for certification. *But see* Fredericksburg v. F.E.R.C., 30 Env't Rep. Cas. (BNA) 1093 (4th Cir. 1989) (no waiver of certification requirement in cases where applicant failed to comply with state filing requirements).

^{41. 33} C.F.R. § 325.2(b)(1)(ii) (1989).

^{42. 33} U.S.C. § 1344(m).

^{43. 16} U.S.C. §§ 661-666(c) (1988).

^{44.} See 33 C.F.R. § 320.3(e) (1989).

^{45.} Id. § 320.4(c).

These fish and wildlife agencies generally take a much more restrictive view towards development than does the Corps. As indicated by its regulations, the Corps does not appear to be bound to accept their comments; however, those comments are given heavy weight and often form the basis for a permit denial or the imposition of stringent conditions on a permit's issuance.⁴⁶

3. EPA Guidelines, Veto Power, and Enforcement

The EPA is the agency other than the Corps which is given the greatest power to influence the administration of the section 404 program. Indeed, EPA's enforcement powers exceed those of the Corps. The EPA's role is significant since the EPA, like the Fish and Wildlife Service, tends to place a higher value on environmental concerns and a lower value upon development and the rights of the private property owner than does the Corps. Moreover, the EPA utilizes the Fish and Wildlife Service to perform many field activities.

The EPA is given significant power to enforce this preference for protecting the environment.⁴⁷ First, section 404(b)(1) of the Clean Water Act⁴⁸ requires the Corps to apply "guidelines" (404(b)(1) guidelines) developed by the EPA in issuing a permit. These guidelines⁴⁹ reflect the lesser weight given to economic factors and private property rights by the EPA.

Additionally, section 404(c) of the Clean Water Act⁵⁰ gives the EPA Administrator the power to veto any section 404 permit "whenever he determines, after notice and opportunity for public hearings, that the discharge of such materials into such area will have an unacceptable adverse affect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding

^{46.} As discussed below, the U.S. Fish and Wildlife Service now has responsibility for many enforcement activities in parts of Pennsylvania pursuant to a Field Level Memorandum of Agreement between the Corps' Philadelphia District and EPA Region III.

^{47. 33} U.S.C. § 1344. Section 404 departs significantly from other portions of the Clean Water Act, where EPA is given the primary power to implement the Act. In most cases, EPA is given the power to issue, to suspend, to revoke and to veto permits, to delegate the program to the states, and to develop and promulgate regulations. Section 404 gives the initial power to issue permits to the Corps, a power Congress deemed appropriate in light of the Corps' traditional regulation of navigable waters. In light of this departure, EPA was given significant powers to check the Corps.

^{48. 33} U.S.C. § 1344(b)(1).

^{49.} These guidelines are set forth in 40 C.F.R. § 230 (1988).

^{50. 33} U.S.C. § 1344(c).

areas), wildlife, or recreational areas."⁵¹ For example, in *Bersani v. Robichaud*, ⁵² the EPA used this power to veto the Corps' issuance of a section 404 permit for a large regional shopping mall. Although the developer had proposed to mitigate the loss of wetlands by creating new wetlands, and the Corps agreed to this mitigation proposal, the EPA found that the filling of wetlands would have an adverse effect upon wildlife and could be avoided because of the existence of other viable development sites in the region. The EPA's veto was upheld on appeal.⁵³

Finally, section 404(n) of the Clean Water Act⁵⁴ reserves for the EPA full authority to enforce all requirements of the Clean Water Act pursuant to section 309 of the Act. This section authorizes the EPA to issue orders, assess administrative penalties, and bring civil actions seeking civil penalties, injunctive relief or both.⁵⁵

C. Policies for Issuing Permits Under Section 404—Why You Should not Expect to Get a Permit for a Private Project

The policies employed by the Corps for issuing section 404 wetlands permits and EPA's 404(b)(1) guidelines are so stringent that it is very unlikely that any individual permit will be granted for any project other than a major public works project, such as a highway or an airport, or a private project which is water dependent, such as a marina or hydroelectric facility.

The specific policies used by the Corps in evaluating permit applications are set forth in title thirty-three of the *Code of Federal Regulations* section 320.4.⁵⁶ That section prescribes a general public interest review in which the benefits of a project are weighed against its detriments. Specifically, the Corps must consider the following criteria:

^{51.} Id.

^{52. 850} F.2d 36, 38 (2d Cir. 1988), cert. denied, 109 S. Ct. 1556 (1989).

^{53.} Id. See United States v. Marathon Dev. Corp., 29 Env't Rep. Cas. (BNA) 1145 (1st Cir. 1989).

^{54. 33} U.S.C. § 1344(n).

^{55.} The EPA will use its broad enforcement powers initially, but persistent or egregious cases will be referred to the Justice Department for enforcement.

^{56. 33} C.F.R. § 320.4. The Corps' procedures for processing permits are set forth in 33 C.F.R. § 325 (1989). The general regulatory policies applicable to consideration of any application for a permit issued by the Corps are set forth in 33 C.F.R. § 320 and additional special policies applicable to section 404 permits are set forth in 33 C.F.R. § 323.6.

- (i) The relative extent of public and private need for the proposed structure or work;
- (ii) Where there are unresolved conflicts as to resource use, the practicability of using reasonable alternative locations and methods to accomplish the objective of the proposed structure or work; and
- (iii) The extent and permanence of the beneficial and/or detrimental effects which the proposed structure or work is likely to have on the public and private uses to which the area is suited.⁵⁷

In the balancing prescribed by this regulation, however, the balance is weighted heavily against development in wetlands. The regulation provides that "[m]ost wetlands constitute a productive and valuable public resource, the unnecessary alteration or destruction of which should be discouraged as contrary to the public interest."⁵⁸

Wetlands which are considered to perform functions important to the public include (1) wetlands which serve significant natural biological functions; (2) wetlands set aside for study of the aquatic environment or as sanctuaries or refuges; (3) wetlands whose alteration would adversely affect natural drainage characteristics, sedimentation patterns, salinity distribution, flushing characteristics, current patterns or other environmental characteristics; (4) wetlands which shield land from erosion or storm damage; (5) wetlands which are groundwater discharge or recharge areas; (6) wetlands which are storage areas for storm or flood waters; (7) wetlands which serve significant water purification functions; and (8) unique wetlands.⁵⁹ Scarcely any wetland would not serve at least one of these functions, so the Corps is not likely to look favorably on development in any wetland.

Moreover, the regulations require the Corps to consider cumulative effects of a number of "piecemeal changes" and to look at wetlands as systems.⁶⁰ Thus, even an argument that a change is small may be to no avail, since numerous such changes would

^{57.} *Id.* § 320.4(a)(2). The Corps' regulations further state that energy projects are to be given special preference, as follows: "Energy conservation and development are major national objectives. District engineers will give high priority to the processing of permit actions involving energy projects." *Id.* § 320.4(n).

^{58.} Id. § 320.4(b)(1).

^{59.} Id. § 320.4(b)(2).

^{60. 33} C.F.R. § 320.4(b)(3).

have a much greater effect, which the Corps would have to consider in its permitting decision.

Finally, the regulations prohibit the issuance of a permit for any wetlands identified as important on the basis of the criteria set forth above unless "the benefits of the proposed alteration outweigh the damage to the wetlands resource." This balancing must be conducted on the basis of EPA's 404(b)(1) guidelines.⁶²

The 404(b)(1) guidelines⁶³ generally forbid the issuance of any section 404 permit "if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences."64 where a discharge would be into "a special aquatic site," such as a wetland, 65 practicable alternatives not involving wetlands are presumed to exist for any project which "does not require access or proximity to or siting within the special aquatic site in question to fulfill its basic purpose"—i.e., the project is not "water dependent"—"unless clearly demonstrated otherwise."66 The 404(b)(1) guidelines further provide that "where a discharge is proposed for a special aquatic site, all practicable alternatives to the proposed discharge which do not involve a discharge into a special aquatic site are presumed to have less adverse impact on the aquatic ecosystem, unless clearly demonstrated otherwise."67

Most private residential, industrial, and commercial construction would not be considered water dependent.⁶⁸ Accordingly, EPA regulations presume that alternative sites exist for these types of activities and that location of those types of projects at those presumed alternative sites will have a less adverse effect on the ecosystem than their location in wetlands. In most cases, an applicant will not be able to overcome this presumption, as indicated by the paucity of permits for such private projects issued by the Corps which were not vetoed by EPA.⁶⁹

^{61.} Id. § 320.4(b)(4) (emphasis added).

^{62.} Id.

^{63. 40} C.F.R. § 230 (1989).

^{64.} Id. § 230.10(a).

^{65.} Id. § 230.41.

^{66.} Id. § 230.10(a)(3).

^{67.} Id. See Bersani v. Robichaud, 850 F.2d 36, 43-44 (2d Cir. 1988), cert. denied, 109 S. Ct. 1556 (1989).

^{68.} See Bersani, 850 F.2d at 44 (holding that shopping mall was not water dependent in sustaining EPA veto of section 404 permit issued by Corps).

^{69.} But see Sylvester v. Army Dep't, 30 Env't Rep. Cas. (BNA) 1331 (9th Cir. 1989) (upholding permit to allow wetlands filling to create golf course as part of

D. How to Avoid the Need for an Individual Permit: Exemptions and Nationwide Permits

Due to the virtual impossibility of obtaining a section 404 approval for any private, non-water dependent activity, the only way to obtain a permit for developing in or around wetlands is to design the project to bring it within either (1) one of the statutory exemptions within section 404 or (2) one of the "nationwide permits" incorporated in the Corps' regulations.

1. Exempt Discharges

Section 404(f) of the Clean Water Act⁷⁰ exempts six categories of discharge from section 404's permit requirements. The exemptions are subject to the limitation that if the discharge has the primary purpose of changing the nature of the use of the wetland or water body, the exemptions do not apply. The discharges exempt from section 404's permit requirements are the following:

- (1) discharges incident to normal farming, forestry and ranching activities;
- (2) discharges for the purpose of maintenance or emergency reconstruction of existing structures such as dams, dikes, levees, groins, riprap, breakwaters, causeways, bridge abutments or approaches, and transportation structures;
- (3) construction or maintenance of farm or stock ponds or irrigation ditches;
- (4) construction of temporary sedimentation basins on a construction site if no waters or wetlands are filled;
- (5) construction of farm or forest roads or temporary mining roads; and
- (6) certain discharges authorized by a state with an approved program under section 208(b)(4) of the Clean Water Act.

These exemptions, which are mirrored in the Corps' regulations,⁷¹ give little solace to the developer of residential, commercial or industrial real estate, since the exemptions apply, for the most part, to other types of activities such as farming and forestry.

alpine resort which location was fixed by analyses based on prior environmental impact statements, finding that golf course was necessary part of resort and that no other feasible location could be identified).

^{70. 33} U.S.C. § 1344(f).

^{71. 33} C.F.R. § 323.4 (1989).

Even more significantly, the exemptions do not apply when a change of use is intended. For example, in *United States v. Cumberland Farms of Connecticut, Inc.*,⁷² a dairy products company was found to have violated the Clean Water Act when it altered a swamp to bring it into a new use as agricultural land, despite the agricultural "exemption."⁷³

2. Nationwide Permits

A developer's best hope for receiving a section 404 approval is to bring its project within the scope of one of the "nationwide permits" or permits by rule included in the Corps' regulations. Fection 404(e) of the Clean Water Act authorizes the Corps in some circumstances to issue "general permits... for any category of activities involving discharges of dredged or fill material. Pursuant to this authority, the Corps has established, by regulation, twenty-six nationwide permits.

Not all nationwide permits apply in all states, since each state must issue a section 401 certification for a nationwide permit before that permit can become effective in that state. Indeed, as discussed below, the most far-reaching nationwide permit, permit number twenty-six, does not apply in Pennsylvania because DER has refused to issue the section 401 certification for that permit on a general basis. Nevertheless, the following are the most significant nationwide permits to the real estate developer.

Nationwide permit number three authorizes the repair, rehabilitation or replacement of any structure or fill which was previously permitted or constructed before any permitting

^{72. 647} F. Supp. 1166, 1175 (D. Mass. 1986), aff'd, 26 Env't Rep. Cas. (BNA) 1393 (1st Cir. 1987).

^{73.} Id. See also United States v. Johnson, 30 Env't Rep. Cas. (BNA) 1550 (4th Cir. 1989).

^{74. 33} C.F.R. § 330 (1989). Because nationwide permits are permits by rule, a developer may simply make its own determination that its project falls within the parameters of the nationwide permits, and proceed. However, the developer bears the risk of being wrong. Therefore, it may request a jurisdictional determination, known as a "JD." However, if the Corps is wrong in its determination that an activity is authorized by a nationwide permit, the developer may be subject to EPA enforcement action or a citizen suit. After an application for a JD is filed, the Corps will issue a letter informing the applicant either that the applied-for activity will require an individual permit, or that it is either outside of the Corps' permitting jurisdiction or falls within a nationwide permit. The Corps' determination is not reviewable by the courts. See Avella v. Army Department, 31 Env't Rep. 1199 (S.D. Fla. 1990). See also 56 Fed. Reg. 14,598 (1991).

^{75. 33} U.S.C. § 1344(e).

^{76.} The nationwide permits are set forth in 33 C.F.R. § 330.5 (1989).

requirement became applicable.⁷⁷ This nationwide permit is particularly important to the developer working on one of the many areas previously filled by the Corps itself.

Nationwide permit number seven authorizes outfall structures where the discharge has been issued a National Pollution Discharge Elimination Permit (NPDES) permit.⁷⁸ This would apply to discharge pipes from permitted sewage treatment facilities. So, for example, it applies where the Corps specifically makes a determination that the adverse environmental effects of the structure itself (as opposed to the discharge) are minimal.

Nationwide permit number twelve authorizes discharge of materials for backfill or bedding of utility lines, as long as after backfilling the original bottom contours are restored. ⁷⁹ In other words, sewer, water, electric, gas and telephone lines may be run underneath a wetland without an individual section 404 permit, provided that the construction is not used to modify the original contours and hydrology of the wetland. Electric transmission lines running over wetlands would not involve the discharge of fill into wetlands and would not fall within the Corps' jurisdiction under the Clean Water Act.

Nationwide permit number thirteen allows stream bank stabilization activities for erosion control if less than one cubic yard of fill per running foot is used and no fill is discharged into wetlands.⁸⁰

Nationwide permit number fourteen authorizes minor road crossing fills, including all attendant features, that are part of a single project for crossing a non-tidal water body. A minor road crossing cannot involve the discharge of more than 200 cubic yards of fill below the plane of ordinary high water and cannot cross wetlands extending more than 100 feet on either side of the water body. The crossing must be culverted or bridged so as not to restrict expected high flows. This nationwide permit, and nationwide permit number twenty-six, are probably the most significant nationwide permits for real estate developers.

Nationwide permit number eighteen authorizes discharges of less than ten cubic yards if there is no discharge into wetlands.⁸²

^{77.} Id. § 330.5(a)(3).

^{78.} Id. § 330.5(a)(7). For an explanation of the National Pollutant Discharge Elimination System (NPDES), see 33 U.S.C. § 1342.

^{79. 33} C.F.R. § 330.5(a)(12).

^{80.} Id. § 330.5(a)(13).

^{81.} Id. § 330.5(a)(14).

^{82.} Id. § 330.5(a)(18).

All discharges in a project are cumulated for the purpose of this nationwide permit. Nationwide permit number nineteen similarly authorizes dredging of no more than ten cubic yards.

Nationwide permit number twenty-five authorizes installation of concrete bases for pilings.⁸³ This means that structures located on pilings, including bridges and buildings, may be located over wetlands and streams without needing an individual section 404 permit. This may provide a means, albeit expensive, of crossing streams and wetlands areas where another nationwide permit would not apply.

Nationwide permit number twenty-six authorizes some discharges affecting less than ten acres of wetlands located "above the headwaters." This nationwide permit potentially has the most practical significance for real estate developers. However, it has a number of serious limitations, as listed below. In addition to the limitations generally applicable to all nationwide permits, and it is not generally applicable in Pennsylvania.

First, nationwide permit number twenty-six does not apply to discharges into (1) any wetlands associated with water bodies which are tidal, interstate or navigable or with streams with an average annual flow of five cubic feet per second or greater (a stream which can just be jumped across), or (2) those water bodies themselves.

Second, if the discharge of fill will affect one or more acres of wetlands, the developer must provide the Corps with at least twenty days prior notice (predischarge notification)⁸⁵ of its intent to discharge fill into the wetlands and give the Corps the opportunity to exercise its discretion to require an individual permit. In administering this nationwide permit, the Corps will require most proposals that fill one or more acres of wetland to demonstrate mitigation, meaning the creation of new wetlands. Usually, unless an applicant submits a mitigation plan showing the creation of at least one acre of new or restored wetlands for each acre filled, the Corps will exercise its discretion to require an individual permit. On the other hand, if a mitigation plan satisfactory to the Corps and to the Fish and Wildlife Service⁸⁶ is submitted as a part of the

^{83. 33} C.F.R. § 330.5(a)(25).

^{84.} Id. § 330.5(a)(26).

^{85.} Id. § 330.7(a).

^{86.} The Fish and Wildlife Service will evaluate all mitigation proposals and its opinions on their adequacy will be given heavy weight.

predischarge notification,⁸⁷ the Corps will require implementation of the mitigation program pursuant to its discretionary authority to impose individual conditions to a nationwide permit,⁸⁸ and agree not to require an individual permit for the project.

Third, Pennsylvania has refused to issue a section 401 certification for nationwide permit number twenty-six.⁸⁹ Therefore, a developer may rely upon this nationwide permit only after the developer applies to DER for an individual section 401 certification for the project at issue and DER either grants a certification or waives the certification requirement by failing to act in a reasonable time.⁹⁰

In order for any of the nationwide permits to be valid, the project must also satisfy the conditions set forth in title thirty-three of the Code of Federal Regulations section 330.5(b). These conditions forbid discharges of dredged or fill material in or near a number of environmentally sensitive areas, including sites in close proximity to public water intakes, endangered and threatened species habitat, wild or scenic rivers, sites on the Historic Register, shellfish production areas, areas where the discharge would interfere with navigation and areas where the discharge would inhibit the free movement of indigenous aquatic life. The conditions further prohibit the discharge of any materials containing toxic water pollutants in toxic amounts.⁹¹ If the discharge is in the coastal zone, a coastal zone consistency determination must be obtained.⁹²

Perhaps most importantly, the discharge must comply with the management practices listed in title thirty-three of the Code of Federal Regulations section 330.6.93 Those management practices require that discharges of dredged or fill material be avoided or minimized through use of practical alternatives. Thus, if there are alternatives, or a discharge is for a use which is not absolutely necessary, such as a second road crossing which might be convenient, the nationwide permits will not be approved. The manage-

^{87.} See 33 C.F.R. § 330.7(b)(4) (1990) (notification may include any other information permittee believes is "appropriate").

^{88.} Id. § 330.8(f).

^{89. 14} Pa. Bull. 3195 (Sept. 1, 1984).

^{90.} Id. § 330.9(a). A waiver is deemed to have occurred if the state fails or refuses to act on a request for a waiver within sixty days, unless circumstances indicate that more time is necessary. Id. § 325.2(b)(1)(ii).

^{91.} *Id.* § 330.5(b)(5):

^{92. 33} C.F.R. § 330.5(b)(12).

^{93.} Id. § 330.5(b)(14).

ment practices further require avoidance of discharges into wetlands, breeding areas for migratory waterfowl, and spawning areas during spawning seasons. Discharges which adversely affect flooding or flow patterns must be avoided. Finally, any heavy equipment used in wetlands must be placed on mats.⁹⁴

94. Id. § 330.6(a)(6). These proposed wetlands regulations have not been published yet, but will be distributed upon request of DER. On April 10, 1991, the Army Corps of Engineers reproposed its nationwide permit regulations set forth in 33 C.F.R. § 330 (56 Fed. Reg. 14,598 (April 10, 1991)). Reissuance was necessary because under the Clean Water Act, all section 404 permits expire after five years. In reissuing the permits, the Corps decided to propose a number of modifications based on its past experience.

The regulations were both reorganized and clarified. The nationwide permits, which were initially set forth in 33 C.F.R. § 330.5, would be moved to an appendix. Corps procedures, which are often the subject of confusion, would be set forth in 33 C.F.R. § 330.5. Section 330.6 of the proposed regulations provides that the Corps will verify the applicability of nationwide permits by a letter effective for two years. This section states that the district engineer is authorized to revoke nationwide permits or to impose specific conditions, including conditions and letters verifying nationwide permits. This may raise considerable questions with respect to judicial review, in light of decisions that have held that the Corps' decisions on the applicability of nationwide permits are not judicially reviewable.

The proposed regulations would further clarify the extent of multiple use of nationwide permits. Two or more nationwide permits could be combined to authorize a single, complete project, but that same nationwide permit may not be used more than once. The regulations further contain a definition of single and complete project. A development on a single property or contiguous properties for a single purpose, such as a residential development, would be a single and complete project. In the case of a linear project, such as a highway or power line, each crossing of a separate waterway would be deemed a single and complete project. Thus, multiple crossings in a real estate development would be cumulated while multiple crossings of an interstate highway would not be cumulated unless the same stream were crossed twice. Individual permits may be combined with nationwide permits to allow measures authorized by a nationwide permit while an individual permit is pending.

The nationwide permits themselves have been modified. The important

changes include the following:

Nationwide permit number 12 would clarify that utility lines may not have the effect of draining wetlands. The permit has been further clarified to indicate

that a crossing is not necessary.

Nationwide permit number 14, addressing road crossings, has been clarified and expanded. The new permit would not require a flowing water body (although there must be a crossing), and would eliminate the restriction on the maximum volume of fill. The new permit would allow 200 feet of wetlands to be affected subject to a maximum of one-third of an acre of wetlands. This permit would now be subject to a 30-day predischarge notification requirement.

Nationwide permit number 17, which formerly authorized certain small hydropower projects, would now authorize all FERC-licensed hydropower projects, subject to a 30-day predischarge notification. Nationwide permit number 18, which authorizes minor discharges, previously authorized only discharges of up to 10 cubic yards. It would now authorize discharges of 10 to 25 cubic yards up to a maximum of one-tenth of an acre of wetlands. A predischarge notification would be required.

Nationwide permit number 25 authorizes structural discharges (pilings,

IV. STATE REGULATION OF WETLANDS

Even if one obtains all necessary approvals from the Corps for discharges into wetlands under the Clean Water Act, one must comply with applicable state regulations. By way of example, the Pennsylvania permit system's applicable requirements will be analyzed. In many cases a permit authorized by the DER will be required even where a nationwide permit would obviate the need for an individual federal permit or where no federal permit would be required at all.

A. Permit Requirements

Pennsylvania's chapter 105 regulations⁹⁶ were adopted pursuant to a number of different state laws, including principally, the Dam Safety and Encroachments Act (DSEA),⁹⁷ and the Clean Streams Law (CSL).⁹⁸ DER implements its chapter 105 regulations primarily in connection with issuance of permits under DSEA. Therefore, in most cases, the chapter 105 regulations will be applied only if a permit is required under chapter 105 or DSEA.⁹⁹

DSEA and chapter 105 require that any person obtain a permit before constructing or operating "any dam, water obstruction

tightly filled concrete structures). The revised language would clarify that this permit may not be relied upon to place buildings and houses on pilings.

Nationwide permit number 26, which authorizes certain "minor" fills above the headwaters, has been clarified to make it clear that the acreage limitation on minor fills applies to areas that are filled, flooded or drained. Currently, this permit requires predischarge notification for all fills greater than one acre and applies to all fills of less than 10 acres. The Corps has invited comment on whether the permit should be limited to instances in which less than five acres are affected and on whether the predischarge notification requirement should be reduced to cover all fills greater than one-half an acre.

A number of new nationwide permits have also been proposed, including permits for authorizing wetlands restoration, authorizing dewatering of construction sites under certain conditions, and authorizing dredging of existing basins.

- 95. See 25 PA. CODE § 125.
- 96. 20 Pa. Bull. 2859 (May 26, 1990). Amendments to chapter 105 have been proposed, 20 Pa. Bull 2859 (May 26, 1990), and have received approval from the Environmental Quality Board (EQB). See section IV-D infra.
 - 97. Pa. Stat. Ann. tit. 32, §§ 693.1 to 693.27 (Supp. 1989).
 - 98. Pa. Stat. Ann. tit. 35, §§ 691.1 to 691.1001 (1977 & Supp. 1989).
- 99. Even if a permit is not required under DSEA or chapter 105, the requirements of chapter 105 may be applicable if another state law requires a permit and further conditions issuance of the permit upon a showing of compliance with DSEA. See Pa. Stat. Ann. tit. 35, § 691.315(f) (Supp. 1989) (applying to CSL permits); Pa. Stat. Ann. tit. 35, § 6018.502(d) (Supp. 1989) (applying to solid waste permits).

or encroachment".¹⁰⁰ This permit requirement applies to (1) all water obstructions and encroachments located in, along, across or projecting into any watercourse, floodway or body of water, whether temporary or permanent, (2) all dams used for the storage of liquids other than water whose release could cause contamination, (3) all dams on a watercourse with a contributory drainage area exceeding 100 acres, and (4) all dams, whether or not on a watercourse, with a maximum depth of greater than fifteen feet or an impounding capacity exceeding fifty acre feet.¹⁰¹

These permit requirements establish the scope of DER's initial permitting jurisdiction under chapter 105. This initial jurisdiction of the regulations differs in some cases from that exercised under the Clean Water Act.¹⁰² For example, the state permit requirements are broader in that stream crossings and structures along streams will require a state permit even if there will be no discharge into the water or wetlands. Moreover, if DER establishes jurisdiction pursuant to any permit, it will apply its regulations governing wetlands even to discharges in isolated wetlands.

DER has waived permit requirements for certain classes of projects pursuant to the authority given it under section 7 of DSEA.¹⁰³ Two of those waivers are relevant to real estate development projects. First, DER has waived chapter 105 permit requirements for aerial crossings of non-navigable streams by electric, telephone or communications lines, as long as the stream is not part of a wilderness area or a wild or scenic river.¹⁰⁴ Second, DER may waive its permit requirements for water obstructions in a stream with a drainage area of 320 acres or less, but only if DER determines "on the basis of preliminary data submitted by the applicant that the water obstruction cannot imperil life or property, have a significant effect on coastal resources, or adversely affect the environment." Thus, a presentation to DER of the

^{100.} Pa. Stat. Ann. tit. 32, § 693.6 (Supp. 1987); 25 Pa. Code § 105.11(a) (1987).

^{101.} Pa. Stat. Ann. tit. 32, § 693.4 (Supp. 1989); 25 Pa. Code § 105.3.

^{102.} For many years DER took the position that discharges into "isolated wetlands" (i.e. wetlands not associated with a body of surface water) did not require a state permit. However, in light of the fact that the definition of "body of water" includes wetlands, DER now regulates discharges into isolated wetlands. See Conneaut Condominium Group Inc. v. Commonwealth Department of Environmental Resources, EHB No. 86-553-R (March 6, 1990).

^{103.} Pa. Stat. Ann. tit. 32, § 693.7 (Supp. 1989).

^{104. 25} PA. CODE § 105.12(a)(3).

^{105. 25} PA. CODE § 105.12(a)(2) (emphasis added).

preliminary data is required; further, the requirement that a water obstruction not adversely affect the environment makes use of this exemption to authorize filling in wetlands inappropriate in most cases. ¹⁰⁶

DER has issued several general permits which may be relied upon in some cases after notification to DER. General permit number three authorizes certain bank rehabilitation and protection. OF General permit number four Will allow stormwater outfall structures to be located along the bank of a stream, but does not authorize their location in wetlands. General permit number five OF authorizes certain utility stream crossings. General permit number fourteen authorizes minor stream crossings where less than one tenth of an acre of wetlands are affected.

B. General Criteria for Issuing Chapter 105 Permits

DER's general criteria for approval of chapter 105 permits involving the discharge of fill material is set forth in title twenty-five of the *Pennsylvania Regulation* section 105.411. That section prohibits approval of an application for a discharge into wetlands areas¹¹¹ "unless the applicant demonstrates to the Department [DER] a public benefit which outweighs the damage to the public natural resources." ¹¹²

Although public benefits can be attributed to private residential, commercial and industrial land development, in many cases, the benefits generated by those projects would not be considered sufficient to offset the high value attributed to wetlands. However, this general test for obtaining state wetlands permits does not include the water dependency test and presumption of alternative locations that make individual Clean Water Act section 404 permits virtually impossible to obtain for private projects. More-

^{106.} DER has recently issued a general permit similar to nationwide permit number fourteen, authorizing minor road crossings of wetlands when it affects less than one tenth of an acre of wetlands. Appendix to 25 PA. CODE § 105, B.D.W.M.-GP-12.

^{107. 25} PA. CODE ch. 105 app. B.

^{108.} Id. at app. C.

^{109.} Id. at app. C-1.

^{110.} Appendix to 25 PA. CODE § 105, B.D.W.M.-GP-12.

^{111.} This standard also applies to discharges into breeding and nesting areas for migratory waterfowl, discharges into spawning areas during spawning season, discharges that would restrict or impede the movement of aquatic species, and discharges which would impede the passage of normal or high flows or cause relocation of waters. 25 PA. CODE § 105.411(1), (2) & (4).

^{112.} Id. § 105.411.

over, the cost-benefit balancing required by this test can be shifted in favor of development if the developer agrees to mitigation sufficient to satisfy DER. Implementation of the mitigation would be required as a permit condition.

A recent decision by Pennsylvania's Environmental Hearing Board (EHB) may significantly increase the depth and scope of the environmental analysis that DER will require in connection with the balancing it performs in issuing a permit under chapter 105. In County of Schuylkill v. F. A. Potts & Co., Inc., 113 the EHB reversed DER's issuance of a permit for a dam on a variety of grounds. Among other things, the EHB held that DER had erred by failing to require the applicant to prepare an environmental evaluation under section 105.15 of the Pennsylvania regulations¹¹⁴ and by failing to consider the impacts of development caused by or related to the permitted activity. Previously, DER would not require the applicant to submit an environmental evaluation, but would conduct its own abbreviated mini-assessment and would limit its consideration of effects to direct effects of the activity being permitted. Although the evaluation required by section 105.15 applies only to certain categories of activities, among those categories are a "stream enclosure, stream relocation or another activity or facility which the Department determines may have a significant impact on the environment."115 In most permitting negotiations, DER has taken the position that any activity in wetlands may have a significant effect on the environment.116 The requirement that DER conduct a social and economic balancing 117 for every discharge into wetlands suggests a regulatory presumption that any discharge into wetlands has a significant effect on the environment. This presumption, and the scrutiny required in this process, slows the permitting process considerably.

^{113.} EHB No. 89-082-W (Nov. 24, 1989).

^{114. 25} PA. CODE § 105.15.

^{115.} Id. § 105.16(a)(4).

^{116.} County of Schuylkill also held that DER must provide both notice and an opportunity for public participation at a meaningful time and after the application is complete. DER has traditionally published notice and invited comment when an application is first submitted, but has not provided additional notice of later submissions and project changes. This decision would require such later notice and may therefore increase both delays and public involvement in the permitting process.

^{117. 25} PA. CODE § 105.16.

C. Special Criteria and Buffer Requirements Applicable to Projects Affecting Important Wetlands

Although the general test for obtaining a chapter 105 permit for discharge into wetlands appears more favorable to private development than the federal test, the calculation changes significantly if the wetlands at issue can be considered "important wetlands" as defined in DER's chapter 105 Regulations.¹¹⁸

As in the case of the Corps' regulations, the term "important wetlands" is broadly defined by the state to include the following:

- (1) Wetlands which serve natural biological functions including food chain production, general habitat, and nesting, spawning, rearing and resting sites for aquatic and land species.¹¹⁹
- (2) Wetlands which are "set aside for study of the aquatic environment or as sanctuaries or refuges." 120
- (3) Wetlands whose destruction or alteration would detrimentally affect natural drainage characteristics, sedimentation patterns, flushing characteristics, natural water filtration processes, or "other environmental characteristics."¹²¹
- (4) Wetlands which shield other areas from erosion or storm damage.¹²²
- (5) Wetlands which serve as valuable storage areas for storm and flood waters. 123
- (6) Wetlands which are a prime natural recharge area or otherwise interconnected with surface and groundwater.¹²⁴

These characteristics could easily apply to any wetland. DER has, at times, taken the position that a wetland must have some special characteristic distinguishing it from other wetlands to be considered "important," but in other cases, as suggested by

^{118.} Id. § 105.17.

^{119.} Id.

^{120.} Id. § 105.17(a)(2).

^{121. 25} PA. CODE § 105.17(a)(3).

^{122.} Id. § 105.17(a)(4).

^{123.} Id. § 105.17(a)(5).

^{124.} Id. § 105.17(a)(6).

^{125.} The legislative history supports the contention that most wetlands should be deemed "important" wetlands. The definition of important wetlands is taken from the Corps regulations at 33 C.F.R. § 320.4(b)(2). Compare 33 C.F.R. § 320.4(b)(4) with 25 PA. CODE § 105.17(b) & (d). Compare also 40 C.F.R. § 230.10(a)(3) (incorporated by reference in 33 C.F.R. § 230.4(b)(4)) with 25 PA.

the breadth of the definition of "important wetlands," it has advised that an applicant should assume that every wetland is "important." As discussed below, DER's proposed regulations would clarify this issue somewhat.

While DER's definition of important wetlands creates broad jurisdiction for applying its stringent requirements, other parts of DER's regulations expand that jurisdiction even further. First, in reviewing applications concerning "important wetlands," DER's regulations require consideration of "interrelated" wetland systems and the cumulative impacts of multiple changes on such systems. 126 This provision has two implications. First, DER will look to an entire wetland system to determine whether it is important or not. Thus, there may be small areas of wetland on the property to be developed which, if considered alone would not be "important." However, if that small wetland is part of a larger stream corridor of wetlands, DER is required to take a systems approach by looking at the entire corridor and may determine that the segment on the property constitutes an important wetland because the corridor is an "important" wetland. In addition, DER will not consider a change proposed for a small project as isolated, but is required to consider its effect cumulatively with other effects.

A second aspect of DER's regulations governing important wetlands extends DER's regulatory concerns and permitting powers significantly beyond the jurisdiction that is exercised by the Corps under the federal wetlands program. DER's regulations include a wetlands buffer requirement, but this requirement is rarely applied. This buffer requirement is imposed by a section of the important wetlands regulation which prohibits any disturbance within an important wetland or within a 300 foot buffer on either side of a wetland unless public benefits for which the project is necessary outweigh the damage to the wetlands resources, as follows:

No permit will be granted for work in or within 300 feet of an important wetlands or otherwise affecting any important wetlands unless the applicant demonstrates and

CODE § 105.17(c) & (e). The Corps regulations in their present form state that "most wetlands" are important; this clarification was added to the Corps regulations after DER's adoption of PA. CODE § 105.17(d). See 51 Fed. Reg. 41,206, 41,207 (1986).

^{126. 25} PA. CODE § 105.17(d).

^{127.} Id. § 105.17(b). Buffers can be important in enhancing wildlife habitat and providing water quality control before reaching waters of the Commonwealth.

the Department concludes, that the public benefits of the project outweigh the damage to the wetlands resource and that the project is necessary to realize public benefits. 128

Although the foregoing regulation generally prohibits the discharge of fill into an important wetland or its buffer, DER's implementation of these requirements limit the regulation's applicability in two important respects. First, as discussed above, DER only applies its wetlands regulations in connection with section 105 permit applications. 129 Accordingly, unless the project otherwise requires a permit that is somehow tied to compliance with the chapter 105 regulations, the prohibition against discharge into important wetlands or their buffer will not apply to isolated wetlands. Second, even if the wetlands lie along a stream, DER will not attempt to regulate discharges into the buffer zone if discharges to the wetlands are avoided and a chapter 105 permit is not otherwise required. 130 This is not what the regulations envisioned. Thus, for example, if one avoided a stream crossing, one might locate construction in the buffer area up to the edge of the important wetlands without DER asserting jurisdiction. However, even where the buffer requirement applies DER has rarely required a buffer and then only in cases of uses such as solid waste facilities.

The same provision that prescribes a 300 foot buffer also describes the test for permitting fill of important wetlands. That test, if considered in isolation, would appear identical to the general test for permitting discharges into wetlands, a balancing of public costs versus public benefits. However, the important wetlands regulation imposes further requirements applicable to discharges into important wetlands which make it more difficult to obtain a permit. Specifically, the regulation places the burden upon the permit applicant to prove that no alternative sites "are available" which are not in or in close proximity to wetlands. 131

^{128.} Id. § 105.17(b).

^{129.} The DER in some cases interprets this statement of "scope," 25 PA. Code § 105.3, to limit its jurisdiction so that it will not regulate certain "dams over small streams" where the "dams" are road crossings impacting wetlands areas. See id. § 105.3(1). This interpretation is probably incorrect. The statement of scope relates to the DSEA permit program, and parallels jurisdiction under DSEA. The wetlands regulations were jointly adopted under the Clean Streams Law, which provides for broader jurisdiction.

^{130.} This interpretation has not been challenged and is somewhat problematic in light of the broad definition of "obstruction" in DSEA.

^{131. 25} PA. CODE § 105.17(c).

Thus, a permit for filling important wetlands or for work in the wetlands buffer cannot be issued unless an applicant can show both that (1) no feasible alternative upland sites are available and (2) the public benefits of the project outweigh the public detriments. If these tests are met, a permit can be issued subject to the additional requirement that mitigation be provided in a form approved by DER "for any unavoidable adverse impacts on important wetlands created by" the project. DER's current policy on what constitutes acceptable mitigation is, like its wetlands policies in general, in flux. However, DER often takes the position that it will require considerably more mitigation than routinely required by the Corps. 133

D. Revisions to the Pennsylvania Wetlands Regulations

Over the last several years, DER has been considering, and the Pennsylvania Environmental Quality Board (EQB) has proposed, substantial amendments to the Pennsylvania wetlands regulations. During 1988 DER announced a wetlands policy which would have incorporated concepts such as the "no net loss" policy recently enunciated by the United States Environmental Protection Agency. The policy would have created three categories of wetlands and imposed buffers of varying sizes.

On April 22, 1989, the DER issued an Advance Notice of Proposed Rulemaking inviting comments upon a draft of amendments to the chapter 105 wetlands regulations. These amendments would have implemented many of the recommendations of the "no net loss" policy and provided greater detail regarding the standards for processing and issuing wetlands permits.

The proposed regulations were then revised and were proposed by the EQB on May 26, 1990.¹³⁶ The EQB has revised and approved these proposed regulations with important modifications. The regulations have not been finally promulgated as of the date of publication.

^{132.} Id. § 105.17(e).

^{133.} DER personnel have enunciated the position that they will require at least two for one mitigation; and DER could require up to five for one mitigation if the applicant proposes to replace the wetland at an offsite location with an ecosystem different from that being filled.

^{134. 20} Pa. Bull. 2859 (May 26, 1990). The Environmental Quality Board proposes and adopts environmental regulations, subject to approvals by additional authorities.

^{135. 19} Pa. Bull. 1737 (April 22, 1989).

^{136. 20} Pa. Bull. 2859 (May 26, 1990)).

To a great extent, the regulations in their present form will simply clarify DER's current regulations by placing the wetlands regulations together and providing greater detail concerning the contents of an application, procedures to be followed and the standards which will apply to the grant of a permit. The regulations will classify wetlands as either exceptional value (EV) wetland or other wetlands. EV wetlands would represent the same basic universe of wetlands now considered important wetlands, but would be more precisely defined. Waivers would be available for certain low quality areas, such as wetlands created within detention basins.

There are several important changes in the unpublished regulations approved by the EQB. One change would expressly require application of the standards established in the wetlands regulations to applications for 401 certification. Another important change relates to wetlands "margins" (i.e. buffers). The proposed regulations retained a 300 foot wetlands "margin" established around EV wetlands only, similar to the 300 foot area established by existing regulations around important wetlands. The EQB reportedly has eliminated all margins in the final version of the regulations without public comment.

V. ENFORCEMENT OF WETLANDS LAWS

Both state and federal laws governing wetlands are backed up by significant civil and criminal penalties for unauthorized discharges into wetlands. Moreover, the laws can be enforced by a plethora of authorities, including the implementing agencies, municipalities, and even citizens.

A. Enforcement Under the Clean Water Act

Section 309 of the federal Clean Water Act¹³⁸ imposes a broad range of criminal and civil penalties for unauthorized discharge of fill or pollutants into wetlands. Negligent and knowing violations of the Clean Water Act are punishable by fines and imprisonment, with a maximum criminal fine of \$50,000 per day of violation and up to three years imprisonment for knowing violations.¹³⁹ The Clean Water Act further authorizes the imposition of civil penalties of not less than \$2500 per day of violation and

^{137. 25} PA. CODE § 105.17 (proposed at 20 Pa. Bull. 2874).

^{138. 33} U.S.C. § 1319.

^{139.} A violation creating knowing endangerment of death or serious bodily injury could be the subject of more severe penalties. *Id.* § 1319(c)(3).

up to \$25,000 per day of violation.¹⁴⁰ The 1987 Amendments to the Clean Water Act also created a new category of "administrative penalties" which may be assessed directly by either the Corps or EPA in amounts up to \$10,000 per day of violation, with a maximum penalty of \$125,000.¹⁴¹ Every day during which illegal fill *remains* in place constitutes a separate violation for which civil or administrative penalties could be assessed.¹⁴²

Additionally, the EPA, the Corps and delegated states are also authorized to issue enforcement orders under the Clean Water Act. The EPA and delegated states are authorized to issue orders requiring compliance with the requirements of the Clean Water Act generally;¹⁴³ and the Corps is authorized to issue compliance orders wherever a person is found to be in violation of any condition or limitation of a section 404 permit.¹⁴⁴

Moreover, the Corps and the EPA have entered into a Memorandum of Understanding (MOU) dividing their responsibility more clearly in which the EPA will be responsible for repeat or flagrant violations and violations in which the EPA has either requested the case or the Corps has recommended an administrative penalty; the Corps will have responsibility for the remainder of the enforcement actions. EPA Region III and the Philadelphia Office of the Corps have entered into a Field Level MOU in which the EPA is given lead authority for all enforcement actions involving unpermitted discharges in Chester, Berks, Lancaster, Lebanon, Northampton, and portions of Pike and Monroe counties. The Field MOU further specifies that U.S. Fish and Wildlife agents will be responsible for EPA field enforcement activities. These MOU's assure that the agencies which have traditionally been more aggressive in wetlands protection will now have lead enforcement responsibility.

The EPA has recently placed greater emphasis upon enforcement and therefore penalty actions have become more common.

^{140.} Id. §§ 1319(d), 1344(s).

^{141.} Id. § 1319(g).

^{142.} United States v. Ciampitti, 669 F. Supp. 684 (D.N.J. 1987); see also North Carolina Wildlife Federation v. Army Department, 29 Env't Rep. Cas. (BNA) 1941 (E.D.N.C. 1989).

^{143. 33} U.S.C. § 1319(a).

^{144.} The Corps' enforcement powers are more limited than those of EPA or a delegated state. For example, until the Water Quality Act of 1987 authorized the Corps to assess administrative penalties, the Corps lacked the power to seek any penalties at all. The Corps can still not bring an action to seek civil penalties. The authority to seek administrative penalties added by the recent amendments has not been extensively used by the Corps thus far.

Although penalties have in many cases been somewhat modest,¹⁴⁵ in a recent case, John Pozsgai was sentenced to a jail term of three years and fined \$202,000 for repeated and flagrant wetlands violations in Bucks County, Pennsylvania. That conviction was affirmed by the United States Court of Appeals for the Third Circuit.¹⁴⁶

The Clean Water Act also includes a citizen suit provision which allows any citizen with an interest which is or may be adversely affected to bring an action to restrain any violation of the Clean Water Act and to collect civil penalties. This section empowers individuals, citizens groups, other organizations, and even state and local governments to enforce the federal wetlands requirements. The first such action was recently brought in Pennsylvania. Although this section would appear to be a powerful enforcement tool, the Supreme Court has held that citizen suits may be brought only to abate present and future violations and penalties can be sought only where violations are continuing or likely to recur. However, the applicability of this case to suits involving most wetlands violations is limited; leaving illegally discharged fill in a wetlands is considered an ongoing violation, until the fill is removed and the wetlands restored.

Where abatement is sought, restoration of the wetlands can be required.¹⁵¹ However, in most cases in the past where illegal wetlands filling has occurred, mitigation has been required and an after-the-fact permit issued. However, the *MOU* now requires all enforcement action to be resolved before an after-the-fact permit application will even be accepted.

^{145.} Compare Hanson v. United States, 30 Env't Rep. Cas. (BNA) 1090 (E.D. Tex. 1989) (affirming \$24,000 administrative penalty in wetlands case) with Public Interest Research Group v. Powell Duffryn Terminals, Inc., 30 Env't Rep. Cas. (BNA) 1201 (D.N.J. 1989) (imposing \$3.2 million penalty for discharges in violation of NPDES permit).

^{146.} United States v. Pozsgai, 897 F.2d 524 (3d Cir. 1990), cert. denied, 111 S. Ct. 48 (1990).

^{147. 33} U.S.C. § 1365.

^{148.} See West Chester Fish, Game and Wildlife Ass'n v. Oaklands Business Parks, Inc., 1 Pa. Envt'l Lit. Rep. No. 12 at 7 (E.D. Pa. 1989).

^{149.} Gwaltney of Smithfield Ltd. v. Chesapeake Bay Found., Inc., 484 U.S. 49 (1987).

^{150.} North Carolina Wild Life Fed'n v. Army Department, 29 Env't Rep. Cas. (BNA) 1941 (E.D.N.C. 1989).

^{151.} United States v. Cumberland Farms of Conn., Inc., 26 Env't Rep. Cas. (BNA) 1393 (1st Cir. 1987).

B. Enforcement Under DSEA and CSL

Because chapter 105 was enacted pursuant to both DSEA and CSL, the enforcement provisions of both apply to wetlands violations. Both DSEA and CSL authorize DER to issue enforcement orders and to bring actions to abate violations. ¹⁵² Both also provide for the imposition of criminal fines and penalties and authorize DER to assess civil penalties. ¹⁵³ Both Acts further authorize counties and municipalities to bring suit to restrain violations. ¹⁵⁴

Finally, CSL also includes a citizen suit provision.¹⁵⁵ Like the federal citizen suit provision, the CSL provision requires sixty days prior notice of intent to file suit,¹⁵⁶ and provides for the award of attorneys fees and expert witness fees,¹⁵⁷ but unlike the federal provision, does not authorize citizen suits for penalties.

VI. ADDITIONAL STATE AND FEDERAL REGULATION OF STREAMS

As discussed above, Pennsylvania regulates wetlands pursuant to a general scheme for regulating dams and water obstructions under DSEA. DSEA imposes permit requirements and both DSEA and chapter 105 impose regulatory standards that apply to work in or along streams even where no wetlands are involved. Moreover, the Corps regulates all dams, dikes and other obstructions in or modifications of tidal waters and waters which are navigable in fact pursuant to the Rivers and Harbors Act of 1899. These additional state and federal requirements can be important to the developer in a number of contexts.

A. State Stream Encroachment Permits

The cases in which permits are required under DSEA are discussed above. However, additional substantive requirements are imposed in the portions of chapter 105 governing obstructions

^{152.} Pa. Stat. Ann. tit. 32, §§ 693.19, 693.20 (Supp. 1989); Pa. Stat. Ann. tit. 35, § 691.601 (Supp. 1989).

^{153.} PA. STAT. ANN. tit. 32, § 693.21, 693.22 (Supp. 1989); PA. STAT. ANN. tit. 35, §§ 691.602, 691.605 (Supp. 1989).

^{154.} Pa. Stat. Ann. tit. 32, § 693.19 (Supp. 1989), Pa. Stat. Ann. tit. 35, § 691.601(a) (Supp. 1989).

^{155.} DSEA does not include a citizen suit provision. Pa. STAT. ANN. tit. 35, § 691.601(c) (Supp. 1989).

^{156.} Id. § 691.601(e).

^{157.} Id. § 691.601(g).

^{158. 33} U.S.C. §§ 401-406.

and dams; and somewhat different standards for permit issuance apply in cases where wetlands will not be filled.

The general standards and procedures for accepting and evaluating DSEA permit applications are set forth in title twenty-five of the *Pennsylvania Regulations* sections 105.11 to 105.20, 159 while standards for issuing, transferring and revoking permits appear at sections 105.21 to 105.26 of the *Pennsylvania Regulations*. 160

These regulations require DER to consider a variety of technical, environmental, economic and social issues in evaluating permit applications, ¹⁶¹ and require environmental assessments to accompany many applications. ¹⁶² A balancing test is prescribed for determining whether a permit should be issued. In cases where there will be a significant impact on the environment, DER will consult with the applicant concerning mitigation, and if, after mitigation, there will still be significant environmental harm, DER will evaluate the project's public social and economic benefits, including the creation or preservation of employment, and balance those benefits against the environmental harm to determine whether a permit should be issued.

If any dam, water obstruction, or encroachment may present a substantial potential risk to life or property, DER may require proof of financial responsibility or security. Permittees who are not governmental entities or public utilities may be required to provide a "bond or other legal device. . ., payable to the Commonwealth" to secure proper construction, operation and maintenance in an amount sufficient to cover repair, replacement or removal of the dam or obstruction by the Commonwealth. 163 DER's regulations also require operation, inspection and maintenance of permitted dams and obstructions. 164 Further design criteria and operational and maintenance requirements are prescribed in regulations specifically governing dams and reservoirs; 165 culverts and bridges; 166 stream enclosures or culverts; 167 stream relocations and dredging for facility construction or main-

^{159. 25} PA. CODE §§ 105.11 to 105.20.

^{160.} Id. §§ 105.21 to 105.26.

^{161.} Id. § 105.14.

^{162.} Id. § 105.15.

^{163. 25} PA. CODE § 105.20.

^{164.} Id. §§ 105.51 to 105.54.

^{165.} Id. §§ 105.71 to 105.136.

^{166.} Id. §§ 105.141 to 105.172.

^{167. 25} PA. CODE §§ 105.181 to 105.211.

tenance;¹⁶⁸ fills, levees, floodwalls and stream bank retaining devices;¹⁶⁹ stream crossings, outfalls and headwalls;¹⁷⁰ and docks, wharves and bulkheads.¹⁷¹

B. Rivers and Harbors Act Permits

Additional permitting requirements pursuant to the federal Rivers and Harbors Act will apply to structures in waters which meet the traditional federal test of navigability. Permits are required pursuant to section 9 of the Rivers and Harbors Act,¹⁷² and section 10 of that Act.¹⁷³ Section 9 requires permits for the construction of a dam or dike across any navigable water and section 10 requires a permit for the obstruction or alteration of any navigable water, the construction of any structure over or in such a water, discharge or removal of any material into or from such a water, and any other work affecting the course, location, condition or capacity of navigable waters.¹⁷⁴

The processing of section 9 and section 10 permits, like section 404 permits, will follow the procedures set forth in the federal regulations.¹⁷⁵ In assessing those permits, the Corps will utilize the same general policies for evaluating permit applications as used for section 404 permits; and environmental concerns will be a major issue.¹⁷⁶ Additional standards for issuance of section 9 permits for dams and dikes are set forth in title 33 of the Code of Federal Regulations part 321.¹⁷⁷ Standards applicable to section 10 permits may also be found in the same title at part 322.¹⁷⁸ These standards, again, include environmental concerns, but also require special consideration of effects upon navigation and general health and safety.¹⁷⁹ A Rivers and Harbors Act Permit, like any other federally issued permit, will also require a water quality

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168. Id. §§ 105.221 to 105.245.
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^{169.} Id. §§ 105.251 to 105.282.

^{170.} Id. §§ 105.291 to 105.314.

^{171. 25} PA. CODE §§ 105.321 to 105.351.

^{172. 33} U.S.C. § 401.

^{173.} Id. § 403.

^{174. 33} C.F.R. § 320.2 (1989).

^{175.} Id. § 325. The procedures generally require a pre-application consultation, submitting an application on a content-specific form, and paying an application fee. The application will then be reviewed to determine whether an environmental impact statement is required, and public notice and a comment period will precede approval.

^{176.} Id. § 320.4.

^{177. 33} C.F.R. pt. 321 (1989).

^{178.} Id. pt. 322.

^{179.} See generally 33 C.F.R. 322 (1989).

certification from the state under section 401 of the Clean Water Act. 180

Section 10 permits will be required by real estate developers more often than section 9 permits. A section 10 permit will be required for most structures or filling in navigable waters. For example, section 10 permits will be required for any pier, boat dock, boat ramp, wharf, weir, breakwater, bulkhead, piling, or utility crossing located in, over or under a navigable water.

VII. STATE AND FEDERAL REGULATION OF FLOODPLAINS

The statutory framework for floodplain management once again demonstrates overlapping state and federal jurisdiction. Unlike the statutory scheme for regulation of wetlands and streams, however, the federal statute expressly contemplates state and local primacy in regulation, without the need for a delegation. Moreover, state and federal regulation of floodplains also call for a much more significant, even mandatory regulatory role for municipalities.

The National Flood Insurance Act of 1968,¹⁸¹ as amended, creates a program administered by the Federal Emergency Management Assistance Agency (FEMA). FEMA's regulations may be found in title 44 of the *Code of Federal Regulations*. The Pennsylvania Flood Plain Management Act (FPMA)¹⁸² is Pennsylvania's response to the federal insurance program. FPMA's program is administered by the Department of Community Affairs (DCA) and DER.

The National Flood Insurance Act provides that federally subsidized flood insurance will be available only in areas which have adopted "adequate land use and control measures (with effective enforcement provisions) which the Director finds are consistent with the comprehensive criteria for land management and use under section 4102 of" title 42.183 These criteria, under section 4102, apply only to "flood-prone areas," 184 which are identified by FEMA pursuant to section 4101.185 Land use and control

^{180. 33} U.S.C. § 1341.

^{181. 42} U.S.C. §§ 4001-4128 (1977).

^{182.} Pa. Stat. Ann. tit. 32, §§ 679.101-679.601 (Supp. 1989).

^{183. 42} U.S.C. § 4022; see also 42 U.S.C. § 4012(c).

^{184.} Id. § 4102.

^{185.} Id. § 4101.

measures typically take the form of local subdivision, zoning or specialized flood plain ordinances.

FEMA has promulgated criteria for communities' land use and control measures. 186 These criteria pertain to flood-prone areas.187 mudslide-prone areas,188 and flood-related erosion-prone areas. 189 FEMA has established criteria which increase in detail as does the information gathered by FEMA concerning a particular community. The criteria effectively require special scrutiny of all new development within a floodplain to ensure that the development will neither exacerbate flood damage elsewhere nor prove particularly susceptible to flood damage itself.

Section 201 of FPMA requires all municipalities in Pennsylvania to participate in the federal program. 190 Municipalities

186. 44 C.F.R. § 60 (1989).

187. Id. § 60.3.

188. Id. § 60.4.

189. Id. § 60.5.

190. PA. STAT. ANN. tit. 32, § 679.201 (Supp. 1989). As discussed in the text, state law expressly contemplates that municipalities must regulate development in floodplains. However, municipalities may also regulate construction affecting other environmentally sensitive features.

The preservation of forests, wetlands, aquifers, floodplains, and other natural scenic and historic values in the environment falls within the purposes which zoning ordinances must serve pursuant to section 604 of the Municipalities Planning Code. PA. STAT. ANN. tit. 53, § 10604(1) (Supp. 1991). The Planning Code, as amended by Act 284, requires specific consideration of wetlands, floodplains, aquifers and other natural resources and features in a variety of contexts. See id. § 10609.1 (requiring consideration in curative amendment proceedings).

Even if, however, a municipality does not expressly regulate environmentally sensitive features in its zoning ordinance, there are arguments suggesting that municipalities should at least consider state and federal requirements in their land use decisions. As a practical matter, a municipality should not approve plans that could not be implemented. Compliance with wetlands requirements is certainly as relevant, as a practical matter, as availability of sewage or ability to obtain State Department of Transportation approval for an intersection with a state highway.

Perhaps more importantly, a municipality may be required to consider environmentally sensitive features and compliance with environmental laws regulating those features pursuant to its obligations under Article I, § 27, of the

Pennsylvania Constitution, which provides as follows:

The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historical and aesthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.

PA. CONST. art. I, § 27. The Commonwealth Court has held that Article I, § 27 is a limitation on state governmental action in the Commonwealth, including municipal land use decisions. Community College of Delaware County v. Fox, 342 A.2d 468, 482 (Pa. Commw. Ct. 1975).

The test for compliance with Article I, § 27, is the often cited three-fold standard of Payne v. Kassab, 312 A.2d 86 (Pa. Commw. Ct. 1973), aff'd, 323

may delegate their responsibilities to the county. Section 202 of FPMA requires each municipality to adopt regulations (i.e., ordinances) adequate to meet the federal criteria. DCA, in consultation with DER, reviews these floodplain regulations for compliance with FEMA's criteria and with DCA's criteria for the coordination of different municipalities' regulatory schemes. 192

DCA has implemented FPMA by issuing regulations found at title sixteen of the *Pennsylvania Regulations* chapter 38.¹⁹³ These regulations incorporate the federal regulations' focus upon the 100-year flood event.¹⁹⁴

A.2d 407 (Pa. Commw. Ct. 1974), aff'd, 468 Pa. 226, 361 A.2d 263 (1976). Payne held that an application must be denied unless the first two of the following questions can be answered affirmatively and the third cannot be answered affirmatively:

- (1) Was there compliance with all applicable statutes and regulations relevant to the protection of the Commonwealth's public natural resources?
- (2) Does the record demonstrate a reasonable effort to reduce the environmental incursion to a minimum?
- (3) Does the environmental harm which will result from the [activity to be permitted] so clearly outweigh the benefits to be derived therefrom that to proceed further would be an abuse of discretion?

Payne, 312 A.2d at 94 (Pa. Commw. Ct. 1973). Under that test, a failure to answer any one of these questions appropriately (that is, "yes," "yes," and "no") mandates denial of an application.

DSEA, CSL, chapter 105, FPMA, the Clean Water Act, and the Corps' and EPA regulations adopted thereunder are statutes and regulations relevant to the protection of the Commonwealth's public and natural resources, as are other laws protecting environmentally sensitive features. Arguably, therefore, even in the absence of an express zoning provision, a municipality could be deemed obligated to consider (1) whether it appears that compliance with state and federal laws has been shown or is possible, (2) whether harm to environmentally sensitive features has been minimized, and (3) whether the benefits of the project, including private benefits, outweigh the damage to the public natural resources.

To a certain extent, compliance with the first element of the *Payne* test may put a permit applicant in a "catch-22" situation. A permit applicant cannot be required to have all permits before getting municipal approval; DER often requires municipal approvals for a project before it will even process permit applications. This "catch-22" can be avoided by imposing upon the applicant an approval condition requiring DER permits consistent with the project as approved by the municipality. However, use of permit conditions does not relieve a municipality of consideration of the second and third elements of the *Payne* test. Moreover, it is at least questionable whether a permit condition would satisfy the first element of the *Payne* test for a project patently impossible to complete, such as a shopping center or other commercial project proposing to fill completely a natural wetlands complex exceeding ten acres.

- 191. Pa. Stat. Ann. tit. 32 § 679.202.
- 192. Id. § 679.205.
- 193. 16 Pa. Code ch. 38.
- 194. See 44 C.F.R. § 59.1 (1986) (defining "flood elevation determination"); 16 PA. CODE § 38.1 (defining "flood hazard area").

Section 38.8¹⁹⁵ of DCA's regulations governs consistency between different municipal floodplain management schemes. It requires, as a minimum, that these municipal schemes apply to construction of completely new buildings, substantial improvements to existing buildings, or man-made changes to real estate within the 100-year floodplain.¹⁹⁶

In addition to requiring compliance with the federal criteria and consistency between municipal floodplain regulatory schemes, FPMA requires municipalities or counties to have certain other special forms of regulation. Section 207 of FPMA requires regulation of "structures. . .which may endanger human life." These are structures in the floodplain which store or manufacture more than 550 gallons of one of eighteen enumerated substances. Section 301 prohibits the construction in the floodplain of hospitals, nursing homes, jails, new mobile home parks, new mobile homes subdivisions, or substantial improvements to existing mobile home parks and subdivisions. One may obtain a special permit to locate such a facility in the floodplain, however.

Although municipalities are given the primary role of enforcing the substantive regulation of construction in floodplains, DER requires floodplain permits of entities which might be exempt from local control. Thus, DER regulates the construction of highways, public utility facilities, and all "structure or assembly of materials owned or maintained by the Commonwealth or a political subdivision" thereof within floodplains.²⁰¹

VIII. CONCLUSION

Environmentally sensitive features are likely to be present on many sites. Moreover, each of these features may be subject to multiple federal, state, and local regulation, whose overlapping requirements and inconsistent exemptions often make it difficult and time consuming, at best, and impossible, at worst, to obtain necessary approvals.

^{195. 16} PA. CODE § 38.8.

^{196.} *Id.* § 38.8(a)(5).

^{197.} PA. STAT. ANN. tit. 32, § 679.207 (Supp. 1987).

^{198. 16} PA. CODE § 38.7.

^{199.} PA. STAT. ANN. tit. 32, § 679.301 (Supp. 1989); see 16 PA. CODE § 38.6. 200. Id.

^{201.} Pa. Stat. Ann. tit. 32, § 679.302 (Supp. 1989); 25 Pa. Code § 106.11; see id. § 106.1 (defining "obstruction" pursuant to which permit requirement applies as state, local or public utility structures and activities).

In this regulatory climate, prevention and planning are the best cure. Investigation of a site for environmentally sensitive features before purchase and incorporation of provisions for a site investigation before closing can help one avoid sites where the presence of such features would preclude the type of project under consideration. A careful site evaluation and awareness of the regulatory requirements discussed above can allow one to design a project which will either (1) avoid these environmentally sensitive features or (2) encroach upon them in contexts where approvals might be expected.