

The Massachusetts Supreme Court in Turnpike Realty Co. v. Town of Dedham²⁷ sustained Dedham's floodplain regulations which restricted repeatedly flooded areas to open space uses such as "woodland, grassland, wetland, agricultural, horticultural, or recreational use." However, landowners could apply for special exception permits. The landowner argued that the regulations were a taking of private property since there was testimony that the land was worth \$431,000 before regulations and \$35,000 after regulations. The court disagreed.

In Dur-Bar Realty Co. v. City of Utica,²⁸ a New York court sustained highly restrictive regulations for a Utica floodplain conservancy area. The regulations limited uses to farming and agriculture, parks, golf courses, athletic fields, essential services, disposal facilities, landfill operations, and marinas.

In S. Kemble Fisher Realty Trust v. Board of Appeals,²⁹ a Massachusetts court upheld regulations that limited property to open space conservancy uses.

Similarly, in Turner v. County of Del Norte,³⁰ a California court upheld regulations that prevented permanent dwellings in a severely flooded area. Open space uses and seasonal camping were permitted.

Dune and Beach Regulations

Several cases addressed the validity of highly restrictive dune and beach setback regulations. In Spiegle v. Borough of Beach Haven,³¹ the Superior Court of New Jersey sustained a beach setback line for an area subject to severe storm damage and held that the line did not constitute a taking as applied to most properties. A lower New York court in Lemp v. Town Board³² held that dune regulations were invalid (although not a taking) as applied to a property in an area for which a permit had been issued and a later attempt made to revoke it.

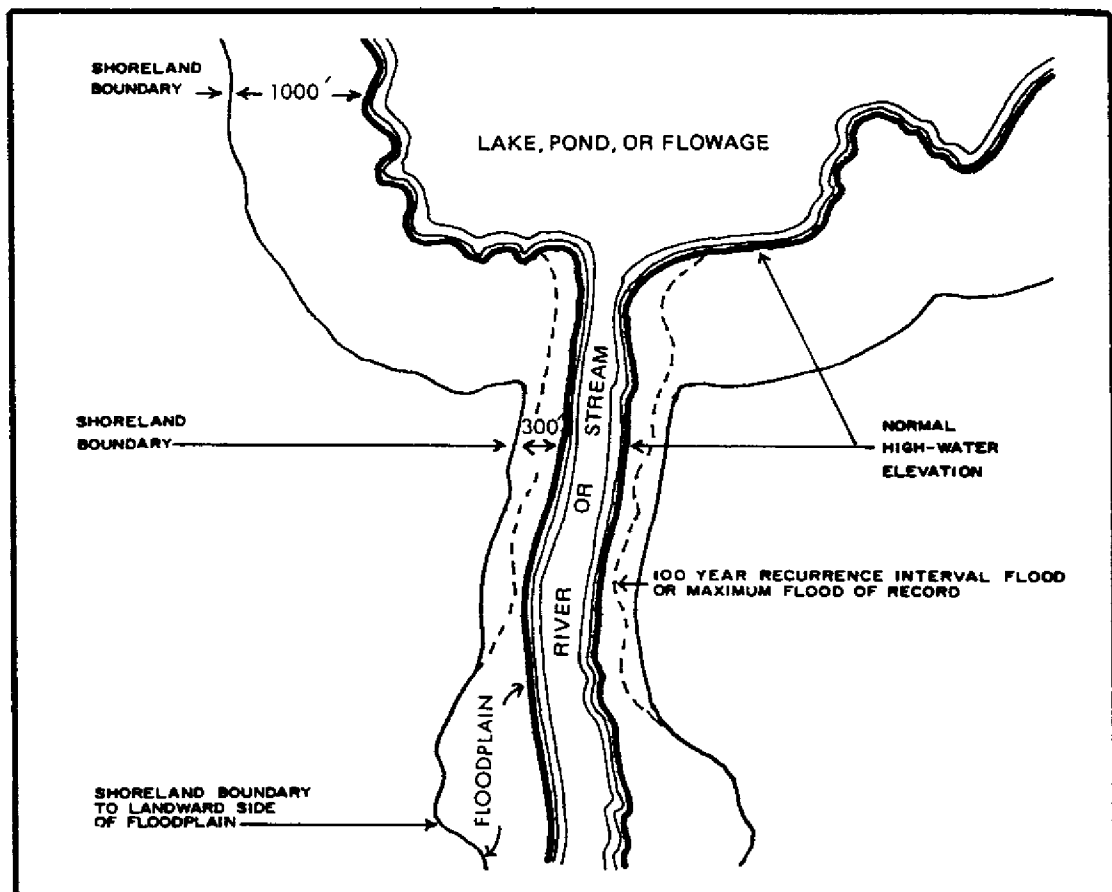
Interim Regulations

Courts sustained interim floodplain regulations in several cases. In Cappture Realty Corp. v. Board of Adjustment,³³ the New Jersey Superior Court upheld highly restrictive regulations until flood problems could be more thoroughly assessed. In Lindquist v. Omaha Realty, Inc.,³⁴ the South Dakota Supreme Court sustained restrictive regulations which prevented rebuilding in a devastated area of Rapid City after the disastrous 1972 flood.

Wetland Regulations

Both federal and state courts were asked to address a variety of wetland regulations controlling fill or dredging in wetlands. Federal courts, in a long line of decisions beginning with Zabel v. Tabb,³⁵ upheld denial of Federal Section 10 and Section 404 permits for development in coastal wetlands. Several cases involved denials of permits for dredging and filling in Florida mangroves,³⁶ which play important hazard reduction roles. Several decisions also addressed Federal 404 permit requirements for inland waters. One decision required Section 404 permits for agricultural activities in bottomland hardwoods along the Mississippi.³⁷ Flood storage was noted as a reason for protecting these areas. Other decisions held that permits are also required for development in wetlands along inland lakes.³⁸

Many state decisions also addressed wetland regulations. Most sustained restrictive regulations, particularly in the late 1970s. For example, a Maryland court in Potomac Sand and Gravel Co. v. Governor of Maryland³⁹ sustained the denial of a permit for dredging coastal wetlands in Charles County. The Rhode Island Supreme Court in J. M. Mills, Inc. v. Murphy⁴⁰ sustained wetland regulations for areas defined to include the 50-year floodplain. The Wisconsin Supreme Court in Just v. Marinette County,⁴¹ the most famous of the wetland decisions, strongly



The Wisconsin Supreme Court in Just v. Marinette County upheld county conservancy zoning for wetland areas adopted pursuant to a "shoreland zoning act."

Source: Southeastern Wisconsin Regional Planning Commission, Floodland and Shoreland Development Guide. Planning Guide #5, Waukesha, Wisconsin, 1968.

supported state-supervised shoreland zoning regulations adopted by Marinette County. These regulations placed lakeshore wetlands in conservancy districts. The New Hampshire Supreme Court in Sibson v. State⁴² upheld tight coastal wetland regulations, citing the Just case. In Graham v. Estuary Properties, Inc.,⁴³ the Florida Supreme Court upheld county refusal of a permit that would have resulted in the filling of 1,800 acres of red mangroves on Marco Island.

Special Permits

More than a dozen decisions focused on the adequacy of standards for issuance of special permits or the adequacy of the factual basis for issuance or denial of special exceptions, variances, or other special permits. Courts universally upheld the regulatory standards as providing sufficient guidance to regulatory boards. For example, in Dur-Bar Realty Co.,⁴⁴ a New York court upheld an ordinance which directed the board of adjustment to consider the impacts of the proposed uses on flood heights.

However, in several decisions courts found that local permitting boards lacked sufficient data to justify granting or denying specific permits. For example, in Pope v. City of Atlanta⁴⁵ the Georgia Supreme Court strongly endorsed a river protection act, including the standards for evaluating permits, but held that denial of a permit for a tennis court based on an argument of cumulative impact on runoff lacked factual support. On the other hand, courts in several jurisdictions found that permits had been invalidly granted because flood problems had not been adequately considered.⁴⁶

Subdivision Regulations and Stormwater Drainage

Several courts upheld flood and drainage standards in subdivision ordinances. In Brown v. City of Joliet,⁴⁷ the Illinois Appellate Court held that refusal to approve a plat was justified where a subdivider failed to include adequate plans for drainage and there was evidence

that without such provision the subdivision not only would have increased drainage problems in surrounding areas but also would have been subject to them itself. The court noted that "the storm water problem which would be created in this case would be uniquely attributable to plaintiff's subdividing and development."⁴⁸

In Hamlin v. Matarazzo,⁴⁹ the Superior Court of New Jersey held that in giving tentative approval to a subdivision for 43 homes on a 28-acre tract of undeveloped farmland, a planning board had improperly failed to consider effects of drainage and flooding. Drainage from the tract flowed onto plaintiff's land. A professional engineer testified that construction of the 43 homes would reduce stormwater absorption by 60% to 70%, substantially increasing erosion.

In Metropolitan St. Louis Sewer District v. Zykan,⁵⁰ the Missouri Supreme Court upheld sewer district regulations requiring construction of drainage facilities in subdivisions and ordered both construction of the facilities and payment of damages for failure to install facilities agreed to by the subdivider.

However, in Kessler v. Town of Shelter Island Planning Board,⁵¹ a New York court held that refusal to approve a subdivision subject to flooding was invalid because the subdivider was willing to fill the area to protect against flooding as required by the planning board, and because the planning board's ulterior goal was to preserve the entire area for recreational use. However, the court conceded that the subdivider might be required either to provide recreation areas on the site or to pay the town for park purposes.

Regulations in Anticipation of Acquisition

Floodplain regulations were quite often adopted for areas that were later to be publicly acquired for flood control, parks, or other public

purposes. Courts sustained such regulations where the principal objective was to prevent flood damages, not to reduce property values.⁵²

Judicial Response to Specific Challenges

A variety of specific legal challenges were posed to floodplain regulations in the cases discussed above.

Adequacy of Enabling Authority

In a few cases, landowners challenged the basic power of a local government to adopt floodplain regulations. Despite adoption of regulations by 17,000 communities between 1969 and 1980, no court invalidated regulations on the grounds of inadequate basic enabling authority: courts found sufficient powers in all cases where the issue was raised. For example, in Turnpike Realty,⁵³ the Massachusetts Supreme Court held that adoption of a floodplain zoning ordinance was valid pursuant to a Massachusetts statute authorizing towns to adopt zoning providing "that lands deemed subject to seasonal or periodic flooding shall not be used for residence or other purposes in such a manner as to endanger the health or safety of the occupants thereof."⁵⁴ The court noted that, even before the enabling act had been amended to include specific reference to flood, "we believe that a municipality could validly have enacted a floodplain zoning bylaw under the general grant of authority . . . (to promote the health, safety, convenience, morals, or welfare), and for the reasons . . . (to secure safety from fire, panic, and other dangers)."⁵⁵ A concurring opinion of the Oklahoma Supreme Court similarly concluded that municipalities had sufficient power to adopt floodplain zoning under a broad zoning enabling act.⁵⁶

The Colorado Supreme Court held that a county had sufficient power to adopt floodplain and mineral conservation zones under a broad enabling statute.⁵⁷ The Washington Supreme Court held that a statute authorizing a state agency to regulate flood hazard areas was sufficiently broad to

justify denial of permits for residences in floodways.⁵⁸ The South Dakota Supreme Court held that Rapid City was exercising a valid use of police powers when it adopted regulations prohibiting issuance of building permits for an area devastated by the June 12, 1972 flood, until a planning study was complete.⁵⁹

Courts in several jurisdictions held that the powers of special districts were sufficiently broad to authorize adoption of floodplain regulations. In Metropolitan St. Louis Sewer District⁶⁰ the Missouri Supreme Court upheld sewer district regulations requiring construction of drainage facilities in subdivisions. The regulations had been adopted pursuant to a broad grant of powers to deal with sewage. Similarly, in Krahl,⁶¹ the Minnesota Supreme Court upheld the floodplain encroachment and elevation requirements of the watershed district since the district had a general grant of power to deal with problems of water use.

In County of Ramsey v. Stevens,⁶² the Minnesota court went beyond a mere affirmation of local powers when it sustained a lower court decision ordering a local community (Lilydale) to adopt regulations. A special statute required that communities designated by the Minnesota Department of Natural Resources adopt regulations to qualify for the NFIP, but Lilydale had failed to comply with this statute.

In Hamlin,⁶³ the New Jersey Supreme Court held that not only were local subdivision review powers sufficiently broad to require drainage facilities, but also they imposed an affirmative duty upon the local planning board to consider flooding. The court held that a planning board had improperly failed to consider effects of drainage and flooding when it gave tentative approval to a subdivision for 43 homes on a 28-acre tract of undeveloped farmland and ordered the board to do so.

The Need to Follow Statutory Procedures.

In a few cases, landowners argued that state or local regulations had not been adopted or administered in a manner consistent with statutory procedures. Several cases held regulations partially or wholly invalid where adoption procedures were not followed. In Jefferson County v. Johnson,⁶⁴ the Alabama Supreme Court held that a county building code and a county resolution adopted to qualify for the NFIP were not sufficient in themselves to authorize the county engineer to deny a permit for construction in a floodway area: a more formal zoning regulation was needed. In Morland Development Co. v. City of Tulsa,⁶⁵ the Oklahoma Supreme Court held that floodplain zoning adopted as an amendment to other zoning was invalid because it was adopted without notifying landowners in writing as the zoning enabling act required for zoning amendments. In A. H. Smith Sand and Gravel Co. v. Department of Natural Resources,⁶⁶ the Maryland Court of Appeals strongly endorsed the concept of state floodplain regulations, but held that the regulations in this case had been based improperly on data that assumed future "developed" watershed conditions. The statute required consideration only of existing conditions. The court did not invalidate the regulations, but it did require a recalculation of flood elevations. Later the state statute was changed to explicitly permit the consideration of future watershed conditions.

The Minnesota court in County of Ramsey⁶⁷ permitted minor irregularities in statutory procedures. The court held that regulations adopted by the city of Lilydale to qualify for flood insurance, under an order of a lower court to adopt such regulations within 72 hours, were valid despite the failure of the city to provide public notice of the regulations as required by state zoning laws. The regulations were adopted while rising waters threatened to flood the area. The court

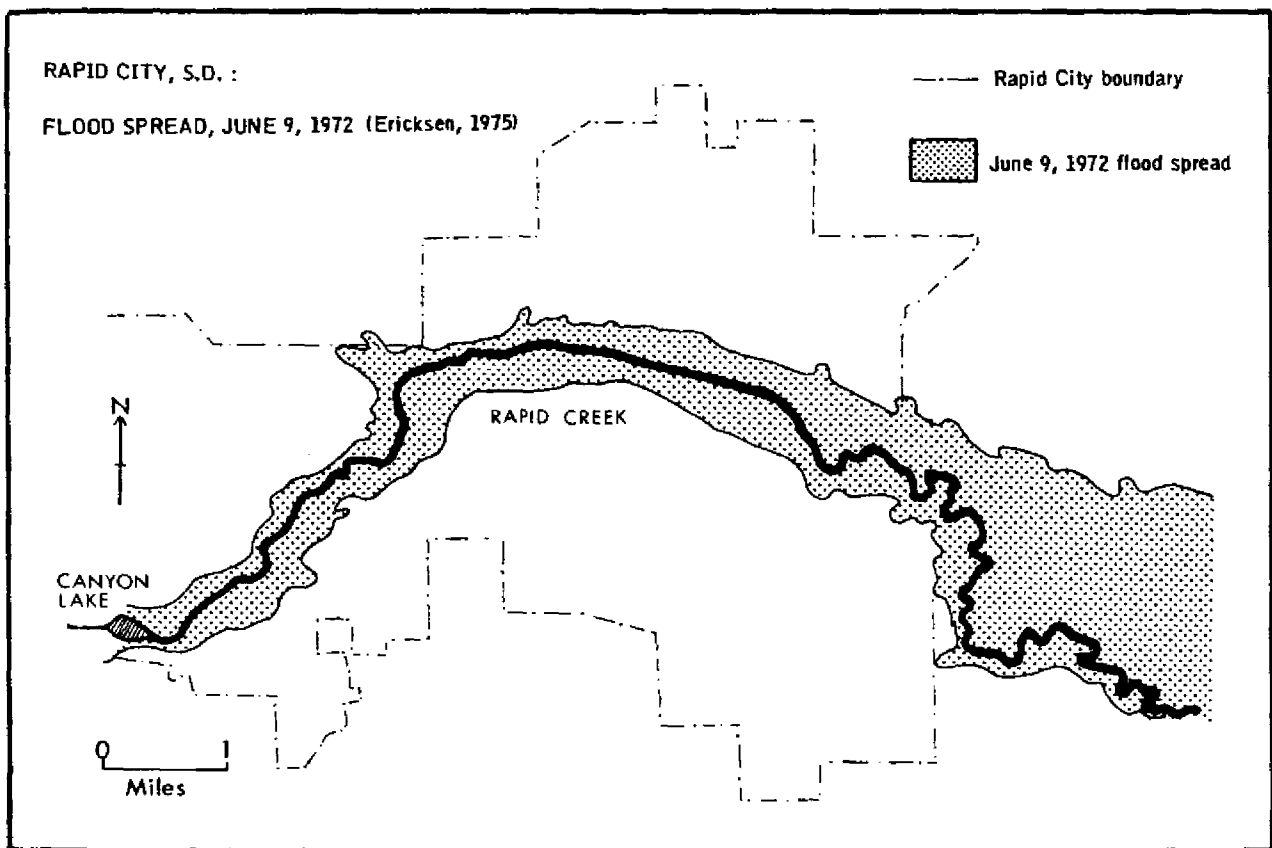
noted that statutory notice and hearing procedures would have been so time-consuming that the flood would have occurred before the regulations were adopted negating, in part, the reason for their adoption. The court stated that failure to comply with statutory procedures could only be justified in emergency circumstances. In addition, the court found no real denial of due process since the landowner contesting the regulations was in fact aware of their impending adoption.

Validity of Interim Regulations

In several cases, landowners challenged interim regulations as not having been specifically authorized or adopted pursuant to statutory procedures. Interim regulations are specifically authorized only in some of the states. There has been some question, therefore, whether such regulations exceed the scope of local powers or fail to follow prescribed procedures. As noted above, an Alabama court held that a resolution intended as an interim regulation was not a valid basis for denying a building permit. Courts in three other decisions supported more formal interim floodplain regulations.

In Cappture Realty Corp.⁶⁸ the Superior Court of New Jersey upheld a moratorium for construction on flood-prone lands until a flood control plan could be prepared. The moratorium had been adopted in October 1971 and extended for yearly periods until November 1974. All statutory procedures had been followed in adopting the ordinance. Under the terms of the ordinance, special permits could be obtained, providing construction did not generate any additional surface runoff. An exception had been denied in the case.

In Lindquist⁶⁹ the South Dakota Supreme Court held that adoption of a resolution by the City Council of Rapid City was a valid exercise of police powers. After the devastating flood of June 12, 1972, the resolution prohibited issuance of building permits for one block on



In Lindquist v. Omaha Realty Inc., the South Dakota Supreme Court upheld a moratorium against rebuilding in this area along Rapid Creek.

Source: Ericksen (1975)

either side of Rapid Creek until a study was completed by the planning commission. The resolution and subsequent "notice of intent to acquire" issued by the city in September 1974 did not take property under eminent domain. The court observed:

This appears to be a legitimate government interest when we consider the situation at the time the resolution was adopted, that is, widespread destruction and a need for some emergency action.⁷⁰

Again, all procedures for adoption of a resolution had apparently been followed.

In Beckendorff v. Harris-Galveston Coastal Subsidence District,⁷¹ the Texas Supreme Court upheld the issuance of temporary groundwater withdrawal permits for an area subject to subsidence-induced coastal flooding until a comprehensive plan could be prepared.

Courts have widely upheld interim resource management regulations in analogous contexts where statutory procedures were followed. These include interim regulations adopted pursuant to the California⁷² and North Carolina⁷³ Coastal Zone Management Acts and interim wetland protection regulations adopted under the New York Coastal Wetlands Protection Act.⁷⁴

Validity of State Floodplain Regulations

All decisions have upheld contested state floodplain regulations as within the scope of statutory powers. The sufficiency of state floodway statutes was sustained by courts in Iowa,⁷⁵ Washington,⁷⁶ Indiana,⁷⁷ and New Jersey.⁷⁸ The Maryland Court of Appeals in A. H. Smith Sand and Gravel Co.⁷⁹ held that the state had sufficient power to adopt state floodplain regulations pursuant to a broad pollution control statute. In State v. Crown Zellerbach Corp.,⁸⁰ a Washington court upheld the power of a state agency to attach conditions to permits for structures in streams in order to ensure compliance with pollution control standards within three years.

Several courts sustained state or state-supervised local regulations against claims that they violated local home rule powers. In Pope,⁸¹ the Georgia Supreme Court held that the Metropolitan River Protection Act was valid and did not violate local home rule powers or constitute state zoning. The act required permits for development in the stream corridor (all land within 2,000 feet of the stream) and the 50-year floodplain to protect the flow of flood waters and prevent erosion, siltation, and water pollution. The court held that flooding was a matter of statewide concern. Similarly, local home rule arguments were rejected in the Washington and Indiana floodway cases.

Courts unanimously upheld other types of state resource management regulations against local home rule arguments including the Oregon State Wild and Scenic River Act,⁸² which requires state permits for uses within the river corridor; the Minnesota State Wild and Scenic River Act⁸³ and state standards adopted for local regulation; the California Coastal Zone Management Act,⁸⁴ which requires permits from regional councils; the New Jersey⁸⁵ and North Carolina⁸⁶ Coastal Zone Management Acts; and New York's regulations for its Adirondack Park.⁸⁷ The reasoning was similar in each case: the matter was of more than local concern. In addition to these cases, a New York court sustained county wetland regulations adopted pursuant to a statute that authorized the county to act if towns failed to pass appropriate ordinances.⁸⁸ A town argued that county regulations for a town without controls violated home rule powers. This argument was rejected, again based on the rationale that wetland protection was of more than local concern.

Adequacy of Regulatory Objectives

Landowners challenged the validity of floodplain management objectives in a few cases. During the decade, courts endorsed six major flood loss reduction goals.

(1) Preventing increases in flood heights and damages. Courts in California,⁸⁹ Indiana,⁹⁰ Iowa,⁹¹ and Washington⁹² strongly endorsed regulations designed to protect flood flow capacity and prevent landowners from increasing flood heights or velocities on other lands. Several of these cases specifically endorsed the consideration in the regulations of cumulative impacts and future development.

(2) Protecting flood storage. The Supreme Court of Minnesota sustained watershed district regulations designed to protect flood storage.⁹³ Similarly, a Massachusetts court sustained regulations to protect storage along the Neponset River, even where there was evidence that a proposed use would have raised flood heights only 1/4 inch.⁹⁴ On the other hand, an Illinois court held that certain storage restrictions that prevented all private use of lands were unreasonable, although it generally endorsed the storage concept.⁹⁵

(3) Protecting buyers from victimization caused by subdivision and sale of flood-prone lands. Illinois,⁹⁶ Missouri,⁹⁷ and New Jersey⁹⁸ courts sustained subdivision regulations requiring storm sewers. The New Jersey court determined that a planning board's decision to approve a plat without taking into account possible problems with drainage was invalid since consideration of drainage was an affirmative duty.⁹⁹

(4) Protecting landowners from flood losses due to their own use of the floodplain. In Turnpike Realty,¹⁰⁰ the Massachusetts Supreme Court endorsed as basic policy "the protection of individuals who might choose, despite the flood dangers, to develop or occupy land on a floodplain."¹⁰¹ A New York court cited and quoted this language and held that "[i]t is beyond question that these objectives which correspond closely to the stated purposes of present ordinance, may be the subject of a legitimate exercise of the police power. . . ."¹⁰²

(5) Protecting and promoting the general welfare, including reduction in public flood-related expenses. The Massachusetts court in Turnpike also strongly endorsed the reduction in public costs. It stated that a principal objective for floodplain regulations was "the protection of the entire community from individual choices of land use which require subsequent public expenditures for public works and disaster relief."¹⁰³ A New York court also endorsed this goal and language.¹⁰⁴

Discrimination

Courts considered arguments that regulations discriminated between similarly situated landowners in several cases. In Beckendorff¹⁰⁵ a Texas court held that interim regulations controlling the withdrawal of ground water to prevent subsidence and flooding were valid and nondiscriminatory despite their application to only two counties. The appellant argued that all landowners who might contribute to the problem should be regulated. Noting the regulations could be expanded in the future to other areas, the court held that "the legislature may implement their programs step by step, adopting regulations that only partially ameliorate a perceived evil and deferring complete elimination of the evil to future regulations."¹⁰⁶ This ruling gives support to community and local efforts to map and regulate the most seriously threatened flood hazard areas first and provide for the gradual inclusion of other areas over time. Regulatory approaches addressing some but not all areas have also been sustained for regulations applying to coastal but not inland wetlands¹⁰⁷ and wetlands in a particular coastal area but not another.¹⁰⁸

Reasonableness of Regulations

In many cases, courts considered the reasonableness of regulations, that is, whether the regulatory standards had some reasonable tendency to accomplish the regulatory goals.

Frequency of flooding. What frequency of flooding should be used to determine floodways or flood fringe elevations? What degree of restriction is justified for particular flood frequencies? The "frequency" question has not been widely litigated, although courts have sustained regulations for particular frequencies of flooding in several cases. The Washington Supreme Court sustained encroachment restrictions for an area identified by the Corps of Engineers and the state as the 100-year floodway.¹⁰⁹ Similar restrictions were sustained for 100-year floodway areas in Indiana¹¹⁰ and Iowa.¹¹¹ The Maryland Supreme Court sustained state regulations for the 50-year floodplain.¹¹² The Rhode Island Supreme Court sustained state permit requirements for activities in wetlands, defined to include the 50-year floodplain.¹¹³

Courts sustained restrictive controls based on historic flood data in a number of cases, although no frequency was assigned to the flooding. In Turner,¹¹⁴ a California court sustained open space zoning for an area devastated by flooding in 1962 and which had been flooded four times since 1936. In Turnpike Realty,¹¹⁵ the Massachusetts Supreme Court sustained open space regulations for an area which had been flooded at least three times since 1936. A New York court upheld a floodplain zoning ordinance which required that the "elevation of the lowest floor to be used for any dwelling purpose in any residential structure shall be equal to or higher than the elevation of the high water level as determined by the enforcement officer in accordance with previous flood records," in Wolfram v. Abbey.¹¹⁶ The court found that the reference in the ordinance to "previous flood records"¹¹⁷ was sufficiently specific since flood records for the subject area had been officially compiled by the Corps of Engineers and the town board had adopted these as part of the town's official floodplain plan.

From these cases it is clear that courts are willing to sustain highly restrictive regulations for frequently flooded areas. Quantified estimates of flooding are desirable but not essential.

Accuracy of mapping. In one case, a Michigan court of appeals held that floodplain regulations were invalid because they were applied to an area where "there was no evidence of flooding."¹¹⁸ But this is the only case that invalidated a floodplain regulation outright for lack of data and the court did so apparently because the regulation was applied to an area without any historical or theoretical evidence of flooding.

On the other hand, the Iowa Supreme Court upheld a state floodplain permit requirement for a property where there were no maps but there was evidence of flooding.¹¹⁹ The Iowa statute required that landowners seek state permits for structures or obstructions in the floodplain but did not require state floodplain mapping. A landowner in this case claimed that he should not have been left to his own devices to determine whether he was in the floodplain. The court disagreed, noting that since the landowner had constructed a levee at the site he must have suspected or known he was in the floodplain.

Map scale apparently has not been litigated, but the issue of minor inaccuracies has been raised. In Turnpike Realty,¹²⁰ the Massachusetts Supreme Court upheld the sufficiency of Dedham's floodplain zoning map which incorrectly included in the floodplain two knolls with a combined area of 3.4 acres. However, for other areas, there was substantial evidence of flooding, including photographs and exhibits of flooding from 1954 and 1967 and testimony of an expert hydrologist. Flood levels had been reached in 1936, 1938, 1955, and 1968. The court held that inclusion of the knolls was "inadvertent."¹²¹ This minor inaccuracy did not invalidate the regulation since the owner could seek a special

permit for such areas under ordinance provisions allowing a landowner to demonstrate that a particular area was not subject to flooding.

In Just,¹²² a Wisconsin court upheld a procedure for remedying map inaccuracies through field inspections and the application of written criteria to the wetlands in question.

Several courts have sustained suspensions of communities from the NFIP because of failure to adopt adequate regulations, despite community arguments that because of map inaccuracies they should not be required to adopt them. In Roberts v. Secretary, Department of Housing and Urban Development,¹²³ a federal district court granted summary judgment for FIA, sustaining flood boundary maps and subsequent regulations based on them. The floodway and floodplain areas had been mapped according to present and historical conditions rather than conditions expected to exist after completion of a flood control project and other public works. The community argued that future conditions should be considered.

In a second case, Town of Falmouth v. Hunter,¹²⁴ a federal district court similarly ruled that Falmouth, Massachusetts could be suspended from participation in the flood insurance program. The town claimed that coastal maps included in the flood insurance study were inaccurate. Falmouth had entered the emergency program in 1971. The Corps of Engineers completed the flood insurance study in 1972 and the town entered the regular program in 1973. In 1974 the town appealed the flood insurance study, claiming that boundaries were arbitrary and unsupported by sound data and scientific principles. FIA conceded some errors, made modifications, and issued revised elevations in 1975. New elevations went into effect in April 1976. The town proposed an alternative method for determining elevations and requested six months to carry out studies applying the new approach. FIA rejected this proposal and began action to suspend the town's participation in the NFIP. The town initiated a

suit to prevent suspension. The court sustained the suspension, reasoning that the community could adopt the required regulations while it was carrying out its own studies.

Standards for floodway areas. In several decisions courts sustained criteria used for defining floodway areas. In Young Plumbing and Heating Co.,¹²⁵ the Iowa Supreme Court upheld the Iowa Natural Resources Council's denial of a permit for a condominium within a 100-year floodway which was 200 feet wide. The condominium would have increased flooding by .3 of a foot, but the cumulative impact (assuming an equal degree of encroachment) would have been 1.7 feet. The court ordered that the building be removed, despite arguments by the landowner that he should be allowed to channel the stream to provide compensatory increases in flow capacity.

In Krahl,¹²⁶ the Minnesota Supreme Court sustained a water district's regulations based on a concept of floodway delineation which involved permitting encroachments to extend "approximately 20% of the distance between the flood zone contour and the creek channel."

In Subaru of New England,¹²⁷ a Massachusetts court sustained the town's highly restrictive floodplain regulations which were designed to protect natural valley storage of the Neponset River. The court sustained the regulations despite evidence that the proposed development would raise flood heights only 1/4 inch.

Cumulative impacts. Several courts sustained state and local consideration of the "cumulative impact" of development in evaluating development proposals or determining encroachment lines. In the Young¹²⁸ decision the Iowa Supreme Court sustained consideration of cumulative impacts. The Georgia Supreme Court in Pope,¹²⁹ endorsed consideration of cumulative impacts even though the court found insufficient evidence of cumulative impact in this instance. In Subaru of New England,¹³⁰ a

Massachusetts court, in upholding restrictions, strongly endorsed a cumulative impact argument. In Beckendorff,¹³¹ the Texas Supreme Court held that regulation of individual groundwater extractions to prevent cumulative subsidence and flooding effects was justified. It noted:

An individual's action may be lawfully regulated when it operates in concert with others' actions to produce an effect, even though the individual action of itself would be incapable of achieving the effect.¹³²

Despite judicial approval for consideration of cumulative impacts, several courts held that in specific factual situations, evidence of cumulative impacts was insufficient to justify withholding a permit. These include a Massachusetts coastal wetlands case¹³³ in which it was argued that filling would have detrimental impact on flooding and erosion but little evidence was provided to support this conclusion; Pope,¹³⁴ in which generalized testimony on the impact of impervious surface was held insufficient to justify denial of a permit for a tennis court; and a New Jersey case in which the court held that a 2-acre minimum lot size throughout the town to reduce runoff and increase infiltration was not justified by the evidence.¹³⁵

Consideration of Present Versus Future Conditions. Several courts considered the sufficiency of flood maps based on existing versus projected watershed conditions.

In A. H. Smith Sand and Gravel Co.¹³⁶ a Maryland court sustained state floodplain regulations, but held that flood maps were to be based on existing rather than future watershed conditions and ordered the modification of flood boundaries. The enabling statute required that existing conditions be considered. The Maryland legislature later amended the statute to authorize mapping based on future watershed conditions.

As noted above, a federal district court in Roberts¹³⁷ sustained the suspension of a community from the NFIP for failure to adopt "regular program" regulations, despite a claim by the community that the flood maps

were inadequate. This case sustained federal mapping of floodplains based on existing conditions. However, the court might also have sustained maps based upon future conditions had FIA taken this approach.

In Young Plumbing and Heating Co.,¹³⁸ discussed above, the Iowa Supreme Court strongly endorsed efforts of the Iowa Natural Resources Council to take into account anticipated future development in determining encroachment limits. With regard to the argument that damages to adjacent landowners were "anticipatory," the court held that the Council had properly looked to the future:

One function of the Council is to facilitate flood control through planning. . . . Part of this function involves projecting the occurrence of floods. In this sense the actions of the Council are always anticipatory as to floods, the effect of channel modifications on adjacent lands, and future development on adjacent lands. Regardless of whether like construction or development were to be undertaken on the opposite bank, the proposed construction and the accompanying channel modifications will reduce the number of potential uses and the corresponding value of the adjacent land due to increased susceptibility to flooding. The effect on adjacent lands being a consideration mandated by the legislature, and planning being a delegated function of the Council, the anticipatory nature of the Council's findings does not work against their reasonableness.¹³⁹

Similarly, in Pope¹⁴⁰ it was held that under the Georgia River Protection Act, the metropolitan council could take into account future conditions.

Judicial review of reasonableness. Courts deferred to legislative or agency determinations on factual matters¹⁴¹ if there was any evidence to support them. Judicial deference to agency fact-finding is due in part to courts' reluctance to act as experts and in part to their endorsement of the separation of judicial, legislative, and executive powers.

Iowa's Young¹⁴² decision represents the most common judicial approach for review of federal, state, and local agency decisions, including data gathering and analysis and the selection of data-gathering and analysis techniques. Here the court held that an agency decision will be reversed only where it is "unsupported by substantial evidence in

the record made before the agency when the record is viewed as a whole."¹⁴³

(emphasis added). The court applied the following standard of review to determine whether there was substantial evidence:

Evidence is substantial when a reasonable mind would accept it as adequate to reach a conclusion [T]he entire record must be considered in determining whether the challenged finding has sufficient support. Nonetheless, the possibility of drawing two inconsistent conclusions from the evidence does not prevent an administrative agency's findings from being supported by substantial evidence¹⁴⁴

Finding a basis for the Iowa Natural Resources Council's conclusions in the record and stressing the impact of the proposed use on adjacent lands, the court upheld the Council. The court further noted:

The conclusion of the Council is further supported by the deference with which a reviewing court should approach agency action due to the Council's particular expertise Still a court reviewing agency action must scrutinize the whole record to evaluate any alleged statutory grounds for invalidation.¹⁴⁵

Judicial support for decision making by special agencies or boards occurred in many cases.¹⁴⁶ California¹⁴⁷ and Massachusetts¹⁴⁸ courts gave particular deference to local decision making.

However, as noted above, several courts held that agency decisions in specific contexts were not based on sufficient data.¹⁴⁹ In requiring the upgrading of flood maps after new flood data became available, the Maryland court noted that "[t]he conclusion reached by an administrative agency, with all of its expertise, can be no more sound than the factual basis upon which it rests."¹⁵⁰

Special Exceptions and Variances

Courts widely sustained special permit approaches, which were often applied to floodways or river corridors.¹⁵¹ In Pope,¹⁵² the Georgia Supreme Court upheld the Metropolitan River Protection Act's requirement that permits be sought for development within 2,000 feet of streams. This act more specifically provided that uses within 150 feet of the

river and the 50-year floodplain were restricted to those "not harmful to the water and land resources of the stream corridor . . . [which do not] significantly impede the natural flow of flood waters, and [which] will not result in significant land erosion, stream bank erosion, siltation or water pollution."¹⁵³ Grading and vegetation clearance permits were required; cut and fill operations that would alter the natural flow of waters were prohibited; and only 20% of the floodplain could be covered with impervious surfaces.

Several courts deemed that the potential for issuance of a special permit was significant in deciding whether regulations were a taking of private property. These decisions included a landmark Wisconsin wetland protection decision,¹⁵⁴ a Washington Supreme Court decision sustaining encroachment regulations¹⁵⁵ and a Massachusetts Supreme Court decision supporting the validity of local restrictions for a floodplain area.¹⁵⁶

Courts sustained the adequacy of standards for special permits in all cases addressing the issue. In Dur-Bar Realty Co.¹⁵⁷ a New York court held valid an ordinance that permitted no floodplain uses by right and required a local board to evaluate proposed uses to determine their impact on flood heights and safety from flooding.

In Wolfram,¹⁵⁸ a New York court upheld a floodplain zoning ordinance that authorized the zoning administrator to determine flood hazard areas with data from the Corps. Special permits were to be obtained from the zoning board of appeals, which was also authorized to require "[a]ny other controls or restrictions which are deemed necessary to minimize or eliminate damage to buildings and structures from flood waters."¹⁵⁹

Data base for permit approval or denial. Several courts held that permits were invalidly denied in particular circumstances because of an insufficient factual basis for such denial. In MacGibbon v. Board of Appeals,¹⁶⁰ the Massachusetts Supreme Court held that a permit for fill

in a coastal wetland had been invalidly denied on flooding and erosion grounds, both because there was lack of evidence of such problems and because adequate measures could be taken to deal with flooding and erosion.

In Pope,¹⁶¹ denial of a permit for a tennis court based on an argument of cumulative effect on flooding was not supported by sufficient evidence. The landowner introduced evidence from the director of Atlanta's Bureau of Buildings that construction of the tennis court would not significantly affect the river. The only rebuttal was testimony of an environmental planner with the Atlanta Regional Commission who had never inspected the proposed construction site.

Several courts upheld the denial of variances for floodplain areas. In Kraiser v. Zoning Hearing Board,¹⁶² a Pennsylvania court sustained denial of a variance for a residential duplex in a floodplain conservation area. The court noted that, based on engineering testimony, "it can be properly concluded that building on the floodplain would increase flood height and conceivably increase the hazard to the inhabitants of other buildings both on and away from the zoned areas."¹⁶³

The court also noted, "Kraiser's puzzlement is understandable. If he complies with the permitted conditional uses under the Floodplain Ordinance he finds himself for all practical purposes stuck with a useless property. But in the interests of all the residents, he must suffer along with other property owners who are likewise affected by the ordinance."¹⁶⁴

Similarly, in National Merritt, Inc. v. Weist¹⁶⁵ the New York Court of Appeals held that a zoning board of adjustment properly denied a property owner's request for an area variance for a 19 3/4-acre parcel to be used as a shopping center. The decision was due in part to a

finding that the shopping center would create flooding and drainage problems for the area. The court noted:

Considerable evidence, also unrebutted, was introduced to demonstrate that the leveling of the property and its conversion into an area almost completely covered by structures and asphalt pavement would result in severe flooding and drainage problems Both the United States Department of Agriculture and the Westchester County Soil and Conservation Service advised the parties that petitioner's plans did not adequately provide for the control of storm water and erosion.¹⁶⁶

In contrast, one court held that a variance for a liquid propane gas tank was acceptable in a wetland area subject to flooding where there was no evidence of adverse impacts.¹⁶⁷

In Green's Bottom Sportsmen, Inc. v. St. Charles County Board of Adjustment,¹⁶⁸ a Missouri court held that a zoning board of adjustment could revoke a permit that was incorrectly issued by a zoning commission. The permit was for a gun club on a 49-acre tract of floodplain near the Missouri River where county floodplain regulations did not permit such uses. Nearby landowners appealed the permit to the board several months after the commission issued it. Prior to this they had been unaware of the club.

The Taking Issue

In 36 of the 55 floodplain regulation cases in the last decade, a "taking" was one of the issues addressed. The courts in 34 of these cases held that there had been no taking. A taking was found in each of two cases where the regulations were subject to other deficiencies such as inadequate data.¹⁶⁹ Both were lower court decisions; in each, the court endorsed the general concept of regulations yet disapproved of them as applied to the specific property in question. This resounding support for floodplain, wetland, coastal zone, and other regulations against claims of taking may explain why courts now focus more closely on the reasonableness issue and other aspects of regulations and why "taking" is now rarely the major issue.

U.S. Supreme Court Cases. During the 1970s the U.S. Supreme Court considered the taking issue in zoning cases for the first time since the 1920s. One case involved regulations for a flood area although the court did not make a decision on the merits. Because U.S. Supreme Court decisions are important to all lower courts, its treatment of the taking issue will be examined.

In the first of these cases, Penn Central Transportation Co. v. City of New York,¹⁷⁰ the Court upheld New York City's Landmarks Preservation Law to protect landmarks and neighborhoods. This law, combined with applicable zoning ordinances, permitted that individual structures be designated as "landmarks" and the blocks containing the structures as "sites". Owners of designated structures were required to keep exterior features in good repair. Exterior alterations require approval by a commission. Accompanying zoning bylaws permitted owners of designated buildings to transfer development rights to other lots on the block.

In analyzing the law, the Court noted that "this Court, quite simply, has been unable to develop any set formula for determining when justice and fairness require that economic injuries caused by public action be compensated by government, rather than remain disproportionately concentrated on a few persons."¹⁷¹ The Court analyzed the public need for the law and the severity of the impact on Penn Central, the landowner. It found that Penn Central had not been unfairly burdened by the regulations, which affected all landmarked property. The Court concluded that Penn Central had a reasonable return on its investment in light of the use now being made of the structure and similar uses in the area owned by Penn Central. Although the Court did not consider the constitutionality of the development rights scheme per se, it noted that the rights "were valuable" and served to mitigate the impact of the regulations.

In a second case, Agins v. City of Tiburon,¹⁷² the Court generally sustained "residential planned development and open space" zoning regulations for a section of Tiburon, California. The regulations had been adopted pursuant to a state law that required California communities to prepare a plan governing both land use and development of open space. The contested regulations were designed to discourage the "premature and unnecessary conversion of open-space land to urban uses." One of the ordinance's objectives was to prevent premature conversion of open space, "thereby protecting against the resultant adverse impacts such as . . . disturbance of the ecology and the environment, hazards related to geology, fire and flood. . . ."¹⁷³ The Court did not extensively discuss the taking issue since the landowner had not applied for a permit under the ordinance, but had rather attacked the general validity of the regulations. The Court strongly endorsed the regulatory objectives--to discourage premature conversion of open space. It held that the landowner had not shown that he was deprived of economic use of his land. Noting that benefits as well as burdens from the regulations would accrue to the landowner and that this was relevant to a consideration of taking, the Court noted:

Appellants therefore will share with other owners the benefits and burdens of the city's exercise of police power. In assessing the fairness of the zoning ordinance, those benefits must be considered along with any diminution in market value that the appellants might suffer.¹⁷⁴

The Court here, as in Penn Central, did not concentrate on the diminution in value caused by the regulations but on whether some value remained for the entire parcel of land.

In a third decision, San Diego Gas and Electric Co. v. City of San Diego,¹⁷⁵ the Supreme Court dismissed an appeal by a utility company which claimed that "downzoning" of a 214-acre tract (some of it floodplain) by the city of San Diego was a taking by inverse condemnation.

The Court dismissed the appeal because a final judgment had not been made in the case since further proceedings were contemplated at the trial court level. Nevertheless, Justice Brennan filed a vigorous dissent joined by Justices Stewart, Marshall, and Powell.

The decision is of interest despite dismissal of the appeal because the strong dissent indicates a potential willingness on the part of the Court to review state and local land use regulation cases as violative of 5th Amendment as well as 14th Amendment guarantees. However, it is to be noted that regulations were apparently being used to lower land values prior to acquisition--a traditionally invalid use of police powers.

The appellant in the case had acquired 214 acres of marshy flood-plain land in 1966 when it was zoned for industrial and agricultural uses. In 1973, San Diego downzoned a portion of the land from industrial to agricultural and increased the minimum lot sizes. The city also incorporated the land into an open space plan and designated it for potential acquisition. The appellant filed suit, claiming damages of \$6,150,000 in inverse condemnation, and seeking mandamus and declaratory relief as well. The trial court granted judgment for the appellant. The California Court of Appeals affirmed, holding, in part, that the purpose of the downzoning was to lower property values. The California Supreme Court granted the city's petition for hearing but transferred the case to the Court of Appeals for rehearing in light of the intervening Agins decision. There, the California Supreme Court had held that an owner deprived of substantially all beneficial use of the land by zoning regulation is not entitled to an award of damages in inverse condemnation, but only to invalidation of the regulation in an action for mandamus or declaratory relief. The California Supreme Court denied further review and the matter was appealed to the U.S. Supreme Court.