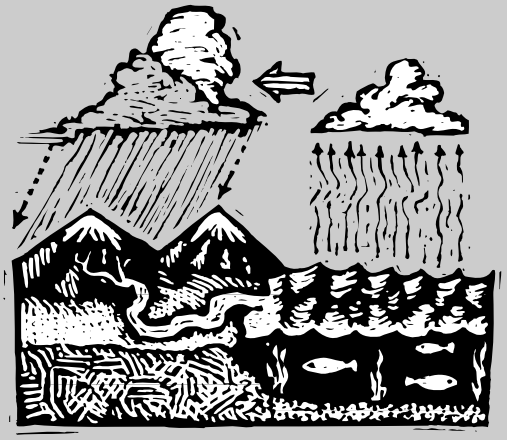
Laws and Regulations Affecting Waterway Protection



Laws and Regulations Affecting Waterway Protection

Statutes and Regulations Affecting Waterways Protection

Navigating the Acts and Codes

BY JOHN J. WALLISER, ESQ.
Walliser is Staff Attorney with the Pennsylvania Environmental Council.

Statutes and regulations relating to the protection of Pennsylvania's water resources are both diverse and intertwined. A single activity affecting a waterway may invoke several different statutes and regulations, whether local, state or federal.

In many cases, both the federal government and the Commonwealth have statutes and agencies that regulate the same threats to the environment. When this happens, many federal statutory regimes allow the states to enforce their own regulations. This situation is often referred to as "primacy"; the state assumes the responsibility of implementing and enforcing environmental regulation, subject to federal approval and oversight.

The following descriptions of selected statutes and regulations are presented only as a basic introduction and are far from complete — a truly comprehensive survey of all relevant statutes and regulations would be larger than this primer itself! It is important to remember that statutes and regulations are notably susceptible to change. Though current at the time of this writing, the explanations that follow may be outdated and inaccurate by the time they are read. For these reasons and more, nothing in this chapter is intended or designed to render any form of legal advice or interpretation. This chapter, in other words, is not a substitute for legal or other professional counsel.

Urban Schuykill River.

Water Quality

Discharges to Water

CLEAN WATER ACT (FEDERAL WATER POLLUTION CONTROL ACT) [33 U.S.C. §§ 1251 TO 1387]; PENNSYLVANIA CLEAN STREAMS LAW [35 P.S. §691.1 ET SEQ.].

The federal Clean Water Act establishes a permit process — the National Pollution Discharge Elimination System (NPDES) — for the discharge of any pollutant from a point source into the waters of the United States. "Pollution" includes additions or alterations to a waterway such as changes in water temperature or dissolved oxygen. A point source is any discernible, confined or discrete conveyance from which pollutants are or may be discharged. The Clean Streams Law gives Pennsylvania primacy to implement

the permit system by providing the Department of Environmental Protection (DEP) with the authority to adopt and enforce water quality standards and regulations.

The quality (concentration) and quantity (load) of pollutants that may be discharged are set by a permit, which also defines monitoring and reporting requirements. The permittee must comply with federal technology-based effluent limitations, determined on an industry-by-industry basis, as well as state water quality standards, which are based on designated protected uses for each waterway in Pennsylvania. These uses define the "water quality goals" of the waterway, such as aquatic life or water supply, as well as the criteria (acceptable levels of different parameters) to protect that use. Therefore, each permit is uniquely dependent on the water quality of the receiving water.

NPDES permits have a fixed term of no more than five years. A separate permit, a Water Quality Management Permit, must be obtained to construct and operate any treatment facility or system relating to the NPDES permit requirements. Public notice and comment requirements are an important part of both permit processes.

Nonpoint source pollution, such as stormwater runoff, does not require a permit under this regime. However, under the Clean Water Act, Pennsylvania is required to protect existing instream uses and the level of water quality necessary to maintain those uses. In addition, several nonpoint sources fall under other regulatory programs, which are addressed later in this chapter.

Another component of the Clean Water Act that is applicable to Pennsylvania is the Great Lakes Initiative, under which the U.S. Environmental Protection Agency (USEPA) establishes specific water quality standards regarding discharges into the waters of the Great Lakes. These standards may be more restrictive than state water quality requirements and apply to all permits for all waterways that drain to the Great Lakes.

The Clean Water Act also contains an "antidegradation policy" for the protection of existing water quality and use. Whether Pennsylvania adequately fulfilled this requirements was the subject of a great deal of debate over the last few years, including: a determination by the USEPA that the state antidegradation program was deficient; a federal lawsuit against USEPA to enforce the Clean Water Act provisions; a 14-month regulatory negotiation; and the eventual move by USEPA, under court order, to impose its own program on the Commonwealth.

The Federal antidegradation regulations require different standards of protection for water quality depending on existing conditions. This is done by dividing waters into three "tiers" based upon the existing uses of the waterbody and how the water quality relates to those uses. In determining what constitutes a "use", the state implementing the program "must take into consideration the use and value of water for public water supplies, protection and propagation of fish, shellfish and wildlife, recreation in and on the water, agricultural, industrial, and other purposes including navigation."

In Tier 1 waters, a state must act to protect existing instream uses (e.g., a cold water fishery) and the water quality necessary to protect those uses. In effect, this means that no permits can be issued that would allow water quality to deteriorate to a level that would impair the existing uses. This protection applies to a wide variety of waters because the regulations require that all rivers and streams be considered fishable and swimmable, even if water quality is severely compromised (e.g., by abandoned mine drainage).

Tier 2 waters are defined as those areas "[w]here the quality of the waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water." In other words, Tier 2 waters have a "buffer" of water quality that, if taken away, would not impair the existing uses. The Clean Water Act regulations recognize the importance of this additional water quality and are designed to protect it. That is, unless there is an important economic or social development in the area for which a reduction in water quality is necessary.

Not surprisingly, the final category of waters is known as Tier 3. The regulation states that: "[w]here high quality waters constitute an outstanding National resource, such as waters of National and State parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected." EPA has taken this to mean that no new or expanded discharges can be made into Tier 3 waters because any additional discharge affects the existing water quality and is a violation of the regulation.

As of early 1999, Pennsylvania DEP was in the final stages of rulemaking for Pennsylvania's antidegradation program.

Sewage

PENNSYLVANIA SEWAGE FACILITIES ACT [35 P.S. §§ 750.1 ET SEQ.]; PENNSYLVANIA CLEAN STREAMS LAW 35 P.S. §691.1 ET SEQ.]; PENNSYLVANIA SEWAGE TREATMENT PLANT AND WATERWORKS OPERATORS' CERTIFICATION ACT [63 P.S. §§ 1001 ET SEQ.].

The Clean Streams Law prohibits the discharge of sewage into state waters without a permit. DEP may order a municipality to perform a study regarding existing and future system and facility needs, and to report these findings to DEP. Further, DEP can require a municipality to construct, repair or modify a sewer system and/or treatment facility where necessary for the prevention of pollution or protection of public health.

However, the key statute is the Sewage Facilities Act, which provides for the development and implementation of sewage waste plans and corresponding regulations. Under the Act, a municipality must develop a comprehensive plan for sewage facilities and services within its boundaries, subject to DEP approval. As part of this process, the municipality must conduct an analysis of stormwater management and wetland protection. In addition, plans must provide for sufficient facilities to prevent the discharge of inadequately treated waste or sewage into state waters. Plans also must assess both current and projected (ten-year) service needs. Individual municipalities may jointly design and submit a single plan together. With limited exceptions, a municipality is required to revise its plan when a new development is proposed. Further, DEP may order a municipality to revise a plan if it is shown to be inadequate for dealing with future needs.

In addition to the planning requirements, the Act gives DEP authority to establish standards for the construction and operation of both individual and community sewage systems and treatment plants. These standards are implemented through permitting, with permits granted only for proposed activities that are in accordance with the municipality's plan. Municipalities or local agencies must employ at least one certified Sewage Enforcement Officer (SEO) to investigate all sewage system permit applications within the municipality for compliance with applicable requirements, including the location and design of the proposed system.

Impacts from Mining and Abandoned Mine Drainage

PENNSYLVANIA CLEAN STREAMS LAW [35 P.S. §691.1 ET SEQ.]; PENNSYLVANIA SURFACE MINING CONSERVATION AND RECLAMATION ACT [52 P.S. §1396.1 ET SEQ.]; NONCOAL SURFACE MINING CONSERVATION AND RECLAMATION ACT [52 P.S. §3301 ET SEQ.]; SURFACE MINING CONTROL AND RECLAMATION ACT OF 1977 (30 U.S.C. 1201 ET SEQ.).

Under the Clean Streams Law, discharges from mining activities are prohibited unless authorized by permit or through regulation. All permit applications must include a determination of the probable hydrological consequences, both on- and off-site, of the proposed operation. DEP may designate an area as "unsuitable for mining" when a certain mining operation could result in the substantial reduction or loss of a water supply's long-range productivity. In addition, mine operators are required to restore the area's "recharge capacity" to approximate pre-mining conditions.

The Surface Mining Conservation and Reclamation Act (SMCRA) requires mine operators to minimize changes to the prevailing hydrologic balance in both the permit and adjacent areas. In addition, the Act establishes water quality standards for bituminous and anthracite coal mining activities. These standards mandate: effluent limitations for acid and other materials such as iron and suspended solids; monitoring requirements; sedimentation control measures; and treatment facilities for discharges. Operators must avoid drainage into ground and surface waters from underground development waste or spoil. Further, underground operations must be conducted in a manner that maintains the existing value and reasonably foreseeable use of perennial streams, such as aquatic life or recreation.

For noncoal mining operations, including surface mining operations that extract an incidental amount of coal, DEP may refuse to issue a permit if the proposed activity will cause water pollution. Further, with strict exceptions, no operation may be conducted within 100 feet of a stream bank. Both coal and noncoal programs must contain bonding measures to ensure that water resources will be restored and protected.

Land Use and Development

Erosion and Sedimentation Control

PENNSYLVANIA CLEAN STREAMS LAW [35 P.S. §691.1 ET SEQ.].

DEP regulations require that any person engaged in earth-moving activities must develop, implement and maintain a plan that contains erosion and sedimentation control measures. The regulations establish minimum design and activity standards that must be met in relation to the unique features and needs of the site both during and after the operation. Municipalities must notify DEP of any permit issuance for earth-disturbing activity that affects more than five acres. With strict limitations, permits from DEP are required only where an earth-disturbing activity affects more than 25 acres. This does not, however, excuse compliance with the regulations on smaller sites.

Landowner Liability

PENNSYLVANIA CLEAN STREAMS LAW [35 P.S. §691.1 ET SEQ.].

Under the Clean Streams Law, DEP may require a landowner or occupier to remedy pollution or the threat of pollution that results from a condition on the land. This liability is imposed regardless of fault. As an alternative, a landowner may be required to allow the agency or another party to enter the property to abate the problem. However, DEP may then assess a civil penalty to retrieve costs.

Storm Water Management

PENNSYLVANIA STORM WATER MANAGEMENT ACT [32 P.S. §680.1 ET SEQ.].

The Storm Water Management Act requires each county, in consultation with the municipalities involved, to prepare and adopt a storm water management plan for each watershed within its boundaries. A watershed is defined by the act as the entire region or area drained by a river or other body of water, whether natural or artificial. An adopted plan must be reviewed every five years and must include an inventory of both existing and potential characteristics and problems of the area. Plans also must include: a survey of existing run-off characteristics, including the impact of soils, slopes, vegetation and existing development; a survey of existing significant obstructions; and analysis, criteria and standards for existing and future development and storm water systems.

DEP, in consultation with the Department of Community and Economic Development (DCED), must review the plan to ensure consistency with municipal floodplain management plans; state programs regulating dams, encroachments and water obstructions; and state and federal flood control programs. Where a watershed extends beyond one county, DEP may require the counties involved to submit a joint plan for the entire watershed. After adoption of a plan, the municipality must adopt corresponding ordinances as necessary to remain in compliance with it. Any person who engages in land development impacting storm water runoff must implement measures to guarantee compliance with the plan.

Though the Act originally contained a two-year deadline for plan development, the timetable has been revised to match the availability of state funds for reimbursement.

Flood Plain Management

PENNSYLVANIA FLOOD PLAIN MANAGEMENT ACT [32 P.S. §679.101 ET SEQ.]; NATIONAL FLOOD INSURANCE PROGRAM [42 U.S.C. §4011 ET SEQ.].

Under the National Flood Insurance Program, the federal government has identified all flood plain areas in the United States. Following the federal standards, the Pennsylvania Flood Plain Management Act establishes an extensive management program wherein municipalities with identified flood plain areas must adopt flood plain management ordinances, codes or regulations. These municipal regulations are reviewed by DCED.

In addition to the management program regulations, DCED has established a list of obstructions that trigger more exacting standards for certain structures or activities located within a flood plain. These restrictions cover obstructions that present special concern to human health or safety, such as hospitals, mobile park homes, and the storage or manufacturing of hazardous materials. A permit from DEP is required for the construction, modification or destruction of any structure located within the federally delineated 100-year flood plain.

Wetlands and Encroachments

CLEAN WATER ACT (FEDERAL WATER POLLUTION CONTROL ACT) [33 U.S.C. §§ 1251 TO 1387]; FEDERAL RIVERS AND HARBORS ACT [33 U.S.C. §§402-403]; PENNSYLVANIA DAM SAFETY AND ENCROACHMENT ACT [32 P.S. §693.1 ET SEQ.].

The Clean Water Act requires a permit for the "discharge of dredged or fill material" into the navigable waters of the United States. Dredged or fill material includes excavated material or any other material used for the purpose of "replacing an aquatic area with dry land or of changing the bottom elevation of a waterbody," such as fills or dams. The definition of "waters of the United States" is broad and includes rivers, streams and wetlands.

The Pennsylvania Dam Safety and Encroachments Act provides DEP and the Environmental Quality Board with the authority to regulate encroachments, obstructions and dams. An encroachment is any structure or activity that alters or diminishes the course or current of any watercourse, floodway or other body of water. DEP has the authority to issue permits for a wide variety of activities and structures, including the filling of wetlands; construction of bridges, dams, docks or roads; dredging or draining of bodies of water; and alteration of streambanks. Certain wetlands have been identified as having "exceptional value" — for example, if the wetland contains habitat for an endangered species. In these cases, DEP will only issue a permit if the application includes plans for strict restrictions and mitigation measures.

Permit applicants must include a broad array of information and analyses, including maps, delineation of wetlands, storm water and floodplain management analyses, and management and mitigation plans. Both the local municipality and the county must be notified of a permit application. Under the Municipalities Planning Code (MPC), local governments are authorized to regulate, permit, prohibit or restrict uses of land, including wetland and riparian zones. Permit evaluation is subject to a joint review process between DEP and the U.S. Army Corps of Engineers through a state programmatic general permit (SPGP) system. When DEP receives an application, it forwards a copy to the Corps for review of Clean Water Act compliance. Certain activities, including those that impact more than five acres, are not eligible for the SPGP process. The Corps may issue a separate permit if a project poses significant environmental impacts.

General permits are available at both the state and federal level for certain structures or categories of activity that are deemed similar in nature and can be adequately regulated by standardized requirements. However, states may reject development under a nationwide general permit in cases where state water quality standards or goals would not be met.

Mitigation is the responsibility of the permittee when wetlands are impacted. Subject to DEP's discretion, this may be accomplished through the replacement of the wetland, typically in an area adjacent to the affected area, or through payment to the state Wetland Replacement Fund.

Another law impacting wetlands is the federal Food Security Act. This law's "swampbuster" provision prohibits farmers receiving subsidies from the U.S. Department of Agriculture, as well as other federal assistance, from dredging, draining, filling or otherwise impacting a wetland. Again, however, mitigation options are available.

Public Water Supply and Allocation

FEDERAL SAFE DRINKING WATER ACT [42 U.S.C. §300F ET SEQ.]; PENNSYLVANIA SAFE DRINKING WATER ACT [35 P.S. §721.1 ET SEQ.]; PENNSYLVANIA CLEAN STREAMS LAW [35 P.S. §691.1 ET SEQ.]; PENNSYLVANIA WATER RIGHTS ACT [32 P.S. 3631 ET SEQ.].

State safe drinking water standards must meet minimum federal requirements for all contaminants regulated under federal law. This is accomplished through the establishment by the state of maximum contaminant levels and the imposition of water treatment requirements. With limited exceptions, these standards apply to any public water system.

DEP maintains a permit system for the construction and operation of a community water supply. The permitting program includes: monitoring and reporting requirements; design, construction and operational standards; emergency procedures; and public notification requirements. Operators also are required to provide notice within 24 hours of any failure to comply with drinking water standards. Under the Clean Streams Law, DEP may adopt and enforce regulations for the protection of public water supplies.

The Pennsylvania Water Rights Act required that

public water supply agencies obtain a permit from DEP before withdrawing from a surface water of the Commonwealth. The Safe Drinking Water Act also authorizes DEP to issue public water supply permits for proposed water systems. The Department must ensure compliance with existing environmental laws and regulations. All other withdrawals of surface or ground water are essentially controlled by the common law (please refer to Chapter 33, Riparian Ownership). However, in the Delaware and Susquehanna River Basins, the River Basin Commissions have designated management authority over their respective water resources.

Other Laws Protecting Water Resources

Environmental Assessment

NATIONAL ENVIRONMENTAL POLICY ACT [42 U.S.C. §§4321 TO 4370(C)].

It is important to note from the start that the National Environmental Policy Act (NEPA) is a procedural, or "action-forcing" statute. The goal of the law is not to impose substantive requirements but to prevent uninformed agency action. The Act, therefore, has two objectives: first, to require agencies to make "informed" and "careful" decisions regarding environmental impacts; and second, to provide the public with information and an opportunity to play an active role in the decision-making process.

The procedural requirements of the Act are triggered by any "major" federal action "significantly" affecting the "human environment." Though somewhat ambiguous, this is a broad definition that affects a wide range of activity. For example, federal financing of a project (such as road construction) would fit within the meaning of "federal action." In addition, the phrase "human environment" was intended to cover a broader range of considerations than the phrase "natural environment," including the indirect effects of land use patterns and growth, aesthetics and public health.

Once triggered, the Act requires an agency to conduct a preliminary study, called an "Environment Assessment," to determine whether the proposed activity could have significant effects on the environment. Based on these findings, the agency determines that an Environmental Impact Statement (EIS) is warranted, or makes a Finding of No Significant Impact (FONSI). If the agency makes a FONSI, this ends the NEPA process, although this decision is appealable. If an EIS is deemed warranted, the agency is responsible for preparing a draft EIS, for which it must solicit comments and allow objections to be filed. The agency then must revise its EIS on the basis of comments received, and publish a final EIS, which can also be challenged. NEPA requirements mandate that the agency provide a "full and fair" discussion of significant environmental impacts, both on- and off-site, and inform decision makers and the public of reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the human environment. Again, however, NEPA is procedural in nature and does not substantively require mitigation activities.

Historic Preservation

NATIONAL HISTORIC PRESERVATION ACT [16 U.S.C. §470 ET SEQ.]; PENNSYLVANIA HISTORIC PRESERVATION ACT [37 PA.C.S.A. §§501 TO 906]; PENNSYLVANIA HISTORY CODE [37 PA.C.S.A. §§101 TO 307].

Much like NEPA, the National Historic Preservation Act (NHPA) is an action-forcing statute. NHPA applies to any federal agency having direct or indirect jurisdiction — including the authority to license any undertaking — over federal or federally assisted projects. NHPA's requirements also apply in cases where a federal agency has granted primacy to a state program; however, NHPA's obligations rest solely with the federal agency. To this extent, federal agencies impose informational requirements on permittees to foster compliance with the Act.

Prior to approval of any funds or the issuance of any license, NHPA requires that the federal agency take into account the effect of the proposed undertaking on any district, building, object or structure that is included in or eligible for inclusion in the National Register of Historic Places. The agency must consult with the Pennsylvania Historic Preservation Board. Even if a structure is determined eligible for inclusion, however, a landowner is not required to accept the designation.

The Pennsylvania History Code requires state agencies to consult with the state Historical and Museum

Commission whenever a historical property will be affected. DEP permit applicants must submit an appendix to their application including a geological survey map of the project area and identify, by photograph, any building within that area that is more than 40 years old.

Coastal Management

FEDERAL COASTAL ZONE MANAGEMENT ACT [16 U.S.C. §§1451 TO 1464]; PENNSYLVANIA BLUFF RECESSION AND SETBACK ACT [32 P.S. §5201 ET SEQ.].

The Coastal Zone Management Act protects "coastal zones." Pennsylvania has two coastal areas subject to the Act: Lake Erie and the Delaware Estuary. Authorized under the federal Act, and approved by the Department of Commerce, Pennsylvania has adopted a Coastal Zone Management Plan. The Plan, based on a network of regulatory and nonregulatory policies, requires specific coastal activities to comply with performance and management standards defined in the Plan and other applicable regulations. These standards apply to issues such as bluff recession, dredging, protection of wetlands, fisheries management, and public access and recreation. These standards also apply to the shorelines of major tributaries. The Plan is primarily implemented through an executive order directing administrative departments to act consistently with the goals and polices of the Coastal Zone Management Program, as well as memoranda of understanding between state agencies.

Pennsylvania's Bluff Recession and Setback Act mandates local zoning permits for development within bluff recession hazard areas along Lake Erie. Municipalities must adopt ordinances and regulations for construction and development activities located within those areas identified by DEP as bluff recession hazards. These regulations include minimum setback requirements, which are also established by DEP.

Endangered Species and Habitat Protection

ENDANGERED SPECIES ACT [16 U.S.C. §§1531 ET SEQ.]; PENNSYLVANIA WILD RESOURCES CONSERVATION ACT (30 PA.C.S.A.. §§ 5307 AND 5309); PENNSYLVANIA FISH AND BOAT CODE (30 PA.C.S.A. § 101 ET SEQ.) PENNSYLVANIA GAME AND WILDLIFE CODE (34 PA.C.S.A. § 101 ET SEQ.); PENNSYLVANIA FISH LAW (30 PA.C.S.A. § 101 ET SEQ.).

The Endangered Species Act applies to anyone, including private parties and state and federal agencies. The Act prohibits the "taking" of any species listed as endangered or threatened. Apart from more obvious activities such as hunting or trapping, this standard also includes ecosystem protection — i.e., one cannot engage in an activity that significantly degrades or modifies the habitat of a listed species or that results in the actual killing or injury of a listed species. Injury includes the significant impairment of essential behavioral patterns, such as breeding, feeding or sheltering. The killing or injury does not have to be deliberate.

However, one can apply for an "incidental take permit," which allows a person to "take" a species where the taking is incidental to, and not the purpose of, carrying out an otherwise lawful activity. This may occur, for example, when a proposed land development project has the potential to adversely affect listed species habitat. To acquire an incidental take permit, it must be determined that the taking will not appreciably reduce the likelihood of the survival or recovery of the species. Further, the permittee must develop and implement a Habitat Conservation Plan that includes mitigation efforts.

Threatened or endangered plant species located on private lands are not protected under the federal Act unless they are also protected under a state statute. In Pennsylvania, responsibility for species identification lies with the Game Commission, the Fish and Boat Commission, and the Department of Conservation and Natural Resources. Pennsylvania may list species for state protection in addition to those listed by federal agencies.

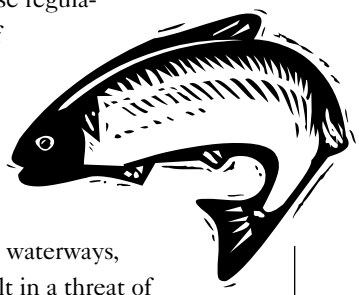
Designation of a listed species may also afford "critical habitat" protection. Critical habitat is defined as those areas within the geographic area currently occupied by a species that, because of the areas' physical or biological features, are essential to the species' conservation. Unlike the designation of species, the designation of critical habitat is subject to an economic impact analysis. Except where failure to designate would result in loss of the species, an area may be excluded from habitat protection if it is determined that the economic costs outweigh the benefit.

The Endangered Species Act provides several opportunities for citizen involvement, from the listing of species to the commencement of citizens' suits to compel protection.

Fish Protection

THE PENNSYLVANIA FISH AND BOAT CODE (THE FISH LAW) [30 PA.C.S.A. §101 ET SEQ.].

The Fish and Boat Code establishes the Fish Commission, which has authority to issue rules and regulations governing the management and protection of fish and fish habitats. These regulations prohibit the emission of garbage or similar refuse, or substances harmful to fish, into the waters of the state. Further, the regulations prohibit the disturbance or misuse of water and waterways, including pollution, that result in a threat of fish kills or streambed injury. The Commission may also designate special refuge areas. ■



The Pennsylvania Municipalities Planning Code

The Power of the MPC

BY: ANNA M. BREINICH, AICP
Breinich is Director of Community Planning with the Pennsylvania Environmental Council
(Modified text from The EAC Handbook published by Pennsylvania Environmental Council (1996)

Local governments have no inherent powers to regulate; they have only those powers that the state legislature has granted them. In Pennsylvania, the principal source of enabling authority for controlling land use and managing growth is the Pennsylvania Municipalities Planning Code (Act 247, as amended). Other laws, such as the Pennsylvania Sewage Facilities Act (Act 537), provide additional authority to municipalities.

About the Pennsylvania Municipalities Planning Code (MPC)

The MPC gives local governments the power to engage in comprehensive development planning and to enact zoning, subdivision/land development, planned residential development and official map ordinances. It authorizes the appointment of planning commissions and allows local governments to prepare capital improvement programs while encouraging them to coordinate development with the availability of infrastructure, such as public water and sewer facilities and necessary transportation systems.

The 1988 revisions to the MPC made by Act 170 added several provisions that improve the ability of municipalities to manage growth and assure a more liveable environment. However, their planning authority is made clearly advisory by virtue of Section 303(c), which was added to indicate that the failure of a municipality to comply with all provisions of its comprehensive plan in the implementation of its land use-related ordinances shall not subject the municipality to challenge or appeal on that basis alone.

Despite this change, comprehensive planning remains critically important because it provides the statement of community development objectives required by the law. This statement can include a goal of controlling "the location, character and timing of future development," as well as goals addressing the preservation of natural resources and the protection of water supply sources. Thus, the comprehensive plan is important as a sound and rational basis for zoning regulations. These regulations are strengthened as a result of the comprehensive plan's consideration of the full spectrum of needs, uses and resources in the municipality.

Municipalities have the power to zone to protect natural resources and farmland, to provide for the trans-

Two very different examples of development.

fer of development rights from areas to be preserved for open uses to areas planned for more intensive development, and to do joint planning and zoning with other municipalities. This zoning power represents the real power of municipalities over land use.

The MPC and Growth Management

Although the present system of land use regulation makes it difficult for even the most progressive municipality to do so, there are ways to plan and zone to achieve maximum natural, historical and cultural resource protection. A careful reading of the MPC, particularly as amended in 1988, indicates that the legislature intended to give local governments in Pennsylvania the power to control the timing, as well as the character and location, of development within their borders. Watershed groups should be aware of these standards for development; they are the essence of a strong municipal growth management/land conservation program.

The MPC and the Protection of Natural Resources

As stated above, the MPC enables municipalities to zone to protect natural resources within their jurisdictions. These provisions authorize a municipality to adopt ordinances protecting farmland, wetlands, aquifers, woodlands, steep slopes and flood plains from development. Before adopting new zoning rules, a municipality must establish a sound and rational basis for zoning protection—in part by developing a local environmental resource inventory.

Key Provisions of the MPC

It is important for watershed groups to be familiar with the following key provisions of the MPC:

The Comprehensive Plan

The comprehensive plan, described in Section 301, consists of maps, charts and text. It must include, but need not be limited to:

- A statement of the municipality's objectives concerning its future development;
- A plan for the character and intensity of land use, as well as a growth phasing plan; and
- A plan for community commerce, facilities and utilities.

In addition, the comprehensive plan must contain a statement about the interrelationships of the various plan components, as well as a statement indicating the relationship of existing and proposed development in the municipality to development in contiguous municipalities. Finally, the plan must contain a discussion of short- and long-range plan implementation strategies. Although plans prepared in the past typically had little to say about implementation, it has become generally recognized that this is the most important element of the comprehensive plan, and should be updated on a regular basis.

In addition to the requirements of Section 301, other plans should be prepared by municipalities. These include an open space and recreation plan (particularly if the municipality intends to require developers to dedicate land for public purposes as a condition for subdivision/land development) and a sewage facilities plan. If a county has an adopted stormwater management plan, municipalities also are responsible for its implementation through adoption of a stormwater management ordinance, or provisions related to stormwater management contained within the Subdivision and Land Development Ordinance.

Subdivision and Land Development

Article V of the MPC authorizes municipalities to adopt regulations governing subdivision and land development. A subdivision and land development ordinance applies anytime a landowner proposes to subdivide a tract of land or develop a tract of land for nonresidential uses.

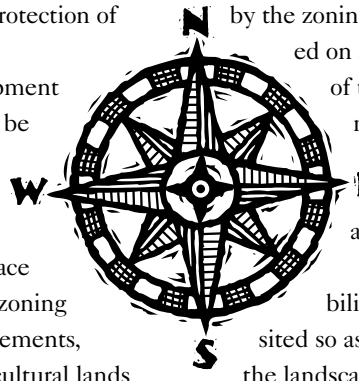
Generally developed as one ordinance, subdivision and land development requirements govern activity at the site or tract level and deal with standards for approval of plats, street design and grading, water and sewer facilities, and dedication of open space. Nearly half of Pennsylvania's municipalities solely rely on subdivision and land development ordinances regulating how a tract or site can be developed, yet have not

adopted zoning ordinances designating where specific uses can be located.

Under the MPC, counties may enact subdivision and land development ordinances for areas of the county that are not governed by a municipal ordinance. A municipality may adopt the county ordinance and designate the county planning agency as the agency for review and approval of plats.

Zoning

The primary way in which municipalities are authorized to manage land use is through the enactment of a zoning ordinance. Specific authority is provided within the MPC for the protection of natural, scenic and historic resources through zoning. Thus, if a municipality has a comprehensive plan identifying natural resources to be protected, it can require performance standards and site design review to ensure the protection of those resources identified in the plan.



Zoning ordinances manage development by determining what kind of uses will be allowed in any given area of the municipality, and imposing requirements relating to density, height, intensity of use, setbacks and open space within a proposed development. The zoning ordinance also establishes other requirements, such as the preservation of prime agricultural lands and the protection of aquifers, streambanks and other natural resource features.

Today it is widely believed that much of the large-lot zoning that municipalities have enacted over the last 30 years has resulted in a "cookie-cutter" approach to development that often does not lead to functional, liveable communities or to protection of connected open space that is important to environmental quality. More creative approaches are being tried by some communities, using the power of zoning, to accomplish quality-of-life and resource protection objectives. Such approaches include mixed-use development with significant open-space requirements, hamlet and village zoning, agricultural zoning, transfer of development rights provisions, performance zoning for natural resource protection, and designation of growth areas.

Official Map

Article IV of the MPC enables counties and municipalities to develop and adopt official maps that show the exact, surveyed locations of existing and proposed public streets, watercourses and public grounds. The official map is an important tool for notifying all landowners of existing and proposed public lands and rights of way. This tool has been little used because of cost, but may be used more in the future because Act 170 allows mapping of all or "only a portion" of a municipality.

Clustering/Open Space Zoning

Open space zoning is a means of preserving configurations of natural features in a community while effecting considerable savings in site development costs. It works by allowing the total number of dwellings permitted by the zoning ordinance for a tract of land to be located on small lots in the most buildable portions of the tract. This "clustering" of development decreases the amount of infrastructure required to support the new buildings while increasing the available open space.

Open space zoning enables more flexibility in site design, allowing structures to be sited so as not to interrupt the traditional rhythm of the landscape, obliterate natural features or obstruct scenic vistas. The remaining land could be used for farming or governed by conservation easements—e.g., for the protection of streambanks or riparian buffers.

Significant cost savings usually are realized with open space zoning, due in part to the use of smaller lots with less frontage; this decreases the length of roads together with public utilities costs. Stormwater runoff is also minimized due to fewer paved surfaces. Last but not least, more natural areas are available for stormwater detention and retention, further lessening the need for manmade stormwater management facilities.

Planned Residential Development (PRD)

Article VII of the MPC provides for Planned Residential Developments (PRDs), which are mixed–use developments combining housing at greater densities with open space and recreation facilities. PRD provisions, generally found in zoning ordinances,

combine elements of zoning and subdivision and land development ordinances into one document. Although originally designed primarily for residential development, Act 170 allows a PRD to include "nonresidential uses deemed to be appropriate for incorporation in the design of planned residential development."

PRDs give builders considerable flexibility within prescribed development standards. As a rule, PRDs allow for greater densities in development in return for the preservation, dedication or construction of agreed-upon open space, recreational or other common public facilities. Through the use of PRDs, both the municipality and developer can have better control over design.

Mandatory Dedication of Land

Section 503(11) provides the standards for mandatory dedication of land within a subdivision for parks or the construction of recreational facilities, or alternative payment of fees. Such standards may not be implemented, however, without the adoption of a municipal open space and recreation plan.

Transfer of Development Rights

Section 619.1, newly enacted in the 1988 amendments to the MPC, creates the right to separate development rights from the land itself through transferable development rights (TDRs), and authorizes municipalities to enact TDR programs allowing the transfer of development rights within a municipality. TDRs enable a community to reduce the intensities of housing and nonresidential development in rural or resource protection areas, encourage more intense development in appropriate areas served by public infrastructure, and provide for a system of compensation for landowners who are restricted from development.

TDR programs also allow for landowners in rural or resource protection areas to sell their development rights to entities wishing to develop in other locations determined by the municipality to be suitable for increased development. The sale of TDRs leaves the rural landowner in possession of title to the land and the right to use the property as farmland, open space or for some related purpose. However, it removes the owner's right to develop the property for other purposes. For the purchaser, the TDR affords the right to develop another parcel more intensely than would otherwise be allowed.

Joint Planning and Zoning

Article VII-A of the MPC was enacted in 1988 to expand and clarify joint municipal planning and zoning, which was authorized (and little used) under prior provisions of the MPC. The new provisions make clear that joint municipal zoning must be based on a joint comprehensive plan adopted by all affected municipalities. Participating municipalities may have joint or separate zoning hearing boards. No municipality may withdraw from or repeal a joint zoning ordinance during the first three years after it is enacted.

Joint planning and zoning, while politically difficult, is a very important tool for achieving a more regionally coherent approach to growth management and watershed protection. Court interpretations of the MPC have required that each municipality in Pennsylvania provide for every use, from industrial to mobile home park, within its boundaries. Municipalities that adopt joint planning and zoning can provide for all uses within the joint area instead of within each municipality and thus can achieve a more rational development plan. They can also protect natural resources at a regional level, a sensible strategy due to the fact that natural resources know no political boundaries.

Site Plan Review Process

The purpose of site plan review is to ensure that a developer meets all the requirements of the community's land-use ordinances, including environmental ordinances that limit the type and amount of development in an area that has been determined to be environmentally sensitive. The developer may be asked to assess the immediate and secondary impacts of the proposal on stormwater runoff, flooding, sewage, environmentally sensitive areas (e.g., wetlands, forest lands, riparian buffers, floodplains, steep slopes), historical and cultural features, and traffic.

The site plan review process is generally a two-step process. A developer has to obtain both preliminary and final approval from a community's official approving body. The preliminary plan, which outlines the long-term results of the development, is subject to

terms or conditions placed on it by the planning commission. Before development can start, the final plan must meet any terms and conditions under which the preliminary plan was approved. The approving body's decision must follow the letter of the subdivision and land development ordinance and/or zoning ordinance within its community. If the plan meets these requirements, approval or conditional approval must be granted.

All site plan reviews must also adhere to certain state regulations and permits as administered by various state agencies. Approval of development plans is contingent on the receipt of proper state permits. All development must be in accordance with the Sewage Facilities, Plan, the Solid Waste Management and Stormwater Management plans. Both the Sewage Facilities and Solid Waste Management plans are developed by local municipalities based on regulations developed by the Pennsylvania Department of Environmental Protection. ■

Riparian Ownership

Who Owns the Water and the Land Around It?

BY CYRIL FOX, ESQ.
Fox is a Professor of Law at the University of Pittsburgh.

Riparian land is land covered, at least in part, by a river, stream, lake, pond or other confined body of water. Every writer on this subject feels obligated to demonstrate an understanding of high school Latin by stating that, technically, land along a lake or pond is not "riparian" land but "littoral" land. This shows we know the difference between *ripa* or "bank" and *litus* or "shore." The truth, of course, is that the rights of a littoral or a riparian owner to reach, use and enjoy the water along the owner's land do not change because of the Latin name for the edge of the water body. Most writers therefore use "riparian" as an all-purpose term to refer to rights in both static bodies of water such as lakes and in flowing waters such as creeks, streams and rivers.

Along a flowing body of water, those owners whose land is upstream of a particular point are referred to as "upper riparian owners." Owners of downstream land are "lower riparian owners." Ownership of riparian land includes rights to use and enjoy the water. A riparian owner's rights are the same whether the water body is a natural or an artificial one. If a riparian owner erects a dam to flood part of the owner's land and if the land of an upstream neighbor is also flooded, that upstream neighbor has the same rights to use the artificial lake as the downstream owner. Whether the upstream owner has the right to use the water over the bed of the downstream owner's land depends on whether the water body is considered navigable or nonnavigable.

The Rights of a Riparian Owner in a River, Stream, or Other Body of Water

Pennsylvania courts have used two somewhat different approaches in defining the rights of riparian owners in the waters that flow over their riparian land. Some older Pennsylvania court decisions talk about a riparian owner's right to receive the "natural flow" of the water from upper riparian owners, and of a duty to pass that natural flow on to lower riparian lands. More recent cases indicate that riparian owners may make any "reasonable use" of the water on their riparian land if no harm is done to other riparian owners along the same stream or in the same watershed. The reasonableness of the use is evaluated, in part, in light of any harm caused to other riparian owners.

Nevertheless, a riparian owner does not own the water that flows over or by the owner's land. When using the water, a riparian owner must respect the rights of other riparian owners to use the water along the watercourse, both above and below the riparian owner's land. If the waterway is a navigable one, the riparian owner must also respect the right of the public to use the water. A riparian owner may, with appropriate government permits, dam the water and delay its passage in order to use the power created by the water's flow. However, the water usually must be released so that the power of the flow may also be enjoyed by lower riparian owners. Likewise, the dam operator has no right to

increase the flow of water over the land of upper riparian owners without their consent. Where the dam is erected by a government agency, the government must compensate the riparian owners for any increased flooding above the ordinary high water line of the river or stream. Similarly, lower riparian owners must be compensated for harm from reduced flow or reduced availability of water below the dam.

Generally speaking, riparian owners have two broad sets of rights regarding the water that makes their land riparian. First, they have the right to get to the water and to use it within the bed of the river or lake; these are the owner's "access and use in place rights." Second, the owner has the right to make certain uses of the water on the owner's riparian land; these are "consumptive use rights." Neither of these rights is absolute, meaning they can in some cases be challenged.

Access and Use in Place Rights

Riparian ownership carries with it the right to get to the water from points along the bank. This includes the right to erect docks or wharves, to swim (often called "bathe" in the older cases) and fish in the water, to boat on its surface, to cut ice when the water is frozen, and to harness the power of the water's flow for uses on the riparian land.

The riparian owner also is entitled to keep others from coming over the land to reach the water without the owner's consent. If the stream, river or lake is navigable, the public has a right to use the river for navigation and other purposes which are described later. In that case, the public may approach the riparian owner's land from the water side without the owner's permission. The public may use the riparian land between the ordinary high and low water lines. And, in times of emergency, such as storms or floods, members of the public may use the riparian owner's land above the high water line to protect life and property; however, they must compensate the owner for any damage done to the land by their use of it.

Consumptive Use Rights

A riparian owner has the right to use the water for a variety of purposes on the owner's riparian land, but only on the riparian land itself. Normally, the owner must return the water to the water body in essentially the amount and condition it was in when diverted. A riparian owner has no right to use the water on lands that are not themselves riparian in character. For example, one may not use water from a stream to irrigate another tract that does not touch the stream. One may not divert water from a stream to a reservoir on nonriparian land, or sell water from a river to owners of nonriparian land to be used on their lands.

A government or private water company that draws its water from a river or lake and distributes it to users on nonriparian lands must get the permission of the lower riparian owners before doing so. If it cannot obtain this permission voluntarily—for example, by purchasing part of the lower riparian owner's rights in the stream—a government agency may acquire the same rights by eminent domain. A private water company may do the same if it is a public utility or otherwise possesses eminent domain powers.

Riparian owners have been permitted to consume all of the water on their riparian land for "domestic purposes" without violating the rights of lower riparian owners. "Domestic purposes" include normal household uses for drinking, bathing, washing and watering livestock. Even large residential institutions may draw so much water from the stream for drinking, washing, bathing and related purposes that little is left for lower riparian owners. Where the use on the riparian land is for other than domestic purposes, courts apply the "reasonable use" doctrine to allocate conflicting claims to the water by different owners. A court generally will allow nondomestic use of the water on the riparian land, even when that use changes the quality of the water or reduces the amount available to other riparian owners, so long as the change does not cause actual harm to the other riparian owners.

No riparian owner can unreasonably increase the amount or speed of the water in a way that causes injury to other riparian owners. In one case, lower riparian owners were able to prevent a public utility from using a stream on their land to carry water away from the utility's plant after it had been used to generate electricity. The water added by the plant would substantially increase the amount of water and the speed of its passage down the stream in all seasons of the year. The court found that this dramatic change in the character of the stream was unreasonable.

The Transfer of Riparian Rights

It is possible for a nonriparian owner to acquire riparian rights from a riparian owner. The law recognizes three ways this can happen: by voluntary transfer (grant), by prescription, and by condemnation or eminent domain.

Access and use in place riparian rights are private property rights and may be transferred voluntarily like any other easement. However, if the right is granted to an individual or corporation without regard to its ownership of other land nearby, the right usually will have a limited life unless it is commercial in nature. For example, a riparian owner who grants an individual the right to fish from the riparian land or the bed of the stream or lake can be assured that the right will end when the individual dies. The individual cannot transfer the right to fish to anyone else without the riparian owner's permission. A similar grant made to a sportsmen's club, on the other hand, can continue long after all original members of the club have died. It may even be transferrable to another club, depending on the riparian owner's intent in the conveyance.

In a few cases, Pennsylvania courts have recognized that continued exercise of riparian rights by a nonriparian owner can establish riparian rights. The nonriparian owner must have exercised these rights without the permission of the riparian owner for a continuous period of at least 21 years. These rights will be limited to the least intrusive of the rights exercised over that time. In other words, if the nonriparian owner has used a neighbor's lake for fishing and boating for at least 21 years, and for swimming only during the last 10 years, the nonriparian owner will be allowed to continue using the lake for boating and fishing purposes, but not for swimming.

There is language in some cases indicating that "personal use only" will not lead to prescriptive rights—in other words, that the rights must have been used for commercial purposes. Under this test, the nonriparian owner who, with his or her family and guests, used the lake for boating and fishing would not acquire any rights by prescription, no matter how long the use continued. But if that same nonriparian owner rented boats to others for boating and fishing, or allowed others to enter the lake in exchange for a fee, he or she could obtain a right to this continued commercial use after 21 years. Again, the court will probably limit the rights acquired to the least intrusive ones possible.

The transfer of riparian rights can also be accomplished by the power of eminent domain. Government agencies and private water companies may use this power to acquire the right to divert water from the stream or lake and sell it to nonriparian land owners. Today, the acquisition of water for these purposes requires a permit from the Pennsylvania Department of Environmental Protection (DEP). Eminent domain powers also can be used in order to construct a dam. Before issuing a permit for construction, the Department must find that the water rights to be acquired are reasonably necessary for the applicant's present and future needs and that the taking of the water will not interfere with navigation, jeopardize public safety, or cause substantial injury to the Commonwealth.

Waterside Boundaries of Riparian Land

The boundary of a riparian owner's land along a river or lake depends on whether the water body is considered a navigable waterway or a nonnavigable one.

Navigable Waterways

Navigable rivers, streams and lakes are public highways. The public has the right to use them for transportation and other riparian purposes without permission from the riparian owners through whose lands these waters flow. A navigable waterway is one that can be used in its ordinary condition to transport people and goods for commercial or trade purposes by customary methods of water travel. It is the suitability of the water body for commercial trade and transportation between communities or regions that makes it navigable, not the fact that someone once traveled over it in a kayak or canoe, or even a steamboat. As the Supreme Court of Pennsylvania observed in Lakeside Park Co. v. Forsmark (1959):

> Navigation and navigability are portentous words. They mean more than the flotation of buoyant vessels in water: if it were otherwise, any tarn [small mountain lake] capable of floating a canoe for which a charge could be made would make the

> water navigable. They mean more than some commercial use to which collected water is put: if this were not so, every spring-fed pool capable of being bottled and sold for drinking water would be navigable. No single factor can control.

The Allegheny River and some of its tributaries were declared to be navigable by acts of the Pennsylvania legislature during the eighteenth and early nineteenth centuries. Tionesta Creek was used to transport logs to the Allegheny. It is therefore a navigable river because it was used to transport goods in commerce. Conneaut Creek and Conneaut Lake are navigable waters because of both an act of the legislature and the incorporation of the Conneaut Lake into the Pennsylvania canal system.

An act of the legislature cannot make a river navigable as a public highway if it is not navigable in fact. However, by declaring a nonnavigable river, or a segment of it, navigable, the Commonwealth acquires title to part of the bed and the right to control certain activities on and along the river. If the river were not in fact navigable, the owners of lands affected by the legislative declaration are entitled to compensation for the loss of any private rights they held as riparian owners along a nonnavigable watercourse.

TITLE TO RIPARIAN LAND ALONG NAVIGABLE WATERS. Ordinarily, a riparian owner's title to land along navigable rivers and lakes extends to the ordinary low water line. The owner's title to the land lying between the ordinary low water line and the ordinary high water line is subject to an easement in favor of the public for navigation and fishing. The bed of the river or lake is owned by the Commonwealth. The riparian owner may not interfere with the public's rights in these areas without permits from both the Commonwealth and the United States Army Corps of Engineers. These two governmental agencies protect the public's ability to enjoy its rights to the water.

OWNERSHIP ISLANDS AND THE BED OF A NAVIGABLE WATERWAY. The Commonwealth owns the bed of all navigable waters between the ordinary low water lines along both banks of a stream or the shore of a lake. The Commonwealth also owns the islands that rise out of the bed and can convey them to private owners in the same way as any other riparian land can be conveyed. The owner of the island will own absolute title to the island, or portion of it, above ordinary high water line and qualified title from there to the ordinary low water line. Islands are conveyed independently of the riparian land opposite them. Even if an island and the land on the bank are owned by one person, that owner has no private rights in the bed of the stream between the ordinary low water lines at the bank and the island. He or she may not fill the bed between the bank and the island without permission from the Commonwealth and the federal government.

The Commonwealth holds the bed of a navigable waterway in trust for the public in order to protect the public's right to use these waters. A 1958 statute provides that the Commonwealth will not grant land patents "for any land or island lying in the beds of navigable rivers," with certain limited exceptions; patents or deeds conveying islands to private owners before this time are valid. As owner, the Commonwealth may permit private parties to use the bed of a navigable river for various purposes, including the dredging of sand and gravel. Licenses for these purposes and related state permits are administered by the DEP. In addition, permission of the U.S. Army Corps of Engineers is required for any activity that may affect navigation.

Nonnavigable Waterways

Any body of water that is not suitable to transport people or goods from place to place within Pennsylvania or to other states is a nonnavigable waterway. For example, a lake that is itself a destination, not a link in a chain of commerce, is nonnavigable. A nonnavigable body of water is owned by the owner or owners of its bed and the public has no right to use it without the owner or owners' permission. Most lakes in western Pennsylvania are not regarded as navigable, even if boats have carried people and goods from point to point along their shores. For example, Sandy Lake in Mercer County was a popular tourist destination early in the twentieth Century. A steamboat that could carry 35 people and tow a barge with 100 dancers went back and forth over the lake for many years. This did not make the lake navigable, however, because the boat's passengers had come to the lake for enjoyment, not to go from one place to another.

TITLE TO RIPARIAN LAND ALONG NONNAVIGABLE WATERS. It is more difficult to describe the ownership rights attributable to land along nonnavigable waters. Where the owner's deed (or often the original patent for the Commonwealth or William Penn's family) describes the land as bordered by a nonnavigable stream, lake or pond, the owner's title ordinarily includes the bed of the water body to the middle of the stream or lake. A riparian owner who owns both sides of the stream owns the bed of the stream. One who owns all the land beneath a lake also owns all riparian rights in the lake. Therefore, although a parcel of land may touch on the lake, if that parcel does not include any part of the bed of the lake, it is not riparian land. Its owner, therefore, has no riparian rights to use or enjoy the lake or the water in it. Where there is more than one owner of the bed of a nonnavigable lake or stream, each owner may prevent the others from using the water over its part of the bed.

Changes in Boundary Locations

Riparian boundaries are generally fixed as the water line or edge for nonnavigable waters and the ordinary high and low water lines in the case of navigable waters. The ordinary high water line is not the line defined by the highest the water has ever been along the stream bank, or even by the highest points from flooding. Rather, it is the level of the water when water regularly flows

Ordinary high and low lines are not constant but change as the course of the stream changes. As the line in question changes with the passage of time, so does the boundary of the riparian land that the stream or lake defines. Change is usually gradual and may not be noticeable from year to year or even over several years. Yet the stream bed and sides do change.

If the change increases the distance to the low water line, the amount of land owned by the riparian owner increases to include this new area. This increase, known as accretion, does not alter the riparian owner's riparian rights, but only increase the amount of land this person owns. If the change results in a decrease in the distance to the low water line, the owner's land area also decreases. This change is known as reliction and, again, does not alter the owner's riparian rights.

A sudden change in the water line, as from a flood, is known as avulsion, and does not change boundary lines. If the water line shifts because of a sudden event to move the stream wholly off the riparian owner's land, that land loses its riparian character. The owner therefore owns to where the water line was before the event took place; ownership does not follow the stream to its new location.

The Effects of Legislation and Improvements to Navigable Water.

In the days before the Allegheny River became a series of canals, with its depth regulated by a system of locks and dams operated by the U.S. Army Corps of Engineers, there were dramatic differences in the ordinary high and low water lines along the riparian land. The ordinary low water line was the height of the water in summer, when the water flow was quite low. The ordinary high water line was the height of the water in the spring, when snowmelt and rains significantly increased the amount of water in the river. During low water, the Allegheny might occupy just one-third as much of the bed as it occupied in the spring. Taking advantage of the situation, riparian owners, particularly mill owners, began to fill the area along their property between the high and low water lines with cinders and other material from their mills, enlarging their lands and diminishing the river channel. After the Pennsylvania Supreme Court held that a riparian owner had no right to fill its land beyond the ordinary high water line, the legislature passed a statute to address permanently the location of these lines along the Allegheny, Monongehela and Ohio Rivers in and around Pittsburgh.

The statute created a commission to investigate, survey and locate the high and low water lines along the rivers. The lines established by the commissioners determined the boundaries between the Commonwealth's absolute ownership (the river bed), the private riparian owner's qualified ownership (the area between the low and high water lines), and the riparian owner's unqualified ownership (landward from the high water line). The commissioners were not empowered to determine boundaries between adjoining riparian owners. Since 1858, various statutes have authorized similar boundary determinations along navigable waters by some municipalities.

The Role of the U.S. Army Corps of Engineers

The U.S. Constitution grants the federal government the power to regulate all navigable waters within the United States. The Constitution creates a public right of navigation, or "navigation servitude," under federal protection similar to that recognized under Pennsylvania common law. It extends to the ordinary high water line of the water body.

The U.S. Army Corps of Engineers exercises the power to protect the public right of navigation under the River and Harbors Act of 1899 and earlier statutes. The Corps is responsible for maintaining the navigability of navigable waters and may fix the high and low waterlines as the boundaries of its jurisdiction. In many locations along the Allegheny River, the Corps has established a "harbor line" along both banks of the river. Any action that may affect navigation—and any construction, filling or other structure, like a dock or wharf, within the harbor line—requires a permit from the Corps. The harbor line determines the area in which a riparian owner may fill lands or erect docks, wharves, and other structures without a permit from the Corps. It is frequently, but not always, the same as the ordinary high water line.

Any conflict between Pennsylvania law and federal law is resolved in favor of the federal government. Thus, where the harbor line is located landward of what had been the ordinary high water line, navigation rights extend to the harbor line. However, if the harbor line is located below the ordinary high water line, the public's rights extend to the high water line. There is no conflict where the federal government has not asserted rights as great as those existing under state law.

Over the years, the Corps erected a series of locks and dams along the Ohio and Allegheny Rivers that have changed the ordinary high and low water lines. The ordinary low water line is now sometimes known as the "pool full line." This line is formed when the surface of the water lies just below the crest of the dam.

Dams and Other Permitted Obstructions

Where the water body is a navigable one, one must obtain a permit from the Corps and the DEP to erect a dam or any other obstruction to navigation. The Corps requires permits under the Rivers and Harbors Act of 1899 and the Clean Water Act. Often, the DEP will follow the Corps' lead when reviewing permits for obstructions, such as dams, docks, bridge piers and other structures. If the activity will require use of the bed of the waterway, a license from the Commonwealth is also required and a fee may be charged for the use of Commonwealth land.

Although the owner of riparian land along a nonnavigable waterway owns the bed of the water way, at least to the middle of the stream or center of the lake, federal and state permits are still required for dams and other actions that can affect the flow of the water. These permits seek to insure the safety of the public from inadequately designed or constructed dams rather than to protect the public right of navigation. A Corps permit under the Clean Water Act may thus be required to build a dam or other structure in a nonnavigable stream, although not for a dock. The DEP regulates dams on nonnavigable waters under the Dam Safety and Encroachments Act. ■

Regulatory Takings

Taking the Fear Out of Takings

BY DAVITT B. WOODWELL, ESQ.
Woodwell is Director of the Western Pennsylvania Office of the Pennsylvania Environmental Council.

Land use decision-making and other governmental regulatory programs limit, to varying extents, what uses landowners can make of their property. Restrictions such as residential zoning and setback requirements, wetlands programs, and emission rules allow citizens and landowners to be secure in knowing the future character and environmental health of their communities. Well designed land use regulations protect property owners from the impacts of inappropriate development and enhance the quality of life in communities. Similarly, environmental laws and regulations protect human health and welfare and ensure the future well being of our surroundings.

But municipalities—and state and federal governments and agencies as well—often shy away from passing and/or enforcing land use regulations because of a fear that they will have to compensate a landowner for a "regulatory taking." This fear is largely unfounded. The courts have long recognized the ability of government to impose restrictions on the use of property in order to promote the health, safety and welfare of the larger community.

The Fifth Amendment to the U.S. Constitution

The Fifth Amendment to the U.S. Constitution states, among other things, that property shall not be taken for public use without just compensation. Article 1, Section 10 of the Pennsylvania Constitution has been interpreted to mirror the Federal provision. The result: when a government entity in the state condemns property for a highway or a school or other public use, it must pay the owner of that property the fair market value.

The more difficult issue involves what happens when a property and its value are affected by a government regulation such as a zoning ordinance or wetland program. Clearly, restricting a property to residential development limits what the owner can do with that property. He or she cannot open an adult bookstore or a steel mill even if these activities would result in a greater financial return. Does this mean the owner must be paid for the difference? The answer under current Supreme Court rulings is probably not. Over the years, the Court has ruled that government can, to a large extent, regulate the use of land and other property in order to protect the public health, safety and welfare without paying for that property.

The Early Cases

A 1922 case, *Pennsylvania Coal* v. *Mahon* (260 U.S. 293 (1922)), marked the first time the Supreme Court found that a regulation could result in a taking of the plaintiff's land for public use, as in cases of eminent domain. The case centered on a statute requiring that coal be left in the ground to avoid subsidence.

The statute was alleged to have "taken" the coal companies' mineral estate obtained by contract with prior owners.

In the *Mahon* case, Justice Oliver Wendell Holmes found that the exercise of the state's police power had gone too far. Nevertheless, Holmes did see the necessity of regulation to protect the public health, safety and welfare. He wrote that: "[t]he general rule at least is, that while property may be regulated to a certain extent, if regulation goes too far it will be recognized as a taking."

Only four years later, the Court had another regulatory takings case before it, this one addressing the general constitutionality of zoning ordinances. The facts of the case—*Euclid* v. *Ambler* (272 U.S. 365 (1926))—were as follows: an owner of 68 acres of land in Euclid, Ohio, objected to the village's recently enacted comprehensive zoning plan, which precluded industrial development on the owner's land. Industry in nearby Cleveland was expanding right through Euclid by way of the land, and the municipality wanted to control development within its boundaries.

The key legal question was whether zoning ordinances were a valid exercise of police power—or whether a local government can, without exceeding its powers, limit the uses that one can make of his or her land. In its ruling, the Supreme Court held that a municipality could indeed impose comprehensive zoning in the exercise of its police powers. However, the Court found that this power is limited by the requirement that the ordinance must "bear a rational relation to the health and safety of the community."

While it approved Euclid's comprehensive zoning plan, the Court could not and would not hold that the ordinance would be constitutional regardless of how and where it is applied. Therefore, it is possible that a zoning ordinance—considered by the Court to be a valid exercise of the police power—still amounts to a taking as applied to a specific piece of property. The landowner in such a case would need to show that the regulation as applied to his or her property was "clearly arbitrary and unreasonable."

Recent Cases: Defining Property

Growth management issues were revisited by the Supreme Court twice in the last few years. In an opinion released in June 1994, the Court reaffirmed "the authority of state and local governments to engage in land use planning." However, the Court also held in *Dolan* v. *Tigard* (1994) that requiring public dedication of land for a greenway and a bikeway could result in a compensable taking. (For more on the *Dolan* case, see below.)

But what are the rules? How can it be determined whether a taking has occurred? Because every piece of land and every situation is different, the Court has stated that each alleged taking must be evaluated on its own merits. The Court also has found that the property in question must be looked at in its entirety.

In *Penn Central* v. *New York City* (438 U.S. 104 (1977)), the plaintiff proposed to erect a 50-story office tower in the air space directly above Grand Central Station, which had been identified as a historic landmark. The City told Penn Central it could not do this, and Penn Central responded by charging that the City's action amounted to a taking. While Penn Central focused on the air space above the terminal as the property in question, the Court considered the entire parcel including the already standing terminal. The Court also considered the fact that the City offered Penn Central development rights on another parcel in the City. Consequently, no taking was found to have occurred.

Another case involving differing notions of property focused the Court's attention once again on coal mining in Pennsylvania. In *Keystone Bituminous Coal Association* v. *DeBenedictis* (480 U.S. 470 (1986)), an anti-subsidence statute required that half the coal under existing structures—or approximately two percent of the total coal in question—be left in the ground. Despite the coal companies, argument that the remain-

ing coal was the "total property," the Court determined that all the coal had to be considered. "In deciding whether a particular governmental action has effected a taking, this Court focuses . . . both on the character of the action and on the nature of the interference with rights in the parcel as a whole," the Court stated.

The Validity of Regulation

Once the property issues are settled, the next step is to address the validity and the impact of the government's actions. In *Nollan* v. *California Coastal Commission* (483 U.S. 825 (1986)), the Supreme Court held that there must be a link between the state interest and the permit condition demanded by the government in order for the regulation to be valid. In Nollan, the California Coastal Commission approved the Nollan family's application for a building permit to replace an old cottage on their beachfront property. However, that approval was conditioned on the Nollans granting the public an easement across their beach.

The Nollans challenged this requirement as a taking of their property without compensation, an argument that prevailed before the Supreme Court. However, the basis for the Court's holding was not that the regulation had denied the Nollans all economically viable use of their land. Rather, it was that the easement was not substantially related to the government interests advanced by the regulation. The Commission defended the requirement for the easement because of what it saw as a loss of public access to the beach view, not physical access to the beach itself.

While the Court agreed that the Nollans' building would reduce the view of the beach, it did not understand how requiring an easement at beach level would improve the view. In the Nollan case, the Court reiterated the requirement that an exercise of the police power that affects property rights must substantially advance a legitimate state interest. Exactly what is meant by "legitimate" is open to changing interpretations by the Court as well as society, but generally has a very broad meaning.

A more recent case that built on the *Nollan* opinion was *Dolan* v. *Tigard* (114 S.Ct. 2309 (1994)). This case resulted from the City of Tigard's determination that in order to obtain a building permit to expand her plumbing and electric supply store along Fanno Creek outside Portland, Oregon, the owner, Mrs. Dolan, had to dedicate land to a public greenway and a public bikeway.

Before sending the case back to the Oregon state courts, the Supreme Court laid out the standards for analyzing land use planning regulations in light of a "takings" claim. The Court did not question "the authority of state and local government to engage in land use planning." Rather, it affirmed that power. The Court also reaffirmed its decision in *Nollan* that, for a regulation to be valid, there must be an "'essential nexus' between the 'legitimate state interest' and the permit condition." That nexus was found to exist in Mrs. Dolan's situation.

The Court also held in the *Dolan* case that if the "essential nexus" test is satisfied, the state then must show that there is "some sort of individualized determination that the required dedication is related both in nature and extent to the impact of the proposed development." Based on the record before it, the Court could not find that this "rough proportionality" requirement had been satisfied in the *Dolan* case. As the Court put it: "[t]he city has never said why a public greenway, as opposed to a private one, was required in the interest of flood control."

On the issue of the bikeway, the Court said the City's statement that the bikeway "could" offset increased traffic pressure from the store's expansion was not definite enough to justify the requirement. "No precise mathematical calculation is required, but the city must make some effort to quantify its findings in support of the dedication," according to the Court.

The Impacts of Regulation

After determining the validity of the regulation, it's important to look at its impacts on the property in question. The key question: Has the regulation deprived the owner of all economic benefit from the property or has it merely limited the uses to which the land can be put?

On June 29, 1992, the Supreme Court issued its much-awaited opinion in the case of *Lucas* v. *South Carolina Coastal Council* (505 U.S. 1003 (1992)). Mr. Lucas, a developer of the Isle of Palms, sued the

defendant following the enactment of the state's Beachfront Management Act in 1988. The Act stated that an increased area of beachfront should be shielded from development in order to protect the state's beaches from erosion. Mr. Lucas, who had paid $950,000 for two single-family residential building lots in his own development in 1986, claimed that the Council's determination meant he could not build on the lots.

The Act, in Mr. Lucas's view, amounted to an unconstitutional "taking" of his property without just compensation because it removed all economic value from his property. The trial court agreed with Mr. Lucas and awarded him $1.2 million in compensation. The South Carolina Supreme Court, however, reversed the trial court, concluding that no taking had occurred because the important public interest objectives of protecting South Carolina's dunes and beach systems, which Mr. Lucas did not dispute, were a valid exercise of state power.

In an opinion written by Justice Antonin Scalia, the Supreme Court's 6-3 decision expanded the takings doctrine somewhat by deciding that a landowner must be compensated when a government regulation denies the owner "all economically beneficial uses" of his land. However, the Court recognized an exception to this rule for restrictions on land that are based on the state's common law and nuisance and property laws. Justice Scalia also recognized the importance of well-formulated and properly implemented land use and environmental statutes, and the possibility that no compensation may be owed where land loses all value because of a regulation enacted due to "changed circumstances or new knowledge." The Court remanded the case to South Carolina for reconsideration in light of its opinion.

The *Lucas* case, which many thought had the possibility of rewriting "takings" law, has left in its wake a process based on a case-by-case determination of the competing interests of the landowner and the public welfare when an environmental regulation is challenged. It is important to remember that this decision affects the analysis in "takings" cases only where loss of all economic value is alleged. Consequently, the decision will have little effect on the vast majority of landowners or the validity and effectiveness of environmental regulations generally.

For the majority of cases where a regulation does not remove all economically viable use from property, the Supreme Court has developed a three-part "test." In the *Penn Central* case focusing on the historic designation of Grand Central Station, the Court assessed the character of the government action and stated that takings "may more readily be found when the interference with property can be characterized as a physical invasion by government, than when interference arises from some public program adjusting the benefits and burdens of economic life to promote the common good."

While requiring consideration of the economic impact on the property owner, the *Penn Central* ruling included an important caveat. Even when over three-quarters of the value of property is affected, this alone does not mandate compensation, the Court concluded. A vital consideration, according to the Court, is the owner's "investment–backed expectations"—i.e., what the owner had in mind when he or she bought the property, the validity of these expectations, and how those expectations have been impacted, if at all, by the regulation.

Because Grand Central Station was turning a profit and the owners still were able to use their land and had transferrable development rights, the Court found that no compensable taking had occurred. Furthermore, the Court reiterated that these questions were "essentially ad hoc, factual inquiries" that could change with each case, meaning that each alleged taking must be analyzed on its own merits because of its individuality.

Pennsylvania Law

The Pennsylvania Supreme Court addressed the issue of constitutional takings in the case of *United Artists* v. *City of Philadelphia* (635 A.2d 612 (Pa. 1993)). The case centered on the historic designation of the Boyd Theater, an art deco moviehouse in Philadelphia. In an earlier decision in 1991, the Pennsylvania Supreme Court found that historic designation of the theater "without the consent of the owner, (is) unjust, unfair and amount(s) to an unconstitutional taking." The 1993 decision reversed the first and held that historic designation of property is a

valid exercise of the state's police power, particularly in light of the Environmental Rights Amendment to the Pennsylvania Constitution, which specifically calls for preservation of historic sites in the Commonwealth. The second part of the 1993 ruling, however, struck down the historic designation of the Boyd Theater because it included the interior of the building. By including the interior, the state had exceeded its power under the applicable ordinance, and the action was therefore invalid.

The *United Artists* case sets forth the test that Pennsylvania courts should apply to questions of regulatory takings claims. Like the test fashioned by the U.S. Supreme Court in *Penn Central*, the Pennsylvania test has three parts to be applied on a case–by–case basis:

1) The interest of the general public, rather than a particular class of persons, must require governmental action;

2) The means must be necessary to achieve that purpose;

3) The means must not be unduly oppressive upon the property holder, considering the economic impact of the regulation, and the extent to which the government physically intrudes on the property.

This opinion is in line with the opinions that have been issued by the United States Supreme Court and undoes the confusion and concern caused by the earlier opinion issued in the *United Artists* case. It even gives reason for optimism in Pennsylvania that protection of historic and aesthetic resources are proper subjects for the exercise of the police power.

Conclusion

Based on the Supreme Court's line of cases interpreting the takings clause of the Fifth Amendment, it is clear that government can regulate to conserve lands. There are clearly situations where government will have to compensate the landowner for the impact of regulation. However, as the Court has stated, these situations are relatively rare.

Generally, government bodies and agencies are still very much able to take actions for the protection of the public without paying for them so long as there is sufficient justification for the action and the economic impact on the property is not total. Many purported experts on takings have gained their "expertise" through press releases, spin control and scare tactics rather than by carefully adhering to the writings of the Supreme Court. When formulating or enforcing ordinances, municipal officials should seek advice from attorneys and other professionals who truly understand the limits of regulation and the takings clause.

A number of useful guides to understanding takings law and its relationship to land use planning have been printed. These sources can help citizens and municipal officials in understanding both their capabilities and their limits when crafting regulations. ■