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# FLOOD CONTROL IN OKLAHOMA: AN EXAMPLE OF LAND USE PRECEDING LAND USE PLANNING

GEORGINA B. LANDMAN,\* JOHN FORRESTER HICKS\*\*  
and T. W. IHLOFF\*\*\*

*Floods are as old as the world, but flood  
damages are only as old as man.†*

## Introduction

To those who still conceptualize Oklahoma as a dustbowl, a place where "the winds come sweeping down the plain," it may seem preposterous that Oklahoma faces considerable flooding problems. But, as did many American pioneers, the early Oklahomans chose to settle at town sites which had two essential features—a ready water source and flat, rich land. A flood plain is found in such a location.<sup>1</sup> Although only 2.5 per cent

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† Hofman, *New Jersey's Experiences in Flood Plain Management*, PROC. OF 1ST NAT'L CONF. ON FLOOD PLAIN MANAGEMENT, July 24-25, 1974, at 113.

<sup>1</sup> HOYT & LANGEIN, *FLOODS* (1955), is a classic work on the subject. At p. 12, they define the flood plain as "the lowland that borders a river, usually dry but subject to flooding."

A more elaborate definition of a flood plain comes from the First National Conference on Flood Plain Management held in Washington, D.C., July 24-25, 1974, by Thomas Maddock, Jr., research hydrologist for the United States Geological Survey, Washington, D.C.

A flood plain is an area of land that, from time to time, has been or can reasonably be expected to be under water. This simple definition covers areas that are overflowed by streams at times of high discharge, those areas covered by abnormal tidal action, areas flooded by tides caused by wind, and even areas that are flooded by impairment of drainage.

The largest of these areas in the aggregate and the most important is found in river valleys that are inundated by overbank flow from stream channels. In fact, the term "flood plain" in one sense means an area of land that is periodically overflowed by water in excess of the capacity of a stream channel. It is also an area where the land is made by deposits of material moved by the stream itself.

of the total land in the United States is flood plain, roughly 6.5 per cent of the population lives on this land "borrowed from a river."<sup>2</sup> The normally placid streams of arid Oklahoma probably draw an even higher proportion near their banks.

Historically, the solution to flooding has been perceived as engineered protective works. In 1936, the federal government embarked upon a massive program to control the nation's rivers;<sup>3</sup> to date, more than \$9 billion has been spent.<sup>4</sup> Oklahoma has roughly 50 federal flood control projects.<sup>5</sup> However, it is only recently that the insufficiency of protective works alone has been realized. In March, the Comptroller General reported to Congress that despite the enormous governmental and private expenditures, annual losses to floods exceed \$1 billion and may increase to \$3.5 billion by the year 2000.<sup>6</sup> These figures may indicate that protective

<sup>2</sup> HOYT & LANGBEIN, *FLOODS*, 12-13 (1955).

<sup>3</sup> Flood Control Act of 1936, 49 Stat. 1570 (1936) *as amended*, 33 U.S.C.A. §§ 701-09 (1970).

<sup>4</sup> "National Attempts to Reduce Losses From Floods by Planning for and Controlling the Uses of Flood-Prone Lands," *Report to the Congress by the Comptroller General of the United States*, Mar. 7, 1975, p. 1 [hereinafter cited as Comptroller General Report].

<sup>5</sup> The following tables list the flood-control projects located in Oklahoma. All are under the control of the Department of the Army, Tulsa District Corps of Engineers.

#### *Lakes and Reservoirs*

Altus <sup>3</sup>	Eufaula	Hugo	Sand <sup>1</sup>
Arbuckle <sup>3</sup>	Fort Cobb <sup>3</sup>	Hulah	Shidler <sup>1</sup>
Arcadia <sup>1</sup>	Fort Gibson	Kaw <sup>2</sup>	Skiatook <sup>2</sup>
Birch <sup>2</sup>	Fort Supply	Keystone	Tenkiller Ferry
Boswell <sup>1</sup>	Foss <sup>3</sup>	Lukfata <sup>2</sup>	Texoma
Broken Bow	Grand <sup>4</sup>	Mountain Park <sup>3</sup>	Thunderbird <sup>3</sup>
Candy <sup>1</sup>	Great Salt Plains	Oologah	Tuskahoma <sup>1</sup>
Canton	Heyburn	Optima <sup>2</sup>	Waurika <sup>2</sup>
Clayton <sup>2</sup>	Hudson <sup>4</sup>	Pine Creek	Wister
Copan <sup>2</sup>			

<sup>1</sup> Construction authorized.

<sup>2</sup> Presently under construction.

<sup>3</sup> Built by Bureau of Reclamation but under Corps control for flood control.

<sup>4</sup> Built by Grand River Dam Authority but under Corps control for flood control.

#### *Local Flood Control Projects*

Boomer Creeks, Stillwater	Joe Creek, Tulsa
Cherry & Red Fork Creeks, Tulsa	Mud Creek, Idabel
Crutcho Creek Channel Improvement	Oklahoma City Floodway
Enid project	Tulsa and West Tulsa Levee
Flat Rock Creek, Tulsa	Turkey Creek, Bartlesville
Jenks project	Turtle Creek, Yukon

Authority: Map, Tulsa District Projects, dated Sept. 1974. Department of the Army, Tulsa District Corps of Engineers.

<sup>6</sup> Comptroller General Report, *supra* note 4, at 1.

works serve to increase flooding damage by luring additional residents and businesses to the flood plains and by encouraging them to remain.<sup>7</sup> Because no dam, levee, or channel improvement is infallible, a potentially dangerous situation is fostered.<sup>8</sup> The solution, then, is not protective works alone; flood-plain use must be regulated, and in some specific instances, restricted.

Flood-plain restrictions are not only necessary for major rivers, but also for gullies and intermittent streams. Unworthy of dams and levees in the eyes of their first human neighbors, these smaller streams and gullies can become raging torrents during a heavy rain once the watersheds which they drain become fully developed. An example of this effect is the Mingo Creek area of eastern Tulsa.<sup>9</sup> Primarily a rural area twenty-five years ago, the watershed area drained by Mingo Creek is highly developed today. The great increase in runoff caused by development in the Mingo watershed has created a situation in which residents along the creek are frequently driven from their homes by flooding—at least four times in 1974 alone. The United States Corps of Engineers estimates that at least \$18 million will be required to correct the Mingo situation.<sup>10</sup> Unfortunately, the damages and the correction expenses are largely unnecessary; adequate flood-plain regulation would have prevented the problem.<sup>11</sup>

The purpose of this research paper is threefold. First, it is to present a review of the federal government's role in the development of flood-plain

<sup>7</sup> Flood-control protective works are not the only federally sponsored incentives to flood-plain denizens. Professor Plater cites the policy of federal flood relief and the federal flood insurance programs as contributors to the continuing maintenance of persons in flood plains. See Plater, *The Takings Issue in a National Setting: Floodlines and the Police Power*, 52 TEX. L. REV. 201, 209-11 (1974). He notes that in 1972, flood-plain occupants "received \$172.5 million out of the regular disaster relief budget, \$200 million voted by Congress as temporary relief, and \$1.3 billion to finance donations of \$5,000 apiece to floodplain homeowners and low interest reconstruction loans beyond that figure." *Id.* at 210 n.27 (citing N.Y. Times, Aug. 16, 1971, at 13, col. 2).

<sup>8</sup> *Id.* at 209 n.23 (citing *Barr v. Game, Fish & Parks Comm'n*, 30 Colo. App. 482, 497 P.2d 340 (1972)). Most dams are constructed to prevent a 250-year frequency flood.

<sup>9</sup> A great deal has been written about Mingo Creek in Tulsa, Okla. However, one of the best research papers found was written by George Birt and Gilbert R. Caldwell III, titled *Mingo Valley Floodplain Study*, unpublished research paper for Urban Studies, the University of Tulsa, Department of Urban Studies, in the spring of 1974. This research paper includes a summary report on *Open Space Plan, Tulsa Metropolitan Area Planning Commission*, Tulsa, Okla., Mar., 1968, as well as a summary of the United States Army Corps of Engineers, Tulsa District, 1970 Report on *Flood Plain Information—Mingo Creek—Tulsa, Oklahoma*, Mar., 1970. See also Tulsa World, June 1, 1975 ("Your World" Magazine), at 8-11.

<sup>10</sup> Tulsa World, Sept. 20, 1974.

<sup>11</sup> Marcus & Abrams, *Flood Insurance and Flood Plain Zoning as Compatible Components: A Multi-Alternative Approach To Flood Damage Reduction*. 7 NATURAL RESOURCES LAWYER, 581 (Fall 1974). See also *Flood Plain Zoning For Flood Loss Control*, 50 IOWA L. REV. 552 (1965).

zoning. Second, it is to explain how, according to the current laws in the state of Oklahoma, *Oklahoma cannot legally comply with the federal programs*. And third, it is to present a proposed Model Flood Control Act for Oklahoma, which, when adopted, would provide the legal enabling legislation for compliance with the federal flood control programs (see Appendix A).

### *History of Flood Control*

Prior to World War II, almost exclusively, the approach to the problem of flooding was flood control and prevention.<sup>12</sup> Attention was focused on the prevention of floods and emphasis was on the engineering methods by which this could be accomplished.<sup>13</sup> The basic philosophy was that flooding resulted from a phenomenon of nature and could be prevented by altering nature. The result of this approach is a network of dams, levees, and dikes which have been erected across the United States at strategic locations in order to control or prevent flooding. Most of the funds utilized have been federal monies, but state and local expenditures have also been necessary, often creating roadblocks to completion of flood control projects.<sup>14</sup>

Over the last half century, increasing emphasis has been placed on an alternative approach: the reduction of flood loss and damage by exclusion of damage-prone human improvements from flood-plain areas or by other human adjustments to floods. This approach has gained importance in recent years because of an increasing awareness that despite sophisticated engineering technology, flood control measures alone are insufficient. Flood losses have continued to increase over the years as development of flood-plain areas across the country has outstripped flood control projects.<sup>15</sup>

The gradual expansion of this approach to flood loss control began with literature<sup>16</sup> which suggested human adjustment to flooding by such devices as "flood-plain zoning," *i.e.*, the control of development within the flood plain as a means of reducing flood loss, as opposed to the attempted control of the physical phenomenon of flooding. This change in

<sup>12</sup> Dunham, *Flood Control Via the Police Power*, 107 U. PA. L. REV. 1098, 1099 (1959).

<sup>13</sup> Comment, *Ecological and Legal Aspects of Flood Plain Zoning*, 20 KAN. L. REV. 268 (1972).

<sup>14</sup> Comment, *Flood Control and Arizona*, 1973 LAW & SOCIAL ORDER 919, 921 (1973).

<sup>15</sup> White, *Changes in Urban Occupance of Flood Plains in the United States* 9 (Univ. of Chicago Dept. of Geography Research Paper No. 57, 1958); HOYT & LANGBEIN, *FLOODS*, 88 (1955).

<sup>16</sup> Engineering News-Record, Mar. 11, 1937, at 385; White, *Human Adjustment to Floods* (Univ. of Chicago Dept. of Geography Research Paper No. 29, 1942).

approach was accelerated by the Federal Flood Insurance Act of 1956<sup>17</sup> which, in effect, required states to adopt a rather loose form of flood-plain zoning control. The subsidized insurance scheme of the Act provided that the insurance would not be made available until a community had adopted such flood-plain zoning protection as was deemed necessary to reduce flood damage. The Act did stimulate state and local zoning action but was never properly funded to accomplish its purpose.

The 1956 Act has been substantially replaced by the National Flood Insurance Act of 1968.<sup>18</sup> This act allows private insurance companies to issue insurance in flood-prone areas with the premiums subsidized by the federal government. The Act induces the enactment of state and local land-use controls by providing that insurance is available only where local governments in the area show a tangible interest in curbing flood hazards. The Act further attempts to limit development in flood-plain areas by providing that those who subsequently build in flood-prone areas will be penalized by becoming ineligible for subsidized insurance.

A complete discussion of this act is contained in Title 24 of the Housing and Urban Development Act. However, in terms of required land-use control measures, the most important part of the Act is Section 1910.3, which covers the required land use and control measures for flood-prone areas. Specifically, paragraph (a)(1) in pertinent part requires:

(1) building permits for all proposed constructions or other improvements in the community;

(2) review of all building permit applications for new construction or substantial improvements to determine whether the proposed building sites will be reasonably safe from flooding (paragraph (i) in this section contains the requirement for anchorage of mobile homes to prevent flotation and collapse);

(3) review of all subdivision proposals and other proposed new developments to assure that such proposals minimize flood damage;

(4) new or replacement water supply systems and/or sanitary sewage systems to be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters, and requires on-site waste disposal systems to be located so as to avoid impairment of them or contamination from them during flooding.

Under the expanded program the limits of subsidized coverage are doubled, tripled, or more, while rates have been substantially reduced. For example, a homeowner may purchase \$20,000 of flood insurance coverage for about fifty dollars a year. Property owners already protected

<sup>17</sup> 70 Stat. 1078, *repealed by* Pub. L. No. 90-448, 82 Stat. 572 (1968).

<sup>18</sup> 42 U.S.C. §§ 4001-27 (1970).

under the original program can greatly increase their coverage at a very low cost.<sup>19</sup>

The Flood Disaster Protection Act of 1973<sup>20</sup> continues and expands this approach to the problem by increasing the limits of coverage authorized under the National Flood Insurance Program. This act requires the states and local communities, as a condition of further federal financial assistance, to participate in the flood insurance program and to adopt adequate flood-plain ordinances with enforcement provisions consistent with federal standards to reduce or avoid future losses. The 1973 act also requires the purchase of flood insurance by property owners who are being assisted by federal programs or by federally supervised, regulated, or insured agencies or institutions in the acquisition or improvement of land or facilities located or to be located in identified areas having special flood hazards.<sup>21</sup>

Briefly summarized, the two new requirements of the 1973 act are:

1. After March 1, 1974, property owners in communities where flood insurance is being sold must purchase flood insurance to be eligible for any new or additional federal or federally related financial assistance for any buildings located in areas identified by HUD as having special flood hazards.

2. All identified flood-prone communities must have entered the program by *July 1, 1975*. That date, July 1, 1975, was the crucial date.

The problems crystallize when an examination is made of the consequences of a property owner failing to buy the required insurance, or a community failing to meet the deadline.

Federal and federally related financial assistance for buildings in the flood plain will be unavailable to any community or property owner that does not comply with the Act. In essence, all forms of loans and grants, including mortgage loans and disaster assistance loans, from either a fed-

<sup>19</sup> HUD NEWS, DEPARTMENT OF HOUSING & URBAN DEVELOP., Washington, D.C., Feb. 1, 1974, *Questions and Answers, Federal Flood Insurance Program*.

The latest HUD publication on this subject is a booklet called NATIONAL FLOOD INSURANCE PROGRAM, publication of the DEPARTMENT OF HOUSING & URBAN DEVELOPMENT, Washington, D.C. (1974), at 20-43. U.S. Government Printing Office: 1974 O-538-961. HUD-I-54.

<sup>20</sup> Pub. L. No. 93-234, 87 Stat. 975 (1973). See also *Environmental Comment*, Nov. 15, 1974, O'Toole, *Analysis of the National Flood Insurance Program*, published by the Urban Land Institute, Washington, D.C.

<sup>21</sup> The Flood Disaster Protection Act of 1973, Pub. L. No. 93-234, 87 Stat. 975 (1973), is the most important and perhaps the least understood Act in the area of flood-plain zoning and management. In order to clarify the background and present the legal justification for the proposed Model Oklahoma Flood Control Act in the appendix of this research paper, see the summary in Appendix B.

eral agency such as FHA, VA, or the Small Business Administration, or banks or savings and loan institutions, will not be available to the community.<sup>22</sup>

As of November 15, 1975, there are pending in both the United States Senate and the House of Representatives bills to extend the compliance date of this act. These provisions would be passed as emergency implementation provisions of the National Flood Insurance Program.<sup>23</sup>

<sup>22</sup> In the *Congressional Record*, Vol. 121, No. 40 (Mar. 12, 1975), House of Representatives, Representative Robert H. Mollohan reviews the sanctions involved in the Flood Disaster Protection Act of 1973:

"To set forth the impact of the sanctions involved in this law, let me cite a few examples:

"First, a private property owner wishes to sell his residence. The residence is located in the flood plain as designated by HUD. The community—city or county—in which it is located has not participated in the federally subsidized insurance program. The result is that the purchaser must pay cash for the property or the seller must carry the loan personally. Few sellers are in a position to do this and few buyers have cash.

"Second, a community, as a part of its flood plain management program, wants to build a park or recreation area along a river. The Bureau of Outdoor Recreation ordinarily would partially fund the project. But under the new law, BOR could not do this, because the community is not in the flood insurance program."

<sup>23</sup> Subsequent to the writing of this research paper, on Dec. 31, 1975, the President of the United States signed S.J.R. 157, which reads: "Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, that section 202(b) of the Flood Disaster Protection Act of 1973 is amended by striking out 'January 1, 1976' and inserting in lieu thereof 'March 1, 1976.'" The reason expressed was to permit the conferees on the bill H.R. 9852 to conclude consideration on the bill.

Senator Thomas F. Eagleton of Missouri has had a great deal to say on the federal flood insurance program. The *LAND USE PLANNING REPORTS*, Nov. 17, 1975, published the following statement by Senator Eagleton:

"Sen. Thomas F. Eagleton, D-Mo., last week called on Congress to change 'Catch 22' provisions of the federal flood insurance program that he said limit new construction in flood prone areas.

"Eagleton made the plea at November 12 hearings on the flood insurance program by the Senate Banking and Housing Subcommittee on Housing and Urban Affairs.

"The federal flood insurance program, administered by the Department of Housing and Urban Development, provides for land use and construction controls to minimize losses in flood hazard areas. It is one of only four federal programs directly affecting state and local land use decisions that are carried out. Other federal programs directly affecting state and local land management are the coastal zone management program of the Department of Commerce, and the air and water pollution control programs of the Environmental Protection Agency.

"Eagleton said provisions of the flood insurance program, which affects 22,000 communities in the United States, 'effectively limit if not rule out altogether' new construction in flood prone areas.

"The Flood Insurance Act Amendments of 1973 deny federally subsidized construction loans for projects in flood hazard areas if a community fails to join the program. Also, individual homeowners and businessmen are unable to purchase federally-subsidized flood insurance if their community has not joined the program.

"But, Eagleton said if a community agrees to join the program it must adopt federal standards that limit and possibly prohibit the construction to be insured.



However, at present, this act, which also increases the limits on flood insurance available under the National Flood Insurance Act, requires states and municipalities to enact adequate flood-plain regulations or face loss of federal financial assistance.<sup>24</sup> As Professor Dunham has aptly stated, even " 'States-righters' do not let their theology interfere with their business—the business of securing federal expenditures. . . ."<sup>25</sup> Thus far, only 500 of the 12,000 participating communities have fully qualified for the program.<sup>26</sup>

As of October, 1974, approximately 34 Oklahoma communities had enrolled in the federal program.<sup>27</sup> These 34 communities that passed flood-plain zoning ordinances are open to attack from affected property owners.

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" 'It is a Catch 22, or in this case Catch 22,000,' Eagleton said.

"Eagleton also complained that the program forces regulations on some communities that have never had floods, and others that have 'as little as one chance in 100 years of being flooded.'

"In other testimony, Samuel Weese, general manager of the National Flood Insurance Association, said the 124 companies that sell the federally-subsidized insurance are opposed to repeal of the compulsory features of the program because they help spread the risk over more homeowners.

"Robert Shofstahl, a New Orleans savings and loan official who testified for the U.S. League of Savings Association, said that prohibiting loans by federally-chartered financial institutions is the wrong way to discourage construction in flood-prone areas.

"Eagleton has introduced a bill (S 810) that would make flood insurance available to individuals living in communities not participating in the federal program, provided the individual would agree to meet land use requirements."

<sup>24</sup> Readers should not get the idea that all communities participate in this program willingly. "Some communities have entered the program under extreme duress. Marietta, Ohio, is a perfect example. Nearly all of downtown Marietta, the oldest city in Ohio, is in the Ohio River flood plain. Recently, the Marietta City Council met to consider enacting the local ordinances required to enter the flood insurance program. All seven city councilmen strongly objected but were caught in a bind. If they did not approve the ordinances, their constituents would suffer the severe sanctions spelled out in the Flood Disaster Protection Act.

"So, a 'straw vote' was taken—literally. Four 'long straws' and three 'short straws' were prepared. Councilmen who drew the long straws were required to vote for the ordinances. Those fortunate enough to draw the three short straws voted 'nay.'

"And that is how Marietta, Ohio, came into the flood insurance program by a 4-to-3 straw vote." 121 CONG. REC. (Mar. 12, 1975), No. 40, House of Representatives.

<sup>25</sup> Dunham, *Flood Control Via the Police Power*, 107 U. PA. L. REV. 1098 (1959).

<sup>26</sup> Richard Krimm, Assistant Director of the Flood Insurance Administration, stated in an open meeting with Tulsa officials that the agency's monitoring of flood-plain management programs was lax due to a small staff, but he anticipated improvement as additional members are added. Tulsa Tribune, Oct. 1, 1975, at 6A, carried quotations and statements from parts of the meeting.

<sup>27</sup> This material was prepared by Professor Jon W. Bruce for his article *Flood Disaster Protection Act of 1973*, 46 OKLA. B.A.J. q-33, q-34 (Jan. 1975). This material is current as of Oct. 18, 1974.

It is submitted that the state enabling legislation does not provide the grant of authority for the passage of local flood-plain zoning ordinances.

*Flood Language Nonexistent in Oklahoma*

*The National Trend.* The place to look first for justification of the exercise of the power to zone is in the state zoning enabling act.<sup>28</sup> State agencies and local units of government are without power to adopt regulations in the absence of enabling statutes or home rule powers. Courts

Oklahoma Areas Eligible for  
Flood Insurance

<u>Community</u>	<u>Date Hazard Area Identified</u>
Ada	2/8/74
Bartlesville	8/30/74
Bixby	6/28/74
Blackwell	2/1/74
Chickasha	5/24/74
Claremore (R)	8/28/71
Comanche (R)	12/28/71
Del City	3/8/74
Duncan	5/24/74
Edmond	N/A
El Reno (R)	8/17/73
Enid	2/22/74
Hugo	2/23/74
Kingfisher	4/12/74
Lawton	8/9/74
McAlester	2/15/74
Moore	6/7/74
Mooreland	3/15/74
Norman	8/23/74
Oklahoma City (R)	7/18/72
Owasso	1/16/74
Ponca City	2/1/74
Rogers County (R)	11/9/71
Sallisaw	4/5/74
Sand Springs	N/A
Sapulpa	5/11/73
Seminole	6/7/74
Skiatook	6/7/74
Stillwater (R)	6/22/73
Tulsa (R)	8/17/71
Waurika	N/A
Wister	N/A
Woodward	6/14/74
Yukon	5/24/74

(R) designates that the community is in the regular program. The difference between the emergency and regular program lies in the amount of insurance available.

hold that regulations unconstitutionally violate federal or state due process requirements if they are not authorized by enabling statutes or fail to comply with statutory procedures.<sup>29</sup>

The state of Oklahoma has no language in its enabling legislation authorizing the adoption of zoning for a "flood plain." To date, there is no existing separate enabling legislation or provision in the general zoning enabling act that would authorize the passage of "flood-plain zoning" in Oklahoma.<sup>30</sup>

The absence of explicit flood-plain enabling language in Oklahoma becomes increasingly important when considered in comparison with existing legislation in the majority of states. Specific language authorizing the adoption of zoning for "flood-plain areas," "flood control," "flood reduction," or similar objectives, has been inserted by amendment into existing zoning enabling authority, or provided by new acts, for cities or villages in 39 states, counties in 30 states, towns or townships in 27 states, and boroughs in two states. There is specific flood or drainage-related language provided in the subdivision control acts for cities in 30 states, counties in 22 states, towns and townships in 24 states, and boroughs in three states.<sup>31</sup>

<sup>28</sup> HAGMAN, URBAN PLANNING, § 38 at 80-81, § 40 at 83-84 (West 1971).

<sup>29</sup> J. KUSLER & T. LEE, REGULATIONS FOR FLOOD PLAINS (ed. Richard Spicer), American Society of Planning Officials. See specifically Part IV, *Common Legal Questions About a Regulatory Program*, at 11.

<sup>30</sup> The following Oklahoma statutes all relate to zoning in the state of Oklahoma. A careful review of the statutes shows no enabling legislation authorizing the adoption of zoning for "flood plain." Municipal Zoning Act, 11 OKLA. STAT. 401-10 (1923); City Planning Commission Act of 1923, 11 OKLA. STAT. 421-25 (1923); Regional Planning Commission Act of 1923, 11 OKLA. STAT. 431-37 (1923); City-County Planning Commission Act, 19 OKLA. STAT. 863.1-863.48 (1955); City Planning Act of 1947, 11 OKLA. STAT. 1411-36 (1947); Regional Planning Commission Act of 1955, 19 OKLA. STAT. 854.1-854.9 (1955); Metropolitan Area Planning Commission Act, 19 OKLA. STAT. 866.1-866.36 (1957); Lake Area Planning and Zoning Act, 19 OKLA. STAT. 866.1-866.36 (1965); Airport Zoning Act, 3 OKLA. STAT. 101-15 (1945); Lot-Split Act, 19 OKLA. STAT. 867.1 (1965); Capitol Improvement and Zoning Commission Act, 73 OKLA. STAT. 82.1-92 (1953); Medical Center Improvement and Zoning Commission Act, 70 OKLA. STAT. 1307.1-1307.14 (1953); Town and City Plat Act, 11 OKLA. STAT. 511-32, (1910).

<sup>31</sup> Local Flood Hazard Regulations Specifically Authorized\*

<i>State</i>	<i>Zoning</i>	<i>Subdivision</i>	<i>Building Code</i>
Alabama	X	X	X
Alaska		X	
Arizona	X	X	X
Arkansas	X	X	X
California	X	X	
Colorado	X	X	X
Connecticut	X	X	

\* This table was prepared by the United States Department of Housing and Urban Development, Federal Insurance Administration. Nov. 15, 1975.

Flood language has been provided in building code enabling statutes for cities in 11 states and counties in nine states<sup>32</sup> (see Appendix C). None exists in the state of Oklahoma.

In addition to statutes expressly authorizing flood-plain regulations, flood or flood-related language has been inserted into comprehensive or master plan enabling authority for cities in 21 states, counties in 16 states, towns or townships in 15 states, and boroughs in two states.<sup>33</sup>

In most instances, flood language has been inserted into the "purposes" section of zoning or subdivision control enabling statutes by special amendment. However, at least 10 states have adopted special statutes

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Delaware	X	X	
Florida	X	X	
Georgia	X		
Hawaii	X	X	X
Illinois	X	X	X
Indiana	X	X	X
Iowa	X		
Kansas	X	X	
Kentucky	X	X	
Louisiana	X	X	X
Maine	X		
Maryland		X	
Massachusetts	X	X	
Michigan	X	X	
Minnesota	X	X	
Montana	X	X	
Nebraska	X		
Nevada	X	X	
New Hampshire		X	
New Jersey	X	X	
New Mexico	X	X	
New York	X	X	X
North Carolina	X		
North Dakota	X		
Oregon		X	
Pennsylvania	X	X	
Rhode Island	X		
South Carolina	X	X	
Tennessee	X	X	
Texas	X	X	X
Utah	X	X	X
Vermont	X	X	X
Virginia	X	X	
Washington	X	X	
West Virginia	X		
Wisconsin	X		

<sup>32</sup> *Id.*

<sup>33</sup> *Id.* (See specifically Appendix C.)

authorizing or requiring local zoning, subdivision control, building codes, or other regulations for flood insurance purposes.<sup>34</sup> For example, a Louisiana statute broadly provides: "[A]ll parishes and municipalities of the state are hereby authorized to adopt such ordinances, rules and regulations including zoning and land use regulations as are necessary to comply with the requirements of said Act [the Flood Insurance Act] and regulations adopted pursuant thereto. . . ."<sup>35</sup>

In some instances, local units of government have been authorized to regulate flood plains by special enabling acts not primarily related to flood hazards. For example, Wisconsin and Minnesota counties are required to adopt "shoreland" regulations to achieve a wide range of objectives.<sup>36</sup> Shorelands are defined by the act to include flood plain areas. Similarly, town conservation commissions are authorized in Massachusetts to regulate wetland uses which are defined to include flood-plain areas.<sup>37</sup> Connecticut authorizes local units of government to adopt stream encroachment lines by special statute.<sup>38</sup> Several states authorize local units of government to adopt regulations along waterways.<sup>39</sup>

*Oklahoma's Present Status.* In the United States today, three-fourths of the zoning and subdivision control enabling statutes now contain *explicit* flood language.<sup>40</sup> Where explicit flood language is lacking but the state's general enabling statute is broad, it can be argued that the state can pass "flood-plain zoning." Oklahoma's zoning enabling law is a very narrow grant of authority. A study of the Oklahoma enabling law reveals that without explicit flood language, Oklahoma communities are without the authority to pass flood-plain zoning regulations.

Oklahoma's Municipal Zoning Act, virtually unchanged since its original passage, was adopted in 1923 by the Oklahoma legislature.<sup>41</sup> Powers delegated by the Municipal Zoning Act to cities and towns include the right to place proscriptions upon the uses of land and buildings, even

<sup>34</sup> Alabama, Alaska, Arkansas, Hawaii, Louisiana, Minnesota, New York, Tennessee, Texas, and Vermont.

<sup>35</sup> Louisiana Act No. 116, Sess. 2, Laws of 1971, at 373.

<sup>36</sup> WIS. STAT. ANN., § 59.971 (1957 and Supp. 1974); MINN. STAT. ANN., § 105.485 (1962 and Supp. 1974).

<sup>37</sup> MASS. ANN. LAWS, ch. 131, §§ 40-40A (1951 and Supp. 1970, 1973).

<sup>38</sup> CONN. GEN. STAT. ANN., § 7-147 (1973).

<sup>39</sup> HAWAII REV. LAWS, § 46-4 (1965 and Supp. 1972) (counties may regulate along natural watercourses); WIS. STAT. ANN., § 59.97 (1956 and Supp. 1974) (counties may regulate along watercourses).

<sup>40</sup> *Supra* note 31. See also STATUTORY LAND USE CONTROL ENABLING AUTHORITY IN THE FIFTY STATES (Draft Copy), Department of Housing & Urban Development-Federal Insurance Administration. (Nov., 1975); REGULATION OF FLOOD HAZARD AREAS TO REDUCE FLOOD LOSSES, Vols. I & II, U.S. WATER RESOURCES COUNCIL, Washington, D.C. (1970).

<sup>41</sup> 11 OKLA. STAT. ANN. §§ 401-12 (1959 and Supp. 1975).

though such uses are not nuisances, for the general purpose of promoting health, safety, morals, or the general welfare of the community. When this act was passed, few states in the nation had experience with this new field of municipal and real property law, and Oklahoma was, in fact, one of the forerunners in the adoption of zoning legislation. The Oklahoma Municipal Zoning Act was modeled after the United States Department of Commerce's Standard Zoning Enabling Act, a model act designed by the Citizen's Advisory Committee headed by the then Secretary of Commerce, Herbert Hoover.<sup>42</sup> Actually, Oklahoma had a zoning law three years prior to the time the United States Supreme Court held zoning was a valid exercise of the police power in *Euclid v. Amber*.<sup>43</sup>

Zoning had its origin in the banishment of dangerous activities, for which earlier "nuisance ordinances," "building codes," and "fire codes" historically had been enacted. Yet, whole communities came to realize that no one of these pieces of legislation, nor indeed, all of them combined, were able to cope with the complexities of modern city life. This gave rise to an insistent demand that the use of property be controlled and, as a result, the use of land became the pivot about which new enactments began to be created. These creations were but the blending of earlier "hazard ordinances." The product came to be known as the Comprehensive Zoning Ordinance, and the Oklahoma Municipal Zoning Act brought it to the newly formed state and its developing municipal areas.

In Oklahoma there has never been a question about the source of the municipal power to zone. The constitutions of a few states give their municipalities specific power to adopt broad regulations to secure the health, safety, morals, comfort, convenience, and general welfare of the community, and where a constitution grants this power as fully as it can be granted by the state legislature, the municipality, as generally held, can proceed to adopt zoning regulations without waiting for the state legislature to pass a zoning enabling act. *There is no provision in the Oklahoma constitution to this effect.*

*Oklahoma Follows Dillon's Rule.* Oklahoma's courts have consistently followed the rule that cities do not have inherent power to zone, nor may they exercise such power unless provided by state law. A review of case law reveals this without question. Since 1897, the courts in Oklahoma have strictly adhered to Dillon's Rule.

Dillon's Rule was first seen in black letter law in 1872, when Dillon wrote his treatise on Municipal Corporations. It states at Section 55,

It is a general and undisputed proposition of law that a municipal corpora-

<sup>42</sup> HAGMAN, URBAN PLANNING (West 1971).

<sup>43</sup> 272 U.S. 365 (1926).

tion possesses, and can exercise, the following powers, and no others: First, those granted in express words; Second, those necessarily or fairly implied in, or incident to, the powers expressly granted; Third, those essential to the declared objects and purposes of the corporation—not simply convenient, but indispensable. Any fair, reasonable doubt concerning the existence of power is resolved by the courts against the corporation, and the power is denied. . . .<sup>44</sup>

Dillon's Rule was first adopted in Oklahoma in 1897, in the case of *In re Gribben*.<sup>45</sup> After *Gribben*, *Mitchener v. City Comm'rs of City of Okmulgee*<sup>46</sup> cites *Gribben* and repeats Dillon's Rule in its entirety. The stream of cases continue to follow Dillon's Rule completely. *Y & Y Cab Service v. City of Oklahoma City*<sup>47</sup> cites *Mitchener* and follows Dillon's Rule. The court in *Worley v. French*<sup>48</sup> states Dillon's Rule completely in the syllabus of the court, but the wording is not found at all in the body of the opinion.

The court in *Development Industries, Inc. v. City of Norman*<sup>49</sup> cites *Mitchener* and *Worley*, but the ending to the rule has been dropped. In the court's language, the "not simply convenient, but indispensable" ending to the Rule has been dropped. In *Shipp v. Southeastern Oklahoma Indus-*

<sup>44</sup> D. MANDELKER, *MANAGING OUR URBAN ENVIRONMENT* (1963). Professor Mandelker, at page 40, cites Dillon's Rule. He explains:

"The strict construction rule [Dillon's Rule] seems to owe its origins to *Kent's Commentaries*, Kent having made it applicable both to private and public corporations. While the rule of strict construction of private corporation powers is substantially dead, the Dillon Rule survives in full strength in the field of municipal law. A good recent example is *Stoner McCray System v. City of Des Moines*, 247 Iowa 1313, 78 N.W. 2d 843 (1956). The case dealt with a provision in a zoning ordinance requiring the removal, after two years, of nonconforming billboards that were erected in zones in which billboards were not permitted. The ordinance was held unconstitutional. In addition, it was held *ultra vires*. Reliance was placed by the city on the typical statutory zoning authority which authorizes it to: "Regulate and restrict the height and size of structures. . . ."

"[M]unicipalities can exercise only such powers as are expressly granted, or such implied ones as are necessary to make available the powers expressly conferred. Powers granted by the Legislature must be granted in expressed words, and implied powers must be more than simply convenient—they must be indispensable to the exercise of expressed powers. Here the only expressed power given to the city to abate billboards . . . relates only to the abatement of nuisances." *Id.* at 1322, 78 N.W. 2d at 849. See also *Schulman v. People*, 176 N.E. 2d 817 (1961)."

"While the language in the *McCray* case appears in a context in which the statute was held unconstitutional, it is typical and is representative of hundreds of cases on local government powers which, for similar reasons, strike similar attitudes."

<sup>45</sup> 5 Okla. 379, 47 P. 1074 (1897).

<sup>46</sup> 100 Okla. 98, 228 P. 159 (1924).

<sup>47</sup> 167 Okla. 134, 28 P.2d 551 (1934). See also *State ex rel. Woods*, 178 Okla. 567, 63 P.2d 730 (1936).

<sup>48</sup> 184 Okla. 116, 85 P.2d 296 (1938).

<sup>49</sup> 412 P.2d 953 (Okla. 1966).

tries Authority,<sup>50</sup> the court cites *Development Industries* and states, "[C]ounties, cities and towns, have no inherent power or authority, but possess, and can exercise, only those powers granted in express words or necessarily or fairly implied or incidental to the powers expressly granted."<sup>51</sup> In 1973, the court in *Morehead v. Dyer*<sup>52</sup> cites *Development Industries*, explaining, "The power of non-charter municipalities are such as are expressly granted or necessarily implied from a statute."

The Oklahoma courts have continued to follow the rule that cities do not have inherent power to zone, nor may they exercise such power unless provided by state law. Therefore, the power to zone may be delegated by the Oklahoma legislature to cities and towns as a valid exercise of the police power reserved under the states of the Union by the ninth and tenth amendments to the Constitution of the United States.<sup>53</sup> This rule has been followed since it was first announced in the landmark case of *Baxley v. City of Frederick*,<sup>54</sup> Oklahoma's first zoning case, decided in 1928.

Numerous other Oklahoma decisions follow *Baxley* in an unbroken line of precedent.<sup>55</sup> Illustrative of those series of cases involving a mu-

<sup>50</sup> 498 P.2d 1395 (Okla. 1972).

<sup>51</sup> *Id.* at 1407.

<sup>52</sup> 518 P.2d 1105 (Okla. 1973).

<sup>53</sup> *Gruger v. Phillips Petroleum Co.*, 192 Okla. 259, 135 P.2d 485 (1943).

<sup>54</sup> 133 Okla. 84, 271 P. 257 (1928).

<sup>55</sup> Oklahoma zoning cases: *Hensley v. Cities Service Oil Co.*, 58 F.2d 347 (W.D. Okla. 1931); *Oklahoma City v. Dolese*, 48 F.2d 734 (10th Cir. 1931); *Delano v. City of Tulsa*, 26 F.2d 640 (8th Cir. 1928); *K & L Oil v. City of Oklahoma City*, 14 F. Supp. 492 (W.D. Okla. 1936); *Cromwell-Franklin Oil Co. v. City of Oklahoma City*, 14 F. Supp. 370 (W.D. Okla. 1930); *City of Bethany v. Hill*, 509 P.2d 1364 (Okla. 1973); *Motor Lodges, Inc. v. Willingham*, 509 P.2d 901 (Okla. 1972); *Bailey v. Uhls*, 503 P.2d 877 (Okla. 1972); *McAlester Urban Renewal Auth. v. Lorince*, 499 P.2d 925 (Okla. 1972); *Appeal of Moreland*, 497 P.2d 1287 (Okla. 1972); *McNair v. City of Oklahoma City*, 490 P.2d 1364 (Okla. 1971); *Hamilton v. Investment Towers Corp.*, 489 P.2d 488 (Okla. 1971); *Hamilton v. Barber*, 474 P.2d 399 (Okla. 1970); *Brown v. Frazer*, 467 P.2d 464 (Okla. 1970); *Hoffman v. City of Stillwater*, 461 P.2d 944 (Okla. 1969); *O'Rourke v. City of Tulsa*, 457 P.2d 782 (Okla. 1969); *Harrison v. Perry*, 456 P.2d 512 (Okla. 1969); *City of Tulsa v. Mobley*, 454 P.2d 901 (Okla. 1969); *Dumas v. Conyer*, 448 P.2d 835 (Okla. 1968); *Sanditen Investments, Ltd. v. Tomlinson*, 447 P.2d 738 (Okla. 1968); *City of the Village v. McCown*, 446 P.2d 380 (Okla. 1968); *Board of Adjustment of Oklahoma City v. Shanbour*, 435 P.2d 569 (Okla. 1967); *City of Sand Springs v. Colliver*, 434 P.2d 186 (Okla. 1967); *Twist v. Kay*, 434 P.2d 180 (Okla. 1967); *Preston v. City of Stillwater*, 428 P.2d 215 (Okla. 1967); *Seven-Eleven, Inc. v. McClain*, 422 P.2d 455 (Okla. 1967); *Shanbour v. City of Oklahoma City*, 422 P.2d 444 (Okla. 1967); *Botchett v. City of Bethany*, 416 P.2d 917 (Okla. 1966); *City of Tulsa v. Nicholas*, 415 P.2d 917 (Okla. 1966); *Development Indus., Inc. v. City of Norman*, 412 P.2d 953 (Okla. 1966); *Elias v. City of Tulsa*, 408 P.2d 517 (Okla. 1966); *Clouser v. City of Norman*, 393 P.2d 827 (Okla. 1964); *City of Tulsa v. Nicholas*, 385 P.2d 816 (Okla. 1963); *Brown v. City of Midwest City*, 380 P.2d 92 (Okla. 1963); *Suter v. City of Okmulgee*, 373 P.2d 527 (Okla. 1962); *Cauvel v. City of Tulsa*, 368 P.2d 660 (Okla. 1962); *City of Tulsa v. Swanson*, 366 P.2d 629 (Okla. 1961); *Vitale v. Dunnett*, 365 P.2d 122 (Okla. 1961); *Elias v. City of Tulsa*, 364 P.2d 678 (Okla.



municipal attempt to circumvent provisions in the Oklahoma Municipal Zoning Act is *Makrauer v. Board of Adjustment of the City of Tulsa*,<sup>56</sup> where an amendatory zoning ordinance changing the zoning regulations and restrictions was adopted without following specified formalities that included notice and hearing required by the Oklahoma Municipal Zoning Act. The

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1961); *Higginbotham v. City of the Village*, 361 P.2d 191 (Okla. 1961); *Oklahoma City v. Barclay*, 359 P.2d 237 (Okla. 1960); *Board of Adjustment v. Puckett*, 353 P.2d 4 (Okla. 1960); *In re Pierce*, 347 P.2d 790 (Okla. 1959); *Elias v. City of Tulsa*, 342 P.2d 573 (Okla. Cr. 1959); *Garrett v. Watson*, 342 P.2d 560 (Okla. 1959); *Application of Reynolds*, 328 P.2d 441 (Okla. Cr. 1958); *Board of Adjustment v. Board of Education*, 326 P.2d 800 (Okla. 1958); *Robberson v. Board of Oklahoma County Comm'rs*, 302 P.2d 784 (Okla. 1956); *Brown v. City of Durant*, 297 P.2d 407 (Okla. 1952); *Dorris v. Hawk*, 292 P.2d 417 (Okla. 1956); *Fletcher v. Board of Oklahoma County Comm'rs*, 285 P.2d 183 (Okla. 1955); *City of Tulsa v. Mizel*, 265 P.2d 496 (Okla. 1953); *Town of Nichols Hills v. Aderhold*, 207 Okla. 396, 250 P.2d 36 (1952); *Board of Adjustment of City of Tulsa v. Shore*, 207 Okla. 381, 249 P.2d 1011 (1952); *Voight v. Saunders*, 206 Okla. 318, 243 P.2d 654 (1952); *Application of Shadid*, 205 Okla. 462, 238 P.2d 794 (1951); *Ptak v. City of Oklahoma City*, 204 Okla. 336, 229 P.2d 567 (1951); *City of Tulsa v. Fred Jones Co.*, 203 Okla. 321, 220 P.2d 245 (1950); *Makrauer v. Board of Adjustment of City of Tulsa*, 200 Okla. 285, 193 P.2d 291 (1948); *Modern Builders v. Building Inspector of City of Tulsa*, 197 Okla. 80, 168 P.2d 883 (1946); *Scheutz v. Dossey Lumber Co.*, 195 Okla. 439, 158 P.2d 720 (1945); *Torrance v. Bladel*, 195 Okla. 68, 155 P.2d 546 (1943); *Gruger v. Phillips Pet. Co.*, 192 Okla. 259, 135 P.2d 485 (1943); *Thompson v. Phillips Pet. Co.*, 194 Okla. 77, 147 P.2d 451 (1944); *Phillips v. Davis*, 194 Okla. 84, 147 P.2d 135 (1942); *Fidelity Lab. v. City of Oklahoma City*, 190 Okla. 488, 125 P.2d 757 (1942); *City of Oklahoma City v. Harris*, 191 Okla. 125, 126 P.2d 988 (1941); *McGrath v. Brown*, 190 Okla. 144, 120 P.2d 624 (1941); *Magnolia Pet. Co. v. City of Tonkawa*, 189 Okla. 125, 114 P.2d 474 (1941); *Howard v. Mahoney*, 199 Okla. 89, 106 P.2d 267 (1940); *Keaton v. City of Oklahoma City*, 187 Okla. 593, 102 P.2d 938 (1940); *Kiowa v. MKT R.R.*, 185 Okla. 641, 95 P.2d 592 (1939); *Inland Devel. Co. v. Beveridge*, 185 Okla. 174, 90 P.2d 942 (1939); *Cooke v. Westgate-Greenland Oil Co.*, 185 Okla. 209, 90 P.2d 940 (1939); *Amis v. Bryan Pet. Corp.*, 185 Okla. 206, 90 P.2d 936 (1939); *Shaw v. Calgary Baptist Church*, 184 Okla. 454, 88 P.2d 327 (1939); *Cash v. Beveridge*, 183 Okla. 310, 82 P.2d 665 (1938); *Royal Baking Co. v. City of Oklahoma City*, 182 Okla. 45, 75 P.2d 1105 (1938); *Russell v. Murphy*, 177 Okla. 255, 58 P.2d 560 (1936); *American Oil Co. v. Beveridge*, 177 Okla. 203, 58 P.2d 337 (1936); *Reinhart & Donovan Co. v. Refiner's Prod. Co.*, 175 Okla. 522, 53 P.2d 1116 (1936); *Weaver v. Bishop*, 174 Okla. 492, 52 P.2d 853 (1935); *Keaton v. Brown*, 171 Okla. 38, 45 P.2d 109 (1935); *Beveridge v. Westgate*, 171 Okla. 360, 44 P.2d 26 (1935); *Van Meter v. H. F. Wilcox Oil & Gas Co.*, 170 Okla. 604, 41 P.2d 904 (1935); *Van Meter v. Wallace*, 170 Okla. 638, 41 P.2d 839 (1935); *State ex rel. Hunzicker v. Pulliam*, 168 Okla. 632, 37 P.2d 417 (1934); *Beveridge v. Harper & Turner Oil Trust*, 168 Okla. 609, 35 P.2d 435 (1934); *Van Meter v. Westgate Oil Co.*, 168 Okla. 200, 32 P.2d 719 (1934); *Indian Territory Illuminating Oil Co. v. Larkins*, 168 Okla. 69, 31 P.2d 608 (1934); *Hud Oil & Ref. Co. v. City of Oklahoma City*, 167 Okla. 457, 30 P.2d 169 (1934); *C. C. Julian Oil & Royalties Co. v. City of Oklahoma City*, 167 Okla. 384, 29 P.2d 952 (1934); *Phillips Pet. Co. v. Kite*, 167 Okla. 359, 29 P.2d 942 (1934); *Anderson-Kerr, Inc. v. Van Meter*, 162 Okla. 176, 19 P.2d 1068 (1933); *Wright v. City of Guthrie*, 150 Okla. 171, 1 P.2d 162 (1931); *McCurley v. City of El Reno*, 138 Okla. 92, 280 P. 467 (1929); *In re Dawson*, 136 Okla. 113, 277 P. 226 (1929); *City of Bethany v. Brewer*, 42 OKLA. B.A.J. 970 (Ct. App. 1971); *Brown v. Carson*, 39 OKLA. B.A.J. 1916 (Ct. App. 1968); *In re Shanbour*, 39 OKLA. B.A.J. 465 (Ct. App. 1968); *Tulsa Metro. Area Planning Comm'n v. Disney*, 37 OKLA. B.A.J. 2467 (Ct. App. 1966).

<sup>56</sup> 200 Okla. 285, 193 P.2d 291 (1948).

zoning ordinance was struck down by the supreme court for failure to follow the requirements of the state act. In this case, the source of zoning ordinances in the city of Tulsa was traced by Justice Welch, who recited the following history:

Prior to 1923, it does not appear that the City [Tulsa] claimed the right and power to pass and enforce general zoning ordinances. It definitely appears that the City of Tulsa, in adopting its general zoning ordinance, proceeded on the theory that its power to zone the city came from the State Zoning Act. It is clear that a general zoning ordinance was drafted, considered and adopted, in rather strict compliance with the terms of the State Zoning Act; and since that Zoning Ordinance itself, as well as the State Zoning Act, provided the procedure for the adoption of amendments, it would seem that amendatory ordinances should only be adopted in compliance therewith and upon notice or hearing, and that we should so hold unless compelling authority to the contrary is shown. . . .

In several cases this Court has stated that the powers of cities in Oklahoma to pass zoning ordinances came from and by the State Zoning Act of 1923. [Citations omitted.]

It is urged that we should now disapprove or depart from those statements and former decisions, but we are not so persuaded.<sup>57</sup>

Later cases likewise deny the independent power of Oklahoma's cities and towns to adopt zoning ordinances, but approve the power to zone as delegated by the Oklahoma legislature exercising the police power that resides in it in this field.<sup>58</sup>

In zoning matters, municipalities act as the arm of the state government. They carry out the wishes of the state by acting within and pursuant to authority granted to them by the legislature.<sup>59</sup>

In a number of states, including Oklahoma, state constitutions empower cities to adopt so-called home rule charters.<sup>60</sup>

For example, the city charter of the city of Tulsa contains no reference to zoning. The chief reason is that Tulsa's city charter was adopted several years before zoning became a topic of conversation, having been adopted on July 3, 1908, and approved by Governor C. N. Haskell on January 5, 1909. Tulsa's city charter was adopted eight years before the

<sup>57</sup> *Id.* at 288, 193 P.2d at 293.

<sup>58</sup> See *Hamilton v. Barber*, 474 P.2d 399 (Okla. 1970); *City of the Village v. McCown*, 446 P.2d 380 (Okla. 1968); *Preston v. City of Stillwater*, 428 P.2d 215 (Okla. 1967); *Seven-Eleven, Inc. v. McClain*, 422 P.2d 455 (Okla. 1967); *Shanbour v. City of Oklahoma City*, 422 P.2d 444 (Okla. 1967); *Development Indus., Inc. v. City of Norman*, 412 P.2d 953 (Okla. Cr. 1963); *Elias v. City of Tulsa*, 364 P.2d 678 (Okla. 1961).

<sup>59</sup> *Gant v. Oklahoma City*, 160 Okla. 62, 15 P.2d 833 (1932), *aff'd*, 289 U.S. 98 (1933).

<sup>60</sup> OKLA. CONST. art. XVIII, §§ 3(a), (b).

first modern zoning ordinance was passed in New York City in 1916. The New York ordinance became effective almost seven years prior to the adoption of enabling legislation in 1923 by the Oklahoma legislature as Sections 401 through 412 of Title 11. As indicated earlier in *Makrauer*, "Prior to 1923 it does not appear that the City [Tulsa] claimed the right and power to pass and enforce general zoning ordinances. . . ."<sup>61</sup>

The Tulsa charter contains many provisions adopted pursuant to the provisions of Article XVIII of the Oklahoma constitution, Sections 3(a) and (b). Included therein is a listing of the boundaries of the city, the powers of the City Council on taxation features, Police and Fire Department enabling provisos, health, sanitation and cemetery regulations, franchise election provisions, election methods for the Mayor and Board of Commissioners, specifications for the office of City Attorney and other municipal offices, creation of a municipal court, creation of a park board, assessment and collection of municipal taxes, public utilities, streets and sidewalk improvement districts, and certain other general provisions constituting a government for the inhabitants of the community known as the City of Tulsa.

Amendments to the Tulsa charter have been enacted by a vote of the citizens of the community over the years covering a variety of subjects, from taxation (1910), water department creation (1926), duties of the Mayor (1928), creation of a municipal airport (1928), auditor's salary (1946), service pay for public safety officers (1962), to the creation of a Civil Service Commission (1957). The last charter amendment was adopted relating to municipal franchises (1962).

None of the original provisions contained in the city charter of the city of Tulsa, nor any of the amendments to the city charter, refer to zoning. Nor do any refer to any of zoning's component parts (subdivision controls, Board of Adjustment, Planning Commission master plans, lot splits, planned unit developments, etc.).

Finding itself without the power to zone in its city charter, or by virtue of any state enabling act, the city of Tulsa was, from 1908 (incorporation) to 1923 (first zoning ordinance adopted in Tulsa), without a Board of Adjustment or any zoning ordinance of any kind. It obviously did not appear to the founders of this community that they had the power to zone granted to them through any provision of the city charter. The intention of the framers of the city charter did not extend to the land-use regulation field nor to the device of zoning.

History reveals that Tulsa's first zoning ordinance and subsequent zoning ordinances have been adopted pursuant to the Oklahoma Mu-

<sup>61</sup> 200 Okla. 285, 193 P.2d 291 (1948).

nicipal Zoning Act and not pursuant to any charter provision or any provisions of the Oklahoma constitution.

*Attorney General Opinion—Participation in  
National Flood Insurance Program*

*Critical Appraisal.* In 1970, several members of Oklahoma's legislature were concerned about the legality of Oklahoma's participation in the National Flood Insurance Program. An opinion was requested from the state's Attorney General.

Oklahoma's resulting participation in the National Flood Insurance Program, as of 1970, has been based entirely on the Attorney General's opinion.<sup>62</sup> In view of the weight of authority, both in statutes and cases existing today in the United States, it is clear that Oklahoma's Attorney General Opinion No. 70-234, authorizing participation in the National Flood Insurance Program, is in error.

Because an Attorney General Opinion has the "force and effect of law" and all state agencies [including municipalities] are obligated to follow these opinions, it is strongly suggested that this Attorney General Opinion be reviewed in light of the materials presented in this article.

There are basically three ways to change an Attorney General Opinion:

1. At any time, a state Attorney General may overrule his own opinion.
2. The state legislature may write a new statute which overrules the opinion.
3. Any court decision which rules contrary to an opinion automatically supersedes and overrules that opinion.

Presently in Oklahoma, any community passing ordinances in an attempt to comply with the National Flood Insurance Program runs the risk of falling under number three, *supra*. A better solution would be the consideration of the adoption of a specific enabling statute which would overrule the opinion and provide the basis of the authorization for the communities to comply with the National Flood Insurance Program.

The Attorney General Opinion is in error for the following reasons. First, as has been established in this article, through the authors' research, Oklahoma has no specific, explicit language authorizing communities to pass flood-plain zoning regulations. It also has been established that Oklahoma has a very narrow zoning enabling act which would not authorize the passage of flood-plain zoning ordinances in the absence of explicit language for that purpose.

<sup>62</sup> OP. ATT'Y GEN. No. 70-234 (Okla. 1970).

Nowhere in the aforementioned Attorney General Opinion is the history of Oklahoma's Municipal Zoning Act dealt with, nor are the cases which have interpreted this important piece of legislation. In addition, the opinion does not deal with the specific narrow interpretation given Oklahoma's Act since its passage.

Specifically, this opinion interprets Oklahoma's zoning laws in reference to Oklahoma's participation in the National Flood Insurance Program. The state Attorney General was asked the following questions:

1. Do cities, towns, and counties in Oklahoma have the authority to participate in this National Flood Insurance Program?

2. Do they have the authority to establish land-use control measures, zoning ordinances, subdivision regulations, and other applications and extensions of the normal police power to provide safe standards of occupancy for, and prudent use of, flood-prone areas?

There is no basis in law to uphold this opinion of the Attorney General. Specifically, the passage of zoning ordinances, subdivision regulations, and building codes for flood-plain regulatory purposes must be passed pursuant to specific enabling legislation. Oklahoma cities and towns have no expressed authority under any existing state statute to participate in the National Flood Insurance Program. Nor do Oklahoma cities have power to establish measures pursuant to any alleged authority. Oklahoma's Municipal Zoning Act is a narrow grant of power and cannot be construed so as to authorize the grant of power to a community to pass flood-plain zoning ordinances.<sup>63</sup>

*Recent Oklahoma Building Moratorium in  
a Flood-Plain Regulation Context*

*Critical Appraisal.* A building moratorium for whatever purposes—noble or otherwise—is an interim zoning control.<sup>64</sup> Although

[t]here is no established definition of interim zoning, many types of land use controls may be characterized as such. As used here interim zoning controls are broadly defined as techniques for safeguarding a community's land use planning and regulatory process by restricting and sometimes even prohibiting development for a relatively short period of time.<sup>65</sup>

The city of Tulsa, Oklahoma, recently passed an ordinance<sup>66</sup> declar-

<sup>63</sup> *Supra* notes 30, 45-59.

<sup>64</sup> WILLIAMS, *AMERICAN LAND PLANNING LAW* (1975).

<sup>65</sup> 2 *MANAGEMENT AND CONTROL OF GROWTH*, ch. 12 (R. Scott ed. 1975). *See also* HETTER, *INTERIM ZONING CONTROLS: SOME THOUGHTS ON THEIR USES AND ABUSES*, 409-14 (1975).

<sup>66</sup> Ordinance No. 13498, Approved Oct. 14, 1975.

ing a moratorium prohibiting construction and prohibiting the issuance of building permits in a flood-plain regulation context. It is submitted that this building moratorium in the city of Tulsa, passed without enabling legislation for interim zoning regulations is *ultra vires*. Furthermore, in light of current statutes and cases, it is argued strongly that this ordinance would be held invalid upon a court challenge by affected property owners.

Because the Standard State Zoning Enabling Act did not provide for interim zoning, it is doubly important that an interim zoning ordinance be enacted pursuant to state enabling legislation.<sup>67</sup> As Professor Hagman explains:

The Standard State Zoning Enabling Act (SZEa) did not provide for temporary or interim zoning but rather contemplated the adoption of permanent zoning after study and the following of several procedural steps. . . . Several states have now authorized interim zoning by special legislation.<sup>68</sup>

Oklahoma has not authorized interim zoning by special legislation.

To date, 13 states have passed enabling statutes authorizing the adoption of interim zoning regulations by cities, counties, or towns.<sup>69</sup> Oklahoma has no interim zoning enabling legislation.

Even in states that have passed interim zoning enabling legislation, and subsequently interim zoning ordinances, the courts are not in agreement as to the validity of interim zoning ordinances in general.<sup>70</sup> There is

<sup>67</sup> HAGMAN, *URBAN PLANNING* (West 1971), at 84.

<sup>68</sup> *Id.* at 84-85.

<sup>69</sup>

State	Interim Controls	
	Initial Term Length	Extension Term
California	4 months or 1 year	1 for 1 yr. or 1 for 8 mos., 1 yr. (2 year total)
Colorado	6 months	
Kentucky		
Michigan	1 year	1 for 2 years (3 year total)
Minnesota	1 year	1 for 1 year (2 year total)
Montana	1 year	1 for 1 year (2 year total)
New Hampshire		
Oregon	3 years	
S. Dakota	1 year	1 for 1 year (2 year total)
Utah	6 months	
Vermont	2 years	3 for 1 year (5 year total)
Washington		
Wisconsin	2 years	1 for 1 year (3 year total)

\* This table was prepared by the United States Department of Housing and Urban Development, Federal Insurance Administration. Nov. 15, 1975.

<sup>70</sup> For a basic discussion of interim zoning ordinances see *generally Validity and Effect of "Interim" Zoning Ordinance*, Annot. 30 A.L.R.3d 1196 (1970); 14 W. RES. L. REV. 135 (1962); 18 SYRACUSE L. REV. 837 (1967).

conflict in the decisions concerning the validity of interim ordinances. In Yokley's *Zoning Law and Practice*,<sup>71</sup> the reason for the conflict is explained as a result of the diversity of state constitutional and/or statutory provisions. The cases, however, do reflect a common thread—in order for an interim zoning ordinance to be valid, it must be passed in accordance to procedures set forth in the enabling legislation.<sup>72</sup> The leading case in this group is *Kline v. City of Harrisburg*.<sup>73</sup> *Kline* has been the case most often cited for the proposition that *an interim zoning ordinance is invalid if it is not enacted in accordance with the enabling legislation*. Thus, the result in *Kline* would weaken the holdings of earlier cases such as *Miller v. Board of Public Works*<sup>74</sup> and *Lima v. Woodruff*.<sup>75</sup>

*Alexander v. City of Minneapolis*<sup>76</sup> continues the theory of *Kline* and particularly notes that a community cannot have a stop-gap ordinance for an indefinite period of time. In 1974, the court held an interim zoning ordinance invalid because the comprehensive plan was not forthcoming in *Lake Illyria Corp. v. Town of Gardiner*.<sup>77</sup>

Cases holding an interim zoning ordinance valid are *Gayland v. Salt Lake County*,<sup>78</sup> *Metro Realty v. County of El Dorado*,<sup>79</sup> *Rubin v. McAlevey*,<sup>80</sup> *Denning v. County of Maui*,<sup>81</sup> and *CEED v. California Coastal Zone Conservation Commission*.<sup>82</sup>

Professor Robert H. Freilich, a noted authority on urban land use law in America, has written extensively on the subject of interim zoning controls. Professor Freilich's recurring thesis supports the position taken in this article that in order for an interim zoning ordinance to be valid and constitutional, it must be passed in accordance with state enabling legislation.<sup>83</sup>

<sup>71</sup> § 78 (2d ed. 1953).

<sup>72</sup> See, e.g., *State ex rel. Fairmount Center Co. v. Arnold*, 138 Ohio St. 259, 34 N.E.2d 777 (1941); *State ex rel. Kramer v. Schwartz*, 336 Mo. 932, 82 S.W.2d 63 (1935).

<sup>73</sup> 362 Pa. 438, 68 A.2d 182 (1949).

<sup>74</sup> 195 Cal. 477, 234 P. 381 (1925).

<sup>75</sup> 107 Cal. App. 285, 290 P. 480 (Dist. Ct. App. 1930).

<sup>76</sup> 267 Minn. 155, 125 N.W.2d 583 (1963). See also *State ex rel. Holiday Park, Inc. v. City of Columbia*, 479 S.W.2d 422 (Mo. 1972); *Silvera v. City of South Lake Tahoe*, 3 Cal. App. 3d 554, 83 Cal. Rptr. 698 (1970).

<sup>77</sup> 43 App. Div. 2d 386, 352 N.Y.S.2d 54 (Sup. Ct. 1974).

<sup>78</sup> 11 Utah 2d 307, 358 P.2d 633 (1961).

<sup>79</sup> 222 Cal. App. 2d 508, 35 Cal. Rptr. 480 (1963).

<sup>80</sup> 54 Misc. 2d 338, 282 N.Y.S.2d 564, *aff'd*, 29 App. Div. 2d 874, 288 N.Y.S.2d 519 (Sup. Ct. 1967).

<sup>81</sup> 485 P.2d 1048 (Hawaii 1971).

<sup>82</sup> 43 Cal. App. 3d 306, 118 Cal. Rptr. 315 (1974).

<sup>83</sup> See Freilich, *Interim Development Controls; Essential Tools for Implementing Flexible Planning and Zoning*, 49 J. URBAN L. 65 (1971); Freilich, *Missouri Law of Land Use Controls: with National Perspectives*, 42 UMKC L. REV. 1 (1973) (interim zoning at 44); Freilich

*Conclusion*

The most common legal question about a federal regulatory program is whether present enabling statutes are sufficient. Everyone asks about this. No one answers the question. If it is answered, the reply is usually lost or brushed over and the regulatory program is put into effect.

In the area of flood control, the question concerning the present enabling statute in Oklahoma is *crucial*. We know that land-use control enabling statutes and case law interpretations differ from state to state. Indeed, flood-plain regulations vary widely depending on their scope and content. Therefore, any generalizations made in this area will be, at best, barely tenable. One generalization, however, that must be made concerns the existence of enabling statutes. Some form of enabling legislation must exist which permits local units of government to adopt regulations related to flood control.

Local units of government possess only the powers specifically delegated to them in general or special enabling acts. This article points out that legislatures in almost all states have some form of authorization which allows cities and villages, and often towns and counties, to adopt flood-plain regulation controls. Oklahoma is not one of those states.

Thirty-four communities in Oklahoma have passed flood-plain zoning ordinances to date. These communities are open to litigation from affected property owners because flood-plain zoning enabling legislation does not exist.

Consideration should be given immediately to the passage of some form of the proposed Model Oklahoma Flood Control Act set forth in Appendix A.

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& Ragsdale, *Timing and Sequential Controls—The Essential Basis for Effective Regional Planning: An Analysis of the New Directions for Land Use Control in the Minneapolis-St. Paul Metropolitan Region*, 58 MINN. L. REV. 1009 (1974) (interim development controls at 1048).



*Appendix A*

*PROPOSED MODEL OKLAHOMA FLOOD CONTROL ACT*

*CHAPTER I. FLOOD PLAIN MANAGEMENT*

*Article 1. General Provisions.*

§ 101. *Short Title.*

This Chapter shall be known, designated, and cited as the *Oklahoma Flood Plain Management Act*.

§ 102. *Legislative Determination—Declaration of Policy.*

Recurrent flooding of a portion of the State's land resources causes loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare. The cities, towns, and counties of Oklahoma are authorized to delineate and regulate areas subject to recurrent flooding for the purposes of preventing and alleviating these flood losses and promoting the most suitable use of community lands, pursuant to authority granted to them in this Act as well as all other applicable statutes. Those regulations shall be based upon sound studies and may include, but are not to be limited to: (A) Regulations for uses including uses of local units of government and agricultural uses which may obstruct floodflows or otherwise threaten public health, safety, or general welfare; (B) Regulations which establish minimum flood protection elevations and flood damage prevention requirements for uses, structures, and facilities such as streets, sewers, and water systems which are vulnerable to flood damage. Wherever possible, regulations adopted under this section shall be in accordance with comprehensive land use plans and ordinances. Appropriate conditions to effectuate the purposes of this act may be attached to permits or permission for use or development of flood hazard areas.

*Comment:* This provision is based on the proposed model "comprehensive" amendment for flood plain regulatory purposes found in Vol. 1, *Regulation of Flood Hazard Areas to Reduce Flood Losses*, published by the United States Water Resources Council.

§ 103. *Definitions.*

In this Chapter, unless the context otherwise requires:

- (1) "Area of jurisdiction" means
  - (a) For an incorporated town or city, all of the lands within the town or city.
  - (b) For a county, all of the unincorporated areas of the county.

- (2) "Dwelling unit" means a place of residence and may be located in a single or multiple-dwelling building.
- (3) "Flood" or "Flooding" means general and temporary conditions of partial or complete inundation of normally dry land areas from the overflow of lakes, streams, rivers, or any other inland waters, or the condition existing when the waters of any lake, stream, river, or any other inland waters temporarily rise to an unusual height above the normal level of such lake, stream, river, or any other inland waters.
- (4) "One hundred-year flood" means a flood which has a one per cent chance of occurring each year, based upon the criteria established by the Oklahoma Conservation Commission.

*Comment:* This generally means the highest level of flooding that is expected to occur on the average of once in every 100 years.

- (5) "Flood plain" means the land adjacent to a body of water which has been or may be thereafter covered by flood water, including but not limited to the one hundred-year flood.

*Comment:* A flood plain is generally that land area adjoining a river, stream, watercourse, swamp, or lake, which is likely to be flooded.

- (6) "Flood-plain regulations" means the codes, ordinances and other regulations relating to the use of land and construction within the channel and flood-plain areas, including but not limited to zoning ordinances, subdivision regulations, building codes, housing codes, setback requirements, open area regulations.
- (7) "Person" means any individual or his agent, firm, partnership, association, corporation, or agent of the aforementioned groups, or the state or any agency or political subdivision thereof.
- (8) "Flood-plain board" means the governing body of an incorporated city, town, or county.
- (9) "Watercourse" means any natural or artificial channel of perceptible extent, with a definite bed and banks to confine and conduct continuously or periodically flowing water. The term may include specifically designated areas in which substantial flood damage may occur.
- (10) "Program" means the overall national flood insurance program authorized by the National Flood Insurance Act of 1968 (P. L. 90-448) as amended.
- (11) "Commission" means the Oklahoma Conservation Commission.

*Comment:* This Section is largely identical to ARIZ. REV. STAT. ANN. § 45-2341, except that subsections 3., 5., and 9. have been revised to use those definitions found at p. 54 of "Regulations for Flood Plains," ed. Spicer, American Society of Planning Officials Planning Advisory Service Report No. 277, Feb. 1972. (Chicago). Subsection 4. has been corrected by the authors, and subsection 10. is our own.

§ 104. *Local Powers: Preemption.*

None of the provisions of this Chapter shall be so construed as to invalidate any existing rules or regulations or ordinances adopted pursuant to other provisions of law or charter and prior to the effective date of this article, which provisions are equal to the minimum standards set forth herein.

*Comment:* From ARIZ. REV. STAT. ANN. § 45-2346, this Section prevents this Chapter from invalidating any local flood-plain regulations currently in effect, so long as they meet the minimum standards of this Chapter. For a listing of communities which have taken steps to comply with the federal flood insurance program, see Bruce, *Flood Disaster Protection Act of 1973*, 46 OKLA. B.A.J. q-33 (1975).

§ 105. *Construction.*

This legislative act shall be complete authority for the accomplishment of purposes hereby authorized and shall be liberally construed to accomplish its purposes.

*Comment:* From WASH. REV. CODE. ANN. § 86.18.910 (1972 Supp.).

§ 106. *Severability.*

If any provisions of this Chapter, or its application to any person or circumstance is held invalid, the remainder of the Chapter, or the application of the provision to other persons or circumstances is not affected.

*Comment:* From WASH. REV. CODE. ANN. § 86.18.910 (1972 Supp.).

§ 107. *Repeal of Conflicting Laws.*

All laws and parts of laws in conflict with any provision of this Chapter are hereby repealed, but not only to the extent that the same are irreconcilable with the provisions of this Chapter. The repeal by this act of any law shall not have the effect of reviving any prior law theretofore repealed, superseded, or amended by such repealed law.

*Comment:* From 82 OKLA. STAT. ANN. §§ 1501-805, 1501-806.

*Article 2. Powers and Duties of Commission and Flood-Plain Boards*

§ 201. *Flood-Plain Delineation Criteria.*

Within 180 days after the effective date of this Act, the Commission shall develop, adopt, and publish criteria and regulations for aiding the flood-plain boards in the establishment and delineation of the flood plains and the one hundred-year floods for the State of Oklahoma.

*Comment:* From ARIZ. REV. STAT. ANN. § 45-2342 (A). Wording has been changed to emphasize that actual establishment shall be conducted at the local level. Time frame was extended for practical reasons.

§ 202. *Delineation of Flood Plains by Local Flood-Plain Boards.*

Within one year after the effective date of this act, the flood-plain boards shall delineate and submit to the Commission all flood plains and one hundred-year floods within the respective jurisdiction of each, using

methods consistent with the criteria and regulations developed by the Commission.

*Comment:* From ARIZ. REV. STAT. ANN. § 45-2342(B).

§ 203. *Enactment of Flood-Plain Regulations Required.*

All flood-plain boards shall adopt flood-plain regulations which shall include the following:

- (1) Regulations for all subdivision of land, construction of dwelling units, construction of commercial or industrial structures, and all uses which may divert, retard, or obstruct flood water and threaten public health, safety, or welfare.
- (2) Regulations which establish minimum flood protection elevations and flood damage prevention requirements for uses, structures, and facilities which are located in a flood plain or are vulnerable to flood damage. Regulations adopted under this Section are to be in accordance with State and local land use plans and ordinances, if any.
- (3) Regulations which provide for coordination by the flood-plain board with all other interested and affected political subdivisions and State agencies.

All flood-plain regulations adopted under this Section shall conform with the requirements necessary for establishing eligibility and maintaining participation in the National Flood Insurance Program.

*Comment:* Taken from ARIZ. REV. STAT. ANN. § 45-2342(C). The last provision is taken from H.B. 498, considered by the Missouri 78th General Assembly in 1974. The elevations referred to in § 203(2) must comply with the current maps issued by the Federal Insurance Administration.

§ 204. *Cooperation Between Flood-Plain Boards Encouraged.*

Flood-plain boards may enter into cooperative agreements pursuant to Tit. 74, Ch. 31, the "Interlocal Cooperation Act," for the delineation of flood plains and adoption of regulations within such flood plains.

*Comment:* Taken from ARIZ. REV. STAT. ANN. § 45-2342(D). The purpose of this Section is to encourage a more comprehensive approach to flooding problems than is possible when each locality works alone.

§ 205. *Public Notice Required.*

Flood-plain regulations enacted pursuant to this Chapter may only be adopted after a public hearing at which parties in interest and other citizens have an opportunity to be heard. At least thirty (30) days prior to the hearing, a notice of the time and place of hearing shall be published in a newspaper of general circulation regularly published nearest the area of jurisdiction.

*Comment:* From ARIZ. REV. STAT. ANN. § 45-2342(E). This Section has the double purpose of (1) informing persons who may be directly affected by the

board's actions, thus affording due process of law, and (2) enabling the board to obtain valuable citizen feedback in its planning process.

§ 206. *Notification of Commission Required.*

At least thirty (30) days prior to the date of any hearing required by § 205, written notice shall be furnished the Commission, accompanied by a copy of each proposed rule or regulation to be acted upon. A copy of any regulation adopted by a flood-plain board pursuant to this Chapter shall, within five (5) days of its adoption, be filed with the Commission.

*Comment:* From ARIZ. REV. STAT. ANN. § 2342(E).

§ 207. *Redefinition of Flood Plains Required.*

Within 180 days after the completion of construction of any flood control protective works, the flood-plain board in each jurisdiction affected shall, within its area of jurisdiction, redefine the flood plain as altered by the works. The new flood plain definition shall then be submitted to the Commission for approval.

*Comment:* From ARIZ. REV. STAT. ANN. § 45-2342(F). This Section assures that lands which are by reason of flood control works, freed of the flood plain, shall be returned to the fuller productivity.

*Article 3. Proscribed Development in Flood Plains.*

§ 301. *Development Proscribed; When. Special Permits.*

One year after the effective date of this Chapter, and at all times thereafter, all subdivision of land, all construction of dwelling units or commercial or industrial structures, and all future development within delineated flood-plain areas is prohibited unless:

- (1) Flood-plain regulations have been adopted pursuant to this Chapter for such flood-plain areas and are in full force and effect; or
- (2) Prior to regulations having been adopted, a special permit is granted by the flood-plain board; or
- (3) A special permit is granted by the State agency having the primary land management administrative duty over the lands, if development or construction is to be on lands owned or held in trust by the State.

*Comment:* From ARIZ. REV. STAT. ANN. § 45-2342(F). This Section provides exceptions for special circumstances. Also, an exception is allowed for lands held by the state. Criteria for issuance of special permits are set out in the next Section.

§ 302. *Criteria for Issuing Special Permits.*

Special permits authorized by § 301 may be issued when the applicable flood-plain board or State agency determines that construction or development in the flood plain in question is not a danger to persons or property. In making its determination, the flood-plain board or State agency shall comply with § 205 and § 206 of this Chapter.

*Comment:* From ARIZ. REV. STAT. ANN. § 45-2342(G). This Section allows for

development in jurisdictions which have not completed regulations, but requires notice and public hearings as well as notification to the Commission.

§ 303. *Pre-existing Uses Not Affected.*

Nothing in this Chapter or any regulation adopted pursuant to this Chapter shall:

1. affect uses of property existing on the effective date of this Chapter, or the right to the continuation of the use; or
2. affect reasonable repair or alteration of property for the purposes for which such property was used on the effective date of this Chapter.

*Comment:* From ARIZ. REV. STAT. ANN. § 45-2342 (H).

Alternate

§ 303. *Pre-existing uses.*

Pre-existing uses which on the effective date of this act do not meet the minimum standards set forth herein may continue. However, unless brought into compliance with the minimum standards set forth in this act:

- (1) may not be substantially altered, enlarged, or added to;
- (2) if damaged to more than 50 per cent of replacement cost, may not be repaired, reconstructed, or replaced.

In no case may nonconforming uses located in a floodway be repaired, reconstructed, or replaced without specific approval of the local flood-plain board.

*Comment:* Patterned after H.B. 1336, "Floodprone Area Protection Act of 1974," aspects of which are currently being considered by the Missouri 78th General Assembly. This alternate Section is more stringent than that one which is based upon the Arizona provision.

§ 304. *Variances.*

The flood-plain board may grant variances for uses which do not satisfy the requirements of this Chapter upon presentation of adequate proof that compliance with the local flood-plain regulations adopted pursuant to this Chapter will result in an arbitrary and unreasonable taking of property without sufficient benefit or advantage to the people. However, no variance shall be granted where the effect of the variance will be to permit the continuance of a condition which unreasonably creates flooding hazards, and any variance so granted shall not be construed as to relieve any person who receives it from any liability imposed by this Chapter or by other laws of the State.

*Comment:* From H.B. 1336, Missouri 77th General Assembly.

§ 305. *Filing for a Variance.*

Any person seeking a variance shall file a petition with the flood-plain board, accompanied by a filing fee of twenty-five dollars (\$25.00).

*Comment:* From H.B. 1336, Missouri 77th General Assembly.

§ 306. *Procedures for Granting Variance.*

The flood-plain board shall exercise wide discretion in weighing the equities

involved and the advantages and disadvantages to the applicant and to the public at large when determining whether the variance shall be granted. The flood-plain board shall conduct a hearing which complies with all requirements of this Chapter for public notice. In no case shall variances be effective for a period longer than twenty (20) years. A copy of any variance issued shall be sent to the Commission within five (5) days of its publication.

*Comment:* From H.B. 1336, Missouri 77th General Assembly.

§ 307. *Declaration of Public Nuisance; Abatement.*

Every new structure, building, fill, excavation, or development located or maintained within any flood plain in violation of flood-plain regulations established by the flood-plain board and without written authorization from such board is a public nuisance *per se* and may be abated, prevented, or restrained by action of the State or any political subdivision thereof.

*Comment:* From ARIZ. REV. STAT. ANN. § 45-2344.

*Article 4. Proscribed Development in Watercourses.*

§ 401. *Development in Watercourses Prohibited.*

No person shall construct any structure which will divert, retard, or obstruct the flow of waters in any watercourse without securing written authorization from the flood-plain board in which the watercourse is located.

*Comment:* From ARIZ. REV. STAT. ANN. § 45-2343(A). This Section gives the local flood-plain board opportunity to determine prior to its construction whether the proposed structure will be a hazard.

§ 402. *Exception.*

Written authorization shall not be required nor shall the flood-plain board prohibit the construction of bridges, culverts, dikes, and other structures necessary to the construction by cities, towns, counties, and the State of public highways, roads, and streets intersecting or crossing a watercourse.

*Comment:* From ARIZ. REV. STAT. ANN. § 45-2343(B). This Section exempts cities, towns, counties, and the state from seeking authorization from the flood-plain board. The Arizona provision also exempted agricultural, mining, and metallurgical operations, as well as local flood control improvements.

§ 403. *Standing to Initiate Abatement Proceedings.*

The State of Oklahoma, any political subdivision, or any person who may be damaged as a result of the diversion, retardation, or obstruction of a watercourse shall have the right to commence, maintain, and prosecute any appropriate action or pursue any remedy to enjoin, abate, or otherwise prevent any person from violating or continuing to violate any provision of this article.

*Comment:* From ARIZ. REV. STAT. ANN. § 45-2343(C). Recognizing the con-

siderably greater danger inherent in watercourse structures, this Section gives individual parties standing to abate such as a nuisance.

§ 404. *Cause of Action Created.*

If any person shall be found to be in violation of any provision of this article, the Courts of the State of Oklahoma shall require the violator either to comply with this article or remove the obstruction and restore the watercourse to its original state.

*Comment:* From ARIZ. REV. STAT. ANN. § 45-2343(C).

§ 405. *Unlawful Acts; Penalty.*

It is unlawful for any person to divert, retard, or obstruct the flow of waters in any watercourse which will create a hazard to life or property, without securing the written authorization required by § 401. Any person violating the provisions of this Section shall be guilty of a misdemeanor.

*Comment:* From ARIZ. REV. STAT. ANN. § 2345.

## CHAPTER II. FLOOD CONTROL CONTRIBUTION FUND

### Article 1. General Provisions.

§ 101. *Short Title.*

This Chapter shall be known, designated, and cited as the "Oklahoma Flood Control Contribution Fund Act."

§ 102. *Legislative Determination-Declaration of Policy.*

Economic development and growth of the State is dependent on the control of flood waters. The Legislature declares, in the exercise of its sovereign and police powers, that the purpose of the Chapter is to provide for contributions of funds for assisting the cities, town, and counties of the State in the protection of lands from inundation; the protection of public highways; the control of storm drainage; the maintenance of stream channels and watercourses; and the protection of life and property. It is the intent of the Legislature that funds be provided to cities, towns, and counties of the State to assist in the development of those flood-control improvements and projects which cannot be reasonably and practicably financed through the normal methods available to such political subdivision, so that the maximum benefit can be made of available federal monies.

*Comment:* From WASH. REV. CODE. ANN. § 86.18.010. This article is also based upon 82 OKLA. STAT. ANN. § 1501-701 *et seq.*, and is similar in concept to the Oklahoma Small Watersheds Flood Control Fund.

§ 103. *Construction.*

This legislative proposal shall be complete authority for the accomplishment of purposes hereby authorized, and shall be liberally construed to accomplish its purposes.



*Comment:* FROM WASH. REV. CODE. ANN. § 86.18.900.

§ 104. *Severability.*

If any provision of this Chapter, or its application to any person or circumstance is held invalid, the remainder of the Chapter, or the application of the provision to other persons or circumstances is not affected.

*Comment:* FROM WASH. REV. CODE. ANN. § 86.18.910.

*Article 2. Creation of the Flood Control Contribution Fund.*

§ 201. *Fund Created.*

There is hereby created a revolving fund to be known as the Flood Control Contribution Fund, which shall consist of all monies appropriated to, deposited in, or credited to said fund.

*Comment:* This Section is based upon 82 OKLA. STAT. ANN. § 1501-701, which creates a similar fund for Small Watersheds Flood Control.

§ 202. *Control.*

The Flood Control Contribution Fund shall be under the control and supervision of the Commission, and shall be paid on its itemized form which shall be audited by said Commission. Upon Commission approval, vouchers which are payable from the fund shall be forwarded to the Director of State Finance, who shall audit the same, and upon approval warrants shall be issued according to law. The warrants shall be paid by the State Treasurer from the Flood Control Contribution Fund.

*Comment:* This Section is based upon 82 OKLA. STAT. ANN. § 1501-703, and uses a procedure identical to the one used in conjunction with the Oklahoma Small Watersheds Flood Control Fund.

§ 203. *State Held Harmless.*

The Commission shall not disburse any monies appropriated to it pursuant to this Chapter unless the city, town, or county which is to receive said monies has in writing assumed all obligations of maintenance and provided the Federal Government and the State of Oklahoma with written indemnification from damages due to the construction of flood control projects.

*Comment:* FROM ARIZ. REV. STAT. ANN. § 45-2707.

§ 204. *Report to Legislature.*

The Commission shall report to the Legislature, within fifteen (15) days after the commencement of each regular session on the disbursal or refusal to disburse money appropriated to it by the Legislature for purposes of this chapter.

*Comment:* FROM ARIZ. REV. STAT. ANN. § 45-2709.

*Article 3. Conditions and Limitations on Contributions From Fund.*

§ 301. *Application for Contribution to Flood Control Projects.*

At such times as federal funds become available in this State for the construction of any flood-control project, the flood-plain board of any city, town, or county affected may make application to the Commission for contribution from the fund. In support of its application, the flood-plain board must include the following:

- (1) Engineering studies and a comprehensive plan for the area involved; and
- (2) The estimate of cost of acquisition of necessary lands, rights of way, and construction of the project or improvements, together with adequate supporting data; and
- (3) Date on which the State contribution will be needed.

*Comment:* From ARIZ. REV. STAT. ANN. § 45-2702 and WASH. REV. CODE. ANN. § 86.18.030. For more information on the Arizona contribution program, see Note, *Flood Control and Arizona*, LAW AND THE SOCIAL ORDER 919 (1973).

§ 302. *Application for Contribution to Flood-Plain Delineation Projects.*

The flood-plain board of any city, town, or county seeking to comply with Chapter I of this Act may make application to the Commission for contribution from the fund, toward the local cost of flood-plain delineation.

*Comment:* For a summary of federal assistance and local funding requirements in the area of flood-plain delineation, see Part VI, *Regulations for Flood Plains*, A.S.P.O. PLANNING ADVISORY SERVICE Report No. 277, Feb. 1972.

§ 303. *Approval by Commission; Certification to Legislature.*

The Commission shall, upon receipt of an application under § 301 or § 302, investigate into the work contemplated by the application. Upon completion of its investigation, the Commission shall report to the Legislature its findings and recommendations, and shall certify to the Legislature that the applicant flood plain is in full compliance with this Chapter. In addition, the Commission shall certify to the Legislature the date State funds should be appropriated to pay the cost of State participation in such project and the estimated contribution amount.

*Comment:* From ARIZ. REV. STAT. ANN. § 45-2702 and WASH. REV. CODE. ANN. § 86.18.030.

§ 304. *Limitation on Financial Assistance.*

The Legislature may appropriate funds to the Flood Control Contribution Fund upon request of the Commission under § 303, not to exceed two-thirds (2/3) of the nonfederally supported cost of:

- (1) the purchase of lands, easements, and rights of way necessary in connection with the construction of any federal or federally assisted flood control project; and
- (2) flood plain, floodway, and one hundred-year delineation.

*Comment:* From ARIZ. REV. STAT. ANN. § 45-2705.

§ 305. *Effect of Failure to Adopt Flood-Plain Regulations.*

The Commission shall not disburse any monies from the Flood Control Contribution Fund to pay any cost of lands, easements, and rights of way for a flood-control project to any city, town, or county which is not in full compliance with Chapter I.

*Comment:* From ARIZ. REV. STAT. ANN. § 45.2704.

§ 306. *Limitation on Expenditure of Funds.*

The Commission shall not disburse any funds from the Flood Control Contribution Fund until the Legislature has appropriated funds to contribute under this Chapter. The Commission shall not undertake the construction of flood-control projects.

*Comment:* From ARIZ. REV. STAT. ANN. § 45.2703.

*Appendix B**BACKGROUND OF THE FLOOD DISASTER PROTECTION ACT  
OF 1973\**

The Congress is acutely aware of the national need for a reliable and comprehensive flood insurance program to provide adequate indemnification for the loss of property and the disastrous personal losses suffered by victims of recurring flood disasters throughout the Nation.

The need for a more effective Federal Flood insurance program also calls for a recognition that mandatory flood insurance coverage must be applied with adequate safeguards and land use restrictions to minimize future losses of life and property.

Floods have been, and continue to be, one of the most destructive national hazards facing the people of the United States. In recent years the Federal Government has assumed more responsibility for providing relief and for partial indemnification for property losses resulting from floods. In addition to relief, the Federal Government has spent large sums of money for flood prevention. The cost to the Federal Government as a result of these disasters has been massive. For example, since 1936 the Federal Government has spent an estimated \$9 billion on flood protection works. Despite this, annual losses from floods continue to increase, largely as a result of unwise use of the Nation's flood plains.

Prior to the enactment of the National Flood Insurance Act of 1968, the sole relief available to the victims of flood destructions had been special disaster loans. Because of the high risks and the lack of underwriting standards, flood insurance had not been made available through the private insurance industry.

Therefore, in 1968 the Congress passed the National Flood Insurance Act which offered a voluntary National Flood Insurance Program to provide limited indemnification to the victims of flood disasters. The two principal objectives of the 1968 Act were to make available to residents of flood-prone areas flood insurance at reasonable premium rates through the means of a Federal Subsidy and to require local jurisdictions to enact land use and control measures designed to guide the rational use of the flood plain as a condition for the availability of Federal subsidized flood insurance. The idea of a Federally-backed flood insurance program is not new. In 1956 Congress passed the Federal Flood Insurance Act, but failed to appropriate funds for the administration of the Act because there were not adequate mitigation measures to reduce the incidence of flood damage. Efforts to revive flood insurance legislation were made in 1962, 1963, and 1965 culminating in a directive in the Southeastern Hurricane Disaster Relief Act of 1965 that a flood insurance feasibility study can be undertaken by the Secretary of Housing and Urban Development. That study, which was sent to Congress in August, 1966, cited evidence indicating that the flood damage hazard in the United States was continuing to rise as increasing numbers of people moved to

\* Reprinted from Senate Report No. 93-583, Committee on Banking, Housing and Urban Affairs, pp. 2-8 (1973).

coastal and river locations to live, for recreation, for business, and for other reasons. The study found that unwise development, reflecting ignorance, or indifference, and sometimes an overestimation of the flood protection actually provided, increased demand for property in flood-prone areas, thus setting into motion processes whereby flood damages were accelerated.

Specifically, the study pointed out that:

\* \* \* In spite of the flood protection programs of the past 30 years, the average annual flood hazard is now greater than before such programs began, because people have moved themselves and their property into flood-prone areas faster than flood-protection works have been built. Many factors have been responsible for this development of flood-prone areas—the general growth of population, income, and wealth, among others; but it is also clear that the substantial separation of cost from benefits—whereby the general public bears most of the costs of flood-protection works while individual members primarily receive the gains—has been a major factor encouraging such development.

Another of the study's major conclusions was that many people in high flood risk areas are seriously uninformed about the risks of flood damage which they face, and that they are grossly over-optimistic about the probability that their property will not be flooded or else expect public help to bail them out when the inevitable flood disaster strikes. However, the study also found that most people in flood risk areas do not consider a requirement of flood insurance, as a condition for obtaining a loan on property, to be unreasonable. The study therefore recommended that:

\* \* \* To encourage widespread purchase of flood insurance, the Congress should be requested to declare that as a matter of national policy all lending institutions entrusted with savings or deposits and under any form of Federal supervision or insurance of savings or deposits shall require in high risk areas flood insurance at subsidized rates on all new mortgages based on new residences, as they now generally require fire insurance; and that such flood insurance be considered in the interest of the borrowers, the lending institutions, and the savers and depositors; and these institutions might well encourage flood insurance by borrowers in low risk areas.

In summary, the 1966 study found that a national flood insurance program was feasible and could provide subsidized premium rates for properties already existing in high-risk areas, but only if actuarial rates were charged for future construction and the program required sound land use and control measures to reduce or avoid future losses.

The Congress recognized the recommendation for sound land use and control measures when it passed the National Flood Insurance Act of 1968. However, despite the efforts of the Federal Insurance Administration to carry out the Congressional intent for land use and control measures in its administration of the

Act, it became quite obvious that without mandating provisions to bring about these measures, no real accomplishment could be expected in this respect. The most significant feature of the reported legislation relates to sound land use and the proposed sanctions to mandate such use.

### The Principal Issues of the Legislation

The key issue in controversy during hearings held by the Committee from June 11 to June 15, 1973, and on October 31, 1973, was the standard used by the Federal Insurance Administration in establishing land use requirements.

The Federal Insurance Administration has adopted the so-called 100-year flood as the standard for the identification of special flood hazard areas and as the base flood elevation for the adoption of local land use controls. This standard was adopted as the result of extensive study and coordination with other Federal and State technical agencies and has since been adopted by virtually every Federal agency and most State agencies for flood plain control purposes as the feasible and realistic national standard, taking both flood perils and economic values into consideration.

More properly stated, the 100-year standard represents the flood level that on the average will have a one percent chance of being equalled or exceeded in any given year and can also be referred to as the minimum safety flood. The standard is established in terms of probability in order to achieve uniformity throughout the country as an estimate of degree of risk, without regional discrimination. A standard of probability was also required as a means of estimating potential annual damages for given locations and types of properties in order to determine actuarial rates for new construction as required by the National Flood Insurance Act.

In determining the area subject to inundation by the 100-year flood standards, historical data is considered. However, testimony received by the Committee indicated that it would be impossible to establish flood safety elevations based on historical storms alone. To use history alone without applying such factors as topography, wind velocity, tidal surge, or man-made preventive devices such as levees or jettys would be so indiscriminate as to require designation of the last flood level as the only level to be protected against.

The fact that use of complete hydrological, as well as historical, data does not guarantee that a particular flood will occur each 100 years does not diminish the desirability of attempting to use the total available data to determine the likelihood of flood losses at particular elevations in particular communities during a storm of specific intensity.

The Committee was told that this is the method utilized by the agencies with which FIA contracts and that refinements are continually being added to the methodology which we are seeking to make more uniform. As an example, the National Oceanic and Atmospheric Administration of the U.S. Department of Commerce recognized the inadequacies of developing statistical projection from fragmentary, questionable records and recommended to the Federal Insurance

Administration an alternative procedure using a hydraulic model similar to the one used by the Hurricane Advisory Office of the Weather Service in Miami, Florida. They concluded that since the model could reproduce experienced storm surges with a high degree of confidence, they could use it to evaluate the effects of the many possible hurricanes along a given coast.

During the hearings on the proposed legislation, the Committee heard much discussion from several witnesses proposing that a lesser standard of flood protection be used by the Federal Insurance Administration. After careful consideration, the Committee agreed that the 100-year standard or the flood that has a one percent annual chance of occurrence is reasonable and consistent with Nation-wide standards for flood protection.

Significantly at the October 31 hearing, a three-member panel of experts, selected on recommendations made by the National Academy of Sciences, stated that fourteen States and the Commonwealth of Puerto Rico now require the 100-year flood standard by law or regulation for statewide flood plain management purposes. In addition, the panel mentioned that 24 States use the 100-year flood standard administratively, and in four states there is proposed legislation to require its use.

Contrary to this testimony, two other witnesses at that hearing recommended that the area of the 100-year flood plain and the elevations established be solely based on historical data or on the flood of record. However, the Federal Insurance Administration, in letters to Committee members and in testimony, pointed out the need to consider other factors. The following is an excerpt from a position statement prepared by the Federal Insurance Administration on the 100-year flood standard:

First, the term "100-year flood" is probably a misnomer. It is actually what the Corps of Engineers refers to as an "intermediate" flood and is a compromise between minor floods and the Corps' "Standard project flood," which is the greatest flood thought likely to occur in a given area. Thus, in many cases, the 100-year or intermediate flood is already far below the flood of record.

Actually, the "100-year flood" is simply the flood level that is estimated to have a 1 percent chance of occurring each year in a given location. It does not imply that no greater flood is likely to occur, nor that such a flood will not happen more often than once every 100 years. Hurricanes Camille and Agnes and this year's Mississippi River floods all involved flooding substantially in excess of the 100-year flood.

In 1972 there were 45 Presidentially declared flood disasters, of which 50 percent were equal to, or greater than, the 100-year flood. Thus, the real question is whether such a moderate standard is actually adequate in light of recent flood losses and recent excessive building along coastlines and waterways.

Second, the highest recorded flood level in a given area is almost entirely the result of chance. Each hurricane season we go through the same agonies: Will a

given tropical storm become a hurricane? Will it hit the mainland coast? At what angle and with what velocity? Will it hit at high tide or low tide? And when it does hit, will it continue inland, or veer off over the Atlantic? And after Agnes, there's the further question: Once a storm dissipates, will it build up again? The same is true of river floods. How much snow will we get? Will there be a slow thaw or a sudden thaw? How much spring rain will there be, and over how long a period? And if the flood is severe, will measuring devices be lost? (In practice, measuring devices are lost more often than not!)

In short, the flood of record is virtually meaningless except as a measure of what has happened. It sheds little light on what *can* happen. To use such a standard in places where a severe flood has never occurred would be to lull residents into a false sense of security, and we would jeopardize lives as well as property. And to use a historical standard in places where a very severe storm has occurred would subject the community to undue hardship.

Third, a national program, such as the flood insurance program, cannot operate in such an arbitrary and capricious manner as to look merely at the local flood of record. The program's whole purpose is to call attention to what can happen, not merely what has happened. We want to alert communities to the degree of their hazard and to the danger *before* the flood occurs, not after it's too late. The same relative standard should be applied to all, not just to the communities that have already experienced a severe flood. The only widely-accepted and scientifically-valid standard we have is the predictable periodic flood—which takes both history and probability into account—of which the 100-year level is the best compromise. The standard could be higher, and it could be lower, but the 100-year standard is the most widely accepted and the most valid. If we suddenly and arbitrarily change this standard, now that the program has been in operation for more than four years, what do we say to the more than 2,300 communities that have already come into the program and that have legislatively accepted or agreed to accept that standard?

\* \* \*

The Committee recognized the concern expressed by the National League of Cities' witnesses on the adverse economic impact of adequate land use and control measures in many cities. However, the major thrust of this legislation is not to penalize or stifle city growth or increase economic burdens, but to call attention to the necessity of cities to undertake wise land use management in order to avert future economic loss resulting from flooding.

With respect to this issue, a member of the National Academy of Sciences panel testified:

My own judgement, Mr. Chairman, is that to push for continued Land use management that takes account of what so far seems to have been reasonable levels from experience on inland floods, is not to bring economic disaster to the communities affected. It is rather to avert disaster of a far greater sort to the nation as a whole.

To the extent that communities have not engaged in this (land use),



one must recognize that there has been a trade-off, and continues to be a trade-off, and the trade-off is between the short term benefits that are gained by a private developer and land owner and the long-term costs of the Federal Government in bailing out those people who subsequently occupy the property and then come to the Federal Government for relief, or for costly protective works.

During the markup session, the Committee considered a proposal to write into the statute the definition of "substantial improvement" with respect to structural changes or improvements made to a property subject to terms of the National Flood Insurance Act. In lieu of writing the definition into law, the Committee decided to adopt the language used with one modification as the definition now provided by HUD regulations for the National Flood Insurance Program as follows: "Substantial Improvement" means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 per cent of the market value of the structure either (a) before the improvement is started, or (b) if the structure has been damaged and is being restored, before the damage occurred. Substantial improvement is started when the first alteration of any structural part of the building commences.

### *Appendix C*

#### *SPECIFIC FLOOD REGULATORY LANGUAGE IN LOCAL ENABLING STATUTES\**

##### *Alabama*

ALA. CODE tit. 12, § 341 (1972) (Comprehensive land management and use program in "Flood Prone Areas"); ALA. CODE tit. 12, § 343 (1972), ALA. CODE tit. 12, § 344 (1972), Zoning, County (All Counties may adopt zoning ordinances in unincorporated areas for flood-prone areas), (All counties may prescribe such standards as may be necessary to comply with federal requirements to make flood insurance available.); ALA. CODE tit. 12, § 345 (1972), Subdiv., County (All counties may adopt subdivision regulations in unincorporated areas for flood-prone areas.), (For the purpose of the county flood-prone area law, subdivision means two or more parcels.) ALA. CODE tit. 12, § 345 (1972), Bldg. Code, County (All counties may adopt building codes for flood-prone areas in unincorporated areas).

##### *Alaska*

ALAS. STAT. § 29.33.150 (1972), Subdiv., Borough, Certain cities ("Drainage" mentioned as a purpose of subdivision control.); ALAS. STAT. § 29.48.035 (1972), Bldg. Code, Borough (If boroughs on September 10, 1972, have exercised areawide flood control powers, they may continue to do so in order to maintain eligibility for flood insurance).

\* Some information presented here was supplied by the United States Department of Housing and Urban Development and completely revised and updated by the authors.

*Arizona*

ARIZ. REV. STAT. ANN. § 9-461.08 (Supp. 1973), Zoning, City, Town (Planning agency may recommend regulations with respect to "flood plains."); ARIZ. REV. STAT. ANN. § 9-462.01 (Supp. 1973), Zoning, City, Town (Zoning may establish "flood plain" zoning districts and regulations.); ARIZ. REV. STAT. ANN. § 45-2342 (1975), Zoning, Subdiv., Bldg. Code, City, Town, County (Local regulations may be exercised for flood plain areas consistent with state standards.), (Cities and towns regulate within their corporate boundaries; counties control unincorporated areas.); ARIZ. REV. STAT. ANN. § 9-463.01(c) (4) (Supp. 1973), Subdiv., City, Town (Subdivision plat approval may be refused for lands subject to periodic inundation. *See also* ARIZ. REV. STAT. ANN. § 463.01 (11) (Supp. 1973) which relates to street construction in flood areas.); ARIZ. REV. STAT. ANN. § 11-806.1 (B) (Supp. 1973), Subdiv., County (Flood-plain zoning mentioned as a purpose of subdivision control).

*Arkansas*

ARK. STAT. ANN. § 19-2829 (1957), Zoning, 1st and 2d class cities, (A unit may zone along a navigable stream for a distance of five miles from the corporation limit, and two miles laterally from the thread of a stream.); ARK. STAT. ANN. § 21-1902 (1969), Zoning, Subdiv., Bldg. Code, City, Town, County (Regulations may be adopted for flood-prone areas. *See also* ARK. STAT. ANN. § 21-1903 (1969) which authorizes the state to regulate in order to qualify localities for federal flood insurance in the event localities do not adopt adequate regulations).

*California*

CAL. WATER CODE § 8410 (West 1965), § 8414 (West 1972), Zoning, City, County (For areas subject to federal flood control projects with a federal survey, a local flood control agency can adopt regulations if cities or other general purpose unit fail to adopt regulations meeting state standards.); CAL. GOV'T CODE § 66474 (1974), Subdiv., City, County (A subdivision map may be disapproved if the subdivision does not meet federally adopted flood-plain criteria.); CAL. GOV'T. CODE § 66474.6 (1969), Subdiv., City, County (A subdivision map may be disapproved if the proposed waste discharge violates water quality requirements).

*Colorado*

COLO. REV. STAT. ANN. § 31-23-201 (1973), Zoning, City, Town, (Uses may be regulated to secure safety from flood.), (Local units may regulate along any storm or floodwater channel or basin as such storm or floodwater runoff channel has been designated and approved by the Colorado Water Conservation Board. *See also* COLO. REV. STAT. ANN. § 31-23-203 (1973) (Ordinances applying to flood areas shall exempt any building or structure as to which satisfactory proof shall be presented to the board of adjustment that the present or proposed situation of such building or structure is reasonably necessary for the

convenience or welfare of the public.); COLO. REV. STAT. ANN. §§ 30-28-111, 30-28-113, 30-28-115 (1973), Zoning, County (Counties may zone to secure floodwaters.), (Counties may regulate storm and floodwater runoff channels designated by the Colorado Water Conservation Board); COLO. REV. STAT. ANN. § 30-28-133 (1973), Subdiv., County (Regulations must contain standards pertaining to "storm drainage" and related matters. Standards shall apply to "natural hazards").

#### *Connecticut*

CONN. GEN. STAT. ANN. § 8-2 (1955), Zoning, City, Town, Borough, Certain Special Districts (Regulations may secure "safety from flood."); CONN. GEN. STAT. ANN. § 8-29 (1953), Subdiv., City, Town, Borough (Regulations may provide for "flood control protection.").

#### *Delaware*

DEL. CODE ANN. tit. 9 § 4903 (1953), Zoning, Kent County (Zoning may be adopted to provide "water flowage."); DEL. CODE ANN. tit. 9 § 6904 (1953), Zoning, Sussex County (Zoning purposes include securing safety from flood.); DEL. CODE ANN. tit. 9 § 3004 (1953), Subdiv., New Castle County (General purposes of regulation include provision for adequate easements or "drainage").

#### *Florida*

FLA. STAT. ANN. § 380.05 (1974), Zoning, State (State critical areas may include flood-prone areas. State is authorized to establish standards for critical areas and to directly regulate such areas in the event local units of government fail to adopt and enforce adequate regulations.); FLA. STAT. ANN. § 163.205(g) (1969), Zoning, City, Town, Village, County (Regulations may apply to the "uses and types and sizes of structures in those areas subject to seasonal periodic flooding."); FLA. STAT. ANN. § 163.260(2(f) (1969), Subdiv., City, Town, Village, County (Regulations may "prevent periodic and seasonal flooding" by requiring protective flood control and drainage facilities).

#### *Georgia*

GA. CODE ANN. § 69-802 (1946), Zoning, City, Town (Regulations may secure safety from flood.); GA. CODE ANN. § 69-1207 (1957), Zoning, City, Town, County (Regulations may secure protection against floods.), (Counties may zone for any militia district or land lot or land and water areas 500 feet wide on either side of any state or county highway or section of such highway or land or water areas 500 feet wide on either side of any water line of a stream, water reservoir, or section thereof).

#### *Hawaii*

HAWAII REV. LAWS § 62-34(18) (1965), § 46-11 (1967), Zoning, Counties (Counties are authorized to enact ordinances and participate in the federal flood

insurance program.); HAWAII REV. LAWS § 70-100 (1957), Zoning, City and County of Honolulu (Development may be prohibited in the flood plain.); HAWAII REV. LAWS § 46-4 (1957), Zoning, County (Counties may zone areas bordering natural watercourses, channels and streams in which trades or industries, filling or dumping, erection of structures, and the location of buildings may be prohibited or restricted.); HAWAII REV. LAWS § 46-11 (1968), County (Allows county participation and application for Federal Flood Insurance Program.); HAWAII REV. LAWS § 179-1 (1961), State (Flood control and floodwater conservation; purpose is for state coordination of all federal and state flood control projects undertaken in Hawaii).

### *Illinois*

ILL. ANN. STAT. ch. 24 § 11-13-1 (Smith-Hurd 1961), Zoning, City, Town, Village (A purpose of zoning is to avoid hazards from accumulation of flood waters.); ILL. ANN. STAT. ch. 34 § 3151 (Smith-Hurd 1959), Zoning, County (A purpose of zoning is to avoid hazards from accumulation of flood waters.); ILL. ANN. STAT. ch. 139 § 303 (Smith-Hurd 1974), Zoning, Township (A purpose of zoning is to avoid hazards from accumulation of flood waters.); ILL. ANN. STAT. ch. 24 § 11-12-12 (Smith-Hurd 1961), Subdiv., City, Town, Village (Reasonable rules and regulations may be adopted governing floodwater runoff channels and basins.); ILL. ANN. STAT. ch. 24 § 11-14-1 (Smith-Hurd 1961), Subdiv., City, Town, Village (Local units may establish setback lines, including those for floodwater runoff.); ILL. ANN. STAT. ch. 109 §§ 1, 2 (Smith-Hurd 1949), Subdiv., City, Town, Village, County (Plats must include topographical studies and indications suggesting danger from the flow of water which may be caused by subdivision.), (Adequate provision must be made for drainage.); ILL. ANN. STAT. ch. 34 § 414 (Smith-Hurd 1959), Subdiv., County (Reasonable rules and regulations may be adopted governing floodwater runoff channels and basins.); ILL. ANN. STAT. ch. 24 § 11-30-2 (Smith-Hurd 1961), Bldg. Code, City, Town, Village (Municipalities may prescribe rules and regulations for the construction and alteration of buildings to avoid flood hazards.); ILL. ANN. STAT. ch. 34 § 422 (Smith-Hurd 1959), Bldg. Code, County (County building codes may provide protection against flood).

### *Indiana*

IND. CODE § 18-7-5-58 (1974), Zoning, City, Town, County (Zoning may be accomplished to secure safety from "flood."); IND. CODE § 18-7-4-46 (1974), Zoning, Area Plan Comm. (Zoning may be accomplished to secure safety from "flood."); IND. CODE § 13-2-22.5-3 (1974), Flood Plain Management, City, Town, County (Local units are authorized and encouraged to regulate all flood hazard areas. Regulations must be approved by the state and comply with state minimum standards.); IND. CODE § 18-5-5.5-1 (1974), Bldg. Code, County, Non-first class city, Town (Counties may adopt "unsafe building regulations" which might be applied to flood hazard areas) .

*Iowa*

IOWA CODE ANN. § 414.3 (Cum. Pamphlet 1975), Zoning, City, Town (Zoning may be accomplished to secure safety from flood.); IOWA CODE ANN. § 358A.5 (Cum. Pamphlet 1975), Zoning, County (Zoning may be accomplished to secure safety from flood.); IOWA CODE ANN. § 414.21 (Cum. Pamphlet 1975), Zoning, City and Town, IOWA CODE ANN. § 358.2 (Cum. Pamphlet 1975), County (Local flood plain regulations, variances, or exceptions require state approval.), (Local units administer regulations when approved.), (Local regulations may be more restrictive than state standards.).

*Kansas*

KAN. STAT. ANN. § 12-734 (Supp. 1974), Zoning, City, County (Local units may establish flood plain zones.), (Nothing shall be construed as affecting the eligibility of any existing structure within such area for flood insurance.); KAN. STAT. ANN. § 12-707 (Supp. 1974), Zoning, City (City may adopt regulations for flood plain purposes.); KAN. STAT. ANN. § 19-2919 (1974), Zoning, County (County may regulate use of land in flood plains.); KAN. STAT. ANN. § 19-2906 (1974), Zoning, Township (Township may regulate uses within flood plain.); KAN. STAT. ANN. § 12-705 (Supp. 1974), Subdiv., City (City may adopt regulations to protect against flood.); KAN. STAT. ANN. § 19-2918 (1974), Subdiv., County (County regulations may provide for flood protection and flood-plain regulation.); KAN. STAT. ANN. § 19-2905 (1974), Subdiv., Township (Township may adopt regulations for flood protection).

*Kentucky*

KY. REV. STAT. ANN. § 100.201 (1971), Zoning, City, County (Local regulations may prevent damages from flood.); KY. REV. STAT. ANN. § 100.203 (1971), Zoning, City, County (Regulations may control lands subject to flood.); KY. REV. STAT. ANN. § 100.281(3) (1971), Subdiv., City, County (Regulations may address design of areas subject to flooding).

*Louisiana*

LA. REV. STAT. ANN. § 33:1236(38)(a) (1975), Zoning, Subdiv., Bldg. Code, City, Town, Village, Parish (All parishes and municipalities are authorized to adopt zoning and land-use regulations necessary to comply with the federal flood insurance act).

*Maryland*

MD. ANN. CODE art. 66B, § 5.03(a) (1970), Subdiv., City, County, Town, Village (Regulations may provide protection from flooding, control of sediment, and shore erosion control).

*Massachusetts*

MASS. GEN. LAWS ANN. ch. 40A, § 2 (1975), Zoning, City, Town (Regula-

tions may protect health and safety from seasonal or periodic flooding.); MASS. GEN. LAWS ANN. ch. 41, § 81M (1975), Subdiv., City, Town (Regulations may be adopted to secure safety in case of flood).

### *Michigan*

MICH. COMP. LAWS ANN. § 281.638 (1975), Zoning, City, Village; MICH. COMP. LAWS ANN. § 281.639 (1975), Zoning, Township; MICH. COMP. LAWS ANN. § 281.637 (1975), Zoning, County (Local units are directed to zone flood on high risk erosion areas and environmental areas along the Great Lakes and connecting waterways consistent with state standards by July 1, 1975.); MICH. COMP. LAWS ANN. § 281.763 (1975), Zoning, State, County, Township (Flood-plain zoning may be adopted for "natural river area."); MICH. COMP. LAWS ANN. § 560.105 (1975); MICH. COMP. LAWS ANN. § 560.117 (1975), Subdiv., City, Village, Township, County (Subdivision regulations may include flood and drainage requirements.), (Local regulations must comply with rules of the state department of natural resources for flood plain.); MICH. COMP. LAWS ANN. § 560.138 (1975), Subdiv., City, Village, Township, County (Technical requirements are established for plat drawings in the flood plain.); MICH. COMP. LAWS ANN. § 560.194 (1975), Subdiv., City, Village, Township, County (General requirements may be imposed for structures and uses in the flood plain).

### *Minnesota*

MINN. STAT. ANN. § 104.04 (1975), Zoning, City, County (Mandatory adoption of flood-plain regulations consistent with state standards is required for cities and counties. State must approve local regulations. The state is empowered to regulate directly flood plains if local units fail to adopt satisfactory standards.); MINN. STAT. ANN. § 412.357 (1975), Zoning, Cities & towns with city powers (Zoning may be adopted for flood control purposes.); MINN. STAT. ANN. § 394.25 (1975), Zoning, Subdiv., County (Zoning may be adopted to insure surface drainage and protect flood plains.); MINN. STAT. ANN. § 462.357 (1975), Zoning, City, Town with city powers (Zoning may be accomplished for "soil and water conservation."); MINN. STAT. ANN. § 505.09 (1975), Subdiv., County (Subdivision controls may require drainage of streets).

### *Mississippi*

MISS. CODE ANN. § 51-35-101-213 (1972) (Flood Control Law of Mississippi).

### *Montana*

MONT. REV. CODES ANN. § 11-3863 (1974), Subdiv., City, Town, County (Subdivision controls may be adopted to require drainage).

### *Nebraska*

NEB. REV. STAT. § 14-403 (1974), Zoning, Metro class city (Regulations

may secure safety from flood.); NEB. REV. STAT. § 15-902 (1974), Zoning, Primary class city (Regulations may secure safety from flood.); NEB. REV. STAT. § 19-902 (1974), Zoning, 1st class city, 2d class city, Village (Regulations may secure safety from flood.)

#### *Nevada*

NEV. REV. STAT. § 278.250 (1973), City, Town, County (Purpose of regulations may include protection of life and property in areas subject to flood.); [See also NEV. REV. STAT. § 543.160 (1973) (Flood Control District Law)]; NEV. REV. STAT. § 278.330(6)(g)(1) (1973), Subdiv., City, Town, County (Purpose of regulation may include consideration of the topography of the land and its relation to the flood plains or areas subject to floods).

#### *New Hampshire*

N.H. REV. STAT. ANN. § 36.21 (1975), Subdiv., City, Town, Village (Subdivision control may be adopted to require drainage.); [See also N.H. REV. STAT. ANN. § 487 (1975) (Connecticut River Flood Control Compact with Vermont, Massachusetts and Connecticut)].

#### *New Jersey*

N.J. STAT. ANN. § 40:55-32 (1975), Zoning, City, Town, Township, Village, Borough (Purpose of zoning may include securing safety from flood.); N.J. STAT. ANN. § 40:55-1.20 (1975), Subdiv., City, Town, Village, Township, Borough (Plats shall be suitable for intended purposes without peril from flood, and all tracts must be adequately drained).

#### *New Mexico*

N.M. STAT. ANN. § 14-20-3 (1975), Zoning, City, Town, Village, County (Zoning may secure safety from "flood."); [See also N.M. STAT. ANN. § 75-36-1 (1975) (Arroyos Flood Control Act.)]; N.M. STAT. ANN. § 14-18-6(3) (1975), Subdiv., City, Town, Village (Subdivision regulations may regulate to drainage.); N.M. STAT. ANN. § 15-36-35(d) (1975), Bldg. Code, Class B & C, County (County ordinance may provide for the control of land in flood plains.); [See also N.M. STAT. ANN. § 14-17-5.1 (1975), (Flood-prone areas, county and municipal powers.)].

#### *New York*

N.Y. GEN. CITY LAW § 20(24) (McKinney 1968), Zoning, City (Regulations may be adopted to secure safety from "flood."); N.Y. TOWN LAW § 263 (McKinney 1965), Zoning, Town (Regulations may secure from "flood."); N.Y. VILLAGE LAW § 7-704 (McKinney 1973), Zoning, Village (Regulations may secure safety from "flood."); N.Y. ENVIRON. CONSER. LAW § 36-0101 (McKinney 1975), Zoning, Subdiv., Bldg. Code, City, Town, Village (Each city, town, and village must enact whatever ordinances are necessary to qualify for federal

flood insurance. State may enact regulations if a local unit fails to adopt or enforce regulations.); N.Y. GEN. CITY LAW § 33 (McKinney 1968), City (Subdivision regulations may require that lots be without danger from flood.); N.Y. GEN. MUN. LAW § 236 (McKinney 1974), City (Subdivision regulations may promote drainage.); N.Y. TOWN LAW § 277 (McKinney 1975), Subdiv., Town (Subdivision regulations may secure safety from flood.); N.Y. VILLAGE LAW § 7-730 (McKinney 1973), Subdiv., Village (Subdivision regulations may secure safety from flood).

#### *North Carolina*

N.C. GEN. STAT. § 143-215.54(a) (1974) (Local units are authorized to adopt regulations for floodway areas.); N.C. GEN. STAT. § 143-215.55 (1974) (Local permit is required for artificial obstruction in floodway once area is delineated.); N.C. GEN. STAT. § 143-215.56(c) (1974) (State may designate floodway if a stream is in more than one jurisdiction or where it finds delineation necessary and local governments have not acted.); N.C. GEN. STAT. § 143-215.59(b) (1974) (Permit must be obtained before any other permission is granted to build in floodway).

#### *North Dakota*

N.D. CENT. CODE § 61-16-11(19) *as amended* (Supp. 1975) (Water management district board may petition County [N.D. CENT. CODE chs. 11-33, 11-35 (1960)], City [N.D. CENT. CODE ch. 40-47 (1960)] or town [N.D. CENT. CODE § 58-03-13 (1960)] to assume jurisdiction over a flood plain for zoning purposes).

#### *Ohio*

OHIO REV. CODE ANN. § 307.37 (1971), *as amended*, AM. HOUSE BILL 664 (Supp. 1975) (Board of County Commissioners may adopt, administer, and enforce such building code regulations for unincorporated flood hazard areas as are necessary for participation in the National Flood Insurance Program); OHIO REV. CODE ANN. ch. 6101 *et seq.* (1971) (Conservancy Districts); OHIO REV. CODE ANN. § 6101.04 (1971) (any area situated in one or more counties may be organized as a conservancy district for the purpose of preventing floods).

#### *Oregon*

ORE. REV. STAT. § 92.044 (1953), Subdiv., City, County (Regulations may secure safety from flood).

#### *Pennsylvania*

PA. STAT. ANN. tit. 53, §§ 10604, 10605 (1972), Zoning, Borough, Village, most cities and townships, Town (Regulations may prevent damage from flood; control uses in flood-prone areas.) [*see also* PA. STAT. ANN. tit. 16, § 1947 (1956) (Prevention and Control of Floods.)]; PA. STAT. ANN. tit. 53, 10503(2) (1972),



Subdiv., Most municipalities and counties (Regulations may require that lots be safe from flooding and that drainage be provided).

*Rhode Island*

R.I. GEN. LAWS ANN. § 45-24-1 (1970), Zoning, City, Town (Regulations may prohibit or limit use of lands deemed subject to seasonal or periodic flooding.); [see also R.I. GEN. LAWS ANN. § 46-2-1 through -26 (1970) (Federal Navigation and Flood Control Projects)].

*South Carolina*

S.C. CODE ANN. §§ 14-350.16 (1974 Cum. Supp.) 14-354 (1962), Zoning, City, Town, County (Regulations may require protection against floods.); S.C. CODE ANN. § 14-350.30 (1974 Cum. Supp.), Subdiv., City, Town, County (Regulations may secure protection from flood and other inundation.); S.C. CODE ANN. § 14-366 (1962), Subdiv., County (Regulations may require provision for drainage).

*South Dakota*

S.D. COMP. LAWS ANN. §§ 7-18-14, 7-18-15 (1967) (Flood Control).

*Tennessee*

TENN. CODE ANN. § 13-701 (1973), Zoning, City, Town (Special districts or zones may be established in areas subject to seasonal or periodic flooding.); TENN. CODE ANN. § 13-401 (1973), Zoning, County (Special districts may be designated for flood areas to qualify for flood insurance.); TENN. CODE ANN. § 13-303 (1973), Subdiv., Reg. Plan. Comm. (Regional regulations may be adopted to provide drainage).

*Texas*

TEX. CIV. STAT. tit. 128 § 8280-13 (1975), Zoning, Subdiv., Bldg. Code, All units (Cities, villages, counties, river authorities, conservation or reclamation districts, water improvement districts, and other water supply districts may adopt flood-plain regulations for flood insurance purposes.); TEX. REV. CIV. STAT. ANN. art. 1581e-1 (1975 Supp.), Zoning, Subdiv., Bldg. Code, certain units (Municipalities and counties along the Gulf Coast may adopt regulations for flood insurance purposes).

*Utah*

UTAH CODE ANN. § 17-8-5.5 (1975 Supp.), Zoning, Subdiv., Bldg. Code, County (County control of flood plain areas authorized throughout entire county).

*Vermont*

VT. STAT. ANN. tit. 10, § 751-53 (1975 Supp.), Zoning, Subdiv., Bldg. Code, City, Town, Village [Local units must adopt regulations (which apparently may include zoning, subdivision and building codes) for flood hazard areas after the

state supplies data. The intent of the act is, in part, to secure flood insurance for Vermont.]; VT. STAT. ANN. tit. 10, § 6086 (1975), Special Permit; VT. STAT. ANN. tit. 10, § 6026 (1975), Special district commission [(District commissions are to consider relationship of proposed development to "flood plains"), (in addition, very specific standards are provided for development in floodway and flood fringe areas)]; [see also VT. STAT. ANN. tit. 10 §§ 751-53 (1975) (Flood hazard areas.); VT. STAT. ANN. tit. 24 § 4407(9) (1975), Subdiv., Town, City, Village, Fire Dist., Unorganized Town, Gore (Regulations may secure safety from flood)].

#### *Virginia*

VA. CODE ANN. §§ 15.1-489, 15.1-490 (Supp. 1975) Zoning, City, Town, County (Ordinances shall be designed to provide safety from flood dangers to expedite the provision of flood protection to protect against loss of life, health or property from flood.), (Ordinances and districts shall be drawn with reasonable consideration for preservation of flood plains.); VA. CODE ANN. § 15.1-466(d) (f) (1975 Supp.), Subdiv., City, Town, County (Regulations may include provisions for "drainage" and "flood control."), (Developer may be required to contribute to drainage facilities).

#### *Washington*

WASH. REV. CODE ANN. § 58.17.110 (1974 Supp.), Subdiv., City, Town, County (Subdivision must provide drainage.), (Plats may be disapproved due to flood inundation or swamp conditions.); see also WASH. REV. CODE ANN. tit. 86 (1974 Supp.); WASH. REV. CODE ANN. § 86.05.010 (1974) (Flood Control). WASH. REV. CODE ANN. § 86.16.170 (1974).

#### *West Virginia*

W. VA. CODE ANN. § 8-24-39 (1969), Zoning, City, Town, Village, County (Regulations may be adopted to secure safety from flood).

#### *Wisconsin*

WIS. STAT. ANN. § 87.30 (1975), Zoning, Village, City, County, State (Local units must adopt flood-plain zoning meeting state standards by 1/1/68 or the state will.); WIS. STAT. ANN. § 59.971 (1975), Zoning, County [Counties may zone shorelands (including flood plains) without town board approval.]; WIS. STAT. ANN. § 59.97(4)(c) (1975), Zoning, County (Counties may regulate areas along watercourses and streams "in which trades or industries, filling or dumping, erection of structures and the location of buildings may be prohibited."); WIS. STAT. ANN. § 60.74 (1975 Supp.), Zoning, Town (Towns may restrict areas in or along natural watercourses, channels, streams, and creeks in which trades and industries, filling or dumping, erection of structures and the location of buildings.).

#### *Wyoming*

WYO. STAT. ANN. § 41-118 (1959) (Flood Control Districts).