THE LAW--LITTLE USED AND SOMETIMES ABUSED--IN FLOOD DAMAGE ABATEMENT

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Floods are a natural phenomena and are said to occur when water, flowing in a well-defined channel, exceeds its banks, or when a body of water, such as an ocean or bay, experiences high tides as a result of severe storms or hurricanes. Overbank flows are not abnormal. The flood plain acts as a natural reservoir and temporary channel for the excess water. In the economy of nature, the channel efficiently conveys the day-to-day flow and calls upon its flood plain only when needed. Typically, a river uses some portion of its flood plain about once in two to three years. At average intervals of, say 25, 50, 100 years, the river may inundate its entire flood plain to a considerable depth. Although records of floods permit estimation of frequency of flooding, it is not possible to forecast the year a flood will occur on any given watercourse.

Floods become a problem to man only when he competes with rivers for the use of flood plains. This competition between man and the rivers has been long and costly.

Use of flood plains involving periodic damage from floods is not in itself, a sign of unwarranted or inefficient development. It may well be that the advantages of flood plain location outweigh the intermittent cost of damage from floods. Further, there are some kinds of activity which can only be conducted near a watercourse.

Considering the need to deal with the problem of flood damage prevention, two general points need to be made. First, we now live in a complex society, and the problems of floods are no longer the concern of one agency or of one level of government. Second, it is important to recognize that "flood control" and "flood protection" seldom provide complete protection. Structures afford a degree of protection only for a flood of a given magnitude and reduce the height or frequency of floods or both. There is always a probability that a greater flood will occur than has been experienced in recorded history. Also, economic considerations frequently limit the degree of flood protection provided. Thus, there is generally a residual flood problem. The provision of even a degree of flood prevention invites continued and increased use of the protected area. People tend to confuse a degree of protection with complete protection. Because people rely on this protection when a flood occurs in excess of that for which protection has been provided, damage may be greater than if there had been no protection.

Federal investment in flood protection and prevention through the Corps of Engineers and the Soil Conservation Service has amounted to more than $7 billion since a national flood control policy was adopted in 1936.[1] In 1964 and 1965, estimated losses from inland floods were $652 million and $788 million respectively. **The upward trend of such flood damage since 1903 can be calculated in a graduated scale as about 5.5 percent annually.** It is highly probable that these figures do not include the hundreds or thousands of very small floods each year that are not fully reported; yet the aggregate damage from this type of flooding may be considerable.[2] Despite this massive investment, estimated annual losses from floods have shown an upward trend since 1936.

When the federal flood control program was first proposed, the economic argument advanced in its support was that such a program would eliminate a serious drain upon the nation's economy. Regardless of the causes of this drain, its reduction was, from an economic standpoint, obviously desirable if it could be accomplished at a cost less than the loss. But as indicated above, the economic loss to the nation has not been reduced. This calls into question the basic economic justification for the great investments the nation has made. From the economic standpoint, it is one thing to eliminate a loss, and it is quite a different thing

1 U. S. Congress, A Report by the Task Force on Federal Flood Control Policy, A Unified National Program for Managing Flood Losses, House Doc. No. 465, 89th Congress, 2d session.

2 Report of the Committee on Banking and Currency, United States Senate, August 19, 1967.

to invest a nation's wealth in a program, which by encouraging continuation of the practices which gave rise to that loss, fails to stop the drain upon the economy. **If present policies and programs continue, the more than $11 billion expected to be invested in federal flood protection projects by 1980 will have no more economic effect than would the simple transfer of that amount from the public treasury to the profits of those who have continued to develop flood plain lands.**

To use a rather homey expression, you might characterize flood damages as a giant "rat hole." Monies for control structures have not decreased the size of the hole, but instead have had an abrasive effect which made the hole larger. This is a luxury which even an expanding economy such as ours cannot long afford. We must find a catalyst which will jell the monies we are expending so as to decrease the size of this loss. Such a catalyst exists if we choose to use flood plain regulation in conjunction with our structure program. It is not enough to concentrate our efforts in keeping water away from man, but we must direct an equal amount of effort to keeping man away from the water. Nature is a very formidable adversary, but when we take on man and try to manipulate him with social laws, the magnitude of the problem takes on gigantic proportions.

A general discussion of land use regulations is beyond the scope of this paper. However, the core of flood plain regulations are floodway encroachment statutes. When we allow unrestricted encroachments to be developed in the channels and floodway, we increase flood heights and velocities and thus add to the flood hazard. The primary goal of encroachment statutes must be to prevent unwarranted constructions that reduce the ability of the channel and floodway to carry waters.

Although the use of encroachment statutes offers considerable promise; to date, there have been no more than thirteen states[3] which have passed such acts. **There may be a variety of reasons for this inaction, but the basic and underlying one is probably that, when the memory of the last major flood fades, the sense of urgency about curing encroachments fades with it.**

This technique may have been tarnished by the fact that existing statutes have not been very effective. So, in a sense, we have little used this tool; and those who have used it have abused it with inept legislation.

There is considerable emotional appeal to keep this kind of regulation at the local level. However, the experience of the states which have tried to delegate or share any of the responsibility with local governments does not warrant this approach. Pennsylvania passed an encroachment statute in 1913, and as early as 1931, authorized municipalities to determine and establish encroachment lines. As of several years ago, there was no evidence that a municipality has used this authority. At the local level, there is a general lack of interest, technical data, necessary personnel, and funds. There is at least one example where a state sought to share the responsibility with local governmental units. Wisconsin passed an encroachment statute, but sought to have the administration and enforcement of the regulations placed at the local level. This proved to be very ineffective since many local governments hesitate to enforce a law strictly that they feel has been forced upon them.

It should also be recognized that the dangers of encroachments may not be as local as they first seem: ponding behind a bridge may cause flooding in a wide area; and, if structures are swept away with the current, they may cause damming miles downstream with the same ponding results. If one community does pass such a law, it may still be injured if its neighbors do not. When changes in the headwaters of a stream increase flooding in a downstream city, the problem is obviously too large for that city to solve alone. When channel obstructions outside the city limits increase flood heights within the city, the problem is again too large for the city to handle. Legislation, if effective, will meet opposition from the local populace affected. A state agency will be better able to withstand such pressures than a local city council.

Many statutes have been permissive in nature, using the word "may" instead of "shall." The use of the "weasel" words can only lead to inaction and provide relief for those seeking to frustrate the intent of the statute. Massachusetts, for example, has provision in its law that unauthorized obstructions may be removed, but an investigation several years ago could find no instance of this action taking place.

3 California, Connecticut, Illinois, Indiana, Iowa, Kentucky, Maryland, Massachusetts, Nebraska, New Jersey, Pennsylvania, Washington, and Wisconsin.

Some legislatures have what I consider a very naive attitude with respect to the general public. The legislation prohibits certain activities, but no penalties were included if compliance were not obtained. It would be nice if we could rely on voluntary compliance with the law, but the experience to date, I doubt, would support this kind of faith. The effectiveness of existing encroachment statutes casts considerable doubt on the validity of this type of assumption.

Let us now consider some of the pitfalls to be avoided if we are to formulate legislation which will be meaningful in terms of flood damage abatement. The items to be discussed are not meant to be inclusive, but will illicit the major problem areas. First, it should be recognized that any encroachment statute should be at the state level. As was mentioned previously, the effects of encroachments need not be local in nature. It must further be recognized that the necessary personnel, technical data, and operating funds for implementation of encroachment legislation are not likely to be found in either the city or county governmental units. These facts, along with the vulnerability of local units to political pressure makes encroachment legislation at the state level imperative.

Once having determined the level of government necessary for an adequate encroachment statute, consideration should be given to various items to be covered in the statute. Again this listing is not meant to cover routine items, but is designed to highlight those factors as might be omitted or inadequately described.

Definitions: All good legislation has a definition section; but it should be stressed that the following items should be given careful consideration:

(1) Care should be taken that the statute covers not merely obstructions in the channel, but in the floodway as well.

(2) At least two types of floodways should be described, one to be specified by the administering agency after proper engineering studies and investigations. Since the latter will involve considerable time, a floodway should be described which would permit the operating agency to function on the effective date of the act. This would have to be very specific in nature so as to permit almost "mechanical application" of the criteria described.

(3) In order to make the statute workable and manageable, certain watercourses might be excluded because of the small drainage area and improbability of significant flood damage. This could be done in several ways--one might be to distinguish between watercourses and drainways.

(4) Care must be used with the words "natural" and "artificial" as adjectives. If they are not adequately described, they may form the basis for excluding some items of coverage.

(5) Obstructions should have a broad definition so as to include those which are both natural and artificial. It should also include excavations which might be as much an obstruction as an embankment.

Purpose: The purpose of the act should be adequately described to forestall a constitutional attack. It should also be comprehensive enough to hinder restrictive interpretation by a court.

Establishment of Encroachment Lines: The statute should set forth a comprehensive program for the delineating of these lines. It should provide for definite standards upon which encroachment lines are to be established. Local conditions must be recognized--differences exist between rural and urban areas. This can be easily accommodated by providing a minimum standard and then higher standards where conditions warrant.

Obstructions: The statute should provide that obstructions existing or to be constructed in the floodway without first having obtained a permit are a public nuisance. This classification of obstructions as nuisances facilitates the implementation of the act. There are several cases holding that obstructions of

flow were a private nuisance and could be enjoined. It would seem that legislation declaring an obstruction of the floodway a public nuisance might be upheld since constructions in the floodway may well affect the entire community since ponding is generally not limited to a narrow area. The entire community would have to bear the cost of any relief program; the burden of which is increased in proportion to the increased damages caused by floodway encroachment. There is legal precedent that a legislature can declare certain things or activities a nuisance which were not so at common law so long as they are in fact nuisances.

Penalties: Penalties should be provided which are meaningful and not such that they can be underwritten as a cost of doing business. They can take several forms, one to create a presumption in favor of an individual who is damaged as the result of the encroachment in a civil action at law, monetary fines and/or injunctive relief.

Permits: There must be some flexibility in the administration of any statute; and a system of permits allows the agency charged with the responsibility of administering the act to permit certain obstructions to exist or to be built. The act should, however, set forth the factors to be considered in granting a permit.

If the above factors are carefully considered along with those which are relevent to the conditions existing in an individual state, we have the basis for an effective tool which can complement the control program which has dominated our flood damage abatement programs in the past.

The results to be expected from a good encroachment statute, effectively administered, may be severely handicapped if there is not a plan to inform the public of the requirements of the statute. Without a well conceived program of public education on the provisions of the law, a great deal of unlicensed construction on the floodway may result. Some of this can be corrected with a good act and a good administrative agency. However, a good corrective program will never replace or have the public acceptance of an education program geared to prevention.

Floods are too big a problem to be handled piecemeal. Only when we shift from simply reacting to them to actually planning for them, can we expect headway in reducing flood damage losses.

You gentlemen, by your presence at this conference, have evidenced an interest in the Water Resources for the state of Mississippi. The problem of encroachments and proper corrective measures should have your immediate attention. It will not be easy, for some of the things which I have suggested may be controversial and exacting. However, you should keep the public good of all Mississippians foremost in your mind without regard for special interests or inadequate but popular suggestions. The benefits from action on your part can be immediate as well as long range. The question is whether you are going to use THE LAW as an effective tool in your arsenal of flood damage abatement for the good of all the residents of this great state.