

# **A LEGAL ANALYSIS OF RIPARIAN BUFFER ORDINANCES IN PENNSYLVANIA**

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## **I. Introduction**

Riparian buffer ordinances are local laws that municipalities can enact to protect their rivers, streams and other water bodies. Such ordinances place limitations on land use in the riparian zone, i.e., the area immediately adjacent to and along waters.

This memo analyzes the legal authority for municipalities to adopt riparian buffer ordinances and considers what municipalities must do to ensure such ordinances are legally valid and defensible.

## **II. Statutory Authority for Riparian Buffer Ordinances**

Municipalities in Pennsylvania have the statutory authority to regulate land use through the Municipalities Planning Code (“MPC”), 53 P.S. § 10101 *et seq.* In addition, various township, borough and city codes have codified municipalities’ general police powers. All of these statutes provide ample authority for municipalities to protect important environmental features such as streams and riparian zones.

### **A. Municipalities Planning Code**

The MPC grants municipalities the power to regulate land use by enacting zoning and subdivision and land development ordinances. The statute provides express authority to enact ordinances to protect and preserve sensitive natural resources such as rivers, streams and other water bodies.

Article VI of the MPC governs zoning. Section 603(b) of the MPC provides that zoning ordinances “may permit, prohibit, regulate, restrict and determine” the following:

- (1) Uses of land, watercourses and other bodies of water.
- ....
- (5) *Protection and preservation of natural and historic resources* and prime agricultural land and activities.

53 P.S. § 10603(b) (emphasis added).

Further authority to regulate land use activities adjacent to streams and other water bodies is provided in Section 603(c)(7) of the MPC, which states that zoning ordinances may contain “provisions to promote and preserve . . . environmentally sensitive areas.” 53 P.S. § 10603(c)(7).

Section 603(d) of the MPC states that “zoning ordinances may include provisions regulating the siting, density and design of residential, commercial, industrial and other

developments *in order to assure the availability of reliable, safe and adequate water supplies to support the intended land uses within the capacity of available water resources.*” 53 P.S. § 10603(d) (emphasis added).

Section 603(g)(2) of the MPC requires that “zoning ordinances shall provide for protection of natural . . . features and resources” 53 P.S. § 10603(g)(2).

Section 604 of the MPC states that zoning ordinances “shall be designed” to:

promote and facilitate . . . the *public health, safety, morals, and the general welfare*; . . . the provision of a *safe, reliable and adequate water supply* for domestic, commercial, agricultural or industrial use, and other public requirements; as well as *preservation of the natural, scenic and historic values in the environment and preservation of forests, wetlands, aquifers and floodplains.*

53 P.S. § 10604(1) (emphasis added).

Finally, Section 605 of the MPC authorizes municipalities to establish zoning classifications:

For the regulation, restriction or prohibition of uses and structures at, along or near:

. . . .

(ii) natural or artificial bodies of water, boat docks and related facilities;

(iii) places of relatively steep slope or grade, or other areas of hazardous geological or topographic features;

. . .

(vii) floodplain areas, agricultural areas . . . and other places having a special character or use affecting and affected by their surroundings.

53 P.S. § 10605(2).

These provisions of the MPC provide ample authority for municipalities to enact riparian buffer ordinances necessary to protect the existing water quality and integrity of rivers, streams and other water bodies. It is beyond question that such waters constitute “natural features and resources” and “environmentally sensitive areas” as described in Sections 603(b), 603(c)(7), and 603(g)(2) of the MPC. They may also serve or be hydrologically connected to drinking water supplies as described in Section 603(d). Pursuant to Section

604 of the MPC, zoning ordinances may be designed to preserve the “natural . . . values in the environment” as well as “forests, wetlands, aquifers and floodplains.” Section 605 of the MPC gives municipalities the power to restrict or prohibit uses “at, along or near” water bodies, steep slopes and floodplains. Thus all of these sections of the MPC provide authority for municipalities to enact regulations to protect and maintain the quality of its streams and other water resources through the zoning power.

Article V sets forth authority for municipalities to regulate subdivision and land development. While not worded as expressly as Article VI, it contains language providing a municipality with the authority to restrict development in riparian corridors. Specifically, Section 503 authorizes municipalities to enact subdivision and land development ordinances which include:

- (2) Provisions for insuring that:
  - (i) they layout or arrangement of the subdivision or land development shall conform to the comprehensive plan and to any regulations or maps adopted in furtherance thereof;
  - . . . .
  - (v) land which is subject to flooding . . . shall be made safe for the purpose for which such land is proposed to be used, or that such land shall be set aside for uses which shall not endanger life or property or further aggravate or increase the existing menace.
  - . . . .
- (5) Provisions for encouraging and promoting flexibility, economy and ingenuity in the layout and design of subdivisions and land development, including provisions authorizing alterations in site requirements and for encouraging other practices which are in accordance with modern and evolving principles of site planning and development.

53 P.S. § 10503.

The MPC gives municipalities flexibility in establishing their land development and subdivision processes. This flexibility may include provisions to protect riparian buffers within subdivision and land development planning. By incorporating conservation measures for riparian buffers into its comprehensive plan and zoning maps, protection of riparian buffers can also be included in a municipality’s subdivision and land development ordinance pursuant to Section 503(2)(i). Section 503(2)(v) provides authority for the protection of buffers within floodplain areas. Section 503(5) provides municipalities with the authority to encourage land development practices “which are in

accordance with modern and evolving principles of site planning and development.” Such progressive principles include low impact design (LID) or conservation design planning, which allows for development while preserving sensitive natural features on a site, such as woodlands, streams, wetlands and riparian buffers.

It is important to note that the MPC provides municipalities with authority to regulate land use through zoning and subdivision and land development processes. To ensure that riparian buffer ordinances which rely upon the MPC are legally authorized, they should clearly invoke a municipality’s zoning or subdivision and land development authority and, where appropriate, be incorporated into the municipality’s existing zoning or subdivision and land development ordinances. *See, e.g., Taylor v. Harmony Township Board of Commissioners*, 851 A.2d 1020 (Pa. Cmwlth. 2004) (holding that MPC does not apply to ordinance which prohibits logging in landslide-prone or flood-prone areas where ordinance is not a zoning ordinance or does not deal with subdivision of land or residential development); *C.f. Chrin Brothers Inc. v. Williams Township Zoning Hearing Board*, 815 A.2d 1179 (Pa. Cmwlth. 2003) (holding that ordinance prohibiting clear cutting on tracts of greater than two acres and on slopes greater than 15 percent was consistent with Section 605 of the MPC); *Jones v. Zoning Hearing Board of the Town of McCandless*, 578 A.2d 1369 (Pa. Cmwlth. 1990) (holding that zoning ordinance preserving steep slopes, woodlands and streams was authorized under Sections 604 and 605 the MPC).

## **B. Applicable Municipal Codes**

For purposes of this discussion, municipalities in Pennsylvania are generally classified as one of the following:

- First Class Townships
- Second Class Townships
- Boroughs<sup>1</sup>
- Third Class Cities
- Home Rule Municipalities<sup>2</sup>

Municipalities in the first four classifications draw municipal powers from an applicable statute, the First Class Township Code, 53 P.S. § 55101 *et seq.*, Second Class Township Code, 53 P.S. § 65101 *et seq.*, Third Class City Code, 53 P.S. § 35101 *et seq.*, or Borough Code, 53 P.S. § 45101 *et seq.*, respectively.

Home Rule Municipalities are municipalities that have utilized their option under the Pennsylvania Home Rule Charter and Optional Plans Law to establish their own form of

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<sup>1</sup> There is also one Incorporated Town (Bloomsburg).

<sup>2</sup> Three of the 65 Home Rule Municipalities in Pennsylvania include the only Pennsylvania cities that are classified as First or Second Class Cities. Philadelphia is classified as a First Class City and Pittsburgh and Scranton are classified as Second Class Cities (Scranton actually classified as Second Class A). All three have adopted home rule charters and thus do not draw specific powers from any applicable municipal codes.

governance under a home rule charter. Such municipalities are granted all powers not restricted by the Pennsylvania Constitution, state statute or their own home rule charter. To date, 65 municipalities have adopted home rule charters and are classified as Home Rule Municipalities.

### **1. First Class Township Code**

The First Class Township Code provides authority for First Class Townships to regulate development in riparian buffers independent of their zoning and subdivision regulatory powers. The Code broadly authorizes First Class Townships to “take all needful means for securing the safety of persons or property within the township.” 53 P.S. § 56510. It authorizes such townships to “make such regulations as may be deemed necessary for the health, safety, morals, general welfare, cleanliness, beauty, convenience and comfort of the township and inhabitants thereof.” 53 P.S. § 56544.

The Code also authorizes First Class Townships to:

make and adopt all such ordinances, by-laws, rules and regulations not inconsistent with or restrained by the Constitution and laws of this Commonwealth as may be deemed expedient or necessary for the proper management, care and control of the township, its finances, and the maintenance of peace, good government and welfare of the township of its trade, commerce and manufactures.

53 P.S. § 56552.

These provisions are a codification of municipalities’ general police powers to protect public health, safety and welfare. They provide the clear authority for First Class Townships to regulate development in riparian areas, as these activities threaten public health, safety and welfare by increasing flooding, erosion and pollution of streams through excessive stormwater runoff. *See Taylor*, 851 A.2d at 1025.

### **2. Second Class Township Code**

The Second Class Township Code provides similar authority to Second Class Townships in Pennsylvania. Section 66506 of Code provides very broad authority for Second Class Townships to adopt any ordinances “necessary for the proper management, care and control of the township and its finances and the maintenance of peace, good government, *health and welfare* of the township and its citizens, trade, commerce and manufacturers.” 53 P.S. § 66506 (emphasis added).

### **3. Borough Code**

The Borough Code provides the same kind of authority to Pennsylvania Boroughs through the provision granting specific powers. Section 46202 of the Borough Code authorizes boroughs to, among other powers, “make such regulations as may be

necessary for the health, safety, morals, general welfare and cleanliness and the beauty, convenience, comfort and safety of the borough” and adopt any ordinances “as may be expedient or necessary for the proper management, care and control of the borough and its finances, and the maintenance of peace, good government, safety and welfare of the borough and its trade, commerce and manufactures.” 53 P.S. § 46202(6), (74).

#### **4. Third Class City Code**

The Third Class City Code authorizes Third Class Cities to:

make and adopt all such ordinances, by-laws, rules and regulations, not inconsistent with or restrained by the Constitution and laws of this Commonwealth, as may be expedient or necessary for the proper management, care and control of the city and its finances, and the maintenance of the peace, good government, safety and welfare of the city, and its trade, commerce and manufactures . . . .

53 P.S. § 37403(60).

#### **5. Home Rule Municipalities**

Home Rule Municipalities are governed by their adopted home rule charter. The powers of a Home Rule Municipalities are expressed broadly and in the negative, that is to say a Home Rule Municipality “may exercise any powers and perform any function not denied by the Constitution of Pennsylvania, by statute or by its home rule charter.” Section 2961 of the Home Rule Charter and Optional Plans Law, 53 P.S. § 2961. A municipality’s police power to protect public health, safety and welfare is among the most basic of municipal powers, and is not restricted by Constitution or statute, and it unlikely to be restricted by any Home Rule Municipality within its home rule charter. Thus it can be assumed that Home Rule Municipalities would have authority to enact riparian buffer ordinances pursuant to their general police power.

#### **6. Pennsylvania Case Law**

Pennsylvania Courts have not considered whether a riparian buffer ordinance is authorized under any of the various municipal statutory codes outlined above. However, in *Taylor v. Harmony Township Board of Commissioners*, 851 A.2d 1020 (Pa. Cmwlth. 2004), Commonwealth Court held that a similar ordinance was authorized under the First Class Township Code. The ordinance at issue in *Taylor* prohibited logging in landslide-prone or flood-prone areas within the township. The Court found that the township clearly enacted the ordinance “to prevent harm to the public welfare caused by landslides and stormwater runoff.” *Taylor*, 851 A.2d at 1025. The Court then analyzed the provisions of the First Class Township Code cited above, and found that that ordinance fell squarely within the authority granted by statute, stating:

[The ordinance] is a valid exercise of the Township's power because it seeks to minimize floods, landslides, and dangerous stormwater runoff; it seeks to prevent damage to roads, damage to drains, damage to public utilities, damage to watercourses, fire hazards, and reduction in property value; and it seeks to enhance the natural beauty and environment within the Harmony Township. All these aims fall squarely within the general police power provisions of the [First Class Township] Code.

*Taylor*, 851 A.2d at 1025.

The analysis undertaken by the Commonwealth Court in *Taylor* can easily be applied to riparian buffer ordinances. Development in riparian buffers can result in similar threats to public health, safety and welfare as those that were at issue in *Taylor*: increased stormwater runoff, downstream flooding, erosion of stream banks and pollution of streams, reduction in property value and loss of natural beauty within a municipality. Riparian buffer ordinances seek to address these problems and, accordingly, are valid exercises of a township's authority granted under the First Class Township Code.

The rationale in *Taylor* can also be applied to riparian buffer ordinances enacted by Second Class Townships, Boroughs and Third Class Cities under their respective enabling statutes. All of the codes analyzed above provide broad statutory authority for municipalities to enact ordinances to protect health, safety and welfare. This general police power of municipalities is widely accepted by Pennsylvania courts, and ordinances based upon it and the statutes under which it is codified are unlikely to be invalidated for lack of statutory authority.

### **III. Substantially Advancing Legitimate Governmental Interests (Due Process Concerns)**

As a general rule of law, municipal ordinances are presumed to be valid and the party challenging the validity of the ordinance has the heavy burden of proving that the ordinance is invalid. *Chrin Brothers, Inc. v. Williams Township Zoning Hearing Board*, 815 A.2d 1179, 1184 (Pa. Cmwlth. 2003). In order for an ordinance to be valid, it must substantially advance legitimate governmental interests. *Id.*

The legitimate governmental interest most readily served by a riparian buffer ordinance is the protection of public health, safety and general welfare. In order to withstand legal challenge, a riparian buffer ordinance should be based on sound science supporting the finding that restricting development in riparian buffers advances public health, safety and welfare concerns.



## **A. Existing Science Concerning Riparian Buffers**

The health, safety and environmental benefits of riparian buffers are certainly well established within the scientific community. See, e.g., *Chesapeake Bay Riparian Handbook: A Guide for Establishing and Maintaining Riparian Forest Buffers*, Section III, (*Functions/Values of Riparian Buffers*) (1998); Bernard W. Sweeney, *Streamside Forests and the Physical, Chemical, and Trophic Characteristics of Piedmont Streams in Eastern North America*, *Water Science Technology*, Vol 26, No. 12, pp. 2653-2673 (1992). Riparian buffers serve to slow down the velocity of runoff during high storm events, thus preventing downstream flooding and stream bank erosion that can harm people and property. Slowing down the velocity of runoff also allows stormwater to infiltrate into the ground, thus recharging groundwater and preventing a decrease in the existing water table that can adversely affect groundwater water supply wells and baseflow of surface streams. Buffers also serve as filters to capture sediments and chemical pollutants before they reach streams. The pollutants can harm fish and other aquatic life and make it more difficult and expensive to treat water for purposes of drinking water supplies. *Id.*

Stroud Water Research Center of Avondale, Pennsylvania, is a leader in scientific research on freshwater riparian buffers. Stroud has compiled a list of research and scientific publications on the importance of riparian buffers and updates it as new information becomes available. The list is available on Stroud's website at [www.stroudcenter.org/education/BufferBibliography\(1\).htm](http://www.stroudcenter.org/education/BufferBibliography(1).htm).

One important issue that has been the subject of much scientific study is requisite buffer width. One of the more comprehensive scientific discussions of the issue of minimum buffer width was published as Section VI of the *Chesapeake Bay Riparian Handbook: A Guide for Establishing and Maintaining Riparian Forest Buffers* (Riparian Handbook) by the United States Department of Agriculture Forest Service in May 1997, revised June 1998, and is entitled *Determining Buffer Width*.

Section VI of the Riparian Handbook explains that riparian buffers serve multiple functions. These include temperature moderation, reducing nutrient and sediment pollution, controlling stream bank erosion, flood control and providing nutrients for aquatic systems and habitat for wildlife. (Handbook pp. 6-7 through 6-11) Different buffer widths are needed to serve different functions. Figure 6-3 on page 6-8 of the Riparian Handbook shows the minimum buffer widths necessary to achieve specific buffer objectives. Buffer widths of up to 300 feet are necessary to achieve certain wildlife functions (Handbook p. 6-11), while "buffers of less than 50 feet have proven increasingly difficult to maintain as effective filters in the field, except on small, low order drainages." (Handbook p. 6-7)

Section VI of the Handbook also explains that site-specific conditions such as slope and soil type may affect minimum buffer width. (Handbook pp. 6-3 through 6-6) The greater the slope adjacent to a stream, the greater the buffer width needed to serve its important stormwater and erosion control functions. (Handbook p. 6-4) Similarly, if soils are

compacted or otherwise not well-drained, a wider buffer will be needed to protect water resources than in areas where soils provide for a high degree of infiltration of stormwater. (Handbook p. 6-6) Because of these site-specific factors, buffer ordinances which provide for increased buffer widths to account for site conditions such as slope and soil type are well supported by the science. (Handbook p. 6-4 (“Buffers are often expanded to include steep slopes on small streams or buffer widths are increased on steeper slopes to provide a lower risk of impact from adjacent land use.”) and p. 6-6 (“Hydrologic Soil Groups are often used as criteria for determining buffer width . . .”))

## **B. Pennsylvania Case Law**

In the 1982 case of *Zoning Hearing Board of Willistown Township v. Lenox Homes*, 439 A.2d 218 (Pa. Cmwlth. 1982), the Commonwealth Court of Pennsylvania considered a challenge to an ordinance that prohibited development within 100 feet of streams. Judge Craig delivered the opinion of the Court, from which Judges Mercer and Williams dissented. The Court found that zoning ordinances must be “enacted for the health, safety, morals or general welfare of the community,” but additionally, “[s]uch ordinances must bear a substantial relationship to those police powers purposes.” *Lenox Homes*, 439 A.2d at 221.

Based on the limited record before it, the Court considered only two police power purposes for the 100-foot prohibition: (i) prevention of flooding; and (ii) prevention of siltation of the stream. As to flooding, the Court noted that the Zoning Hearing Board made no finding that the land was in a floodplain, nor was there any other justification established in the record for linking the 100-foot provision to a propensity for flooding. *Id.* at 222. As to siltation, the Court undertook a confusing analysis, stating that “[w]hether soil disturbance at a construction site will affect a nearby stream certainly depends upon the relative elevation of the two, and the presence or absence of alluvial soil, borne onto land by water, is plainly pertinent to whether construction might cause soil to be recarried to the stream.” *Id.* The Court held that the prohibition on development within 100 feet of streams was not reasonably tailored to the stated police powers, stating that it “is a broadside rather than one directed at a police power goal.” *Id.* The Court thus affirmed the court of common pleas order invalidating the ordinance.

*Lenox Homes* is a case to be seriously questioned. First and foremost, it shows a fundamental misunderstanding of the benefits of stream buffers. This may be, in part, a function of a poorly developed record before the Zoning Hearing Board (the Court noted that only two justifications were given for the ordinance—flooding and siltation, and that the Board merely noted a “great likelihood that there are many more justifications” without providing any). Moreover, *Lenox Homes* was argued before the Court in 1980, which was well before much of the current scientific work on the value of riparian buffers had been conducted. Scientific advances in the study of riparian buffers, including their multiple functions of reducing nutrients, sediment, chemicals and other pollutants from runoff, moderating water temperature, protecting and stabilizing stream banks, moderating stormwater runoff and flooding, and providing habitat for aquatic life

and water-dependent wildlife, have revealed that wide forest buffers are necessary to maximize buffer benefits.<sup>3</sup>

A close analysis of the Court's discussion of the two justifications (flooding and siltation) of the ordinance reveals the lack of knowledge on the part of the Court regarding riparian buffers. With respect to flooding, the court discusses flooding in terms of the 100-foot buffer's overlap with the floodplain for the stream in question, not in terms of the buffer's protective capacity to slow down stormwater runoff, increase infiltration and prevent catastrophic downstream flooding during heavy storms. The Court seems to analyze the ordinance as if it were a floodplain ordinance designed to prevent damage to properties constructed in flood-prone areas. However, a riparian buffer's capacity to aid in flood control is not merely related to the delineation of a stream's floodplain. Rather, a buffer's ability to capture and remove runoff during heavy rain events plays a critical role in reducing downstream flooding. These functions are readily performed by portions of riparian forested buffers *outside* of delineated floodplains. As explained in the Chesapeake Bay Riparian Handbook:

On a given site, a vegetated buffer that resists channelization is effective in decreasing the rate of flow, and in turn, increasing infiltration. Forests provide as much as 40 times the water storage of a cropped field and 15 times that of grass turf. These increases in storage are largely due to the forest's ability to capture rainfall on the vast surface area of the leaves, stems, and branches; the porosity and water holding capacity of organic materials stored on the forest floor and in the soil; and the greater transpiration rates common to the community of forest vegetation. Forests are being evaluated more frequently for their role in reduction of water volume for stormwater management.

(Riparian Handbook p. 6-10)

With respect to siltation, the Court appears even more confused. The Court discusses the potential for siltation of a stream as a function of the amount of alluvial soils on the site (along with elevation and distance), not as a function of the erodibility of the soil type, the amount of vegetative cover along the stream, or the slope of the riparian area. The statement that "the presence or absence of alluvial soil, borne onto land by water, is plainly pertinent to whether construction might case the soil to be recarried to the stream" seems to indicate that the Court is linking stream siltation to the presence of floodplain soil deposits. Again, this constitutes a misunderstanding of the scientific functions of buffers. Vegetative buffers work to trap and filter sediment from runoff and prevent soil erosion, whether those soils are within floodplains or not. (Riparian Handbook p. 6-9) In fact, because steeper slopes are more prone to erosion, wider buffers are necessary to prevent stream siltation in areas where steep slopes are adjacent to streams. (Riparian Handbook p. 6-4) Because of their elevation and slope, these steep slope areas are unlikely to be delineated within floodplains or receive deposits of alluvial soils. Thus the

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<sup>3</sup> See [www.stroudcenter.org/education/BufferBibliography\(1\).htm](http://www.stroudcenter.org/education/BufferBibliography(1).htm).

connection between stream siltation and presence of alluvial soils in buffers is tenuous at best.

The Court also notes in passing that the 100-foot prohibition applied to all streams within the municipality, regardless of stream size or flow. *Lenox Homes* 439 A.2d at 222 (100-foot prohibition “is, by its terms, applicable regardless of the smallness of the flow, as illustrated by the fact that the particular stream in this case has a maximum depth of two feet and width of three feet”). In this discussion, the Court seems to imply that, the smaller the stream, the smaller the riparian buffer needed. Current science, however supports just the opposite conclusion—sensitive headwater and first order streams perform valuable watershed functions, and thus wider buffers are needed to protect their integrity.<sup>4</sup>

The precedential value of *Lenox Homes* today is questionable for other reasons. The case was decided prior to the 1988 and 2000 amendments to the MPC. Those amendments added the strong language that gives municipalities the authority to protect “natural resources,” “environmentally sensitive areas” and “reliable, safe and adequate water supplies.” 53 P.S. §§ 10603(b), 10603(c)(7), 10603(d). Further, as mentioned above, the Court makes clear that only *two* bases were given by the Zoning Hearing Board in support of the township’s ordinance: (i) prevention of flooding and (ii) preventing of siltation of the stream. The Court recognizes that there may be other justifications for the ordinance, but indicates that the Court’s decision must be based on the limited record before it. *Lenox Homes*, 439 A.2d at 223 (“the presumption of validity cannot be extended infinitely by the supposition that many more unnamed purposes may be likely”). As explained above, the multiple health, safety and environmental benefits of buffers are now well established by the science, and presumably a municipality would be able to establish a substantial and thorough basis for enacting a riparian buffer ordinance 25 years after *Lenox Homes*.

Recent decisions by Commonwealth Court indicate that, irrespective of *Lenox Homes*, ordinances that protect sensitive environmental features such as riparian buffers will be upheld as within a municipality’s legitimate police powers. One such decision is *Taylor v. Harmony Township Board of Commissioners*, 851 A.2d 1020 (Pa. Cmwlth. 2004), the case involving the ordinance prohibiting logging in landslide-prone and flood-prone areas. As discussed above, Commonwealth Court found that “minimiz[ing] floods, landslides and dangerous stormwater runoff; . . . prevent[ing] damage to . . . watercourses . . . and reduction in property value; and enhance[ing] the natural beauty and environment within the [municipality]” were purposes that “fall squarely” within the municipality’s general police powers. *Id.* at 1025.

In *Chrin Brothers Inc. v. Williams Township Zoning Hearing Board*, 815 A.2d 1179 (Pa. Cmwlth. 2003), Commonwealth Court similarly upheld an ordinance that prohibited clear cutting on tracts greater than two acres and on slopes greater than 15 percent. The Court found that the ordinance was reasonably related to public health safety and welfare concerns because it was enacted to help prevent erosion. *Id.* at 1185. This conclusion

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<sup>4</sup> See [www.stroudcenter.org/education/BufferBibliography\(1\).htm](http://www.stroudcenter.org/education/BufferBibliography(1).htm).

was backed by the credible testimony of the township engineer, who provided the planning and engineering work behind the clear cutting ordinance. *Id.* (the engineer testified that the “elimination of all the trees on the subject properties, including the areas of steep slopes, will expose soils of the denuded hill to the undiminished force of nature and to increased erosion and permanent loss. The potential environmental damage is sizable . . .”). The Court concluded that “it is evident that an ordinance which is based on an engineering study and which enacts restrictions to prevent soil erosion is not arbitrary or unreasonable and does have the requisite substantial relationship to the public welfare.” *Id.*

In *Jones v. Zoning Hearing Board of the Town of McCandless*, 578 A.2d 1369 (Pa. Cmwlth. 1990), the municipality passed a zoning ordinance which established a “D-Development District” requiring the preservation of steep slopes, woodlands and streams, but allowing for development of other, less environmentally sensitive areas. The Court found that the ordinance properly “weighs the maintenance of the ecological balance in the D-District with the property owner’s right to develop his property” and concluded that the standards for preserving steep slopes, woodlands and streams were “substantially related to the purpose which they purport to serve.” *Id.* at 1371.

### **C. Case Law from Other Jurisdictions**

A recent court decision from the State of Washington considered the issue of the appropriate minimum width of a riparian buffer ordinance, holding that a 25-foot buffer was unsupported by the science and thus legally indefensible, but that 50-foot, 75-foot and 100-foot buffers were supported by the science. In *Whidbey Environmental Action Network v. Island County and Western Washington Growth Management Hearing Board*, 93 P.3d 885 (Wash. App. 2004), review denied, 100 P.3d 756 (Wash. 2005), an environmental organization challenged a county’s establishment of a 25-foot buffer for Type 5 streams (less than 2 feet wide), a 50-foot buffer for Type 4 streams (two feet or wider but not supporting significant fish community), a 75-foot buffer for Type 3 streams supporting non-anadromous fish and a 100-foot buffer for Type 3 streams supporting anadromous fish. On appeal before the Washington Court of Appeals, the court reviewed the scientific evidence presented on minimum buffer width and concluded that a 25-foot buffer requirement for Type 5 streams was not supported by the science. *Id.* at 893. The Court came to this decision even though the county’s expert scientist testified that a 25-foot buffer was sufficient and consistent with best available science. *Id.* at 894. The Court concluded that, with respect to the multiple valuable functions provided by riparian buffers, the scientific evidence was just too overwhelmingly against 25-foot buffers. *Id.* at 895. The 50-foot, 75-foot and 100-foot buffers for Type 3 and 4 streams were upheld as supported by the science. *Id.* at 895-96.<sup>5</sup>

In the Delaware case of *Wawa, Inc. v. New Castle County Board of Adjustments*, 2005 Del. Super. LEXIS 39 (January 10, 2005), the Superior Court of Delaware upheld the county’s denial of a request for a variance to allow construction of an underground

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<sup>5</sup> The Washington Supreme Court declined to review the decision of the Court of Appeals. *Whidbey*, 100 P.3d 756 (Wash. 2005).

gasoline storage tank in a “water resources protection area.” A county development code provision prohibits new underground storage tanks in water resource protection areas such as riparian buffers, floodplains, wellhead areas, recharge areas and wetlands. *Id.* at \*8. In affirming the denial of the variance, the Court concluded that “the protection of the public water supply, as embodied in the [code], is a valid public interest.” *Id.* at \*38.

Other jurisdictions have upheld restrictions to development in riparian buffers as legitimate exercises of police powers. *Kent v. Mosher*, 1897 R.I. Super LEXIS 129 (R.I. Super. 1987) (requiring subdivision to establish 200 foot buffer adjacent to salt marsh was “necessary and valid exercise of the police power”); *Pope v. City of Atlanta*, 249 S.E.2d 16 (Ga. 1978) (establishment of 150 foot buffer upheld where interests advanced by restrictions relate to public health and safety, including preventing flooding, halting land erosion and protecting water supply); *Just v. Marinette County*, 201 NW.2d 761 (Wisc. 1972) (1000 foot buffer around lakes and 300 foot buffer around streams upheld where “Wisconsin has long held that laws and regulations to prevent pollution and protect the waters of this state from degradation are valid police-power enactments”); *Turnpike Realty Co. v. Town of Dedham*, 284 N.E.2d 891 (Mass. 1972) (finding that establishment of floodplain district was valid use of municipal police power).

## **IV. Takings Concerns**

It is exceedingly rare for reasonable restrictions on land use such as riparian buffer ordinances to constitute “takings” under the United States or Pennsylvania Constitution. By crafting ordinances which remain rationally related to legitimate police powers, draw upon existing science regarding the benefits of riparian buffers, and allow for reasonable non-intrusive uses within buffer areas, municipalities can minimize, if not eliminate, takings concerns.

### **A. Takings under the United States Constitution**

The Takings Clause of Article V of the United States Constitution states that “nor shall private property be taken for public use, without just compensation.” But not every restriction on the use of property is a “taking” requiring compensation. In a case arising in Pennsylvania, the U.S. Supreme Court explained:

Under our system of government, one of the State’s primary ways of preserving the public wealth is restricting the uses individuals can make of their property. While each of us is burdened somewhat by such restrictions, we, in turn, benefit greatly from the restrictions that are placed on others. These restrictions are properly treated as part of the burden of common citizenship . . . . [T]he Takings Clause did not transform that principle to one that requires compensation whenever the State asserts its power to enforce it.

*Keystone Bituminous Coal Assn. v. DeBenedictis*, 480 U.S. 470, 491 (1987) (citations omitted) (holding that requiring underground coal miners to leave fifty percent of their coal in place to provide support for overlying structures did not effect a taking of property).

The United States Supreme Court has issued several opinions over the years that help determine whether a regulation restricting land use constitutes an appropriate exercise of government's police power to "preserve the public wealth," or whether, on the other hand, a land use regulation constitutes a taking for which compensation is required under the U.S. Constitution.

Where a regulation authorizes a "physical invasion" of private property, even if slight, courts consistently find that a taking has occurred. *See Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 422 (1982); *see also Penn Central Transportation Co. v. City of New York*, 438 U.S. 104, 124 (1978) ("A taking may be more readily found when the interference with property can be characterized as a physical invasion by government.").

Where regulations stop short of authorizing a physical invasion of private property, a taking may nonetheless occur if the regulation goes "too far." *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393, 413 (1922). A regulation goes "too far" when either:

- (1) The regulation "denies all economically beneficial or productive use of land." *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003, 1015 (1992) (often referred to as the "*Lucas* test").
- (2) The regulation, although falling short of denying all economic use of the land, nonetheless effects a taking upon a review of a complex set of factors, including: (i) the economic impacts of the regulation, including the extent to which the regulations has interfered with "distinct investment-backed expectations"; and (ii) the character of the governmental action, specifically whether health, safety or general welfare would be promoted by prohibiting particular uses of land. *Penn Central*, 438 U.S. at 124-25 (often referred to as the "*Penn Central* test").

**1. Whether there has been a taking of property needs to be analyzed by considering the "parcel as a whole," not simply the regulated portion of the property.**

As a preliminary matter, it must be noted that the issue of whether there has been a taking must be analyzed by considering the *entire* property, not just the portion of it that is subject to regulation. This is known as the "parcel as a whole" rule.

After a decade of dancing around it, in 2002, the United States Supreme Court squarely addressed the "parcel as a whole" issue in the case of *Tahoe-Sierra Preservation Council, Inc. v. Tahoe Regional Planning Agency*, 535 U.S. 302 (2002). *Tahoe-Sierra* involved a

regulation designed to control stormwater runoff from impervious surfaces caused by development in riparian areas adjacent to high quality waters. Specifically, the challenged regulation was a temporary (32-month) moratorium on development in riparian areas that was imposed in order for the planning agency to develop and finalize a comprehensive land use and development plan designed to ensure that future development would be done in such a way that would preserve the existing water quality of Lake Tahoe and its tributaries.

The Supreme Court found that the temporary moratorium was not a taking. In so doing, it clarified that, in analyzing regulatory takings claims, “we must focus on ‘the parcel as a whole.’” *Id.* at 327 (quoting *Penn Central*, 438 U.S. at 130-31). The Court went on to say that:

This requirement that “the aggregate must be viewed in its entirety” explains why, for example, . . . restrictions on the use of only limited portions of the parcel, such as setback ordinances, . . . were not considered regulatory takings. In each of these cases, we affirmed that “where an owner possesses a full ‘bundle’ of property rights, the destruction of one ‘strand’ of the bundle is not a taking.”

*Id.* (citations omitted).

The Supreme Court went on in *Tahoe-Sierra* to explain that an interest in real property has both physical and temporal dimensions, and that the landowner’s *entire* interest in both of those dimensions must be considered when applying the Court’s “parcel as a whole” takings rule:

An interest in real property is defined by the metes and bounds that describe its geographic dimensions and the terms of years that describes the temporal aspect of the owners interest. *See* Restatement of Property §§ 7-9 (1936). Both dimensions must be considered if the interest is to be viewed in its entirety.”

*Tahoe-Sierra*, 535 U.S. at 331-32.

The Pennsylvania Supreme Court has acknowledged the legitimacy of the “parcel as a whole” rule, stating that “[f]ollowing *Tahoe-Sierra*, there can be no dispute that the ‘property as a whole’ rule remains controlling.” *Machipongo Land and Coal Co. v. Department of Environmental Protection*, 799 A.2d 751, 768-70 (Pa. 2002). *See also Seiber v. United States*, 364 F.3d 1356, 1368-69 (Fed. Cir. 2004) (citing *Tahoe-Sierra* and stating that “[t]he Supreme Court has repeatedly instructed that the impact of an alleged taking must be considered in terms of the ‘parcel as a whole’ . . . there can only be a categorical regulatory taking if the *whole parcel* of land is deprived of *all* beneficial use,” and thus acknowledging that, where the 40 acres that are regulated are part of a larger 200-acre parcel, there can be no taking); *Walcek v. United States*, 303 F.3d 1349, 1355-56 (Fed. Cir. 2002) (holding that entire 14.5 acre parcel and not 13.2 acres of



regulated wetlands should be considered with respect to takings claim, and finding no takings where some development in the remaining 1.3 acres was permitted).

## **2. Physical invasion of property.**

Under the legal framework outlined above, the easiest manner in which to show that a taking has occurred is when the regulation has authorized a physical invasion of property. *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419 (1982). Riparian buffer ordinances are unlikely to constitute such physical invasion. As a general matter, riparian buffer ordinances will limit under certain circumstances some uses of land adjacent to streams and other water bodies. A carefully crafted riparian buffer ordinance will not, however, contain provisions authorizing the municipality or any other body of government to seize the property or invade it in any way. It will not require landowners to turn over the property to the government so that it can plant native trees along the stream, build a nature trail, and turn it into a public park or a scientific research field station. Rather, the successful riparian buffer ordinance will permit landowners to retain private ownership of all property within the buffer area, and permit them to continue to use that land for various (non-invasive) permitted uses enumerated in the ordinance. Under such circumstances, no physical invasion of the property will have occurred, and thus the ordinance cannot be said to effect a taking on that ground.

## **3. Depriving landowners of all economically beneficial or productive use of their land (the *Lucas* test).**

Under the *Lucas* test for determining whether there has been a taking, a taking can only exist if the regulation deprives landowners of all economically beneficial or productive use of their land. In *Tahoe-Sierra*, the U.S. Supreme Court explained that a *Lucas*-style, categorical taking will rarely, if ever, occur, stating that the rule “was carved out for the ‘extraordinary case’ in which a regulation permanently deprives property of all economic value.” *Tahoe-Sierra*, 535 U.S. at 332.

In case of a riparian buffer ordinance, several safeguards can be added to the ordinance to protect the rights of private property owners and to prevent complete economic deprivation from occurring. First and foremost, the ordinance should not prohibit *all* economically beneficial or productive uses of buffer areas. An ordinance can set forth various uses that are permitted by right within the buffer area. These uses should be non-intrusive so that they preserve the integrity of the buffer and its functions and the stream and its water quality. Such uses may include wildlife sanctuaries, boat launch sites, public fishing and access points, hiking and biking trails, buffer and stream maintenance and restoration activities, permitted stream crossings, picnic areas, etc.

By structuring a riparian buffer ordinance in such a manner, the ordinance allows many viable uses of the property. Many of these uses could be quite economically productive, particularly as they relate to public recreational opportunities in and around the stream. When a regulation expressly allows for continued albeit restricted use of the property in question, courts consistently find that a taking has not occurred. *See, e.g., Seiber*, 364

F.3d at 1368-69; *Walcek*, 303 F.3d at 1355-56; *Machipongo*, 799 A.2d at 769-70; *Mock v. Department of Environmental Resources*, 623 A.2d 940, 948-49 (Pa. Cmwlth. 1993), *aff'd* 653 A.2d 1234 (Pa. 1995), *cert. denied* 517 U.S. 1216 (1996) (holding that a regulation does not effect a taking simply because it deprives the property owner of the most valuable use of the property).

It is possible that some pre-existing homes and other structures will be located in the buffer area when a new riparian buffer ordinance goes into effect. Takings concerns can be alleviated by “grandfathering” these existing structures.

As a practical matter, it is unlikely that many landowners will actually be denied the right to build or develop their properties, for several reasons. First, smaller building lots within a municipality are likely to have already been subdivided and developed, thus qualifying for the type of grandfathering mentioned in the previous paragraph. Second, riparian buffers, by their nature, are thin strips of land that follow the course of streams. It is unlikely that properties would consist wholly of narrow strips of land along streams, particularly properties which the landowner is holding for potential development. Third, with respect to larger properties that include both riparian buffer areas and unregulated upland properties, riparian buffer ordinances do not in any respect prevent landowners and developers who want to subdivide and build on their property from doing so. Lot boundaries, sizes and dimensions will simply have to be drawn with the riparian buffer provision in mind, so that building does not occur within the buffer. Moreover, as discussed below, where other non-development uses of the buffer area are permitted—such as constructing an unpaved walking trail along the creek or a boat launch—developers may be able to command a higher sales price for the homes that they build by adding popular outdoor recreational amenities.

Under *Lucas*, even where a regulation denies a landowner all economic use of the land, the regulation may still not be considered a taking if it is attempting to prohibit behavior that could be prohibited by general principles of state property law. *Lucas*, 505 U.S. at 1027-29. In other words, if the activity to be regulated could constitute a “public nuisance,” compensation is not required. Since riparian buffers are tools to prevent water pollution from runoff, and since “pollution” is defined as a public nuisance under the Clean Streams Law, 35 P.S. §§ 691.1, 691.401, it is possible that, even if the riparian buffer ordinance were to deprive a landowner of all economic use its land (which, if crafted in the manner suggested above, the ordinance is unlikely to do), there would be no taking. *See Machipongo*, 799 A.2d at 771-75.

#### **4. Takings under the “traditional” takings analysis (the *Penn Central* test).**

Where the “extraordinary case” of a regulation depriving a landowner of all value in its land does not exist, whether the regulation results in a taking is determined by consideration of several factors designed to ensure that the regulation does not “forc[e] some people alone to bear public burdens which, in all fairness and justice, should be

borne by the public as a whole.” *Penn Central*, 438 U.S. at 123-24. As stated above, the factors to be considered in the *Penn Central* analysis are:

- the economic impacts of the regulation, including the extent to which the regulations has interfered with “distinct investment-backed expectations”; and
- the character of the governmental action, including whether health, safety or general welfare would be promoted by prohibiting particular uses of land.

*Penn Central*, 438 U.S. at 124-25.

Given the factors to be considered in the *Penn Central* analysis, land use regulations that advance legitimate governmental interests in protecting the public health, safety and welfare, and that are adopted and implemented in a manner that respects the private property rights of landowners, will generally not require compensation under the Takings Clause. *Penn Central*, 438 U.S. at 124; *see also Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393, 413 (1922) (“Government could hardly go on if to some extent values incident to property could not be diminished without paying for every such change in the general law.”)

For the reasons set forth below, a well crafted riparian buffer ordinance should pass muster under the *Penn Central* test.

**a. Protecting the “distinct investment-backed expectations” of property owners.**

Good riparian buffer ordinances are not insensitive to the “distinct investment-backed expectations” of property owners who may own property within the buffer area. In fact, such ordinances should offer several accommodations to landowners that allow those expectations to become a reality. As stated above, this can include permitting many legitimate and economically viable uses of the riparian area by right.

As discussed above, with respect to owners of larger parcels who may have only a portion of their property affected by a riparian buffer ordinance, the extent of economic impact to their property will be minimal. Such an ordinance does not prohibit them from subdividing and developing their property. Rather, the ordinance merely influences the manner in which the subdivision is designed and building lots are drawn, requiring landowners and developers to avoid placing buildings within the riparian zone. *See Jones*, 578 A.2d at 1371 (reviewing ordinance that establishes restrictions on development to preserve woodlands, streams and steep slopes and finding no taking where landowner could not develop his property as intensively for residential purposes as it could prior to the ordinance, but nonetheless could still develop his land); *Greater Atlanta Homebuilders Association v. DeKalb County*, 588 S.E.2d 649, 696-97 (Ga. 2003) (Tree Protection Ordinance was not a taking where ordinance did not destroy homebuilders’ ability to develop land, but merely regulated the way in which trees must be managed during the development process). The fact that building and earth disturbance in riparian areas may be restricted in some manner cannot be unexpected by

landowners wishing to develop their property, as “riparian land has been the subject of regulation for centuries.” *Mock v. Department of Environmental Resources*, 623 A.2d 940, 949 (Pa. Cmwlth. 1993) (citing *White v. Pennsylvania Railroad Co.*, 47 A.2d 200 (Pa. 1946)), *aff’d*, 667 A.2d 212 (1995), *cert. denied*, 517 U.S. 1216 (1996).

Moreover, far from interfering with economic value of properties within the watershed, preservation of riparian land may actually *enhance* the economic viability of properties. Preservation of areas along streams, lakes and wetlands as open space can increase the property values of adjacent properties. Studies have consistently shown that proximity to open space increases the property value of homes. Moreover, the other uses of the buffer area that are permitted within the ordinance, such as constructing an unpaved walking trail along the creek or a boat launch, can lead to developers commanding a higher sales price on the homes they build. *See generally* Randall G. Arendt, *Conservation Design for Subdivisions: A Practical Guide to Creating Open Space Networks*, p. 9-13, 155-58 (Island Press 1996) (discussing economic advantages to conservation design development, including quicker and cheaper permit review period, lower infrastructure costs, marketing and sales advantages, and home value appreciation).

In *Tahoe-Sierra*, the United States Supreme Court recognized the distinct possibility that land use regulations might have such an effect when it stated that:

[i]n fact, there is reason to believe the property values often will continue to increase despite a moratorium [citations omitted]. *Such an increase makes sense in this context because property values throughout the Basin can be expected to reflect the added assurance that Lake Tahoe will remain in its pristine state.*

*Tahoe-Sierra*, 535 U.S. at 341 (emphasis added).

**b. A proper and reasonable exercise of police power necessary to promote public health, safety and welfare.**

The *Penn Central* test also requires an inquiry into the “character of the governmental action.” *Penn Central*, 438 U.S. at 124. In so doing, the United States Supreme Court has acknowledged that “in instances in which a state tribunal reasonably concluded that ‘the health, safety, morals or general welfare’ would be promoted by prohibiting particular contemplated uses of land, this Court has upheld land use regulations that destroyed or adversely affected recognized real property interests.” *Id.*

As discussed at length above, riparian buffer ordinances clearly promote the legitimate governmental interest of promoting health, safety and welfare. Ensuring that certain land uses do not destroy the important health, safety and environmental functions of riparian areas fits squarely within government’s police powers. Indeed, courts that have considered takings claims involving similar regulation of riparian areas and floodplains have come to this conclusion. *See Taylor*, 851 A.2d at 1026 (rejecting claim that regulation prohibiting logging in flood-prone and landslide-prone areas was an unlawful

taking where legitimate interests of preventing flooding and stormwater runoff were advanced); *Pope v. City of Atlanta*, 249 S.E.2d 16, 19-20 (Ga. 1978) (finding no taking where river protection regulations prohibited cut and fill operations within floodplain and riparian area within 150 feet of watercourse; the interests advanced by the ordinance--control of sediment pollution and soil erosion, prevention of an increase in water treatment costs, prevention of loss of infiltration and recharge--were related to public health and safety); *Maple Leaf Investors v. State Department of Ecology*, 565 P.2d 1162, 1165-66 (Wash. 1977) (finding no taking where floodplain ordinance prohibited development of 70% of property); *Turnpike Realty Co. v. Town of Dedham*, 284 N.E.2d 891, 899-900 (Mass. 1972) (finding that establishment of floodplain district was valid use of municipal police power and thus not a taking even when there was substantial diminution in value of landowner's property).

**c. Balancing the *Penn Central* factors.**

Balancing all of the *Penn Central* factors discussed above, it is difficult to see how a riparian buffer ordinance could fall to a takings claim. Carefully written ordinances will protect the economic interests of private property owners by allowing them to engage in many productive and economically viable uses of their lands while still protecting the integrity of the buffer and water body. Such ordinances allow landowners who wish to subdivide and develop their property to continue to do so, so long as lots are designed to avoid building in the buffer areas. Moreover, these landowners can take advantage of the economic benefits of building new homes next to preserved open space along streams, and, in fact, can enhance the economic value of those lands by engaging in beneficial permitted uses of riparian property.

Balanced against the modest restrictions of the regulation is the public interest served. In this case, the public interest in addressing the adverse impacts of flooding, stream bank erosion and scouring, loss of groundwater recharge capacity, and pollution caused by stormwater runoff is great. Where an ordinance is written in a reasonable way that accommodates and may collectively enhance the economic interests of private property owners, and where the interest served by the ordinance is of such great public concern, it should not be vulnerable to any sort of takings claim. *See Penn Central*, 438 U.S. at 124 (“in instances in which a state tribunal reasonably concluded that ‘the health, safety, morals or general welfare’ would be promoted by prohibiting particular contemplated uses of land, this Court has upheld land use regulations that destroyed or adversely affected recognized real property interests.”). Any burden here would simply be a “burden of common citizenship,” not a taking of property. *DeBenedictis*, 480 U.S. at 491.

**B. Takings under the Pennsylvania Constitution**

Riparian buffer ordinances are also unlikely to be susceptible to a takings claim under Article I, Section 10 of the Pennsylvania Constitution, which states: “Nor shall private property be taken or applied to public use, without authority of law and without just compensation being first made or secured.”

The takings clause of the Pennsylvania Constitution provides the same protections offered by the United States Constitution and, consequently, Pennsylvania courts have analyzed state takings claims under federal takings case law. *Machipongo*, 799 A.2d at 763 n.7 (citing *United Artists' Theater Circuit, Inc. v. City of Philadelphia*, 635 A.2d 612, 616 (Pa. 1993)). Accordingly, for the same reasons discussed above, well crafted riparian buffer ordinances will not constitute a taking under the Pennsylvania Constitution.

## **V. Conclusion**

Riparian buffer ordinances are important tools that municipalities can use to protect streams and other water resources within municipal boundaries. This analysis should make clear that municipalities have the legal authority to enact such ordinances and that a carefully written riparian buffer ordinance should withstand any legal challenge.

The lessons of the legal analysis set forth above are clear. Solid, legally valid riparian buffer ordinances should cite for authority the relevant provisions of the MPC, the appropriate municipal enabling code, and the general police powers of the municipality to protect health, safety and welfare. They must be based on the current and overwhelming science regarding the beneficial functions and values of buffers. Any minimum buffer widths established by the ordinance should be supported by the science, as should use restrictions and prohibitions.

The ordinance should not be insensitive to the rights of private property owners, and should include provisions allowing for certain non-invasive permitted uses. Additional provisions may clarify that pre-existing homes and other structures are “grandfathered.” Such provisions protect the rights of property owners and prevent the municipality from being subject to takings claims.

Qualified experts, such as engineers, hydrogeologists and/or aquatic biologists should be involved in developing the ordinance or, at a minimum, reviewing and approving the scientific literature on which the ordinance is based. Such experts should be prepared to testify and give expert opinions in any challenge to the ordinance that may be raised before the municipality’s governing body, zoning hearing board or court of law.