

U B L I C H E A R I N G

before

ASSEMBLY COMMITTEE ON AGRICULTURE,
CONSERVATION AND NATURAL RESOURCES

on

ASSEMBLY BILLS NUMBERS 596 AND 572
(Flood Control)

Held:
April 11, 1972
Assembly Chamber
State House
Trenton, New Jersey

MEMBERS OF COMMITTEE PRESENT:

Assemblywoman Josephine S. Margetts (Chairman)
Assemblyman George H. Barbour
Assemblyman Kenneth A. Black, Jr.

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ASSEMBLYWOMAN JOSEPHINE S. MARGETTS (Chairman)

Good morning, everyone. The public hearing will please come to order at this time.

I am Josephine Margetts, Chairman of the Assembly Agriculture, Conservation and Natural Resources Committee, and these are members of my Committee here at the table. On my left is Assemblyman Black; on my right, Assemblyman Barbour.

At this hearing we are considering Assembly Bills 572 and 596. Assembly Bill 572, introduced by Assemblyman Evers, gives authority to the Department of Economic Development to regulate and control the use of floodways and further authorizes the Department to establish minimum standards for regulation of the flood fringe areas by local ordinance.

Assembly Bill 596, sponsored by Assemblywoman Fenwick, gives the authority to the municipalities to establish regulations for control of the floodways.

I think these two bills are extremely important at this time. I am very pleased to see so many people here in attendance to testify.

If anyone wishes to testify, and has not signed in, you may do so if you come to the desk at this time and sign according to the rules of the hearing.

In conducting this public hearing, we will follow the regular legislative procedure. When you are called upon, you will come to the front, to the microphone, state your full name, address, position, and the name of the organization which you might be representing. We will permit no questions from the floor but, if anyone here has a question, you may bring it, in writing, to the desk.

We will get under way at this time and, as I call your name, will you please come forward.

I would ask, in consideration of the time and the many people who wish to testify this morning, that you make your remarks as brief as possible. If you have a written

statement, please file it for the record. And we would appreciate having copies of your statements, if you have any additional copies.

Is Mr. Ludlum here, from the State Chamber of Commerce? (No response)

Mr. Charles Pike, Department of Environmental Protection.

C H A R L E S M. P I K E: My name is Charles M. Pike. I am Director of the Division of Water Resources in the Department of Environmental Protection.

Assembly Bill 572 is endorsed by the Department and the Administration as a means for effectively controlling development in flood plain areas.

This is an amendment to R.S. 58:16A-50, which was enacted in 1962. This granted to the Water Policy and Supply Council the authority to delineate flood hazard areas and to mark them. This essentially was a public education program. The results of that act have left much to be desired.

The proposed amendments which are provided by A-572 provide for the delineation of floodways and flood hazard areas, and after delineation is made by the Water Policy and Supply Council, the Department would have authority over any development which took place in the floodway.

In the flood hazard area, municipalities, after the delineation, would have a one year period in which to institute flood plain zoning in accordance with minimum standards established by the Department. If within that period of time they didn't act, then the Department would have the authority to establish regulations.

There has been a great deal of delineation that has been completed or is under way. I think an evaluation of this delineation and the results of it would indicate quite clearly that more authority is necessary to have a uniform and comprehensive approach which is necessary. Delineations that have already been completed within the

State, without, however, the official action being taken by the Water Policy and Supply Council, - the ones undertaken by the Corps of Engineers that are completed include the Rancocas; the North and South Branch of the Pennsauken; the North and South Branch of Big Timber Creek; Little Timber Creek; Cumberland County, along the coastline, including the tidal portions of the Mantua Creek and the Maurice Creek; Cape May County in its entirety.

In the works at the present time, by the Corps of Engineers, is delineation in the Bay Shore Area, the Raritan Bay Shore Area of Monmouth County; the Rahway River; the Toms River; the Shabakunk Creek; the Little Shabakunk Creek; and Mantua Creek.

In addition to this, work is being completed, under contract, for the Department of Environmental Protection, of 300 miles in the Raritan Basin. In addition to this, work will be undertaken very shortly, under funds that were provided by S-298, for an interim delineation on the Passaic Basin.

Our main concern is that full and effective use be made of this engineering work to properly control development in flood plain areas.

Up to this time, under the municipal enabling act for zoning, there are only a few municipalities who have established effective regulation of flood plain areas. There is very little use that's being made of all of the delineation that has been done by the Corps of Engineers, and we would anticipate that, without more direct authority on the part of the State, this program really won't be effective.

I think everyone recognizes that you have to have a uniform and comprehensive approach. One municipality in an isolated location, establishing flood plain zoning, really doesn't do the job on a regional basis or a drainage basin basis. It really requires a comprehensive and complete approach.

I don't think, and experience would indicate, that

you can count on the 567 municipalities, capable of taking separate and independent action in this State, developing the comprehensive approach that's inherently necessary to have effective flood plain zoning.

The basic purpose of this act would be to protect against flood losses. We will always have floods. And I think the problem that we have to address ourselves to is to eliminate development, really, that will be destroyed or impaired as a result of floods.

Examination of the records of the losses during the past two floods, the most recent floods, I think clearly indicates the magnitude of the problem that you are faced with in New Jersey as the most urbanized state in the country.

The May, 1968 flood resulted in total damages of \$133 million. The most recent flood, Doria, and the storm that followed, resulted in damage that would amount to over \$100 million on a statewide basis. The declaration of emergency that was declared resulted, really, in payments by the Federal Government for damage to public facilities and installations of about \$19 million. All of the applications haven't been processed but that's a reasonable estimate as of this time. The FCA had applications for loans, as a result of the damage, of over \$32 million; \$21 million has already been approved. In addition to this, there were individuals, of course, who got payments through the flood insurance program.

I think when you look at the alternatives to effective protection of flood plain areas, they are equally undesirable. One is the construction of public protective works at public expense. And I think a good example of this is the proposed Plan 3 in the Passaic Basin. Most of the benefits that will be derived from that project and most of the works that will be constructed relate to the protection of flood damage. Based on current estimates, the amount that would be attributed to flood protection would be in excess of \$400 million that would be

required to protect against flooding and the protection of property and life.

The other program, which again leaves much to be desired, is the flood insurance program. I think this recognizes that there is considerable development that has taken place in areas that are subject to flooding, and the only way that you can provide for some relief for the individuals is through the Federal Government subsidizing the insurance against flooding.

An additional factor that is becoming more apparent in the State is the problem that you have with the development of flood plain areas increasing the flood stage. Right here, in Trenton, on the Assunpink Creek, there is a gauging station which has been in existence since the 1920's. The same discharge, 2,000 cubic feet a second at the present time, results in an increase really - they did in 1972 over 1923 - of about 1½ feet in flood level. And you can attribute this in its entirety, really, to the development of flood plain areas, filling in, obstructions that are located in these areas increasing flood heights. This is something that's occurring all over the State. And I think that this pattern really has to be interrupted in the public interest.

In addition to the protection that would be provided under this Act, in terms of eliminating development which would be subject to flooding and the saving of tremendous amounts of public monies, as far as protecting these areas after they develop, the bill has great significance in terms of proper management of the water resources of the State.

The flood plain areas provide natural retention areas that absorb flood flows. If they are kept in a relatively undeveloped state, you improve the opportunity in the future of constructing impoundments to absorb flood flows as development takes place.

The protection of flood plains also is extremely important in water quality management. The flood plain areas form filter strips along your major water courses.

the State and they also eliminate the possibility of pollution from direct discharges from the development of the flood plain areas. They provide areas for recharge of ground water, which becomes more important as development proceeds in the State; and also the protection of these areas eliminates the problem that you get from siltation and erosion in flood plain areas which are very fragile.

So that we look on this bill not just in terms of means of protecting against development that will be subject to flooding, but a very important environmental measure to properly manage the water resources of the State.

Thank you.

ASSEMBLYWOMAN MARGETTS: Thank you very much, Mr. Pike. I have several questions.

One. does this duplicate in any way the Wetlands Act?

MR. PIKE: No. I realize the Committee had raised this question previously and it's something that we have looked into rather carefully.

We feel that, if the regulations are carefully constructed and integrated with the Wetlands Act, there won't be any overlapping or any confusion.

There are no floodways, really, in the areas that are subject to tidal flooding. However, there are flood hazard areas. Some of these would exceed the area, in some instances, under the jurisdiction of the Wetlands Act. I think that the regulations could take a form, however, that would have distinct provisions relating to tidal flooding as opposed to flooding from upland flows.

ASSEMBLYWOMAN MARGETTS: As it affects tidal water, salt water, this is considered part, of course, of the floodway all the way to the ocean.

MR. PIKE: Not the floodway, really. At the mouth of the discharge point into the tidal waters you cease to have what would be considered a defined floodway under the regulations, under the delineation work that has been

undertaken. So that there are areas where flooding results from a combination, really, of tidal action and wave action, and also the runoff from the upland areas. There is sort of a grey area there, and I think that in the establishment of the regulations this could be handled. We felt this would be the best way to do it.

ASSEMBLYWOMAN MARGETTS: Are there any questions?

ASSEMBLYMAN BARBOUR: Just one. What is the difference between flood protection and flood prevention, if any?

MR. PIKE: I don't really think there is any.

ASSEMBLYMAN BARBOUR: I thought you were making a distinction at one point.

MR. PIKE: No. The distinction that I was making really was between what is required to protect improvements that do exist in flood plain areas, such as diking, this type of thing, which generally is incorporated in a flood control project, as opposed to not preventing the flood but actually eliminating from the flood plain areas the development. Floods are going to occur regardless of what anyone does. I think that everyone recognizes this, unless you do have projects that will store, you know, and impound these flood waters. But the flooding will exist regardless. I think the main point is that you want to eliminate improvements from the area where they would be affected by the flooding.

ASSEMBLYMAN BARBOUR: Aren't there some floodways in the Wetlands area? Aren't there rivers there which would --

MR. PIKE: No. I think that what you would find is there could be areas where there would be a slight overlap. And I think, as I say, this is something that could be handled through the regulations. What you're going to find -- and there are some delineations that have been undertaken -- is that in the areas that are influenced primarily in flooding, in terms of tidal waters, it's really flood hazard area that you're talking about, basically.

ASSEMBLYWOMAN MARGETTS: Any questions, Mr. Black?

ASSEMBLYMAN BLACK: Director Pike, I have, roughly, three questions.

You mentioned earlier the possibility of, let us say, silt contamination. Would you conceive that this bill would bar agricultural activities in these flood plains?

MR. PIKE: No. Definitely not. I don't think there are any flood plain provisions, really, in a zoning ordinance that would bar any type of open use, such as agriculture.

ASSEMBLYMAN BLACK: The effective date, according to the bill - the act shall take effect immediately. In your opinion, would it be the desire of the Department to halt any activities that are in a construction phase at the present time?

MR. PIKE: No. There would be no way that this could be done. The only way this act can be implemented is, first, a delineation by the Water Policy and Supply Council. The engineering work has been completed, as I mentioned previously, in the Raritan Basin. There are public hearings that are scheduled later this spring, which are required before the delineation is made. So that the act, by its passage, really wouldn't initiate this program of flood plain regulation in the State. The first thing required is delineation. So that this is something that will proceed over a considerable period of time, really, before all areas in the State were covered.

ASSEMBLYMAN BLACK: I asked that question specifically with reference to the Gloucester County Regional Sewerage Facility which, I believe, in certain instances parallels Mantua Creek.

MR. PIKE: Yes, that's correct.

ASSEMBLYMAN BLACK: So it should have no effect upon the progress of that program.

MR. PIKE: No, it wouldn't have any direct effect.

ASSEMBLYMAN BLACK: And a third question. Do you feel the Department would have objection to having the effective date changed to depending upon the promulgation of regulations?

MR. PIKE: No. The preparation of the regulations, of course, should occur after the act, you know, becomes effective. There is a considerable amount of work and some research that will be necessary. We would do this in conjunction, I'm sure, with the Attorney General's Office and also the Legal Analyst within the Department. So that I think the regulations, really, would be subject to separate hearing at the time they were promulgated, and I would think that would provide the necessary opportunity for people to raise questions concerning the provisions that the State would adopt as minimum standards to the flood hazard areas.

ASSEMBLYMAN BLACK: Well, the reason I bring that up, having seen the regulations promulgated with reference to the Wetlands, I feel that these regulations far exceeded the intent of this particular House, and I am sure the Senate, as well, and I feel that we ran into a great deal of difficulty and caused the public a great deal of concern by, first of all, enabling the Department to proceed, and then not having the Department come back and submit to the Legislature, for its review, the regulations. I believe that perhaps if some of these measures were so written or so amended, we might solve a great deal of our problems in administering a program such as this or the Wetlands, if we had the proposed regulations for promulgation presented to the Legislature sufficiently in advance. It appears to me that we, as Legislators, reach a situation where we give you the power to accomplish something but then the accomplishment is not always paralleling or running along the same trend of thought as the Legislature originally envisioned when they gave the Department this right.

MR. PIKE: Yes.

ASSEMBLYMAN BLACK: Thank you.

ASSEMBLYWOMAN MARGETTS: Thank you very much, Director Pike. Have you a statement to submit for the record?

MR. PIKE: No. We could leave one with you, if you want. I just spoke from notes but we can incorporate this

in a statement, if you would like.

ASSEMBLYWOMAN MARGETTS: Thank you.

I neglected to mention that we will keep the record open for two weeks to accept any written testimony if anyone should wish to send in a statement.

ASSEMBLYMAN BARBOUR: Director, I have one or two other things.

Do you have any idea how long it will take for regulations to be promulgated after the bill would become effective?

MR. PIKE: I would think within six months.

ASSEMBLYMAN BARBOUR: Now, one other area. In the Agriculture Committee hearing that was held, there was a question raised as to whether this would further restrict the use of land that presently exists. The regulations, as I understand, would impose a further restriction on the use of land than we now have.

MR. PIKE: Yes, of course. Anything that existed prior to the promulgation of the regulations - and, of course, this would be after the delineation of the area - would exist there as a nonconforming use and they would have the same rights under law that nonconforming uses do under zoning. As far as any future development, they would come under the jurisdiction of the regulation.

ASSEMBLYMAN BARBOUR: And in the Committee hearing there was some discussion as to whether an owner of land should be compensated for this restriction. Would you care to comment on that insofar as what the State's or the Department's or the Division's attitude is to this? I think it should be in the record.

MR. PIKE: The regulations that would be adopted would be reasonable. We feel, however, in these areas, that the public interest is the overriding concern. This is something that would require, you know, very careful legal review. And I think there are precedents for this type of thing in other States where they have established regulations, and there

are some municipalities, just through the exercise of their zoning powers, that have enacted flood plain zoning that would be very similar, undoubtedly, to what the State would be promulgating. So that we don't feel that it is necessary, really, that any compensation be required. In effect, it isn't a taking of land, it's just restricting what use could be made of the land.

ASSEMBLYMAN BARBOUR: That's all.

ASSEMBLYWOMAN MARGETTS: Thank you, Director.

Mr. Harold Scaff.

H A R O L D H. S C A F F: My name is Harold H. Scaff. I am a farmer working a 100 acre farm on Lee's Hill Road in New Vernon, which is in Harding Township, in Morris County.

I am a member of the Executive Committee of the Morris County Board of Agriculture.

My comments are directed to Assembly Bill No. 572. I understand there is another bill, No. 596, which relates to the same subject, but since I have not had an opportunity to obtain a copy of that bill, I am unable to comment on it.

I would like first to comment on the provisions of the bill and then more particularly on the purpose of it.

No mention is made as to who determines the extent of the "flood plains or floodway" and on what basis it shall be determined. The flood hazard area is determined by the Council under Section 3 of the Bill, but I find no Section 3 in 572, so I presume it is in the original legislation that this amends.

No indications are given as to who determines the "flood fringe area."

Under the meaning and intent of the expression "person" everybody is included, including the State Government, but I notice that the Federal Government is left out. And as I understand it, under the State laws of New Jersey and under the Water Power laws, the Federal Government comes under the jurisdiction of the State as far as water laws are concerned.

Subsection (b) on page 2 refers to the provision for waiver according to definite criteria where necessary

to alleviate hardship. Who determines the definite criteria and the hardship?

All of these provisions are too vague and leave way too much to the discretion of the administration of this bill. This would certainly lead to the imposition of legislation by man and not by law which would be completely un-American.

This bill is conspicuously lacking in any comments on compensation to land owners for the loss in value of their land by reason of the restrictions imposed under this Act. The loss would, undoubtedly, be very substantial. Numerous law suits would certainly result from lack of such a provision. Bernards Township recently passed a flood plains ordinance and the next day three lawsuits were instituted against the Township.

There is no provision in the bill for its discontinuance once a flood plan is completed and flooding conditions have been eliminated. Unless it is the intention of this legislation to keep this land in open space, this requirement is imperative in fairness to property owners. If this provision is not inserted in the bill, then the citizens who own property affected by the legislation would be providing open space for the general public at their expense. And such property owners are mostly farmers.

Flood areas can be coped with far better by local areas than on a Statewide basis that uses "land adjoining a stream" as a generality in designating a "flood plain". This gives no consideration to areas that flood and are nowhere near a stream and where the water will remain longer than adjacent to a stream.

A municipal ordinance, such as one passed recently by Passaic Township, can far better cope with the problem. In this ordinance certain areas, regardless of streams, are designated as flood plains. Such ordinances can be rescinded when they have served their purpose.

I would now like to comment on the purpose of the bill.

Item 1 under Section 1 on page 1 states "It is in the interest of safety, health and general welfare of the people of the State that legislative action be taken to empower the Division of Water Resources to delineate and mark flood hazard areas, to authorize the Department of Environmental Protection to adopt land use regulations for the floodway."

The final statement on page 4 reads in part as follows: "It is essential to regulate the use and development of these lands to insure the objectives of minimizing flood losses and protection of the environment will be achieved."

I assume from these two statements that the thousands of people, largely farmers, who would be vitally affected by this legislation are not thought of as part of the "general welfare of the people".

While the legislation might minimize flood losses by taking the rights of people away from them, the environment will not be protected in the least. In fact, it will not only continue to be harmed by future floods, but will get progressively worse as time goes on.

This legislation solves nothing. It bypasses completely the problem and tries to lessen potential damages by taking the rights of property owners away from them. This is the old story of "least lines of resistance".

The Passaic River flood problem has been the subject of study and reports by local agencies since 1888. I think that's 84 years ago. For 50 years reports and recommendations on the control of floods on the Passaic River have been made, but not a single plan has been accomplished to date. This is the root of the problem and not land use.

The latest document that I have been able to locate on this subject is one released by the U. S. Army Engineer District, New York Corps of Engineers in December 1968. And I remind you that the United States Army Corps of Engineers is the finest group of hydraulic engineers in the world.

The following statement is quoted from their report:

"Protection of Life and Property. The plan would result in the reduction of flood flows on the Passaic River and its tributaries to acceptable levels. The best plan would result in the elimination of virtually all damages to property and hazard to life, along the Pompton and Passaic Rivers that would be caused by flood flows 20 per cent in excess of the maximum flood record which occurred in October 1903. The value of the flood benefits now and for the foreseeable future would be supplemented by the value of indirect benefits such as the elimination of loss of wages, transportation costs, cost of relief and rescue and emergency measures. Land Enhancement. The areas would be protected from flooding and thereby enhanced. The enhanced value of the land would result from the use for more economically productive purposes than under present conditions."

This is the legislation we should be striving for and not abandoning the usefulness of land and driving its value down.

The palliative that this legislation proposes would be only of a temporary nature. The flood problem has become progressively worse over the years and will be much greater in the future. Every time a piece of land is taken out of a farm or undeveloped use, the problem is increased. And I know that from experience because in Harding Township the flood problem has definitely become progressively worse for the last 20 years. And I will explain later why it will get even moreso.

Now the Sunday Star Ledger of Newark, New Jersey - last Sunday's issue - contained an article on "Trenton seeking ways to control flood-prone lands". The article indicates that "The U. S. Army Corps of Engineers will eventually attempt to harness 'old man Passaic' next year, if the Federal Government approves the final plan."

Samuel Tosi, from the U. S. Army Corps of Engineers, New York District, attended the February 10, 1972, meeting

of the North Jersey Conservation Committee for Flood Control and Water Protection, which is a very effective Committee. In answering questions, he made this observation about the plan: "The status of the report is that all investigative and analytical work required for the Passaic River Survey is complete. The final coordination with other Federal Agencies is in process. A letter from Governor Hughes expressing the State of New Jersey's concurrence with plan III is on file. The Corps of Engineers is now in a position to forward the final report to Washington. The only matters which are unresolved at present are a large state public hearing and final coordination with the Environmental Protection Agency. It is expected that final coordination will be concluded in March and a public hearing will be scheduled for late April or early May." I have no reason to believe that this is not an accurate statement by a responsible person and, if that is so, it would seem that flood plains legislation at this late date is not justified.

In Harding Township, where I reside, the problem of flooding has become progressively worse and when Highway 287 is paved it will be severely affected. There is 10 miles of this highway and its service roads which will create a run-off of over 3,240,000 gallons of water from one inch of rainfall into the rivers in Harding Township. I understand that the State has no responsibility for anything beyond the right-of-way area, so Harding Township will bear the brunt of this run-off.

Efforts have been made by citizens of Harding Township to do something about its flood problem since the Township's elected officials have done nothing about it, but to date their efforts have produced little or no results. The problem of flood control in Harding Township lies wholly within its boundaries which should make it easy of solution, but no effort by the Planning Board is made to analyze the problem and to determine the courses

of action for its solution.

What is required is an hydraulic engineering study of the problem and recommendations to solve it. If this were done, as in the case for the entire State of New Jersey, we would not require any flood plains legislation unless it is a subtle means of downgrading the property for future open space requirements.

In view of recent developments in connection with the report of the United States Army Corps of Engineers, I urge the members of the Assembly to support and help in the approval of the report so that action can be taken to solve the flooding problem by directing efforts to the source of the problem. If communities in the State feel that legislation is necessary until the plan proposed by the Corps of Engineers is completed, this can be taken care of by municipal ordinances which can be rescinded when the plan is completed. In this way the rights of citizens will be maintained which is the foundation of our democratic system.

Thank you.

ASSEMBLYWOMAN MARGETTS: Thank you, Mr. Scaff.

Are there any questions?

ASSEMBLYMAN BARBOUR: Mr. Scaff, what town are you from?

MR. SCAFF: I'm from New Vernon, Harding Township.

ASSEMBLYMAN BARBOUR: And you said that you hadn't seen A-596?

MR. SCAFF: No, I have not.

ASSEMBLYMAN BARBOUR: I think it would be advisable, if you desire to submit a written statement within the next two weeks.

MR. SCAFF: On 596?

ASSEMBLYMAN BARBOUR: Yes.

MR. SCAFF: I should be glad to. Unfortunately, I got this assignment 11 o'clock Friday night.

ASSEMBLYMAN BARBOUR: Now, in your presentation you

indicated that it was your feeling that if these regulations were implemented and did alleviate the flood problem, then there should be provision in the legislation to eliminate them. And I don't quite understand.

MR. SCAFF: No.

ASSEMBLYMAN BARBOUR: Well, if this is done, if these regulations do alleviate the problem, I don't quite understand how they could then in the future be rescinded and not cause the problem to recur. Can you elaborate on that?

MR. SCAFF: In my opinion this bill, 572, does not eliminate the problem. To eliminate the problem you must carry out a plan which will control the flood itself, and the Corps of Engineers, in their report, has said that this plan that they are proposing will eliminate the flood problem to start with. So, if you eliminate the flood problem, then you have no problem on fringe flood areas or flood plains or anything else.

ASSEMBLYMAN BARBOUR: And what is the name of the Corps' Report, or the date of it?

MR. SCAFF: Passaic River Basin Water Resources Development. Plan III.

ASSEMBLYMAN BARBOUR: I have no further questions.

ASSEMBLYWOMAN MARGETTS: Assemblyman Black?

ASSEMBLYMAN BLACK: No questions.

ASSEMBLYWOMAN MARGETTS: Thank you very much, Mr. Scaff.

MR. SCAFF: Thank you.

ASSEMBLYWOMAN MARGETTS: Mr. John Reed.

J O H N R E E D: Good morning, ladies and gentlemen. My name is John Reed, builder, real estate consultant and occasionally a general broker in real estate. I am currently serving as Chairman of the New Jersey Builders Association's Environmental Control Committee, a position I have held for the last four years. Our Association represents some 1500 member firms located throughout the

State of New Jersey. Its members are involved in every segment of the building industry and include allied trades, suppliers, lawyers and bankers.

The Environmental Control Committee serves as the major liason between the building industry and environmental protection officials and even includes, among its members, representatives of the U. S. Department of Agriculture and the Rutgers University Bureau of Conservation and Environmental Science. In addition, several NJBA executives, myself included, meet every month with Richard J. Sullivan, Commissioner of the New Jersey Department of Environmental Protection, in an effort to resolve potential problems before they reach major proportions.

Members of our Association also sit on the Department of Environmental Protection's Sewage Task Force and the Department of Agriculture's Land and Water Resources Task Force. And only recently, in cooperation with the New Jersey Association of Soil Conservation Districts, we sponsored a Soil Conservation Seminar for our members.

All of these facts are indicative of the ever more active role now being taken by the New Jersey Builders Association in regard to the

protection of the environment and the role of the developer in this area.

It is in the role of a builder who wishes not only the freedom to ply his trade but as one who wishes to do so under the proper environmental conditions that I appear today to present the New Jersey Builders Association's objections to Assembly Bills 572 and 596.

Assembly Bill 572, which would attempt to regulate the use and development of so-called "flood hazard areas", was evidently drawn in haste and as a result sufficient consideration was not given to the consequences, which include, among others, a new set of unduly restrictive standards.

The term "flood plain" represents a known area as shown on a geodetic map. It is an area which has a history of natural flooding and is defined in terms of feet above sea level.

Yet the definition of "flood plain" (page 2, lines 11-12) - accurate from the point of a history of flooding - becomes completely distorted when the phrase

"or may be hereafter covered by flood water" is added.

Such a definition thereby attempts to regulate, under obviously arbitrary criteria, the use of land which may have been historically flood free. If one were to liberally construe such a definition, virtually every parcel of land could be included in the said area. For a burden would be placed upon the Department of Environmental Protection

which could only be born by a clairvoyant.

The terms "flood hazard area" and "flood fringe area" present similar problems. Such terms are not formally defined as are "flood plain" and "floodway." The definitions, as presented in the bill, allow for totally arbitrary determinations by the Division of Water Policy and Supply.

The term "flood hazard area" is such a nebulous one that it may be construed in any number of ways. The definition and the wording of the bill is such that if a drainage pipe is blocked up by a heavy rain-storm, the area 100 feet on each side of the drainage pipe may be designated as "flood hazard" and therefore deemed unusable. Interpretations of this type would abound under the bill, as written, and the result, of course, would be catastrophic.

Another example may be where an uprooted tree plugs a stream under a small culvert or bridge. This would be a one-time phenomenon, but under the provisions of this bill, such perfectly usable land would carry the false label of "flood hazard area."

What criteria will the Division use to decide which areas represent a "hazard" or a "fringe"?

Where may one find official definitions of "flood hazard area" and "flood fringe area"?

Are there tests which will prove conclusively that an area is a "hazard" or a "fringe"?

What are some specific examples of "flood hazard areas" and "flood fringe areas" around the State? How and by whom were these areas so designated?

Without answers to these questions and without detailed research based upon geodetic study, a bill which relies on such arbitrary and unsophisticated definitions can only manifest itself in ways never originally intended. For without meaningful definitions, the regulations which follow and which are predicated upon such definitions allow for unfathomable limitations on land use.

Our Association has never advocated construction of any type on known flood plain area. However, this particular bill seeks to remove from use land for which there is no justifiable reason for withdrawal.

Certainly, there is most definitely a need for rational control in this area. But would it not be of greater benefit to the State, the local municipalities and the property owners if a definitive survey was conducted to determine specifically those parcels of land to be effected by this bill. Only then will anyone be able to determine the true impact - economically and ecologically - of the proposed measure.

Action followed by a definition of problem areas is manifestly unfair to all parties involved and can only result in unforeseen difficulties. Before such a measure is even contemplated and before controlling power is given to anybody, a complete study should be undertaken.

The consequence of such a measure is far ranging and potentially disastrous. The most obvious effect would be the removal of usable, expensive land from circulation. The very vagueness of the definitions would tend to discourage would be investors and would thus leave the value of the land in question.

The withdrawal of such expensive lands and the inevitable tax reductions would mean a significant decrease in the ratables to be accrued by the respective municipalities. A decrease which could be crippling to a number of municipalities throughout the State.

This brings into play another critical consequence. The total compensation to the owners of such "withdrawn" lands would be prohibitive. It is surely beyond the financial capacity of any municipality and would impose upon the State a burden of more than one billion dollars.

It is also doubtful that consideration has been given to the effect such a measure would have upon construction costs around the State. Land, which is already at a premium, would become even scarcer with such a large proportion withdrawn. As a result, the cost of the existing undeveloped land would skyrocket to a level that would make today's inflated market prices seem small by comparison.

Even if one were to assume that the definitions were acceptable, the provisions contained in Sections 6 and 8 on Page 3 would be in direct conflict with what our Association firmly believes to be the proper chain of authority.

Both sections provide for the adoption of standards which may differ significantly from those as promulgated by the State. It is our contention that control, and especially environmental control, should be conducted and enforced on the State level whenever feasible.

For there can be no argument that the State is more capable of

providing the expertise necessary to implement such programs. They are better able not only to administer such an operation but also to bear the financial burden of assuring that only trained and qualified people are entrusted with such administration.

To allow local municipalities the option of expanding upon the State level standards is to open the way for abuses designed to do nothing more than inhibit development. The Department of Environmental Protection has proved that it possesses the knowledge and understanding to promulgate effective yet reasonable regulations.

* * *

Many of the objections which I voiced about Assembly Bill 572 also apply to Assembly Bill 596. In particular, I refer to the phrase which defines "flood plain" with respect to those areas which "may be hereafter covered by flood water." Again, this allows for such a broad interpretation that abuses are almost certain to follow.

In addition, A-596 allows for review of application for building in the so-called "flood hazard area" by local authorities. It is folly to assume that each municipality will be able to provide people who have the expertise and training demanded by such a position.

The bill also permits each municipality to define its own flood levels, thereby opening the way for the discrepancies that may develop when two adjacent towns decide upon different "feet above sea level" readings to use as determinants of the flood level. One town could set their flood level two feet higher than an adjoining one.

I would take this opportunity to caution you with a homily. Political boundaries do not control water. This can and should be done only through natural basins and watersheds.

In addition, the cost of administering such an operation would place a great burden upon the State's 567 municipalities. As I stated in the previous bill, such efforts are most efficiently handled by a central State agency. And it is only feasible, in terms of economics and ability to perform, that such a function be handled not by local municipalities but by the Department of Environmental Protection.

I have thus far directed my comments only to the provisions of the bill. At this time, I would like to present our Association's recommendations for the use of flood plain areas.

It is our belief that flood plains, while admittedly unsuitable for building, could still be used to advantage. There is no reason why land so designated could not be used for farming. Sod farming for example.

We would also recommend that such flood plain land be sold for and taxed for less than normal. If it were stated in the deed that there could be no building upon the land, the local conservation commission could justifiably recommend a tax reduction.

However, I should repeat here that the removal of an exorbitant amount of land - a development which could result from a bill such as A-572 - from the tax rolls or at a substantial reduction would cause great tax deficit that would have to be assumed by other land around the State.

The suggested tax reduction for flood plain land would allow the farmer, now suffering from high taxes, to directly retail his products and therefore maximize his profit potential. More importantly, it would encourage farming in a state which is in danger of losing its last few remaining farms.

Flood plains also are of particular interest in the area of PUD or density zoning, where a certain proportion of the land must be set aside for "green space" or undeveloped land. Why not use flood plain land to meet part of the requirement for open space? Why not establish a farm, right on the PUD premises, from which residents would be able to purchase fresh produce?

As I leave you with these suggestions for a more profitable and constructive use of flood plain areas, I again request that such measures not be drawn in haste. Let us first define the problem. Then let us conduct detailed research not only to determine solutions to the problems, but as a means of assessing what effect of the solutions will have in other directions.

Our environmental problems are considerable and demand action. But let the order of priority be (1) definition (2) research and (3) action. And let this order serve as a guideline in dealing with any environmental problem.

If I may, Mrs. Margetts, I would like to say that, in general, we concur with the thrust of Mr. Pike's previous statement. We just feel that too hasty action here on perhaps ill-considered bills is dangerous and has a massive potential economic effect on thousands of property owners. We do believe that there is only one proper ultimate party to handle this and that is the Department of Environmental Protection.

Thank you.

ASSEMBLYWOMAN MARGETTS: Thank you for your very good presentation, Mr. Reed.

As I understand it, you have never built or authorized any building on so-called flood plains? Is that correct?

MR. REED: We do not. We certainly do not concur that we should have any building within a known flooding area.

ASSEMBLYWOMAN MARGETTS: Then you indicated that under this bill, 572, there could be no farming on the flood plains? That is not my understanding of the bill.

MR. REED: The bill does not leave it clear to us at the moment. We are suggesting that that specifically be a suggestion, possibly in the form of an agricultural zone.

ASSEMBLYWOMAN MARGETTS: Then you feel it is not clearly spelled out in this bill to what uses the land could be put. Is that right?

MR. REED: That's correct. In both cases, Mrs. Margetts, we feel the cart got before the horse. We don't know what areas we're specifically speaking of and we don't really know what regulations or controls are proposed at this point. We do not, listening here today, hear much about what may be the massive effect in Northern New Jersey where some towns, for example, have put their lowlands into an industrial zone where the value of acreage may run \$50,000 or more an acre and where at

the present moment anything from shopping centers to sports stadiums may be planned in what, under this bill, might be prohibited. These are vast sums, in the northern area in particular.

ASSEMBLYWOMAN MARGETTS: Have you a question, Assemblyman Barbour?

ASSEMBLYMAN BARBOUR: I take it, though, that your organization is in favor of regulation in this area, just that you don't think that this does the proper job the way it is attempted to be done now.

MR. REED: That is right.

ASSEMBLYMAN BARBOUR: And would you be in favor of statewide regulations rather than municipality by municipality?

MR. REED: Absolutely. It's a massive problem and it should be handled at the State level. They are the only ones properly equipped.

ASSEMBLYMAN BARBOUR: Thank you.

ASSEMBLYWOMAN MARGETTS: No further questions. Thank you very much, Mr. Reed.

Mrs. Rooney, State League of Women Voters.

M R S, F R A N K R O O N E Y: Mrs. Margets and members of the Committee, I am Mrs. Frank Rooney, Director of the League of Women Voters of New Jersey. I am pleased to have this opportunity today, to comment on the need for flood plain regulation, the subject of Assembly Bills 572 and 596. The 96 local leagues in New Jersey have devoted much time and effort in the past 16 years to studying and evaluating the management of our State's water resources. They have come to the conclusion that present management is fragmented, does not include provisions for long-range planning, and that the trend is toward single purpose uses motivated by short-term advantages to individuals, industries, and local governments. Further, that this trend is creat-

ing a serious dissipation of our state's water resources. Our members realize that while many other changes are needed to improve the total management of New Jersey's water, mandatory zoning of flood plains will remedy one of the flaws in the system.

Following are the reasons why our members believe that mandatory flood plain zoning is in the best interests of the people of New Jersey:

- * The flood plains have a biological value which when destroyed will set in motion a chain of events which have long and far reaching consequences:

"A flood plain is a great sponge, when the rains and floods come it soaks up an enormous amount of water, it returns a good part of it to the underlying water table, and then over a period of days and weeks slowly releases the rest." (Whyte, William H. - The Last Landscape)

While acting as a sponge these flood plains help slow down the speed and volume of flood waters far more effectively than any man-engineered project can. These natural flood barriers act as a storage area for municipal water supplies. Development of these areas will increase runoff as the flood plain is waterproofed with asphalt paving and roofs, causing an increase in the speed and volume of the flow thus increasing downstream flooding. Development reaching into the flood plain and the river with fill materials will act as a cork in the waterway increasing upstream flooding. Development will cause siltation, which will settle in the channel and decrease the river's carrying capacity, again increasing flooding up and downstream. Unregulated development will also serve to decrease the capacity of the ground to absorb water which is stored there for future use by homes in the municipality and region. We therefore conclude that regulation of development in the flood plains is in the best interests of the majority of the people of the state.

- * From an economic standpoint regulation of flood plain development is a sound practice when the costs of floods are measured against the benefits realized. In August 1971 tropical storm Doria caused \$140 million in damage in New Jersey, driving many people from their homes and threatening their lives. When construction unsuitable to the area deprives the owner of the use of his property he becomes a public burden as tax dollars are used to compensate him for his decision. This is an unfair burden to those citizens whose tax dollars are spent for they realize no benefits, since when with proper regulation they may have realized beneficial uses of the land. The League feels that flood plain regulations will help assure that the benefits of uses of these lands will exceed the costs of using flood prone lands, by eliminating the repeated need to reimburse owners for their flood losses.
- * The League is not advocating that these areas be left completely undeveloped. There are uses to which this land can be put that are compatible with the land, that will not cause a burden, create a hazard, and will be beneficial to many people. These uses include agriculture, forestry, institutional open space, open space for housing using the principle of planned unit development, golf courses, parks, and other recreational uses.
- * The right of the property owner to determine the use of his land has always been considered a constitutional right. He has been curtailed in his activities only by the zoning and building codes of his municipality. These were developed to prevent development which would be a nuisance to the community, or a threat to its safety and well-being; in addition these restrictions guide the development of the community in the desired pattern. Restrictions the land itself places on develop-

ment are often ignored. The fact that a flood plain represents the ancient river bed to which the river returns without fail in time of high water should prevent building and construction on these areas. The inevitable damage costs to the New Jersey taxpayers deprives them of their constitutional right to benefits from their tax dollars. In addition, this situation frequently creates hardships for the unwary buyer. On February 18, 1972, a Record editorial summed it up this way:

"If tax hungry municipal governments haven't the brains or conscience enough to forbid such exploitation of innocents the state should take over... people should just not be lured into flood plains to lose uninsurable property or indeed their life."

Our members consider the constitutional rights of the majority of people to be more worthy of consideration than those of the few.

- * As mentioned previously the total management of water resources is fragmented between federal, state, county and municipal authority. Flood plains which cover a large continuous area should be governed by an authority which can properly coordinate, consolidate and regulate the development of the entire area. Without this type of regulation, development practices of the area will be inconsistent and often work against each other. As I have previously stated, any development or change in one part of a river's flood plain can seriously affect areas up and downstream of the altered area.

In 1967 the report of the New Jersey Joint Committee on Drainage (Surface Water Control in New Jersey, by Stephen A. Dector), made recommendations regarding the development in the flood plains. "The need to develop programs to restrict the use and occupance of flood plain areas has been recognized. The goals attained by developing such programs are...":

- * High intensity development can be restricted in areas where damage is likely.
- * Open areas which absorb and slow runoff can be preserved.
- * Construction can be controlled, affording protection from damage and the creation of unsanitary conditions.
- * Recreation areas can be provided and suitable fish and wildlife habitats preserved.

Connecticut is one of the states which has recognized the necessity for state regulation of flood plains. The traditional independence of its towns made any comprehensive regulation of flood plains difficult, and many towns were built directly in the path of flood waters. These towns were rebuilt after each destructive flood until the flood of 1955 proved so disastrous that the state took action. The Legislature enacted legislation which provided for a channel encroachment line program for the major streams and rivers. No one in Connecticut can build within this line without state authorization.

The League of Women Voters realizes that in New Jersey the demand for land and its relatively scarce supply has increased pressures to develop unsuitable lands such as the flood plains. In fact, this land which is flat and easy to build on, which is priced low because of hazardous conditions, is under more pressure than other types. We hope that this Committee and the Legislature will recognize the problems, realize that a solution is necessary, learn from the experiences of other states as well as from past studies and adopt strong legislation which will contribute to the future welfare of New Jersey.

Thank you.

ASSEMBLYWOMAN MARGETTS: Thank you, Mrs. Rooney.
From your testimony, you favor A-572.

MRS. ROONEY: Right.

ASSEMBLYWOMAN MARGETTS: You did not mention or
comment on A-596.

MRS. ROONEY: Well, we feel that 572 is the better
bill because it is mandatory; it requires and is not
permissive as is 596.

ASSEMBLYWOMAN MARGETTS: Thank you. Are there
any questions?

ASSEMBLYMAN BARBOUR: No.

ASSEMBLYMAN BLACK: No.

ASSEMBLYWOMAN MARGETTS: Thank you very much.
Mayor Gibson.

F R A N K W. G I B S O N, JR: Mrs. Margetts and
members of the Committee. I am Frank Gibson, Mayor of
Passaic Township. I speak in favor of Assembly Bill 572.

We feel that it will curb the flood destruction
which could be caused by future development in the flood
areas throughout the State.

We are not asking for anything which we have not
already done in Passaic Township. We enacted a flood plain
ordinance last November and we stated, at the time, that
while we felt this would help it would not do the job unless
all communities up and down stream of the Passaic enacted
the same type of ordinance.

I think all the communities are trying to do their
job. I think it has been evidenced in our local area because
subsequent to passage of our flood plain ordinance several
other municipalities, both upstream and downstream from us on
the Passaic, have also enacted local ordinances.

Why we favor 572 is because we feel that 572 will
provide cooperation completely, which is often not available
through voluntary cooperation. A flood plain ordinance will
not help unless all communities in any particular river basin
are involved.

I think that the Morris County Planning Board, in their newsletter, which I received last night, has stated this problem much better than I could and I would like to read it into the record, if I may.

"As in most natural systems, the operative potential of the flood plain can be easily disrupted. It has long been obvious that if flood plains are developed with impermeable surfaces, such as roofs, blacktop and concrete, absorption by the land cannot take place. Estimates suggest that an average rooftop of 1200 square feet will shed about 750 gallons of water during a one-inch rainfall. Combine the number of rooftops found in an ordinary subdivision, put that subdivision in a flood plain and one doesn't have to exercise any imagination to recognize the danger inherent in such irresponsible development. Those who seek to profit from the most 'economic use of flood plains' argue that flooding can be eliminated by building protective dikes and dams. This is true to a limited extent. Damage to the immediate area of a developed flood plain can be minimized by artificial devices such as dams, but the over-all effect of such diking is to reduce flood storage and thereby increase the flooding problem to all communities downstream." And I might add, as it backs upstream.

"In addition to simply diverting the damage from one spot to another, channeling the runoff away from the flood plain, may also hinder the replenishment of the water table. And regardless of their efficiency, flood control structures are an expense. In his book, 'The Last Landscape, William Whyte'- he was quoted earlier -"estimates the construction of just one moderate-sized shopping center with a parking lot in a flood plain would necessitate flood control structures costing from \$500,000 to \$1 million. There is no reason the taxpayers should provide subsidies of this sort for the benefit of speculators who seek to profit from development of the flood plain, especially when one remembers the natural flood control is immeasurably cheaper.

"Establishing the need for preservation of flood plains is not enough, however; practical measures of implementation must be investigated. The principal tool for preservation would seem to be enlightened use of zoning. We must accept the premise that it is in the interest of public welfare to zone against development of selected areas. Such zoning is clearly a proper exercise of the police power of governments."

That's the quote from the Morris County Planning Board Newsletter which I received yesterday.

We felt, in Passaic Township, that such zoning was clearly a proper exercise of the police power of governments and we enacted our zoning ordinance 19-72.

With regard to the statement that the principal tool for preservation would seem to be the enlightened use of zoning, I would like to add that in Passaic Township we have recognized that when we do take land out of circulation, as we in a sense do with particularly the floodway area, it is incumbent upon us as a municipal government to modify the zoning for the remaining areas of land. And this we are doing. As a matter of fact, our Planning Board met last night to discuss a new density modification zoning which will permit greater use of the remaining lands in Passaic Township.

I would like to comment on a remark made by Mr. Scaff, I believe, of our neighboring Township of Harding. He comments on the provision for loss of value. Well, this is true. We recognize - and on the map in front of you, you will see that in Passaic Township, which is approximately 8,000 acres, we have probably removed approximately 20% of the land in floodway and additional land in the flood hazard area.

So, from our experience, we were quite worried about how much this would cost us in so-called tax ratables. For the record, I would like to say that Passaic Township has a valuation of approximately \$72 million, and the land which we removed in the floodway, which represents about 20% of the land area in town, is somewhere in the neighborhood of \$600,000.

Now there has been discussion about, and there will be much more discussion about the value of land which is taken from the floodway. I think the value of land which is taken from the floodway is considered by those who own it or by those who plan to own it for speculative purposes, as its potential value. The land, as it is used now and it is evaluated now for our tax purposes, is very, very low cost in the floodway. Now, if you take low-cost floodway land and build a shopping center on it, obviously the value of that land per acre becomes immeasurable. But land, as it exists now, in the floodway is quite low cost.

For the record, I would like to ask two questions - one brought up earlier on the criteria under line 4b. These have not been spelled out and I understand now that the idea now is to spell them out after the bill is passed.

And the second is on line 5 - minimum standards. I would hope that they would be strong enough to do the job.

For the record, I would like to submit our ordinance, 19-71, and the amendment, 22-71, which is simply to eliminate a couple of typographical errors and to give the Township Planning Board also the means to judge on any variations.

I think that our ordinance, 19-71, is the best evidence I have that Passaic Township is in favor of Assembly Bill 5-72. And with that, I will conclude.

(Ordinances 19-71 and 22-71 - see p. 82 A & p. 83 A)

ASSEMBLYWOMAN MARGETTS: Thank you, Mayor Gibson. Have you a written statement for the record?

MAYOR GIBSON: I will send you a written statement, Mrs. Margetts.

ASSEMBLYWOMAN MARGETTS: Is there a particular objection from the property owners to this ordinance, those property owners involved?

MAYOR GIBSON: Yes. There were some objections in the beginning when we held our hearings but we have not received any formal objections in the way of law suits. I think most of our citizens are completely understanding of

what their land really is worth as it is now, not from a potential point of view.

I have an interesting comment. We are involved in Green Acres now and one of the property owners that we are hoping to work with in regard to Green Acres - his land lies in the floodway, not the flood hazard but the floodway. He stated, when we contacted him, that he also has land in an industrial area downstream from the Passaic and he has a building which is worth a million dollars, and he now realizes how important it is for him not to build on his own property in our floodway which would cause more damage to him later on in his industrial area.

We have not had any real serious objections. Of course, we've only had it since November.

ASSEMBLYMAN MARGETTS: Any questions? (No questions)

Thank you very much.

MAYOR GIBSON: Thank you very much.

ASSEMBLYWOMAN MARGETTS: Is Mr. Walker here? All right, Mr. Walker.

I A N W A L K E R: Madam Chairman and members of the Committee, my name is Ian Walker. I am Executive Director of the Stoney Brook-Millstone Watershed Association with offices in Pennington, New Jersey. Today I am expressing the views of that Association and also of the South Branch Watershed Association located in Clinton, New Jersey.

The Watershed Associations have watched for many years the conditions or what happens after a property owner has sold the land, the developer has built upon it, and we've watched the damages; in fact, we've watched the cycle of damage and hardship and then of property owners going to their municipal officials and then finding that there is no way to get upstream protection, the costs are too high for engineering works or there simply isn't room, or land values are too high.

So engineering works, in many areas, can't be done even after the fact, and in undeveloped areas of this State

are unnecessary if a bill such as this is enacted.

I think we have four points or major reasons for support of A-572. First, it is, we think, foolish to develop high damage areas; secondly, the hundred million dollar figure that was mentioned in damages in Doria cannot be sustained and will be much larger as other areas develop. Doria followed a path up through our area, through the Millstone and Raritan and if this area is developed more in the future that hundred million figure will be much higher. That figure also does not represent or indicate in any way the health problems or hardships of property owners in that area. So this is a second reason for enacting such a bill.

A third reason is that the flood plains are important in storage and absorption of flood waters. The Corps of Engineers was alluded to earlier. I think in the past they have stressed engineering measures. In some cases there is no choice. I see more recently, especially in New England, the Corps of Engineers is recommending in their reports that flood plains and marsh areas not be developed, that they are a source of flood protection and should be maintained as such a source.

A fourth reason for supporting A-572 is that these areas are very important, very sensitive areas, they act as nutrient traps, fish and wildlife areas, and they are the interface between ground water and surface waters and are very sensitive.

We've watched many attempts in the past to regulate flood plain areas, most of them unacceptable. Passaic Township, possibly, and Princeton being the exceptions. But I should point out that in the case of Princeton where they have enacted a flood plain ordinance, this was done only after the engineering surveys were completed and the area was carefully delineated.

The counties, of course, but for the most part the municipalities have not acted. The counties are barred

from zoning regulations and this leaves the State.

The flood plains and flood areas cross municipal and county boundaries, and speakers before me have supported the need for action on a larger level. The State has the technical and legal expertise to carry out such a program and to promulgate uniform standards and regulations. I think it better that we have one set of standards and regulations rather than 567, which, interestingly enough, is about five units less than the number of this bill.

So we would recommend several things in addition to our support of this bill.

One is that the delineation program be much expanded.

Second, that these standards and regulations, as we've been assured this morning by Mr. Pike - and it was our experience that this would certainly be so - that these regulations will be reasonable. I can't see agriculture, park, recreation areas, and so on, be excluded from flood plain areas.

An addition or suggestion that we might make is that the Water Policy and Supply Council be incorporated in the process of review or regulation. Certainly there are going to be conflicts and there should be someone - we think a quasi judicial body in the form of the Council - other than an administrative body which could first, resolve the conflicts and, second, enforce the agreements which had been made.

The photographs which I have given to you, I think are interesting. These are taken in the Princeton area. These photos show the flood hazard area. The first picture, in the low water, was taken on August 25th, and the second picture, in high water, was taken at the height of the flow of Doria, three days later, on August 28th. And I think these pictures should be shown to anyone who would suggest development in flood plain or flood hazard areas. And this shows a flood hazard area. My question to them simply would be - to what usage should we put these areas?

Again, we express our support for Assembly No. 572.

ASSEMBLYWOMAN MARGETTS: Thank you, Mr. Walker. Your first recommendation, could you repeat that please?

MR. WALKER: Yes. We think that the delineation program should be expanded.

ASSEMBLYWOMAN MARGETTS: It should be expanded. Regulations be reasonable.

MR. WALKER: Certainly that regulations be reasonable. And we're assured by the statement and the assurances of public hearings. The Wetlands hearings, which were questioned and referred to earlier, - I think the final regulations are not out yet and I think they will represent a reasonable standard and compromise.

ASSEMBLYWOMAN MARGETTS: Any questions?

ASSEMBLYMAN BARBOUR: You indicated, I think it was in the second recommendation, that the Water Policy and Supply Council be included. Is this just in the process of making the regulations or setting them up? You don't mean in the enforcement and other activities.

MR. WALKER: I think in the case where municipalities do not act within a year's time, then this authorizes the State to come in --

ASSEMBLYMAN BARBOUR: No, I don't mean that.

Your second recommendation, as I understood it, was that you recommended that the Water Policy and Supply Council be included in the process of formulating the regulations.

MR. WALKER: No. My suggestion for the involvement of the Water Policy and Supply Council might be that where the municipality fails to act and the State then comes in and sets some requirements and standards and specifications for them, that there be a hearing before the Water Policy and Supply Council for that specific municipality or on that case, so that conflicts and issues can be resolved, not before the administrative agency but before the quasi judicial body. And this would be an open hearing in which all parties, for and against, and so on, would have an opportunity to

testify and comment.

ASSEMBLYMAN BARBOUR: In other words, you're recommending then that the regulations that the State would promulgate would not automatically be the standard in each municipality where they don't act themselves but that each municipality should have a separate --

MR. WALKER: No. I think the State will set general standards and regulations, or standards and specifications. But I can see conflicts arising or questions from the municipality. I think the municipality or anyone else should have an opportunity before the Council to resolve any fine points or any differences. The matter of the delineation and the engineering, and so on, I think will be a standard procedure and standard process which will apply across the board. But I think in any situation, when you establish the flood hazard lines, and so on, in a municipality there may be questions. And I'm saying that there should be an opportunity for those questions to be resolved by this body rather than just the administrative body. Again, it's for the fine points and not the over-all regulations or not the over-all intent and over-all engineering surveys.

ASSEMBLYMAN BARBOUR: Do I understand then that you are advocating that there be public hearings with respect to the delineations that are made, as well as with respect to the regulations that are promulgated?

MR. WALKER: I would see the State doing the delineations, the engineering work.

ASSEMBLYMAN BARBOUR: Yes.

MR. WALKER: I would see the State setting up broad general regulations. But then I would see this applied in a particular municipality and there may be questions concerning a particular line, particular property owners, and so on --

ASSEMBLYMAN BARBOUR: Insofar as delineations are concerned.

MR. WALKER: Possibly insofar as the delineations or some of the fine points, the engineering, yes. And I think then the hearing before the Council would give an opportunity for the State, those who had made the delineations, to support and enforce what they have arrived at, and also a property owner and a municipality to also come in and either support and state an objection and back it up with engineering data. Then the Council could make the ruling.

ASSEMBLYMAN BARBOUR: Are you advocating the same procedure with respect to regulations too?

MR. WALKER: No.

ASSEMBLYWOMAN MARGETTS: Any questions, Assemblyman Black?

ASSEMBLYMAN BLACK: Only one or two pertaining to the pictures.

I looked at two pictures and I see in the background of the earlier picture, at low water, - that is a masonry bridge which seems to be about 18 feet high above the surface of the water.

MR. WALKER: That's right.

ASSEMBLYMAN BLACK: And I take it that's the bridge that's inundated in the center of the second picture.

MR. WALKER: That's correct.

ASSEMBLYMAN BLACK: Who built the third bridge? Is that a county project or is that a State project?

MR. WALKER: The bridge in the second picture is a State project.

ASSEMBLYMAN BLACK: It looks like they better up their benchmark just a little bit.

MR. WALKER: There were assurances that such a picture couldn't be taken, when the bridge was built.

ASSEMBLYMAN BLACK: Did that bridge suffer any damage?

MR. WALKER: No, it did not.

ASSEMBLYMAN BLACK: Thank you.

ASSEMBLYWOMAN MARGETTS: Thank you very much, Mr. Walker.

MR. WALKER: Thank you.

ASSEMBLYWOMAN MARGETTS: Do you have a statement to submit?

MR. WALKER: No, I will send one in.

ASSEMBLYWOMAN MARGETTS: If you would send one in. Thank you.

We will take one more before lunch. Mrs. Lechner.
H E R M I A L E C H N E R: My name is Hermia Lechner. I am here today as a member of the Water Policy and Supply Council. I represent that Council as Chairman of the Flood Plain Committee. Flood plains and flood water are a part of total water resource management which is a function of the Council with the Division of Water Resources. This testimony is in support of A-572 and is from the overview of the Council.

By way of background - my involvement in the area of flood plain regulation predates by several years my appointment to the Water Policy and Supply Council in 1967. Following the 1955 floods, the Army Corps of Engineers held a hearing on flooding in the Raritan basin. That particular flood caused little damage in the Raritan above the confluence except in old towns clustered around former mill sites. The flood plains were open but the observed water levels were a red flag warning of dangers to come if development were permitted to occur in these areas. And "people memories" of flood heights are exceedingly short.

At the Corps of Engineers hearing, I testified on behalf of the three citizen watershed associations of the valley and requested that the flood plains be mapped as a tool for preventive measures. At that hearing, engineers from the State Bureau of Water Control suggested we obtain applications for mapping from all river bordering communities. The Bureau could then use these applications to obtain funding for the mapping program. As representatives of the watershed associations, two of us consulted with each governing body of the river bordering municipalities, we

explained the program and we assisted them in preparing applications. That was in about 1962 that we started getting applications together. And I might point out that at that time some of our municipal clerks did not even have typewriters and we took typewriters with us and helped them with their applications. However, cooperation was 100%. That was in 1963. These municipalities have since been waiting for the maps and some directive for using the maps plus criteria for extending flood mapping to the smaller streams not covered by the State delineation programs. And these smaller streams become rather important in the highlands area.

I am using the Raritan as an example because it's the valley that I am most familiar with. And in this particular valley, because of education programs, there is an awareness by people and public officials that uses of flood prone areas need to be regulated to prevent irresponsible actions that result in both private and public losses and costs. A few stop-gap measures have been adopted, and a few of our municipalities have something to say about using flood plains. However, even in this favorable climate there will be very spotty action unless there is (1) approved methodology for delineating flood prone lands that lie outside the State's mapping program. This methodology is in being and it was adopted by the Council as Rules and Regulations following an administrative procedure hearing last fall. And this, I believe, was referred to by Mr. Reed as being necessary. This is the criteria for determining floodway and flood fringe, and it can be used by municipal engineers or anyone else on smaller streams. It also provides for some alternative ways that can be used as an interim basis for delineating your floodways.

Secondly, we need uniform minimum standards for land use regulation in the flood fringe area that can be relied upon as being reasonable. And these will need to be finalized to implement A-572. Presently the Princeton Township flood

plain regulation ordinance is being referred to interested municipalities as a model to follow.

I might say about the criteria, the question of Water Policy and Supply Council being involved in these, the criteria have been adopted, as the State moves forward with it's mapping program, and these are to be applied, hearings will be held upon the delineation maps and they will be held in the localities of the mapping. The Raritan Basin is the pilot project on this and we will start hearings very shortly in this area. So that the people who are involved in municipalities will see what has been mapped as flood way, what is mapped for flood hazard ways, and they will have some input into this program.

The third thing that is needed in this flood plain regulation is an implementation timetable and an enforcement provision at the State level that assures each municipality that if they adopt regulations then municipality A, B, or C - upstream, downstream or across stream - will have similar controls so the regional land uses will be compatible. And this is provided by A-572. And Mayor Gibson, I think, spoke very well to that point.

The Morris County Planning Board Newsletter has been read into the record and I think I will not quote my part from that. But I think whoever wrote that did a quite succinct job on what is meant by A-572.

While A-572 addresses itself to flood protection or prevention, there are side benefits which accrue to the total water resource. Water spread over the flood plain drops considerable silt which is added to the land instead of ending up in harbor channels to be dredged out at public expense. And there is a certain amount of water storage and slow release and improvement of water quality achieved by ponding and flow through streamside vegetation. And other benefits have been mentioned here by other witnesses.

Now, how does all this fit in with the function of

Water Policy and Supply Council? And I am thinking particularly in relation to our dealing with flood channels. In years past and at present, by law, every structure - including fill - to be placed within the ordinary high water mark of a stream draining more than one square mile may be placed only after application to and with permit from the Division of Water Resources. The Encroachment Section of the Division recommends. The Council reviews, approves, denies, holds hearings on doubtful situations and violations and, upon complaint, orders illegal encroachments removed. Public projects involving streams follow a reasonably correct systematic pattern for obtaining permits. Other than this, few people know the law exists or believe it applies to them. Others evade or ignore it. Few municipalities require evidence of an encroachment permit as requisite for building on filled land in streamside areas. Those who diligently comply and request permits, find themselves hidden in a backlog of up to 500 applications. To my knowledge, no violator has been prosecuted in the courts.

It is utterly impractical to expect to manage every aspect of the flood channels of New Jersey's streams from an office in Trenton manned with three engineers and no field force. It is equally impractical to throw the problem completely in the laps of local municipalities inasmuch as streams are no respecter of municipal boundaries and floods are a migrating hazard. State and local entities must work together according to a structured plan of implementation. As an elected municipal official - I am a Township Committeeman - I am aware that the most needed ordinances do not come about with the snap of a finger. Even where a good model ordinance is available, there must be either an upwelling of local support or some timetable for study, technical assistance and implementation set by a higher level of government to encourage prompt action.

The only logical procedure is to transfer the zoning tools and primary responsibility to the local level where the

action is taking place and back this up at the State level with technical assistance, uniformity of standards, standby enforcement and a means of relief from hardship through variance.

Passage of A-572 will be a large step forward in protecting the water resources of the State and protecting people from the costly consequences of irresponsible acts committed either through ignorance or intentionally in the interest of a quick profit. It would also put the Water Policy and Supply Council and the Department of Environmental Protection in the role of shepherding the State's water resources without dabbling in every backyard brook. I feel that once the municipalities become involved in responsibility for flooding, they will have reason to cooperate on smaller streams and do some more extensive work than is required here. The professional staff in the Division could lend most of its expertise to constructive action and assistance to municipalities.

Delineation of flood prone areas coupled with local and State regulation based upon uniform standards can go a long way toward preventing growing flood damages and expediting the processing of encroachment permits that will still be required.

I thank you, and I will try to answer questions.

Then I would like to add one personal statement of my own, and it comes from a lifelong empathy with water and small streams and about 12 years intensively involved in what's going wrong with them. And my own personal strong feeling is that if the Legislature does not see the wisdom of enacting this legislation or something quite like it, I would hope it would have the honesty and courage to eliminate entirely the State's involvement in flood channel protection. Because, except for bridges and pipeline crossings, the present situation is chaotic, it's frustrating, it's a waste of time and money. The encroachment permit procedure is like poking at the edges of a sore to keep the

patient dependent instead of doing what you know will heal it. In fact, the whole history of stream encroachments and misuse of flood prone areas is tragic to the point of verging on the comic. (Applause)

ASSEMBLYWOMAN MARGETTS: That's a very excellent presentation. Thank you, Mrs. Lechner.

What would be your reason for feeling that the encroachment permit has not been adequate? Why has it failed if we have the tool presently?

MRS. LECHNER: Well, it's a very simple, broad little law that at the time it was passed I believe it lacked what this bill provides for, which is that you set up quite definite criteria. And the criteria under which the encroachments are given - I wish you would investigate it and see what it is for yourself. I think that's the best thing to say to you because as it has been interpreted for the last thirty years, perhaps up until recent times, the idea was to get a channel that you could get water through and from an engineering point of view this is a trapezoidal channel and, carried to its extreme, it would mean that every stream in the State of New Jersey would be this shape, made of concrete, because it would have to be to preserve it. When you make it out of land, unfortunately, God and whoever works with him as far as streams are concerned doesn't know about trapezoidal channels. And when you make one, the river immediately asserts its right and it starts to meander and do the things that rivers are supposed to do, which is not to stay in a trapezoidal channel. They have their place going through an area, like the City of Trenton, where you are built up and you must cope with this thing. Then, so help us, a trapezoidal channel is fine. But when you get out in areas where there is just a little more space, it's a ridiculous kind of desecration of the landscape, for one thing, and it doesn't do.

Now, we've been casting upon this, and also your encroachments come in piece by piece. And until recently

when we started doing some engineering and flood plains mapping and survey, our engineers were not equipped with an over-all picture of a valley. So, therefore, you start to compute from whatever little information you have and you work out this thing. So, one place you have a big wide place and then you come along and have a trapezoidal channel and then you have something else farther down. I can't think of a worse kind of a mishmash than we have. And it shows in what's happening.

ASSEMBLYMAN BARBOUR: I understood from your presentation that you were advocating that municipalities be involved in, I think, not just the enforcement but the operation, the functioning, under the plan.

MRS. LECHNER: I think they need to. I think it has been shown in this encroachment law that you can't take, you know, the whole State of New Jersey and every little thing that's happening and have it come in to a State level office. This is why you have criteria for mapping your flood plains and you set standards for the use of a floodway and the flood hazard area once it's been established. At the local level, the environment is different wherever you go and, therefore, you have to have a little flexibility in there because it doesn't have to be the same tee and the same dot all the way down the line. So the municipality has to have some little way in there for changing and doing things a little differently, and they have the consultation at the State level to assist them in this and, if need be, the enforcement to back them up in the decision.

ASSEMBLYMAN BARBOUR: I understand what you're advocating and I'm in favor of home rule in many cases but do you think there would be a danger of the same thing that we had on the assessment of real property when it was left up to the municipalities, each one assessing at different levels and each one making their own interpretation and you're going off in 567 different directions. I think you have to have some coordination at the State level for interpretation because you can interpret one thing six hundred

different ways.

MRS. LECHNER: Right. I believe, as this works out, you would find that all mapping done would come in for review probably, that is you wouldn't have each township engineer deciding this is fine for us. I think his plans should come into the Division to see that it fits in with the whole plan. And the main streams, if we can carry out our program as we feel it should be, will be done from the State level by our engineers or under contract. This kind of thing will all be reviewed and I would think that everything that ties into the system would have to be reviewed. But I think when you involve your municipalities in this under a plan, they then see the wisdom of this, and they can go beyond this to control of drainage water which is not being done now at all. As was testified here this morning, you put it in a pipe, well, it disappears from where you take it but, unfortunately, it comes out the other end, you see, and this is your problem. So you have to have retention basins and different structure in handling our drainage. And I believe that this is a start to work back to your municipalities on these things.

ASSEMBLYMAN BARBOUR: Now, on enforcement, would you be in favor of citizen complaints being involved in the statute under the regulations, not just the Department. Would a private citizen have the right or should they have the right to file complaints if they're not satisfied?

MRS. LECHNER: Oh, I think they would probably go the course that you usually do in planning. You go to your planning board and your board of adjustment. And after that, if it's an important enough issue, you might want - I think this was mentioned by Mr. Walker -- you might want to have it come before Water Policy and Supply instead of going to a court at that point, you know, and have it come within the judicial view of a quasi judicial body such as the Council. And it could probably be resolved at that area, instead of going through your courts. Then, from there,

if there is still an appeal, you go to your courts, of course, as all of our decisions do if they're challenged.

ASSEMBLYMAN BARBOUR: Yes but, for instance, if there is a violation and the question of an imposition of a penalty for the violation, would you feel that either the Department of Environmental Protection or Water Policy or the municipality should be the only one to be able to file a complaint?

MRS. LECHNER: Oh, I would think a citizen would file a complaint just as you do on anything else. I see no reason why not, if they feel it's a violation.

ASSEMBLYMAN BARBOUR: But I'm not sure that as the law is written in this bill that a citizen would have the right to file a complaint.

MRS. LECHNER: Well, citizens do on other matters over which the Council has jurisdiction. For instance, your encroachments. As I pointed out here, most of our orders to take out come on complaint because there is no field force to go out and find the things and, you know, take it from that level.

ASSEMBLYMAN BARBOUR: And one of the problems, isn't it, with the present operation for these encroachment permits is the lack of personnel, at all levels?

MRS. LECHNER: Yes. And I don't know how - you would have a tremendous staff of personnel and you still would need the mapping which we are doing here. I think they need this because the present means of figuring encroachments gives you such a narrow channel that it's not related to the total resource in any fashion. It's like, you know, a pipe. What this bill is doing is saying that the river has a right to a channel and to a natural channel, and there is virtue in the river having its natural channel and not being dug out with the bulldozer and being imposed into this thing. This is not conducive to a good water system, it's not conducive to quality, it's not conducive

to many things related to the total water resource. It's necessary in some situations but it's an impact upon the resource every time you channel a stream.

ASSEMBLYMAN BARBOUR: Thank you.

ASSEMBLYMAN BLACK: No questions.

ASSEMBLYWOMAN MARGETTS: Thank you very much, Mrs. Lechner.

We will have one more testify before lunch.

Mr. Zagorzycki.

J O H N Z A G O R Z Y C K I: Mrs. Margetts and members of the Committee, ladies and gentlemen, my name is John Zagorzycki from Lawrence Township, New Jersey. The Mercer County Board of Agriculture asked me to present their views to you on the proposed legislation. We, organized farmers of Mercer County are very much concerned with the proposed A-572 and A-596 and, while we like certain aspects of these proposed bills, we oppose them in the form they are written.

In our opinion these bills can be made useful and practical if the following deficiencies are corrected:

1. Paragraph C of Section 3 of A-572 defines the "flood plain" as: "the relative area adjoining the channel of a natural stream which has been, or may be hereafter covered by flood water."

Certainly no human being can know whether a given plain will be flooded in the future if it had never been flooded before. The possibility of flooding always and everywhere exists. Consequently, this definition would encompass all areas of all streams. Therefore, we request substituting the following words: "or may be hereafter" by the following: "more than once."

2. This proposed legislation gives the right to the administration to confiscate the use of lands in flood areas without compensation to the land owners. Therefore, we request that an additional section be added to this legislation which would provide for said compensations to the land owners whose lands will have been

restricted as to their use and thus devalued for the benefit of the public.

3. Finally, we strongly recommend to give more authority and freedom of action to the municipalities. We believe that the local government is better acquainted with the local flood problems than the central administrative agency in the State capital.

The State should lend only technical assistance to the municipalities and help in coordinating local solutions of the flood problems.

Thank you for giving me a chance to present our views.

ASSEMBLYWOMAN MARGETTS: Are there any questions?

(No questions)

Thank you very much for your testimony.

MR. ZAGORZYCKI: Thank you.

ASSEMBLYWOMAN MARGETTS: We will recess now for lunch and I would like to start promptly at one o'clock if you think you can all get some lunch in forty minutes.

(Recess for lunch)

AFTERNOON SESSION

ASSEMBLYWOMAN MARGETTS: The public hearing will now come to order, please.

We will hear from Mr. Hosking.

H A R R Y H O S K I N G: My name is Harry Hosking. I am the Chairman of the Mount Olive Planning Advisory Committee. This is going to take four minutes. It is a four-minute appeal for enough tools to do the job.

Let's not follow Mark Twain's comment about the weather; let's do something as soon as we can.

Mount Olive Township has undergone years of frustrating experience attempting to deal with floods and flood problems, commencing in 1936. In 1964, development was put along Drakes Brook. The Morris County Planning Board warned us of future floods. The floods did occur and nothing happened. This is a problem that will not go away by itself. It will accelerate as building and growth increase.

For Mount Olive, Morris County and similar areas throughout the state, particularly those also in the path of the flight from the cities, a proper solution is vital to economic growth and prosperity.

At present, Mount Olive has under advisement the adoption of a moratorium on building in the flood areas to force the issue. It is planned strictly as a temporary, interim measure, pending the passage of acts, such as Assembly 572 or 596. The Governor, the Legislature and the State organization certainly have the experience, wisdom and expertise required.

The enabling legislation should be broad, detailed and standardized enough that it would be uniform in application throughout the state. It is the kind of step to take before the State feels impelled to take over and render "home rule" impotent.

We in the municipalities are criticized for lack of action, for zoning against people. We are threatened that if we do not do the job that needs to be done the State and the courts will take action.

So I say to you - give us the proper tools and we will do it. After all, we are just asking for a fighting chance.

(Written statement submitted by
Mr. Hosking can be found on page 84 A.)

ASSEMBLYWOMAN MARGETTS: Thank you very much, Mr. Hosking. I appreciate your very good statement and also the brevity of your statement. There are many people here who want to be heard and I hope that you will all hold your statements to a minimum.

Any questions? (No response.)

Mr. Piche.

G E O R G E W. P I C H E, J R.: Mrs. Margetts and gentlemen, my name is George Piche, I am with the North Jersey Committee for Flood Control and Water Protection. The North Jersey Committee is made up of official delegates from the Passaic Basin municipalities.

Statistics, economics and mathematical probabilities are always plentiful in any discussion of flood control. They are used to reach a logical conclusion or a self-indulgent rationalization. The State of New Jersey and its individual municipalities have been voting for self-indulgence for more than two centuries. What is being discussed here is whether we will view the problem from this same perspective, and continue the mistakes of previous generations, or begin the long and difficult task of reversing the trend.

To many people, a Flood Plain Zoning Bill is a consumer protection measure. When it comes to the largest investment he will probably ever make, the consumer is pretty much on his own.

The planning of a housing development is automatically monitored by many officials - at least a building inspector, probably a planning board, and possibly a zoning board and a town council, with various engineers and attorneys for each. County and State agencies may also be involved. When a builder sells a home in a flood-prone area, all of these

officials and boards are forced into the position of accessories to what looks very much like fraud. Most of them do not accept this willingly, but they have no statutes to help them.

At about midnight last August 29th, I sat in the office of the Mayor of East Hanover Township and listened to a delegation from one of the newest housing developments in the township. Their road was under water, their houses were surrounded, and some of them had river water flowing through their living rooms. This scene was simultaneously taking place in many other offices in many other towns.

These people wanted to know what the Mayor was going to do to help them. If he had been a lawyer, I suppose he might have advised "Caveat Emptor," which translates to "After all, you were the fool who bought the house." What he did do was to assure them that there is a comprehensive plan to control all water problems in the Passaic River Basin. He did not have the nerve to tell them that night that the plan had been pending for many years and that it would take fifteen years to complete if it were adopted tomorrow.

The Army Corps of Engineers' plan has been mentioned today as evidence against 572. Actually, without 572, the cost of real estate in the plan will continue to increase astronomically as flood plain construction continues.

East Hanover Township is probably a stranger to many of the people here. It is situated at what geologists call "Lake Passaic." Lake Passaic is a glacial lake with many islands, fed by the Passaic River and its tributaries. It has a leak, through the lower river, and for this reason there is not usually much water in it. Many homes were built years ago on the higher islands, on the premise that you can usually reach neighboring islands, or the shore, across the mud flats. Most years, this might be difficult for a few weeks due to high water, but the residents were able to live with that. Over the years, as the high islands were taken, homes and factories were built on lower and lower islands. Now, most of these are also filled, and developers are insisting that they have the

right to build on the mud flats themselves. Much of this has already been done in many areas.

A crime is then being committed against these new residents, but it does not end there. The leak which keeps the lake drained is slowed considerably by any structures added to the flood plain. Anything which speeds the runoff of surface water, such as buildings, highways and shopping malls, also raises the over-all water level. The height of the flood water is therefore greater each year for any given amount of rainfall. More and more of the older residents, those on the lower islands, are beginning to find themselves below the surface.

If you are not familiar with Lake Passaic, I will locate it for you. It covers large portions of Morris, Passaic, and Essex Counties. It contains dozens of municipalities and hundreds or thousands of people. The leak is to the North, through Paterson and then Newark.

Several of our member municipalities have already enacted Flood Plain Zoning Ordinances, and others are in the process of doing so. Some of them are ambitiously strong, some are compromises, and others are meaningless exercises. The profits realized by developers of the flood plain are large enough to permit legal fees comparable to the annual budgets of many municipalities. These governing bodies were not elected by the voters in order to bring about bankruptcy through empty gestures. No matter how sincerely concerned they might be, they are forced to limit the provisions of their ordinances to those easily defensible in court. Of course, even the most effective ordinance may only have the same texture as the men who pass it.

The State must establish a uniform code to provide legal backing for the municipalities, commit itself to mutual defense of this code, and provide protection for the residents and neighbors of towns which refuse to act.

Assembly Bill 572 does this; 596 does not.

The present threatening situation along the Passaic River

and its tributaries has been building for over 200 years. Flood plain zoning is long overdue. Now that this menace is finally being publicized, and the Legislature is being asked for the tools to combat it, it is inconceivable that responsible people can allow it to continue. Failure to pass this bill would place the State of New Jersey in the position of condoning these crimes against our neighbors and our environment.

If we are not going to have this bill, we should at least decide on a formula for future guidance. We will need to know how many lives and how much property loss and environmental destruction to allow for X number of dollars of profit or tax revenue.

(Written statement submitted by Mr. Piche
can be found on page 192 A.)

ASSEMBLYWOMAN MARGETTS: Any questions of Mr. Piche?
(No response.) Thank you very much for your testimony.

Mr. Grossman.

LEE GROSSMAN: Madam Chairman and gentlemen,
my name is Lee Grossman. I am Executive Board member of the North Jersey Committee for Flood Control and Water Protection.

Because our state is the most populated state, the rapid increase in land values is inevitable. Previous development of flood plains causes annual damage in this country in excess of one billion dollars. This figure is ten times the estimate of 30 years ago. Federal expenditures alone exceed a half billion dollars annually to alleviate flood damage.

A recurrence of the 1903 flood in the Passaic River Basin would cause damage in excess of the annual damage figure for this entire country and the loss of human lives is estimated at over 200.

Remember flood damages are man-made, caused by unwise development of our flood plains. Conservationists, flood control groups and our environmentalists frequently differ in approach and methodology. On the subject of protecting our flood plain from further rape and plunder, we do agree. Indiscriminate development of our flood plain must be stopped and stopped now.

Planned proper usage should be encouraged and controlled.

Parks, picnic areas, bicycling, and horseback riding trails, cultural exhibits and concerts are among the uses requiring no obstructions while utilizing these vital areas.

Delineation of flood hazard areas is the most important step in protecting our natural resources. Several communities have passed flood plain zoning ordinances. Vested interests, motivated by political or profit motive, have resisted this forward-thinking step.

With the hazard areas defined, proper planning and regulation by the community is possible. Without abrogating home rule, this bill would define hazardous areas; it would stop the development in areas that should not be developed. The bill provides time for each community to regulate its own town and it provides State control only if a community fails to act on its own within one year. This bill is necessary and long overdue.

While the Realtors Board has not advocated development of flood plains, no step has been taken to deter development. In fact, realtors and developers who promote the use of our flood plains are rewarded with substantial profit. Local home rule is in fear of losing power to the State. But the State, itself, is in danger of losing the initiative. Federal legislation will, if the trend continues, extend its powers to control the same areas we are now discussing.

Should the decision be reached that portions of this bill are inadequate in definition, we would suggest that persons offering pertinent and constructive criticism be asked to participate in finalizing a more acceptable and comprehensive bill.

If a delay in passage is deemed necessary, we would propose that a temporary building ban be enacted now to prevent further encroachment and this ban should cover all areas inundated by the flood of record, 1903 as a minimum. Thank you.

ASSEMBLYWOMAN MARCETTS: Thank you very much, Mr. Grossman. Are there any questions from the Committee? (No response.) Thank you very much.

Mrs. Filippone.

E L L A F. F I L I P P O N E: I am Ella F. Filippone, the chairman of the Passaic River Coalition, which has been established under the corporate laws of the State of New Jersey as the Watershed Association for the entire Passaic River Watershed including all its tributaries. During the past two years, we have presented a program which has grown week to week, entitled first "The Crisis of the Flood Plains", then "Can the Passaic River Become a Model River?", and finally "And then the Floods Came!" Our slides were shown in 1971 a total of 76 times. Our membership includes citizens, organizations and municipalities from Bergen, Hudson, Essex, Passaic, Sussex, Union, Morris and Somerset Counties and is growing daily. Our Board of Advisors (thus far a total of 35 people) come from key areas throughout the Basin and have shown a commitment to a concern for the total environment - air, land and water.

On November 10, 1970, Commissioner Richard J. Sullivan appeared before our fall meeting and stated - and I think you were there that night Mrs. Margetts:

"I wonder if it isn't also time to consider zoning for the flood plains...I wonder if the State political system would enter into a land use control for the flood plain superseding local control in the same manner as was just done for the protection of the wetlands, and for the same reason."

Our statement here today is in strong support for both A 572 and A 596 - as a package. The future of the Passaic River Watershed now hangs in delicate balance. Daily new encroachments appear on the scene, which without such legislation will make it impossible for us to save those areas which provide basic benefits for the well-being of the people of New Jersey and possibly certain parts would have even farther reaching effects.

We cannot equate flood plains only for their use to hold water in times of flood. They serve an extremely high economic benefit when appraised from the point of view of benefits toward (1) cleaning the air and water, which directly affects the health

of the community; (2) providing the base of the ecosystem of the Passaic Basin - its aquatic and avian life; (3) providing feeding grounds within the Atlantic flyway; (4) acting as recharge areas for our watertable; (5) holding the water in times of flood. It is important to note that Dr. Charles H. Wharton, professor of biology at Georgia State University, a long time student and expert of inland wetlands has often stated: "Man seems never to have really learned that the flood plain of a river was built by the river, and it is the river's channel in times of excess water."

The Passaic River Coalition had requested photographic documentation of our river flooding when we first organized. We could not obtain any such pictures either from the State nor the Federal Government. Therefore, last September, we rented a helicopter and small aircraft and took over 100 pictures ourselves. You will find that you have copies of these pictures in the back of my testimony. Picture 1 represents a view of Whippany, New Jersey by Route 10 and Whippany Road, which shows homes, factories, a church, and even a U. S. post office built in a flood plain. Picture #3 is Sharkey's Dump in Morris County, which will for many years leach into the Rockaway River. The picture, incidentally, won a prize for, I think, scooping the people at Sharkey's Dump. Picture #4 is Great Piece Meadow, an important viable marsh, which must be preserved in its present state at all costs so that it can serve as efficiently as nature intended it to do. On this last large remnant of open space found within the Passaic River Watershed hangs the hopes of those thousands of people who wanted to see the Passaic River chosen as the model river last year. Picture #5 also shows the holding power of the East Orange Water Company property, another inland wetland which along with such areas as Troy Meadows, Black Meadows, etc., are constantly being threatened for development.

Every week we are being called upon with another crisis of this type. Bit by bit, little by little, communities are hacking away at these areas - for sewer lines, highways and roads, super-shopping centers, airports, etc. Frequently,

the argument is raised that this land can also be used for low-income housing. Here the legislator has a supreme obligation to the public. Don't let any more people, who have saved to buy a home all their lives, be duped into buying houses that get flooded every time it rains!

It seems appropriate that an amendment be added to this legislation as soon as possible to add the words "flood zone" to all deeds within the flood plain delineation; that the Department of Environmental Protection would place visible high water markings along the river banks for all to see, such as is done in certain European countries. During the dry seasons, many honest people have been caught unaware and this is the story up and down the Passaic and its tributaries.

We feel it is the obligation of every legislator to direct his or her attentions to the interests of the majority of the people and not to one or two private interest groups. The rivers themselves are often public property and so too should be its flood plains. We would immediately like to see funding made available so that municipalities would not incur any hardships regarding the charges found in these bills and so that the Department of Environmental Protection would have adequate staff and equipment to accomplish the intent of this legislation; to provide additional financing so that all flood plains eventually become public property or have special easements such as illustrated by Patriots Path along the Whippany River. If through tax assessment this land does not receive a high economic value, then some of the pressures regarding private property rights could be decreased. In addition, we would recommend an additional criteria - once this bill becomes law. The schedule for implementation should first address itself to those areas which affect the most number of people. Possibly then the Passaic River Basin which contains almost half of the population of the State and contains the highest population density in the United States might begin to see some assistance come to its flood plains.

The water must flow and with more and more development along the riverbank, we have seen flood waters where they never before occurred. In the last few months alone, hearings have been held regarding expansion into the flood plains in Chatham Boro, East Hanover, Morristown, Paramus, to name but a few. After several years of intensive study of the Passaic River and its tributaries, we firmly feel that this proposed legislation is critical to the survival of the Passaic River. These flood plains which are still found in our headwaters have within themselves the ability to restore life and clean water within our system if we can only establish sewage and waste disposal systems which do not pollute this watershed.

If the New Jersey legislature does not pass this legislation immediately - if it delays - if it does not place sufficient funding for the implementation of these proposals, as far as the Passaic River is concerned, we will by our own inaction be signing the death warrant for the most vital natural resource of northern New Jersey!

Again, we urge you to set aside the selfish economic interests of one or two special groups and act in behalf of the public trust. We, within the Passaic River Coalition, have established programs to inform and educate the public regarding proper water resource management and to survey and determine how to balance the delicate environment of the Basin. The enactment of this proposed legislation would provide a most important link in accomplishing the goals we set forth in 1970, and which we hope to build upon so that we will ourselves change the environment of the Passaic River in our own lifetime and so that we can look back at a clean, productive river which when evaluated over the long term will reap tremendous benefits to all the people of northern New Jersey.

MRS. MARGETTS: Thank you, Mrs. Filippone. Are there any questions from the committee members?

MRS. FILIPPONE: Thank you.

MRS. MARGETTS: Did you have someone with you?

MRS. FILIPPONE: Yes, could we? We have had the wonderful

opportunity of working with 23 high schools in Morris County under the President's Environmental Merit Awards Program and several of the students have studied this legislation, Mrs. Margetts, and have prepared statements as part of their project. This project will be submitted to President Nixon's Team for Evaluation for a certificate of excellence by the Morris County Review Board and part of their project would be for the three of them to submit a statement to you.

We have with us, Joan Long, Laurence Pittis and our football star, Mike Wallace. We would appreciate it if you could give them a few moments at this time.

MRS. MARGETTS: Will they all come up?

MRS. FELIPPONE: Yes.

MRS. MARGETTS: Joan, will you give your statement first, please?

JOAN LONG: Mrs. Margetts, members of the committee: My name is Joan Long. I am an 18-year-old registered voter and a senior at Madison High School in Madison, New Jersey.

I noted for the four years I have been at Madison High, environmental education has always been stressed. It is usually incorporated into the history classes. Probably since grammar school the three of us have been taught that it is necessary to incorporate environmental conditions into part of the government. So we are here today to express our views on the two bills being considered.

A flood plain, as defined in the two bills being considered today, is a relatively flat area adjoining the channel of a natural stream, which has been or may be hereafter covered by flood water. According to this definition, just about 20% of all the land in New Jersey would fall under the category of a flood plain. Take, for example, Wayne, New Jersey. Much of Wayne is built on a flood plain. The fantastic amount of rain that we had in the late summer-early fall of last year caused serious damage which resulted in a great monetary loss for many of these people. Now they are forced to salvage whatever is possible and live with what they have. Ideally, when Wayne was being built, drastic measures should have been taken to

avoid any detrimental effect to the buildings. However, now such communities should take efforts to remove such structures. Mayor Miller is now trying to do this with "old" Wayne.

I think it is about time that people realize just how necessary untouched flood plains are. Their values are innumerable. Not only do they give extra rain water and spring thaw water a place to go where no damage is done, but they also provide homes for many species of animals including: deer, muskrats, ducks, fishes, and birds. Wetlands also offer recreation in the forms of hiking, picnicking, photography, bird watching, camping, fishing, and hunting.

It is common belief that wetlands breed mosquitos. Basically this is false. Many of the mosquitos are taken care of by their natural enemies and also by mosquito eating fish.

Wetlands also improve water quality by reoxygenating the water and absorbing nitrates and phosphates. Vegetation also reduces much of the organic load.

Consider this for a minute. It has always been thought to be in the public interest to build good roads that provide a quick means of transportation. No one really makes too much of a hassle when the State claims houses and property for the construction of these roads. Isn't it also in the public interest to provide a place for excess water where no damage can be created? Houses that are found in lowlands take up much of the land that used to soak up water. All of the plants, trees, and grass that used to be there was much more capable of soaking up water than tar and cement ever will be. One inch of rain on one single roof equals 750 gallons of water. Multiply this in terms of many housing developments plus the water from driveways and streets. The end result is tens of thousands of extra gallons of water that have nowhere to go. So what happens is that the water accumulates and floods houses, stores, etc. The more houses put up in developments the larger the floods are going to be. Now is the time to initiate laws which will insure that further development will continue only after due consideration of the situations involved.

Anyway, allowing housing developments and shopping centers to go up in lowlands is very expensive to you as a taxpayer. Your taxes are going to be used to finance flood control measures to protect those that have built in them. Methods of flood control include dams and dykes that the Army Corps could build. However, it has been proven that this cost is sometimes 10 to 20 percent more than it would have cost the community to originally have purchased the land for a flood plain reserve.

I think that much more could be done if both of these bills were incorporated into one. Bill No. 572 points out the necessity of regulating the development and use of flood plain areas. Bill No. 596 gives municipalities the right to protect their flood areas. Only by special permission can anyone use the land. This permission is granted only if the use is clearly in the public interest. Alone each bill does one thing, but the combination of the two would produce a most effective situation.

With knowledge we have about the necessity of flood plains we now know that it would be foolish to continue any type of developing in these lands. Now is the time to start preserving our flood plains.

MRS. MARGETTS: Thank you very much, Joan; that was excellent. I enjoyed hearing your presentation. Are there any questions?

ASSEMBLYMAN BLACK: Yes, I have just one.

Joan, you touched upon a subject that is very dear to my heart and very dear to the heart of Senator Turner, sitting along side of me. You mentioned muskrats and muskrats are deliciously edible little creatures that abound in the Southern part of the State of New Jersey. I would suggest you check the spelling, I think it is m u s k r a t. Aside from that it's a very fine presentation.

JOAN LONG: Thank you.

MRS. MARGETTS: Mike Wallace.

MICHAEL WALLACE: Mrs. Margetts, members of the Committee. My name is Mike Wallace and I am a student at Madison High School. I am a member of Madison Student Senate, an organization for youth activities. I am on the committee for recycling aluminum cans and the money we raise from recycling these cans sponsor students' activities in Madison.

A few years ago almost no one realized the value of wetlands beyond their natural beauty. Wetlands can be used as farms. The only reason we don't think of wetlands as farms is because we don't see the food they produce because that food

has to work its way up the food chain until we eat it in the form of fish. The wetlands help to support the lives of foxes, skunks, raccoons, mice, an occasional deer and birds in more varieties than one could count. The wetlands also do things for us that farms cannot do. (1) Wetlands absorb up to 18 times their volume in water and thus prevent floods; (2) by catching the silt in rain run-off, they prevent channels from filling in; (3) They harbor wildlife. And they do all this without any human labor at all.

Private ownership and profit have collided with conservation groups over the use of the wetlands. People must realize we cannot live in a destroyed environment. The filling, draining, and dredging of the wetlands has produced many flood areas. Since the turn of the century, this country has experienced more major floods than ever before. This is due to the increased amount of construction over the wetlands. The issue is now private vs. public benefit. President Theodore Roosevelt said, "When the soil is gone, Man must go. And the process does not take long."

The wetlands must be bought up by the State of New Jersey. The State most probably cannot afford to purchase all the remaining wetlands. It, therefore, must strengthen its laws. Assembly No. 572 and No. 596 are too vague. Any person or group could get around these laws and build on the wetlands on their own town. These laws should be strengthened so the wetlands can be saved.

Nature uses the wetlands to handle the overflow of water. With the wetlands destroyed, there would be floods. Building dikes, reservoirs, wells and channeling the rivers would be another way to solve the problem. This would destroy the beauty of the surrounding landscape of the rivers. It would also cost the State a lot of money. When the river overflows, the dikes, well, and reservoirs trap and hold large quantities of water. A second flood may come after the first and burst the dikes and reservoirs. A second flood could not destroy the wetlands.

This is why I urge the laws to be strengthened. It is too costly to build dikes, etc. or to buy the land. By strengthening the laws it will take care of the wetlands that are not under the State's control and the wetlands that are under state control.

MRS. MARGETTS: Thank you, Mike. Are there any questions for Mike?

Mike, it was a very excellent statement that you gave. I thought for a moment we were in the trapping hearing when I saw Foxes, Muskrats, ~~Skunks~~, etc. Thank you very much.

We have with us now, Laurence Pittis.

LAURENCE W. PITTIS: My name is Larry Pittis. I am a student at Madison High School. I am 17 years old and a future voter. I have come here today to speak for stronger measures to be taken for the preservations of the wetlands of this State particularly the flood plains of New Jersey's rivers. The laws that are in effect today are not strong enough. The wetlands of this State and of the rest of the country are among the most productive landscapes, but have suffered greater destruction and abuse than any other natural region manipulated by man. The destruction of the wetlands is becoming larger every day at an accelerated rate. The destruction is favored by the pseudo socio-economic concept that the conversion of these lands is in the best interest of the society. The contractors, realtors, architects, town fathers, with ideas of making their town the home of the world's largest shopping center, and town planners, use this idea. Unfortunately, most people have on their minds ways of making money at the expense of irreplaceable natural resources, rather than preserving the untouched land for future generations.

Driving around you can see the intrusion into the wetlands and flood plains. Morristown Airport officials wish to fill in and drain the Black Brook flood plain in order to expand their airport. This area of wetland is the headwater of the Whippany River. This filling in would further reduce the amount of water which already flows in the river. Poor zoning along the roads which goes through, and alongside the meadows, is slowly shrinking the headwaters of the river. The miniature golf course and driving range has cut a nice big chunk out of the Black Meadows. Hanover Park has already begun filling in lower Troy Meadows in order to build a shopping center. There

are enough shopping centers in the area along routes 10 and 46. Upper Troy Meadows is being filled in drastically for Interstate 280. The Great Swamp should be made an example to other communities with wetlands in their towns.

Every time a heavy rain falls, all the communities built in filled flood plain areas, flood. An example is Wayne. The residents are led to believe that the flooding is caused by heavier rainfall than ever before, which is not true. The real reason is that the river floods over into the town, normally a flood plain area. The river must get rid of excess water somewhere, and in its natural state, the flood plain provides this area.

The rivers create the flood plains in order to channel excess water in times of flooding. The flood plain area is a relatively flat area adjoining the channel which has been or is covered by flood waters of the stream or river. The flood plain is a large life system with great potential value to its owners and to the people of the entire state. Swamp grass produces a great quantity of the oxygen which we breathe. Water forms an indispensable part of the environment.

The only way to prevent overflowing banks is by building enormously expensive dikes which must be periodically raised owing to the deposition in the restricted flood plain. This measure is expensive.

Some others say channelization and dredging is the answer. It is not. These measures only lead to the increased velocity of the river. If the water moves faster, then there is greater erosion.

In the laws of our land an individual can do with his land what he pleases as long as it is not detrimental to others. The law should not leave the municipalities to decide the fate of the wetlands, because most towns always want to expand, such as Hanover, and this expansion can be harmful to the environment. The State should override these laws with eminent domain.

The three of us today have given testimony to complete

a project that will be sent to Washington under the President's Environment Merit Awards Program. Certain environmental crises cannot wait. We must decide which way we must go. Thank you.

MRS. MARGETTS: Thank you very much, Laurence. Are there any questions from the Committee members?

Thank you very much. We are very pleased to hear from the three of you.

Mrs. Little.

B E T T Y A. L I T T L E: That is going to be a difficult one to follow. I am absolutely thrilled with those kids. Really, we should have the scientific experts here telling you this. They have been learning it for 11 and 12 years and now they are able to speak up and I am terrifically proud of them.

I have had a tremendous amount of personal experience in the field of flood planning and this has been something that I have been personally involved in for almost three years. In the course of doing this I have talked with everybody from Colonel Barnett, Mr. Tossi, Mr. Lindsey in the Corps of Army Engineers to Russell Train in Washington.

We want to thank this Committee for the opportunity to speak today about the protection of the flood plains which has been of greatest concern to us over the past several years. I am speaking today for Citizens for Conservation. As citizens, we believe it is our duty to step forward at this time and make known our concern not only for the rivers of this State, particularly the Passaic, but also for the total environment whose quality is dependent in large part on the effectiveness of this Committee in developing a law which will receive government and public support. The two bills before you make a fine beginning for the legislation which we feel is so urgently needed.

Citizens for Conservation is a Bernards Township based conservation group concerned with the total environment and affiliated with about 15 other similar groups located in northern New Jersey. I am an environmental economist, a member of the State Board of the American Association of University

Women, a member of the American Economic Association and a Trustee of the Passaic River Coalition.

Last October 10,000 people lost their lives in flooding in India when the river swept upward from the Bay of Bengal. We were truly horrified but we should not have been surprised. This is the fate of the people of any society which is unable to control building in the river.

The Passaic River is most complex with housing, industry, roads, and still viable wetlands. Unless we recognize the multiple values of these wetland areas and flood plains and act swiftly to protect them, hazards from flooding and inevitable pollution will doom northern New Jersey to a rapidly deteriorating environment. Every responsible person with whom we have discussed the problems of the river, every level of government, every civic leader, every scientist and educator has said that unless we are able to prevent the continued and unregulated building and filling in the flood plain areas there can be no end to the problems of the environment which affect the lives of 4 million people in Northern New Jersey.

The Passaic River is one of the ten most abused rivers in the nation. It is almost too small to be on a map of the United States but it looms large in terms of population and human concerns. We have had extensive experience with this area and with the efforts of citizens and municipalities alike as they struggle to solve its problems.

We have come to know this river and its viable wetlands. We have walked along it, waded in it, canoed on it, we have driven along it. We are witnesses to the wildlife which still lives there, to the fish, the birds and the plant life. We have seen the function of a natural flood plain as it absorbs water and we have experienced the peace and the beauty of such a natural area.

We have viewed dumping along the river in the flood plain, seen the river rise and the litter carried down stream and over the Paterson Falls, the beds, tires, barrels and plastic foam of our modern civilization. We have been among those who have

tried to fish out the litter and clean the river both up stream and down.

We have seen the dumping of logs and soil in the flood plain and the consequent siltation and flooding of the river. We have watched helpless as the river was reshaped to build shopping centers like Willowbrook, or to construct a highway intersection such as the one at Short Hills and then we have walked through the flooded streets of Passaic Township which suffered from the reshaping and talked with the people who have lost their possessions and dreams.

We have talked with and been among those questioning the filling of such areas as Black Meadows in Morristown and the ripping up of Troy Meadows for a pipeline or the proposed shopping center along the river in Chatham or the threatened development of the Dead River in Somerset.

We have flown over the river in times of flooding and viewed from the air the Dead River Basin, East Orange Water Co., Great Peace Meadows. We have seen the flooding and we can only guess what uncontrolled development will do not only to these areas but also the those who already have homes or industries in the area.

We have urged and supported municipal ordinances and municipal and county planning boards to protect the flood plains and we have seen the passage of a few laws - not enough and some too weak-and the inability of even the best municipalities to handle the situation alone. The laws which you are considering today we feel are long overdue. We need state action. It is evident that municipalities are unable to handle this problem alone. Unless the State can develop and implement laws which protect our rivers, there is no hope for the river or for the people that live near it and depend upon it. Who among us can live on this earth without the water that flows in our rivers and rests in our lakes and oceans?

Historically our laws and the culture upon which they are based were formed at a time when the population was less crowded and our resources, particularly water, more abundant. In the summer of 1971 NASA in recognition of our earth problems

undertook a study of earth problems, including the Passaic, and in a report "Clean Water: Affluence, Influence, Effluents" -- a design for water quality management, stated the problem quite plainly, "...man has stated the values and rules by which he lives and uses his resources; and therefore, man where the will is generated can change them to suit his needs." The report concludes that "If rules and social forms become our master rather than our servants, then our opportunity for a meaningful solution to our problem must remain elusive." (summer 1971).

The time has come to recognize the great multiple value of our wetland areas (see appendix 1) and to begin to place a value on its use. One man's freedom to build in the river means a loss in flood damage and heartache to others up and down stream, means expense to government in terms of police protection, rescue, rebuilding of roads, treatment of polluted waters, cleaning of debris and payment of flood insurance, means a loss to all men in the quality of water and air, the availability of water, freedom of open space, natural flood plain control, diversity of fish and wildlife, and the aesthetics of the natural environment.

Knowledge of the value of wetlands and flood plains is no longer the province of a select group of scientists but the subject of inquiry and debate by schools and civic organizations. In the 1972 World Book Year Book, Professor Harvey S. Perloff of the University of California, Los Angeles, discusses the value of protecting the areas along the rivers in an article entitled "Making Our Cities Livable." The socio-economic temper of the time demands consideration of these needs for a modern society.

The principles set forth in Mrs. Fenwick's bill which states that "...the department of Environmental Protection (has) authority to grant permits only for those uses of land which are clearly in the public interest" seem a most important principle for flood plain legislation. This is the new concept on which we must base our laws. Our new priority is the protection of the flood plains and wetland areas and to provide for their restoration. We would like therefore to make the following suggestions so that in combining the two pieces of legislation proposed a new and workable law can be developed.

First, that a bill to protect the flood plains shall provide for adequate funding to carry out the intent of the law. Delineation of the flood plain itself will cost in excess of \$1 million. I know this, I have talked to the people who have tried to do it in Passaic and at that time the price was \$1 million. Other earlier plans to control the flood plain have failed because money was not provided. Funds will also be needed to police the rivers and to provide for acquisition of land so that those whose land can never be developed can be compensated, either through purchase or, perhaps, taxes.

Second, our tax laws should be revised to discourage building in the flood plain areas because they now provide a positive incentive to develop this land for rateables and over a period of time it would be difficult to stand against strong economic incentives.

Third, that an environmental impact statement be required with every application to use the land and that this be made available to the public so that there is general awareness of the potential use and of the proposed measures to protect the environment.

Fourth, that both public and private uses of the flood plain be under review since much of the land is in public hands and public projects often have a greater impact on the river than private.

Fifth, that an Environmental Council be formed with strong citizen representation to gain public support and to work out problems relating to the protection and restoration of the rivers and other parts of the environment. Strong citizen support will be in our opinion the only feasible means of policing the environment, under a democratic form of government.

Sixth, in this or additional legislation we must recognize that to preserve the flood plains we need additional legislation. We need to provide for land acquisitions to provide for removal eventually of structures which cannot be protected or which are the cause of flooding and pollution, to provide for the use of retention ponds and innovative building materials on existing

developments to keep the water where it falls and to provide the watershed management to prevent and discourage soil erosion which causes water pollution and fills the flood plain at an excessive rate.

We congratulate this Committee for bringing these important bills to public hearing and we urge them to develop the necessary legislation as rapidly as possible.

I'd like to read my appendix here because this represents a tremendous amount of work on the part of several fifth grades in Cedar Hill. Mrs. Fenwick has spent some time in the school with us and they do have an environmental education program going. They asked if I would present this as part of my testimony today.

Regarding Assembly Bill No. 596: "We the fifth grade class, favor Mrs. Fenwick's bill to protect the wetlands because Mrs. Fenwick's bill will prevent:

1. ruination of wetlands by factory building and wastes
2. by preventing more trash being dumped in streams
3. by preventing further draining of marshlands
4. by helping to prevent buildings that cause blocks in streams and cause flooding
5. preventing house building in wet areas.

"We the fifth grade class favor Mrs. Fenwick's bill because we know marsh grasses clean the air and give us oxygen, the wetlands are a great place for animals to live, the wetlands clean our water, the wetlands provide our area for recreation and study of wild life, the wetlands allow animals to live that keep a check on insects, the wetlands allow streams to run and not become still, the wetlands keep the water table in balance.

"As future voters we want this bill to become a law.

Respectfully submitted,

Mrs. Cliff's 5th Grade class
Cedar Hill School
Basking Ridge, N.J. "

ASSEMBLYWOMAN MARGETTS: Thank you, Mrs. Little. Are there any questions? Thank you very much.

Mr. Fields.

C. H. F I E L D S: Mrs. Margetts, members of the Committee, ladies and gentlemen:

My name is C. H. Fields, Trenton, New Jersey. I appear here today to speak for the New Jersey Farm Bureau and the New Jersey State Grange. I have the honor of serving as Executive Secretary of the Farm Bureau, a voluntary, non-profit association of more than 4,000 farm families in 20 counties of New Jersey.

The Legislative Action Committee of the Farm Bureau and Grange, and the Natural Resources Advisory Committee of the Farm Bureau have given this proposed legislation considerable study. Our farmers have a vital stake in the question of who will control the use of floodplain lands and to what degree and in what manner such controls will be instituted and exercised. Since we own and farm a large portion of the remaining open space left in New Jersey, including the upland floodplains, we would probably be more directly affected by undue restrictions on the use of this land than any other group of property owners in this State.

Before I proceed with the statement I would like to use this visual chart that may help to clarify some of the terms that have been used already today and particularly that we are going to use in connection with our testimony. You will notice the blue area on the chart is the stream channel which, of course, the State already has control over in the Stream Encroachment Law. We believe that the Stream Encroachment Law could also be construed to give the State control presently -- the State may already have control over the floodway, which is the yellow portion beyond the stream channel itself. And then the green portion there is what we call the flood fringe area. The yellow and the green combined would make up the flood hazard area. We also indicated with the dotted line there is an area beyond that which constitutes the total floodplain. So that might help a little bit to visualize what we are talking about in terms of the definitions.

We are not opposed to reasonable controls over building on flood hazard areas; but we are opposed to any proposal to

greatly expand state control over these vast acreages as opposed to local control; and we are opposed to any plan, implied or explicit, that would seek to confiscate the value of private property without due compensation. We feel strongly that when zoning is used in such a way as to severely reduce property values, it constitutes a partial taking, and under our Constitution, such a taking must be accompanied by just compensation.

Before proceeding to discuss the details of this proposed legislation, we need to first seek clarification as to the purpose of these bills. Is the purpose to stop the building of structures in the area immediately adjacent to a river or stream that is needed to carry the normal and regular flooding of such a river or stream, so as to provide for efficient flow of the excess water and to minimize property damage? Or, do the proponents of this legislation have in mind a broader purpose of providing for open spaces and green acres for the benefit of the public without compensation to the owners of the property? If the purpose is limited to the former, then we are sure that amendments can be worked out to this legislation that will achieve such a purpose without undue damage to property values but if the purpose includes the latter idea, then we feel that such an illusion should be ended right now. The owners of this property should not be expected to give away their property for public purpose without due compensation and no property owner should be required to provide at his expense flood water holding areas to benefit other property owners down stream who have already benefited from development of their property. If any of these lands need to be preserved as open space to improve the environment or provide for the esthetic or recreational needs of the community, then the proceeds of the recent Green Acres bond issue should be utilized for this purpose, and the purchase of scenic or conservation easements or purchase in fee simple should be undertaken as a priority consideration in the allocation of these funds.

We strongly recommend that the Committee write a legislative purpose section into this bill, so as to clearly set

forth the purpose for providing any additional authority to the State or to municipalities.

It should be pointed out that before the State undertakes an extensive program of regulation to protect the public against flood damage it should also take into consideration the causes of excessive flooding. Much of the problem is caused by uncontrolled erosion and siltation of streams, the failure to keep streams clear of the growth of trees and brush, and allowing debris to collect and pile up in the channel and in the floodway.

We suggest that this Committee consider separate legislation to require the state to keep floodways clear of these natural obstructions. It is perhaps true that they are as much at fault for flood damage as man-made structures. Certainly, regulations should not be utilized to constantly expand the natural flood hazard areas. The state should have an obligation to undertake a program of flood damage prevention that goes beyond restrictions on construction of buildings.

After many years of experience in the field of legislation, we are growing more and more wary of bills that provide for broad grants of authority to administrative agencies of the government, leaving details up to administrative rulings and regulations. Our observation is that this type of legislation is becoming more prevalent year by year and we believe the legislature is too often abdicating its responsibility to instruct administrative agencies by detailing the intentions of the Legislature in passing a bill. In our opinion, both of these bills are guilty of this legislative trend.

Because we feel that legislation in the field of floodplain zoning is so important and so far-reaching, we have employed the services of a legal expert in this area of law, and he has assisted us in the drafting of detailed amendments to A-572, which we are filing with this statement. We will not read them in detail but will summarize for you what we seek to achieve through these amendments. While we like certain aspects of A-596, particularly its emphasis on local control, we feel that A-572 offers a better basic structure for a workable law,

and we are thus restricting our comments and proposed amendments to that particular bill. (See page 95 A.)

The amendments we are presenting to A-572 are designed to accomplish the following:

1. Give the Water Policy and Supply Council of the Department of Environmental Protection the authority to delineate the flood hazard areas and the floodways instead of the Commissioner or Department of Environmental Protection. We believe that the Council is sufficiently broad-based and has sufficient expertise, with the help of experts in the Department, to oversee this function, and the basic authority should rest with the Council. This does not mean, of course, that the members of the Council will actually carry out the technical phases of this job but the basic standards and guidelines would be determined by the Council. Under existing law, actions of the Council are subject to the approval of the Commissioner.

2. We propose new or revised definitions for such terms as "Floodway", "Flood Hazard Area", and "Mean Annual Flood." We would define floodway as that portion of the flood hazard area necessary to preserve the flood-carrying capacity of a natural stream. In other words, this is the portion of the flood hazard area on either side of a stream that normally and regularly floods every year or two, and should not be obstructed by the building of any structures that would interfere with regular flooding of the stream.

We would define flood hazard area as the portion of the floodplain which has been covered by the mean annual flood and we also recommend a technical definition of that term based on statistical records in an annual flood series calculated over a relatively long period of time.

3. We believe the State already has control over the area we define as the floodway under provisions of the Stream Encroachment Act but this act is somewhat vague in its definitions, so we recommend that A-572 clearly give the State control over the floodway portion of the flood hazard area as we have re-defined the term.

4. The remainder of the flood hazard area, as we have defined it, should be under the control of each municipality, as far as the enforcement is concerned, but we are recommending that the Water Policy and Supply Council be directed by this bill to develop and make available minimum rules and regulations that could be adopted by a municipality to control this area of the floodplain, with certain basic requirements for such minimum rules to be included in this bill.

5. The term "Flood Plain" as defined in the bill is entirely too broad, and we recommend that the words "in fact" be added in Section 3, paragraph (d) of the bill to clarify this definition.

6. We recommend that Sections 6 and 7 of the bill be deleted entirely. This form of pressure on the municipalities is neither desirable nor necessary, since requirements of the Federal Flood Insurance Law are already forcing municipalities with flooding problems to adopt floodplain zoning ordinances. I might interrupt here to say that we have received information from Congressman Forsythe's office that as of March 31st, one hundred thirty-eight municipalities in the State of New Jersey had been approved for the Federal Flood Insurance program and so at least that amount of municipalities have enacted some kind of floodplain zoning ordinance and maybe more that have not applied for the Federal approval on flood insurance. What the municipalities badly need is a set of minimum rules and regulations from the State. While they should not be prohibited from exceeding the model ordinance, most municipalities will welcome the model and adopt it without extensive changes.

The municipalities already have authority to adopt floodplain zoning ordinances, and with the existing threat of losing federal funds, the desirable restrictions on the use of this land will be achieved with the help of minimum rules and regulations promulgated by the State and enforced at the local level.

7. We recommend that the regulations adopted by the Council to control the use of floodways include a provision for reasonable filling of land areas, where such filling would not unduly interfere with the flood carrying capacity of the

stream and that a similar provision be included in the minimum rules and regulations promulgated by the State for local control over the flood fringe area.

8. We also strongly recommend that the minimum rules and regulations for local control of the flood fringe areas include a provision to permit clustering or other methods of re-distributing the development rights of a property owner, where a portion of his land is located in the flood hazard area and it is feasible to protect the value of his property by concentrating such development rights on the portion of his land lying outside the flood hazard area. We believe that allowing for reasonable filling and clustering of development rights will bring this bill and the regulations in conformance with the State Constitution and help to avoid takings without compensation.

9. We recommend that the bill be amended to include an exemption for the use of floodplain lands for agricultural purposes; and

10. We also recommend that you exempt from this act the tidal areas subject to the jurisdiction of the Wetlands Act, since we could end up with two sets of regulations on the same lands in portions of upland streams that flow into the wetland areas. We certainly don't need additional regulation of these areas.

We ask that the Committee give careful consideration to these recommendations. We oppose the passage of either of these bills as presently written but we believe that if A-572 is amended along the lines we have recommended, you can achieve the necessary and desirable additional control over the flood hazard and floodway areas without unduly lowering the value of private property. Assembly 572, as submitted, includes faulty and confusing definitions, grants too much authority to the Commissioner of Environmental Protection, provides for a highly undesirable takeover of control of the floodplains by the State unless municipalities act within a year, and fails to spell out some basic details and guidelines, leaving too much authority in the hands of the administrative agency.

We appreciate the opportunity to present our views.

ASSEMBLYWOMAN MARGETTS: Thank you very much, Mr. Fields. Do I understand that these suggested amendments are presented to be considered by the Committee?

MR. FIELDS: That is correct.

ASSEMBLYWOMAN MARGETTS: Or the sponsors?

MR. FIELDS: We are presenting them to the Committee with the idea that the Committee may wish to come out with an amended bill or a Committee substitute.

ASSEMBLYWOMAN MARGETTS: Are there any questions?

ASSEMBLYMAN BARBOUR: Yes, I have one.

You indicated that it was your opinion and the opinion of the farm organizations and the farmers that you should be permitted to fill land where this filling would not unduly interfere with the flood problem.

MR. FIELDS: Right.

ASSEMBLYMAN BARBOUR: Now, if this were to be permitted, what use would you visualize being made of the areas that are filled?

MR. FIELDS: Well, I would think that in certain circumstances where you could fill up to the minimum sea level requirement, or whatever requirement would be written into the regulation, then you could build safely on that land. I think this is going to be limited - where you can do this - but there no doubt will be places where this could be done and we certainly ought to provide for it where it can be done without interfering with the normal flooding of the streams.

ASSEMBLYMAN BARBOUR: If this were written into the law, wouldn't it be also required in the law or in the regulations that in some cases if you were permitted to fill, you wouldn't be able to build?

MR. FIELDS: Well, I think that is a possibility. I think you want to leave some flexibility on that. I think our only contention here is we want certain rights and standards, basic rights, written into the act rather than leaving all of this entirely up to the regulation.

Now, certainly, if you read the court cases - there is one going on right now in Caldwell - the main arguments that the

property owners are putting up in the court case, bringing a suit against the ordinance that was passed up there, is that there was no allowance in there at all for any filling under any circumstances, no allowance for any clustering of development rights to protect the property rights and thus it constitutes a taking without compensation. I think this is what we want to avoid.

ASSEMBLYMAN BARBOUR: One of your main differences, other than the compensation and those things, is where the flood hazard line would be drawn.

MR. FIELDS: Yes, I think we have sharpened up the definitions, at least we think we have, until probably the flood hazard area would not reach as far beyond the stream as the definition in the bill that was introduced.

ASSEMBLYMAN BARBOUR: I have no further questions.

ASSEMBLYWOMAN MARGETTS: Any questions?

ASSEMBLYMAN BLACK: No.

ASSEMBLYWOMAN MARGETTS: Thank you very much, Mr. Fields.
Mrs. Julia Held.

M R S. J U L I A B. H E L D: Mrs. Margetts, my name is Julia Held and I am Chairman of the Environment Department of the West Caldwell Residents' Association.

The Borough of West Caldwell has under private ownership undeveloped, and I quote from the comprehensive revision of the master plan for the Borough of West Caldwell, Essex County 1964, "swampy areas where the ground water table is at the surface most of the year. Drainage is extremely poor and such areas are not considered well-suited for development. The major part of the southwest section of the Borough makes up what is known as the Hatfield Swamp. This area serves as a detention area for flood waters along the Passaic River."

In recent years some of this land has been developed much to the despair of its present inhabitants. I enclose a letter from one of the owners of a residence in this area as testimony to the misery and hardship that flood damage causes when development is allowed in a flood detention area.

In October 1971, our present mayor and council passed a flood plain use ordinance, which the West Caldwell Residents' Association supported with the recommendation that it be strengthened since it was found that "there is very little experience anywhere in the State on the legal aspects of flood plain zoning." The ordinance's constitutionality was summarily tested. The presiding judge has not yet released his decision. I did call and that decision should be out by the end of the week and, if it is possible, I would like to send a copy of the judge's written decision as part of the record.

Even if a community were fortunate enough to have the protection of a good law that withstood the test of constitutionality, its lowland residents would not be free from the fears of periodic inundation, for their problem would only be aggravated and intensified by heedless neighbors who indiscriminately fill and develop their lands spilling water in the basin over to new and higher grounds.

Although a few municipalities have spent the time, effort and money necessary to research and develop effective controls of their flood plains, it is unrealistic to assume that the majority of the municipalities want to police themselves in this respect. We have never underestimated the hunger for ratables or the pressures of land developers upon municipal officials. Land speculators, particularly those with properties in more than one river community, are quick to point out the zoning regulations of those towns with the least stringent building codes, such as adjacent Fairfield in our case.

The one thing we determined early in our investigations was that if we are to have an effective Passaic River Basin flood control plan, further development in the flood plain would have to be stopped, and that could not be left to the discretion of the governing bodies of the 112 municipalities along the waterways.

Other groups testifying here today will no doubt point out the ecological and environmental reasons for preserving the flood plains, not the least of which is the preservation of

aquifers which in our area return water to wells under West Caldwell. These wells presently supply water to surrounding communities.

Perhaps the havoc wrought by floods in the Passaic River Basin in the past years has been a blessing of sorts. It points out the need for the state to step in and exercise its authority. William Whyte, the author of "The Last Landscape", states in his introduction: "But there is a good side to the mess. We needed it. It is disciplining us to do out of necessity what we refused to do by choice."

West Caldwell has a serious problem. But it is by far not an isolated one. It is the problem of all who will suffer, directly or indirectly, through costs of flood damage, if New Jersey is allowed to continue to develop as it is, encroaching ever deeper into its inland wetlands.

In order to provide the guidelines for municipal regulation of flood plains and to preserve the integrity of the intent of flood plain protection for all the people of New Jersey, the West Caldwell Residents' Association supports immediate passage of Assembly Bills No. 596 and No. 572. It also recommends that sufficient funds be made available to delineate the flood plains of New Jersey's rivers on a priority basis starting with those rivers where the pressure for development is greatest and that the legislature consider not only preserving but also restoring, in those areas where encroachment produces frequent, recurrent flood damage, green belts along all of New Jersey's rivers as a sensible approach to flood control.

ASSEMBLYWOMAN MARGETTS: Thank you very much.

Have you any questions, Assemblyman Barbour?

ASSEMBLYMAN BARBOUR: No.

ASSEMBLYWOMAN MARGETTS: Thank you very much, Mrs. Held. Charles Maier.

C H A R L E S M A I E R: Mrs. Margetts and Committee members: My name is Charles Maier, Pine Brook, New Jersey. I feel kind of out of place here: it seems I am the only one interested in the property owners' side of this.

My brothers and I own and operate a farm in Pine Brook, of which a good portion, in our opinion, will be affected by either of these two bills, 572 or 596.

We agree the State needs some control over rivers and waterways to keep them free and open to handle the flow of flood waters.

We believe the State already has this control in the "Stream Encroachment Act", which in my opinion could have been used in the Pine Brook area on the Passaic and Rockaway Rivers, where encroachment of these streams can be found.

We have operated this farm for 45 years keeping it as open space, while others above and below us on the Rockaway and the Passaic Rivers developed their land, much of it with very little regard to flood waters.

This farm land has been valued at \$5,000 and \$10,000 per acre by the township for assessment values.

We oppose the two bills, 572 and 596, in their present form because, in our opinion, they are too broad giving the State control over much of this land, which could be filled and developed at levels above any high water danger and not affect the flow of the flood waters.

If the intent is to control and hold this land in present state to hold flood waters to protect the property which others have developed with very little or no regard to flood, this would prohibit us from using our land for its highest and best use and greatly reduce the value; in that case, we should be compensated.

I see nothing in either of these bills to compensate for the value lost. If this is not taking land, it is pretty close.

In our opinion taking property without just compensation is prohibited by the New Jersey Constitution.

I would say that I sat here all morning listening to a lot of good statements that I might agree with, but no one has mentioned anything about the person that holds this property - how he could be compensated. They tell us about how valuable it is to the rest of society and I can tell you right here, publicly, that if it is that valuable, I would sell the development rights anytime the State thought that they wanted to do

something about it and it would be at a fairly good price. I'm not selling real estate but I certainly hope that there isn't a mass movement to take property from people that have held it for 40 or 50 years and use it for other people's recreation without compensating them.

ASSEMBLYWOMAN MARGETTS: Thank you Mr. Maier.

Would you say that this bill, or these bills, have merit if they would consider compensation?

MR. MAIER: I would say, yes, I think something should be done. I thought so years ago. But I can't see how you are going to do it and expect people like us to give up maybe half our holdings for the benefit of other people who have neglected the flood problem. I have some pictures that I could talk about of a dump right across the river from us; it's right in the channel of the river. I can't understand why the State of New Jersey even permitted anything like this.

ASSEMBLYWOMAN MARGETTS: Have you any questions, Assemblyman Barbour?

ASSEMBLYMAN BARBOUR: No.

ASSEMBLYWOMAN MARGETTS: Thank you very much.
Mrs. Shively.

M R S. R I C H A R D S H I V E L Y: Mrs. Margetts and members of the Committee: I am Mrs. Richard Shively, Chairman of the Environmental Quality Committee of the Morristown Area, League of Women Voters. I am speaking today on behalf of the Morris County League of Women Voters, in favor of A 572.

The Morris County area in geological terms has two physiographic subdivisions, the New Jersey Highlands, which occupy 70 per cent of the county; and the Piedmont Plateau. The two are separated by a major fault-line contact, which extends southwest from Stoney Point, New York, through Riverdale, Boonton and Morristown. Northwest of the fault in the Highlands are broad, rounded or flat-topped northeast-southwest trending ridges of very ancient rock. The ridges are at elevations of 1,000 to 1,400 feet. Southeast of the fault lies the Piedmont Plateau, a low land of gently-rounded hills, with a few ridges and isolated higher hills. Altitudes in the Piedmont Plateau are 200 feet to 400 feet typically.

The streams of Morris County drain into three watersheds. Sixty-five per cent of the county drains into the Passaic River. A few streams drain into the Raritan and others drain into the Musconetcong. I will restrict my comments to the Passaic watershed with which I am familiar.

The head waters of several tributaries to the Passaic, which originate in Morris County, attain great momentum in periods of heavy rain. The Piedmont Plateau area or the Central Basin area, as it is also known, contains 2700 acres of low-lying, lightly-developed bottom lands composed largely of fresh water swamps and meadowland bordering thereon, which form a natural retention basin for the temporary storage of flood water. These protect the lower valley, the more highly urbanized area to the east, from flash floods of the Rockaway and Whippany and other tributaries of the Passaic. Even so, damaging floods took place along the Passaic in 1810, 1843, 1865, 1882 and 1896, and 1902, 1903, 1936, 1938, 1945, 1951, 1955, 1968 and 1971. The most serious flood was in 1903, but serious recent floods

have also occurred in 1936, 1945, 1955, 1968 and 1971.

The Army Corps of Engineers' Passaic River Basin Water Resources Study, which was referred to way back this morning, notes that the principal flood damage in the Central Basin itself is "along the lower Pompton, the Rockaway and Whippany Rivers and along the fringe of the natural detention basin, due to encroachment of industrial, residential and recreational developments during the last 30 years."

I attend many Planning Board meetings and I am familiar with the arguments put forth by some developers who have speculated on land purchases and wish to develop the land along streams. In one recent case, the developer sought to build 12 houses on lots near a stream. Members of the Planning Board's Site Plan Committee and also the Conservation Commission had visited the site in advance of the meeting and found that 4 of the 12 lots had several inches of standing water. When this was brought to the developer's attention, he immediately volunteered to install a sump pump - never mind the volumes of water that the pump would have to handle when the stream floods. The application was denied without prejudice and this developer will be back.

In another case I am familiar with in the same general area, a development was built several years ago, not long after the drought near a stream which had had a long history of causing flood conditions. A number of the homes in this development were flooded last year to the first story. This stream, like many, unfortunately, looked harmless during most of the year. After the drought of the mid '60's, the planners undoubtedly forgot or discounted what the stream could do in flood conditions.

It is evident that legislation is needed to get municipalities to delineate their flood plain areas and protect them against unsuitable development for the health, safety and welfare of the unsuspecting purchasers of homes, the residents of the downstream areas, and the taxpayers who, in effect, subsidize the developers who build in places where they should not, as William Whyte pointed out in "The Last Landscape."

In cases where the municipalities have not taken the initiative in delineating the flood plains and protecting them, the State must be empowered to do the job. Enlightened zoning on the local level seems to be the principal tool, although there are others, such as engineering solutions, acquisition - public and private - tax adjustments to encourage open space use, and regulation.

The Rutgers Bureau of Government Research publication, "Surface Water Control in New Jersey - Drainage, Flood Control and Related Policies in an Urban State," noted that, "Examination of case law in other states as it pertains to flood plain zoning has revealed the following: (a) Land-use regulations of flood plains have withstood attacks when they had as their objectives presenting external economies and the protection of landowners from their own irrationality in the assumption of flood risks. (b) When land-use regulations, which local governments are authorized to promulgate, are calculated to benefit the public by means of adjustment to flood conditions as part of an over-all community plan, they have been upheld."

As noted, in the most popularly-quoted publication, the News Letter of the Morris County Planning Board, "Zoning for flood plain lands need not be a negative restraint. There are productive uses for flood plains which are compatible with their primary function. Some directly benefit the municipality, such as linear parks, green belts, along the streams, or other recreational uses. Others provide a source of rateables, while protecting the land: specialized agriculture, limited commercial forestry, golf courses, cluster housing."

I would like to call to the attention of this Committee several of the conclusions of the U. S. Water Resources Council in its publication, "Regulation of Flood Hazard Areas." (Reading) "Conclusion 1. Regulations to guide land uses in flood hazard areas can play an important role in reducing losses to future construction. Conclusion 2. Uncontrolled development in flood hazard areas results in increased flood heights and recurring flood damages to unprotected losses. Conclusion 3.

Flood plain regulations can help assure that benefits of proposed uses at flood-prone sites exceed cost. 4. Engineering works are inadequate, unnecessary or undesirable in some instances to reduce flood losses." And I will skip to number 13 of the 27. "Land-use regulations must be appropriately combined with other flood plain management techniques to reasonably minimize flood losses. Number 19. (The last I will cite.) Widespread judicial support can be found for regulations which require that those who use lands be responsible for actions which substantially harm public or private interests."

In conclusion, I quote again from the Morris County Planning Board News Letter. "The dangers inherent in the improper development of flood plains seem evident. The task of government is to articulate the goals and implement the procedures before rising costs and the developments of target areas remove the potential for enlightened alternatives."

We feel that A 572 is a step toward accomplishing this task. Thank you.

ASSEMBLYWOMAN MARGETTS: Thank you very much. Are there any questions? (No response.) Thank you.

Mr. Clark.

H A R M A N R, C L A R K, J R.: Mrs. Margetts and members of the Committee: My name is Harman Clark. I am attorney for Green Brook Township, Somerset County. I am appearing in representation of Mayor Noble, who at this time has an appointment with the National Oceanic and Atmosphere Administration to install an early warning device upstream on the Green Brook.

We have a written statement which I will not read. In this statement, we do point out though the steps that Green Brook Township has taken in the past, including a Master Plan Delineation in 1957 and what we believe to be very strong zoning ordinance, flood plain delineation.

We also attach a copy of a study made in January of this year by the Somerset County Planning Board, which shows the acreage of flood plain of the Green Brook, from which we take our name. Green Brook Township has more acreage within that,

about 148. We have applications in for Green Acres acquisition of 110 of those.

I am not pointing this out to tell you what Green Brook has done or hasn't done, but to say that on those 110 acres not in public ownership which we are attempting to acquire, we only have three structures. I think this resulted to a large extent from our regulations over the past 15 years.

We also touch in our statement on the problem that Mr. Maier raised a few minutes ago with the idea of confiscation. We suggest that it is not confiscation. We are not saying anything about properties that are put in these zones, other than describing the property that exists.

We have a classic case of a man who has a lot. There are no sewers available. He can't get a percolation test. He cannot build on that property. He understands that because he knows that you can't put a house on a lot unless you can get rid of the sewage. Now to a large extent we are talking about property which should not be built upon. It exists that way and it requires a great deal of fill and other things to put in a buildable state. When we say you shouldn't build on it, we are not saying something novel or new; we are recognizing that that is the condition of the property.

We also recognize, however, - and I think the Legislature has done this and the voters in New Jersey have done this - that there are situations where the property ought to be acquired, and this is the purpose of Green Acres. Green Brook was hit by Doria last summer and there are Federal acquisition funds available in that.

We filed a statement in support of both bills. We recognize that they are not totally compatible and our main support is in regard to 572.

We are home rule advocates. However, we also recognize that not all communities have done what we think we have done, and that the failure to act on the part of upstream communities can affect us. So we feel that 572 provides us with home rule. It gives us a year to act. It gives the other communities a

year to act. We like the idea that if they don't act, some action will be taken for them. Because if they don't and building is allowed upstream, the water is going to get to us quicker. We think that has to be prevented in some reasonable way. Thank you.

(Written statement submitted by Mr.
Clark can be found beginning on page 103 A.)

ASSEMBLYWOMAN MARGETTS: Thank you.

Mrs. McNeill.

P E G G Y M C N E I L L: I am Peggy McNeill, a member of the League of Women Voters of New Jersey Environmental Quality Committee and a recent member of the Mercer County Flood Task Force, appointed by Arthur R. Sypek, Director of the Mercer County Board of Chosen Freeholders. My testimony is based on my experiences on the Task Force, literature surveys, and personal observations.

The expenditures of government in the form of facilities and services will help shape the nature of the State's population according to the Horizon Planning Concept of March 1965, and, more importantly, the population distribution. Public policy decisions determine to a great degree the direct function of private investment. A difference was noted between "patterns of development" and a "living environment."

According to N.J.S.A. 40:55-32 the purpose of zoning regulations is, among others, to promote the general welfare including "to secure safety from fire, flood, panic, and other dangers." And in 1962, the State was empowered to delineate the flood hazard areas, but this has been slow and expensive, said to cost approximately \$7,000 a mile, by the Department of Environmental Protection. Few municipalities have enacted flood plain zoning ordinances. Subdivision regulations and building codes have not been exploited to restrict the use of the flood plains.

So I feel it is time for the State to speed the delineation of the flood hazard areas and to assume the responsibility of regulating them. We have heard people testify to the fact that

one community can affect another upstream or downstream.

In the meantime flooding has recurred throughout the State. New Jersey's flood plains represent a figure slightly higher than the national average of 6 per cent of the total land area. Urbanization is occurring at a rate faster than that with which government and the people can cope (an observation noted by the Mercer County Flood Task Force). New Jersey's flooding experience during the past sixty years has, until recently, been far below its potential.

The floods of last summer in New Jersey caused \$140 million in damages. The Federal Government has paid \$34 million to New Jersey in flood relief. In the May 1968 flood in the Passaic River Basin, there was \$19,323,500 damages. There have been floods in that Basin also in 1969 and 1971. An engineering flood plain delineation of the principal streams of the Passaic River Basin would have cost only \$2 million, according to the Department of Environmental Protection. This probably would have been a saving in the long run.

According to the Mercer County Flood Task Force Report of March 9, 1972, Mercer County officials estimated that \$14 to \$18 million worth of property was ruined due to Tropical Storm Doria on August 27 and 28, 1971. The storm produced a record rainfall of 8.09 inches within 36 hours. Industrial damage in Trenton totalled over \$5 million in losses. Hundreds of families were forced to leave their homes due to flooding and motorists were stranded. Nearly 40 inches of water covered the Penn Central Railroad tracks in Trenton.

Inadequate culverts and urbanization contributed to the flooding and excessive damage in Mercer County. The Assunpink Watershed Flood Control Project approved in 1964 and scheduled for completion in 1971 won't be completed until the late 1970's due to economic problems. A 120-foot break in a dike constructed in the 1800's ruptured at Port Mercer, allowing Stony Brook waters to flow into the Assunpink Watershed and the Delaware and Raritan Canal. This caused an even higher increase in the flood level and a flood of longer duration.

The State was declared a National Disaster Area. Thus, residents and businessmen could receive a direct subsidy or "forgiveness" provision of up to \$2500 per eligible party.

The Mercer County Flood Task Force was established by Director of the Mercer County Board of Chosen Freeholders on September 21, 1971, to study the basic problems of flood control in the entire county. Richard J. Coffee was the Chairman of the group.

The Task Force recommended that all municipalities in Mercer County with significant streams be encouraged by the County to establish flood plain ordinances to restrict development within the flood plains. Princeton Township is the only one of thirteen at this time to have a Flood Plain Ordinance in Mercer County. This ordinance is based on a design flood determined by hydrological and engineering methods. The Task Force recommended that in areas where the flood plains have not been identified by the engineering method that the flood plain be identified using alternate procedures, as suggested in Section 5.4 of the Flood Plain Management Report, prepared by the State Department of Environmental Protection, Division of Water Resources, dated September 1971.

The Task Force also recommended that the County encourage sedimentation and erosion control ordinances be adopted by the municipalities. The Task Force endorsed the requirement of the County Planning Board that new developments provide temporary retention or detention facilities. They recommended that the Mercer County Board of Freeholders express to the State Department of Transportation that they adopt a policy requiring retention or detention facilities to be constructed in all highway developments where flood dangers exist and that consideration be given to the inclusion of necessary storm drainage facilities in the interchange areas of freeways.

New Jersey's population continues to grow. From over 7 million by the 1970 Census, one projection method raises it to 8 million by 1980 and 10 million by 2000. But the "Horizon Year" of 2030 projects 20 million and full development.

I wonder if the flood damage potential will increase proportionately or will even accelerate because of the possible compounding effects of altering less suitable lands for development in the race for profit and tax ratables?

New Jersey should carefully consider the consequences of continued development by arbitrary design. Another way has been suggested by Ian McHarg, head of the Department of Landscape Architecture at the University of Pennsylvania. It involves charting all of the physical resources of the region, especially its drainage network, and seeing what kind of a picture emerges. He has also devised a system of eight social values which he cranked into the standard cost-benefit items used when justifying a project. The current Federal Water Pollution Control Acts passed by the House and Senate, but not active jointly yet, each has stated, in spite of other major differences, that the Administrator shall "initiate and promote the coordination and acceleration of research designed to develop the most effective practicable tools and techniques for measuring the social and economic costs and benefits of activities which are subject to regulation under this Act."

Should not the potential cost of flood damage be an input into the cost-benefit ratio when arbitrary planning and development infringes upon flood plains? Experience has shown that the costs of damage greatly exceeds the cost of delineating flood plains, even at \$7000 a mile. Is it right for society as a whole to underwrite the cost of damages due to indiscriminate development?

It is interesting to note that Madison Township's zoning ordinance was recently declared invalid because engineering data and expert opinion or ecological data and expert opinion were lacking in the legislative process and at the trial. These were necessary to substantiate that safeguarding against flood and surface drainage problems and protection of the Englishtown aquifer would be reasonably advanced by the sweeping zoning revision into low population density districts along the four water courses and elsewhere or the exclusionary limitations on multi-family apartment units. From this case, it would seem

that in-depth studies and charting of natural resources are necessary and proper in order to protect critical areas from encroachments from man's activities.

Flood plain zoning is a proper exercise of police power and has been so upheld by the courts. It is considered the most useful of the preventative tools for reducing loss of life, property damage, and the cost of flood control. A comprehensive approach to flood damage abatement is emphasized in the literature and has strong support.

To date most of the alleviation of flood damage has been by the construction of protective works, such as dams, which create a residual flood hazard downstream and a false sense of security. Between 1936 and 1967, the Federal Government has spent more than \$7 billion on flood control structures throughout the nation. Because the benefits must be equal to or greater than the costs, the actual flood damages would be at least the sum of the residual damage and the Federal expenditures. The damages each year are greater than the year before. In 1966, \$500 million were spent for Federal flood control expenditures by the Federal government in the United States and \$1 billion for residual flood damages in the United States.

The increase in damages is due 45 per cent to increase in property values, 25 per cent to increase in the amount of flooding and 30 per cent to an increase in building and other uses of flood hazard lands.

Human adjustment to flood situations has been neglected. The flood damage situation must be recognized and additional measures, such as flood plain regulations, flood forecasting, temporary evacuation, permanent evacuation, flood proofing, and flood insurance utilized properly. The Mercer County Flood Task Force has made recommendations on most of those items.

The continued construction of flood control works and the availability of insurance with rates not realistically reflecting the flood risk have and will encourage the improper use of flood plains unless adequate regulations are enacted. The public is subsidizing the unwise actions of others.

Highway programs and the availability of water, sewer, and other utilities have tended to lure business, industry, and housing developments into the flood zones by following the low gradients of stream valleys. This is an example of public policy decisions determining the direct function of private investment. Thus, in addition to regulating the flood hazard areas, it should be incumbent upon the State to re-examine its public policy decisions in regard to how they influence development in flood hazard areas.

Continued efforts should be made to develop quicker and cheaper methods of delineating flood hazard areas without sacrificing their legal status. Adequate funds should be available to provide personnel and equipment for that purpose. Because a false sense of security from flood insurance and flood control projects is a factor, information concerning actual flood hazards should be widely disseminated.

The regulations of flood hazard areas should contain permitted uses of those areas so designated as such in accordance with the degree of danger. And some people have mentioned many of those already. Efforts should be made to tie together various strips of open space as flood plains, sewer line right-of-ways, or other utility areas. Future planning by local officials is needed to save these areas and make good use of them for the community or private people.

Agencies involved should be adequately funded so they may purchase flood hazard areas when necessary or may be able to take advantage of reasonably priced land when it is available. Conservation easements might be given to property owners in some instances. In other words, there are many avenues open to satisfy many situations.

In conclusion, New Jersey is a state experiencing growing pains at perhaps too great a rate. Whatever needs to be done by the State Government to achieve proper land and water use should be determined without delay and implemented with proper regulations and funds.

Water is a priceless national resource and floods waste

great amounts of it. No state can expand without an adequate supply of water both in quantity and quality. There has been an increase in the number of areas in New Jersey with inadequate supplies of water and greater pollution. Yet the State Department of Labor and Industry in its pamphlets states that there is sufficient rainfall and water supply for expansion. Many officials agree that the State must study reuse of water. All levels of government must be able to anticipate solutions to water problems rather than be caught short by proposals that may be short range and minimal. Thank you.

ASSEMBLYWOMAN MARGETTS: Thank you, Mrs. McNeill.

Mr. Larson.

P E T E R W. L A R S O N: Mrs. Margetts, my name is Peter Larson. I am Executive Director of the Upper Raritan Watershed Association, which is a citizen-supported conservation organization working for environmental quality.

Today we are contemplating not as great a giant step in regulating the use of flood plains as some states have taken. Considering our problems in New Jersey, this is only one small phase of what must be done by the State since local action options have been available for some time, with little action resulting. Those communities with greatest needs for regulation have generally done the least to prevent further unwise development of flood plains. This is clearly against the best public interest of the people of the State, although not always to the detriment of those causing the problems downstream. The race for ratables upstream, symptomatic of accelerating development, notably industry, crowds in on the more level flood plain land. This development causes accelerated run-off of storm water. Its effect is cumulative and, as the mass of water-borne debris gathers momentum, flood damage speeds up geometrically. Thus the problem brought up - it is called, "which portion of a developed flood plain is significant" - this is really irrelevant. Every square inch is part of a larger ecosystem. Everything which happens to it is reflected elsewhere

in the system. Some things are tolerable; others become intolerable. Such are floods - merely chance accumulations of long-ignored storm-water run-off problems. Such problems result from lack of land use policy by the State, a part of which is regulation of flood plains. The rest of the package should include: (1) General control over inland wetlands and, (2) coastal wetlands, (3) standards for storm water control on site instead of big "pipe-itis", (4) special controls for use of steep slopes, and (5) definition and regulation of critical areas, such as aquifers and unique natural areas.

There are not enough public resources to acquire fee simple title to all such lands. That is neither an excuse nor a reason, but a consideration of the magnitude of the problems before you.

This bill - and I support 572 - will be opposed by many who oppose state takeover of any regulation, particularly land use controls. Again, permissive legislation has failed; home rule has not worked. And this, I submit, is what 572 would accomplish. Now the State must act to fill the void where local action is non-existent or inadequate through 572. Where local action has worked, there will be no change.

An outstanding example of State inaction is the inability to regulate development of septic tanks in critical areas until after damage is done to persons or the environment. How can we not recognize the motives of the devil's advocates as those of private interests intent on profit at public expense?

In New Jersey, the individual citizen has no standing to invoke judicial action until or unless he has been subjected to injury or loss. If the Legislature utilizes its great wisdom to weigh the values of judicial review and public standing as a check on administrative powers granted by this bill, then the hangup of granting additional power to the Department of Environmental Protection would be removed.

If we look around the United States at the states with equally serious problems, yet nowhere near the overwhelming

cumulative magnitude of our problems, my position on this bill will be quite clear. The Federal government in 1965 faced similar crises. It solved the problems of long-standing environmental abuse with an omnibus package of bills. I, therefore, suggest most humbly that the magnitude of our problems are far too great to waste time considering only the merits of this bill's or that bill's weakness and then bury matters of such critical importance in committee for further study. This bill, 572, is workable; it is amendable and it is flexible. It is a second building block upon the coastal bill and oceans bills of last year. It is important to recognize that flood plain regulation is but one step in many needed to protect the public interest. Such matters might better be handled as a package in the manner of a constitutional convention - such are the magnitudes of the problem and the need for immediate attention. Since such a convention is not likely, then an amendment to the Constitution entitling everyone to a healthy environment is also of high priority. This, coupled with standing to sue, could ensure state action, regardless of personalities in administration.

The Constitution does not guarantee anyone a profit. I would underline this. The Constitution does not guarantee anyone a profit. Equal rights and just compensation have been misconstrued many times as the question of development rights evolves. Even the Romans used the term "caveat emptor" - let the buyer beware. This has a doubled-edged meaning. The land buyer has eyes and intelligence to investigate flood plains. He probably didn't pay much for the land in the first place. He probably isn't paying much to keep it. The uses are probably already controlled by local ordinance. If he wants to change the use he has already put it to, that is too bad. He can still sell it or continue that use himself. Existing development would not be affected by 572, except through limitations on expansion. If public funds are to be made available to bail out speculators, then the public should gain some benefit, such as easements or access rights, if not fee simple title.

To make payments for compensation of damages to development rights is absurd unless some public gain is permanently established by acquisition of title controls over land use.

Because it is unlikely that this august body will complete all the work outlined above in this session, I commend to your attention the need for a land use policy. Such a policy should declare flood plains and other areas in need of special protection as off limits to all but certain compatible uses. Following adoption of such a policy, passage of building blocks of legislation will build a meaningful monument to one of the most aware and sensitive legislative bodies in the country. We have the needs, the resources and the brains. Do we have the will to act? Each of you must answer to your own conscience and that of your constituents. We're waiting.

I will be happy to answer any of your questions I can.

ASSEMBLYWOMAN MARGETTS: Thank you very much. Any questions? (No response.) I think you covered it very well. It was a very fine presentation. Thank you.

Mrs. Graves?

MISS CAMPBELL: I am Faith Campbell.

ASSEMBLYWOMAN MARGETTS: All right, Miss Campbell.

F A I T H T. C A M P B E L L: My name is Faith Campbell. I am living in Princeton, New Jersey. I represent the South Jersey Branch of the Sierra Club.

Ever since man first inhabited the flat areas adjacent to rivers and streams, he has been plagued by floods. His answer to this problem was to try to prevent floods by controlling the flow of water. If such an approach were the answer, surely the advanced engineering technology of the 20th century would have brought about a reduction in flood damages. But it has not. Damages continue to rise, and the reason is clear: people are building more houses, stores, industries on the flood plain.

Therefore, as has long been recognized by experts in the field of flood control, a balanced approach to the problem is essential if losses to life and property are to be minimized. A balanced approach is one that does not rely exclusively on dams or other structures, but makes use of such other methods as land use regulation, structural adaptation, insurance, and provisions for emergency evacuation and protection.

New Jersey was one of the first States to recognize the importance of these other measures by the adoption in 1929 of legislation regulating encroachments in stream channels. It is therefore fitting that New Jersey now consider regulation of land use on the adjacent flood plain.

The flood plain is actually part of the river. It was formed by the deposit of silt during past floods. Its characteristic breadth and flatness enable it to absorb and carry the excess runoff from storms and thaws. When left in its natural state, it stores rainfall and releases it slowly, thus reducing the likelihood of a flood. And when a flood does occur, it absorbs the water with minimal damage. It is when man imposes himself on the flood plain that damages result. Last summer's floods were not a freak event. The vulnerable areas will be inundated again. It is in everybody's interest, property owner and community alike, to limit development of the flood plain.

Land-use ordinances are usually adopted by local governments. But it has been shown² that municipalities are rarely able to resist the pressure of economic interests seeking to develop this land without regard to the flood danger. The result is that few communities enact land-use regulations designed to meet the flood hazard, and those ordinances which are adopted frequently exempt land already developed.

These phenomena are most noticable in those areas where development is proceeding at the fastest rate - just those areas which are most in need of land-use regulations.

The reluctance of landowners, developers, and local governments to adopt such regulations could, perhaps, be dismissed as their own "calculated risk." But, in fact, there is almost never any calculation of the flood hazard, nor is there a willingness to accept the risk.

When damaging floods occur, these landowners and municipalities turn to the State and Federal governments for emergency relief and the construction of protective works. The State has a right and duty to protect the lives and property of its citizens and to reduce unnecessary expenditures. It is therefore in the State's interest and within its prerogatives to regulate development of flood-prone lands.

There are two proposals currently before the Assembly purporting to serve this purpose. The first, A-572, is in the form of an amendment to a 1962 statute. In general it is well conceived. Its first section makes clear that the purpose of the law is to protect the safety, health, and general welfare of the citizens. It then transfers authority for establishing and administering floodway encroachment regulations from the Division of Water Policy and Supply (as established by the 1929 channel encroachment law) to the Department of Environmental Protection. This strengthens the Department and ensures better administration of these regulations by centering all authority in the area of flood damage reduction in the same agency.

The most important part of the proposal is the requirement that the Department establish minimum standards for regulating the use of

land designated as within the "flood fringe area" and that local governing bodies enact ordinances which put these standards into effect. The provisions of the law, as amended, would ensure generally good procedures for establishing fair and effective standards. Section 3 of the law, as it now stands, provides for the participation of both experts and the public in determining flood hazard areas. It also recognizes that the seriousness of damages suffered varies according to such factors as depth and velocity of flood waters, and establishes the principle that these variations must be considered when standards are adopted. By these provisions, Section 3 goes a long way in overcoming such common problems in flood plain zoning acts as local planners' lack of expertise in evaluating the flood damage potential, uncertainty as to the limits of the flood plain, and the need for flexibility. The establishment of State-wide standards is in itself a necessary step toward making the provisions effective and fair to all concerned.

At the same time, the proposal provides for local variations according to special conditions by allowing local governments to adopt their own, more stringent, regulations. This is very important as each stream has its own flood pattern. A-572 does as much as a legislative act can to balance the needs for general standards and individual variations.

The proposal also establishes penalties for violations. This is obviously necessary.

A-572 does have a few weaknesses which ^{by} should be eliminated. The first is the lack of a "non-complying uses" clause. Such clauses provide for the gradual elimination of uses existing at the time of

enactment which are in conflict with the standards so established. Among the possible ways of carrying out such a policy are setting specific time limits within which the non-complying use must be brought into compliance, or forbidding the rebuilding of a seriously damaged structure, or its conversion to another non-complying function.

A second weakness is the lack of an explicit statement that the Department may revoke or change its minimum standards according to changed conditions. The local ordinances would then, of course, be brought into accord with these new standards.

The proposal must be strengthened by providing that should local governments fail to enact appropriate land-use regulations, the Department shall (not may) enact such regulations itself.

The second proposal, A-596, is weaker than the first in nearly all respects. First, it allows but does not require municipalities to adopt regulations governing the use of land in flood hazard areas. We have already pointed out the reasons why local governments rarely take such actions on their own and the harmful consequences of this failure.

In Section 3a criteria are proposed for the Department's administration of floodway encroachment provisions. It must be stressed that it is in the public interest to allow no structures on the flood plain. The examples of "public interest" structures are most unfortunate. narrow bridge openings and highway embankments frequently cause increased flood stages by blocking the natural flow of water in the floodway. As for utility installations, electrical equipment and all motors are severely damaged by inundation, water supplies become contaminated, fuel storage containers resting on the ground can be

swept away and become caught in bridge openings, etc., to block the flow, or rupture. Open uses, such as parking and recreation, are possible. But the lack of reference to the benefits of retaining such areas in their natural state as wildlife habitat is unfortunate.

Section 1b simply states that the local planning board or governing body would administer its own regulations. Section 3b attempts to establish some guidelines. The prohibition of structures for human habitation is excellent. But it is impossible to use the value of the land as the criterion for determining the value of any structure which may be built upon it. The relationship between the selling price of land and the structure to be placed upon it is circular: land considered suitable for more expensive and profitable buildings is, for that reason, also considered more valuable.

A-596 does not provide for the advice of experts in evaluating flood damage potential. It contains no explicit "non-complying uses" clause. It is not explicit on how flood hazard areas are to be delineated. The proposal establishes no penalties for violations.

A-596 does not provide for effective State-wide standards of land use, nor does it make one agency responsible for administration. It thus is likely to increase confusion and encourage local economic interests to oppose any attempts to establish land-use regulations. Under the circumstances the proposal does not answer the State's need for effective measures to regulate development in flood hazard areas.

The Southern New Jersey Group of the Sierra Club urges the adoption of A-572. We strongly recommend the inclusion of our suggestions which we believe will strengthen the bill.

Thank you for the opportunity to testify.

ASSEMBLYWOMAN MARGETTS: Thank you very much.

ASSEMBLYMAN BLACK: Strictly from a parochial standpoint, Miss Campbell, you are listed as the Southern New Jersey, Princeton.

MRS. DIANE T. GRAVES: The Southern New Jersey Group of the Sierra Club encompasses Central and South Jersey.

ASSEMBLYMAN BLACK: It does go further south than Princeton?

MRS. GRAVES: Yes, all the way to the tip of Cape May.

ASSEMBLYMAN BLACK: Thank you very much.

ASSEMBLYWOMAN MARGETTS: Thank you, Miss Campbell.

Miss Long. Is Miss Long here? (No response.)

Mr. Stickel? (No response)

The North Branch of the Sierra Club - Mrs. Cobb.
(No response.)

Is there anyone here from the Monmouth County Soil Conservation Service? (No response)

Mr. Severin of Somerville.

C Y R I L C. S E V E R I N: My name is Cyril Severin and I live in Bridge Water Township. I was a farmer. I am a mechanical contractor and a property owner. I have various holdings in flood land and my age is 66.

I am here representing myself because I have a lot of flood land and I have been doing a lot of work in this flood plain. In fact, we have about twelve flood plain sites. They are beautiful lands and they need development. They have been neglected for the last generation or two.

I am here to try and encourage the State not to give us more legislation, but let's enforce the legislation we have. There are two agencies that are very capable. One is the Army Corps of Engineers and the other is the Water Policy Commission of the State of New Jersey. They should control, maintain and design flood plains. Putting flood plains in the hands of municipalities would be a great mistake because the control would then be handled by laymen who are unacquainted with flood plain conditions.

Flooding knows no municipal boundary. We have to have proper maintenance, which is the most important. We have regulations and we have the necessary personnel and the expertise to take care of these things. What we need to do is enforce what we have rather than confuse people with lots more legislation, more agencies, and confuse the people so no one knows which way he is going.

If we would give the Army Corps of Engineers the personnel they need and the help they need financially, also the New Jersey Water Policy Commission, they can take care of this job very adequately.

I had one instance where I asked the Water Policy to make a survey on a property, but they didn't have any field men. Now, if these agencies had adequate personnel, adequate funds, they could handle the job. Everything has been done in a haphazard manner.

The Army Engineers will do a job when the municipality calls them in. At the present time, the Army Engineers are working on my property and doing a beautiful job, but it is only in that one particular area.

For a municipality to try to control a flood plain is almost impossible. They are limited. They go to their boundaries and the next municipality may not continue the work.

My main purpose in coming here is to urge not more legislation, but let's use what we have. The agencies that we have can do the job. If they need more funds and extra personnel, let them have it. And we wouldn't be burdened with more taxes and administrations stepping on each other, which we have too many of now. Also the people working on the flood plains wouldn't be harassed by the various municipalities. Municipalities are controlled mostly by politics and it is impossible. It would be the same as trying to put a highway through a municipality. Everybody would have a different opinion and nothing would get done.

So I am here to ask that the Water Policy Commission and the Army Engineer Corps be given all the cooperation and

they should handle this whole project. They know how, they can handle it, and I don't think they need any more help.

ASSEMBLYWOMAN MARGETTS: Thank you very much, Mr. Severin.

Is Mr. Dilatush here? (No response.)

Mr. Donovan, Councilman from Rahway.

P E T E R M. D O N O V A N: Chairman Margetts and members of the Committee, it is a pleasure for me to be here today. I took the day off from work. I hope I don't get fired because of it.

I will try not be too redundant and go over many of the things that have already been said. A lot of good points have been brought out.

In my two short years on the Council, I would like to explain a couple of the problems that I have run into and also why I feel so strongly that these bills should be passed.

I have before me a letter, a courtesy copy of which was sent to me when I was a rookie councilman, by a person in my ward. It was addressed to the Honorable Clifford P. Case. This happened to go back to last August 1st, and I am only going to read the last paragraph of this letter. I am going to read that because I think it means something.

(reading)

"It is a twist of irony that on the very day when men are walking on the moon, the residents of Second Avenue, Rahway, are scurrying about removing their possessions, due to inadequate sewerage on their street. I am sure that the governmental offices on a local, state and federal level can realize how ludicrous this situation is.

"Very truly yours,

Mrs. Eugene H. Hamler"

Since that letter and even before this, I felt a need to work for flood control projects. After I was elected to the Rahway Municipal Council, I took it upon myself to become active in the Rahway Citizens for Flood Control. The President, Howard E. Baker, I believe has sent a letter to you today

that will be entered into the record. So I won't mention much more about that.

I think the Federal government, HUD, to be exact, perhaps two years ago, requested the municipalities to enforce local regulations concerning flood regulations, so they would be eligible for flood insurance. There have been many, many followup articles in the paper and I know that Governor Cahill was quite concerned about this and I have no doubt this has brought about this public hearing.

I would say in Rahway we do not have any flood regulations that have been passed even though there has been so much publicity concerning it.

I took it upon myself about two months ago to introduce an ordinance which was the first one offered because it is very political in nature. This was brought out earlier today. It actually was an ordinance to prohibit the filling, excavating or modification of the original grades of lands abutting the Rahway River and its tributaries for a period of one year. I did a great amount of research concerning this particular ordinance. As a matter of fact, for being a short-term moratorium, it is almost like a complete ordinance in itself, except that I would have liked to have been able to do a little more delineating of the breakdown of the actual lands that are excluded in this ordinance.

I had help from the Federal government, State, local and concerned people and legal advice. I would like to turn this over to you in hopes that it may just give you another idea or two in regard to the particular bills that will be before the Assembly. Because, as I said, there is an awful lot of merit in it. There have been a lot of pros and cons. I brought this up before the Rahway Municipal Council on a couple of occasions. I think we have just about ironed out all the loop-holes in it. There has been a lot of criticism. When you introduce anything like this, it is going to be controversial. But it is for the benefit of the majority of the people.

I would like to go on record and say that due to the

fact that many of the municipalities have not followed through and introduced their local forms of legislation to protect the flood plains, I think it is imperative that the State take a much more active part in trying to help the communities. When I say "help," this doesn't always necessarily have to be financial help. I think it is one of the most important problems that we have. I think this year it is going to be a very, very big campaign issue.

I have been on the Council two short years. I have no intention of running for re-election this year. But I would like to go out, feeling I have done something positive that needs to be done and flood control is one of the biggest things we have to work on.

The indiscriminate filling in of lands along the Robinson's Branch which lies in my ward in Rahway has reached the point where something has to be done. There are several applications before the State Water Policy Bureau right now - I believe Mr. Pike was here earlier today - and 90 per cent of a parcel of land which is to be excavated by a local contractor is below the normal flood levels in the City of Rahway. I think when it gets to the point where people who live adjacent to this area are being intimidated and flooded - they talk about the Hundred Year Flood and all these other floods and we are having them annually - something has to be done about this positively. Thank you very.

ASSEMBLYWOMAN MARGETTS: Thank you very much. Do you have a copy of the ordinance for us?

MR. DONOVAN: Yes.

(Copy of ordinance can be found beginning on page 10.9 A.)

ASSEMBLYWOMAN MARGETTS: Thank you very much. There is a question Assemblyman Black would like to ask.

ASSEMBLYMAN BLACK: Just a comment more than anything, sir, and that is this: You mentioned you were not planning on running for re-election next year. Senator Beadleston undertook a complete study on why legislators did not want to seek re-election.

Perhaps you might want to send your comments along to him. You might find them interesting.

MR. DONOVAN: I think I would because, quite frankly, I entered this game of politics and I enjoy it. I didn't want to come down here and try to be philosophical over it. But when I do a job, I like to really do a job. When I see the way politics enters into some of these things - and you know better than I - I wonder. They say when you are not in office, you don't have as much say. But I'm going to give it my darnest. I have said in Rahway, even after I am off the Council, I may become the Ralph Nader on this flood control issue.

ASSEMBLYWOMAN MARGETTS: We could use a Ralph Nader in New Jersey. Thank you.

Mrs. Schonewise.

L Y N S C H O N E W I S E: My Name is Lyn Schonewise. I am the Chairman of the Water Study Committee of the Gloucester County League of Women Voters. I have personal knowledge of two major streams in Gloucester County. One is Big Timber Creek which borders between Camden County and Gloucester County. The other is Woodbury Creek. Both are tidal streams and flow directly to the Delaware River.

I am most familiar with the stretch of Big Timber Creek from Clements Bridge Road to the Delaware River. That stretch is about four miles long. By consulting a 1966 U. S. Geological Survey Map one can see that both sides of the stream were lined with flood plains nearly continuously for two-thirds the length of the stream. The flood plains of the upper reaches of the stream, from Clements Bridge on up, are not particularly heavily filled in. However, the area from Clements Bridge to the Delaware River is quite a different story. The flood plains are nearly all filled in. That four miles of stream had, as nearly as we can figure from the U.S.G.S. Map, 300 acres of flood plain in 1966. Now there is approximately 100 acres of flood plain. That means 200 acres have been filled or 66 per cent. This has

resulted in, among other things, the yearly flooding of homes built on the stream on the filled flood plains. I am referring particularly to homes in Westville that I have seen in a flooded state.

The stretch of Woodbury Creek I am most familiar with runs from the center of the town of Woodbury to the Delaware River. This stretch is about three and a half miles long. Prior to 1966 there were about 470 acres of flood plain on this stream. By 1966 about 170 acres of this had been filled and/or was diked in. Since then another 250 acres or so have been filled. This includes a vast plain at the mouth of the stream behind Fort Mercier in National Park. This particular plain covers approximately 100 acres, is completely diked on all four sides, and about 50 acres of it have been filled with the spoils from the dredging of the Delaware River. Not included in the figures are two more very large diked areas on the opposite side of the stream which we could not get to. The fact that they are diked indicates the possibility that those plains are filled, or partially filled, or that there are plans to fill them.

Over all, about 320 acres, or 68%, of flood plains on the Woodbury Creek are filled, or are being filled.

In addition to the excess flooding caused by the filling of flood plains, these fills cause a great amount of pollution. I canoed both streams and could not find one fill that wasn't leaking noxious fluids into the creek. In one case there were car batteries that still had battery acid in them spilling into the water. Paper, boxes, toilet seats, rusting metal drums--all these types of things were literally falling into the stream.

One of the first things I learned about Limnology is that it is the life in the stream that keeps the water clean. The microscopic organisms

that are fed on by the larvae that feed the fish that feed the birds and you--each of these creatures have a definite and vital function that they perform in "eating up" pollutants. When we destroy the marshes and swamps and floodplains, we destroy the nurseries of these creatures. Without the water organisms we have no chance for clean water.

I would like to return to the subject of flooding caused by the filling of flood plains. There is no place for the water to spread out and in so doing reduce the effect of the flood downstream. We all saw examples of this late last summer when Hurricane Doria moved through this area. By the time she got here she was no longer a hurricane but a tropical depression. She wasn't a particularly large storm. Theoretically, she wasn't large enough to flood the 100 year flood plains--not even the 50 year flood plains. In fact, though, roads were washed out and entire towns were flooded. I can only discern from the studies we have made that the filling in of flood plains added greatly to the amount of flooding. If you can imagine a two inch rain in six hours over the entire water shed on Big Timber Creek (we have one and often more of these rains every year) and half of it reached the tidal flats at the time the tide was flowing IN, we computed there would be a nine foot rise above usual high tide. Before the filling of 200 acres which has occurred in the last six years, the same amount of rain would have caused an increase of only four feet.

There are those who feel the problem can be resolved by dredging the channels deeper and/or installing flood gates to regulate the amount of water in the streams. Aside from the ecological damage done by such things, engineers have not been able to build any structure that can withstand the force of a large flood without being damaged or destroyed. Not only is the initial cost of dredging and building flood gates an

overwhelming burden on the taxpayer, who already feels over-taxed, the cost of maintainance and repair is a continuous one.

The municipalities have not done their job regarding regulating the filling of flood plains. That is why we are hoping the responsibility for the protection of the flood plains will be assigned to the Department of Environmental Protection. It took millions of years for this planet to "get it right". A balanced system was set up to control flooding and pollution--and it didn't cost us a cent. We have already done nearly everything possible to destroy that system and we are suffering for it now. Let us strictly regulate the filling in of these ecologically valuable flood plains in our own self interest. Let us not finish off that balanced system completely.

Last year our League's Water Study Committee put together an excellent twenty-five minute film depicting much of what I have said here today. Actually, the primary function of the film was to show the devastating results of erosion on the streams, but about half of the film shows many of the landfills I mentioned, shows them leaking and the fill itself falling into the stream, and shows houses along Big Timber Creek being flooded.

If at some future date, you would care to see it, I would be most pleased to show it to you.

Thank you very much for this opportunity to speak to you and for your courteous attention.

ASSEMBLYWOMAN MARGETTS: Thank you very much. Are there any questions?

ASSEMBLYMAN BLACK: Well, I certainly can't dispute the facts. The young lady comes from part of the district I represent. So I have no questions at all. I would like to see the film.

MRS. SCHONEWISE: All right. I'll get in touch with you.

ASSEMBLYWOMAN MARGETTS: Is Mr. Roach here?

W I L L I A M R O A C H: I know it has been a long day for you. I have been tied up in court in Freehold and that is the reason for my late arrival. I won't be long.

I am speaking for the Somerset Planning Board. We have a very long record of trying to preserve what might be referred to as nature's plumbing system, keeping development out of the flood plains.

The basic bill, which is being amended by one of the bills that you are considering today, 572, is one that we endorsed when it was introduced in the Legislature more than a decade ago. Following up on that endorsement, we did something that was really unique. That bill calls for the approval of the property owners before any flood hazard signs can be posted on their property. Somerset County officially authorized the State to place flood hazard markers on any county-owned land. We own extensive lands along the rivers in our park system. We have county roads that cross and parallel rivers, giving wide opportunity for the placement of these signs. We then embarked on a missionary effort and we received similar endorsements from each of our 21 municipalities. Two pilot markers were placed in our county back in 1962. There has been no further progress.

We would hope with this bill and with the flood hazard study in the Raritan Basin that this program will be advanced. We most recently have sent out a memorandum to all large land owners, to all municipal bodies, urging that in all future development, on-site storm-water detention systems be installed to try to hold back some of the runoff that is generated by development.

As we look at both of these bills, A 572 and A 596, we think that there should be something included in these bills to direct substantial tax relief to owners whose rights in the flood plain are severely restricted over what might presently be the case.

Another unique thing done in Somerset County was they authorized the Planning staff to be policemen, to scout around

the county and spot encroachments and report them. Present law is not adequate. We think we should move towards a substantial tax relief program and, ideally, public ownership of the flood plain. It is the only certain way of keeping development out, particularly in urbanizing areas where there are severe development pressures, where we have the precedent of owners having State approval to fill in flood plains for economic advantage and development.

We wholeheartedly endorse both of these bills in principle. We urge their enactment and some consideration for tax relief so that owners will not resist county and local efforts to preserve a flood plain. Thank you very much.

ASSEMBLYWOMAN MARGETTS: Thank you, Mr. Roach.

Do I understand that you permit the Department of Environmental Protection to post flood hazard signs?

MR. ROACH: On any county-owned land. That authorization was extended to the officials in office at that time and it stands today.

ASSEMBLYWOMAN MARGETTS: But not regulations from the department - you don't accept any regulations from the department.

MR. ROACH: Oh, we accept the maximum regulations they are presently enabled to perform, the establishment of encroachment lines, but this is not adequate.

In the event neither of you have seen these signs, in our 1962 Annual Report, we had a picture of one of the first flood hazard signs posted in the State. It is quite dramatic. It shows Former Commissioner Matt Adams looking up at the height of the flood, as shown on the sign. I would submit that to you for your files.

ASSEMBLYWOMAN MARGETTS: Are there any questions?
(No response.) Thank you very much.

Mrs. Purviance.

M R S. J A M E S P U R V I A N C E: My name is Mrs. Virginia Purviance and I am a Trustee of the North Jersey Conservation Foundation, a non-profit membership foundation

with offices in Morristown, New Jersey. The Foundation operates in three major areas, acquiring open space for public purposes, environmental education, and assisting municipal conservation commissions and other conservation groups in a service capacity.

In response to your committee's invitation, the North Jersey Conservation Foundation is pleased to announce its support of the pending legislation before the Assembly, enabling the Department of Environmental Protection to regulate flood plains, as embodied in A 572 which is an amendment to P.L. 1962, Chapter 19.

Since 1962, municipalities have had the opportunity to regulate development by zoning frequently flooded areas. Only a handful of communities have done so, and in the same time millions upon millions of dollars have been expended by the people of this state to rescue and provide public assistance for the victims of flooding. It is time home rules' hand was forced to do what it should have done years ago.

There is no less expensive method of flood control than by prohibiting habitation of flood plains. There is no easier way to prevent flood damage than by removing any chance that structures can be built in part time river beds. There is no better way of preventing damage caused by the constant increase of high flows due to accelerated runoff and the filling in of flood storage areas, than by preventing the occupation of flood plains by landfills, highways, and other structures. No individual has the right to use his land so that damages occur to his neighbor's property. Filling and building in flood plains do exactly that, cause damage to others along the river, and certainly damage the owners that follow.

Yet, there are uses to which flood plain areas can be put. Certainly agriculture, open space recreation, parking areas, landscaped areas adjacent to clusters of homes, businesses or industries are included in this category. Flood plain zoning constitutes a setback from a river in quite the same way as setbacks from streets, serving even a greater public health, safety, and welfare function. The future options for use for

utilities, particularly those relying on gravity transport, are reserved, as well as water-oriented recreation. Pollution control, sediment and erosion control is assisted by such zoning provisions.

It would be useful if the state were required to provide delineation studies as soon as practicable. This is not spelled out in A 572. It would also be useful if there is need for public access to areas regulated by this bill to provide for a means of compensating owners. Compensation is only needed, of course, if public access is involved. We also would like to see assurances that inland wetlands would be protected under this bill as well as the conventionally defined flood plains. Such wetlands not only serve the flood storage functions of any flood plain, but also provide for stream stabilization, pollution filtration, and the same kinds of high ecological productivity as coastal wetlands.

We also recommend that a special fund be set aside to acquire improvements already constructed on flood plain lands where public assistance is constantly required to compensate damaged victims. It makes no sense to continue paying such assistance time after time. Moving people out of high hazard areas is by far the least expensive course of action compared to erecting structures for protection purposes.

The additions we have suggested here do not indicate any opposition to A 572; we would support this bill in preference to any others now before the Assembly.

Thank you very much for the opportunity to provide this statement. I would be very pleased to take any questions you might have back to our staff so that they may answer in detail for the record.

ASSEMBLYWOMAN MARGERTS: Thank you very much, Mrs. Purviance. Are there any questions? (No response.)

Miss Helen Chase.

H E L E N C H A S E: My name is Helen Chase. I am the President of the West Windsor Environmental Protection League. I am also Vice Chairman of the Mercer County Conservation Advisory Council.

The West Windsor Environmental Protection League wants to offer its strong support of Assembly Bill 572 over the other bill presently before us, 596. We believe the bill is long overdue from many standpoints: environmental realities, political realities, tax realities, and from the standpoint of Federal policy and statutory realities. Environmentally, these flood-hazard or riparian areas must be recognized as areas of high biotic potential and they would be worthy of protection from natural, esthetic and wildlife standpoints alone. But their value goes well beyond these considerations.

Protection of these areas from development allows the growth of natural buffers along waterways, which growth reduces significantly runoff of pollutants from neighboring agriculture, construction, industry, housing and transportation. Protection of riparian lands further results from more stability of stream banks, thus reducing erosion and sedimentation, and it screens construction activities from those hazard areas where excessive flooding and high water tables create excessive sedimentation and erosion problems.

The ever-increasing development of our State has created ever-increasing runoff, which is channeled through storm sewers, drainage ditches and the like, into streams and waterways which were overburdened years ago. As a result, municipalities have turned in ever-increasing numbers to channelization and other flood control methods. And this is at ever-increasing cost to the taxpayer. But while tax moneys are being spent for flood control projects on the one hand, the same municipalities are allowing flood plain development through variances granted in existing flood plain zones, as well as through permitted uses in flood plain areas, which were improperly zoned. And with the cumulative and incremental development of such riparian sites, the flood plains become more and more reduced and flooding becomes more and more pronounced.

The cost of flooding to the riparian land owners yearly increases and attendant tax requirements to control these flood areas also increases.

The question is: Should the situation be allowed to exist so that the taxpayers must finance the transgressions of a few individuals? In many cases the tax structure has encouraged this type of abuse because land in these marginal areas is often less expensive and the tax ratable benefits to the municipalities assuage any misgivings the municipality might have. But in other cases, the motives of municipal officials may be less community-minded. Being elected officials, they feel the rath of riparian land owners who oppose flood plain zoning because they believe it deprives them of the right to use the land as they choose. And this is a very real political fear and I think this has been demonstrated over and over again today.

It is probably the most important reason why the State should unburden the municipalities from the right to zone these areas themselves. As long as the municipal officials fear reprisal from local land owners, who are very often their neighbors and friends, they will acquiesce to the demands of developers and to the detriment of environmental quality. Political reprisal and land-owner outrage is no doubt also a concern of State legislators as well. But in the face of existing Federal policy and statutes, this fear of infringing upon existing rights of land owners appears to be groundless.

Beginning with the doctrine of riparianism, under the natural flow theory, no riparian owner may be allowed to impair or diminish the flow of a stream to the detriment of any other riparian owner. All are entitled to have the stream flow past their land precisely as it did in its natural state. Needless to say, development along flood plains drastically changes stream characteristics. Far too often, land ownership is interpreted as the right to exploit and destroy at will. Riparianism doctrines in common law, however, disprove such interpretation. Instead they underscore the duties that accompany the right to land ownership.

On the Federal level, riparian ownership has long since been subject to restrictions in the public interest. Further,

Federal policies with regard to improvement of environmental quality have been transferred to the state and local level. According to the Environmental Quality Improvement Act of 1970, Section 202 (a), the Congress finds that: (1) Man has caused changes in the environment. (2) Many of these changes may affect the relationship between man and his environment. Then down to (b), Number 2, the primary responsibility for implementing our environmental policy rests with the state and with local governments.

Federal policy, as stated in the Environmental Policy Act of 1970, and the responsibility for which has been conferred upon state and local government, has been expressed with particular relevance to A 572, in a report of the House Committee on Government Operations (March 17, 1970). This report is based on a study that was made by its Conservation and Natural Resources Subcommittee. The report is titled, "Waters and Wetlands - How the Corps of Engineers can help prevent their destruction and pollution." I have a cite number for that and I will include the necessary data in a written statement to be submitted later. (Reading) "As the Committee views it, not only should the Corps consider conservation, but it should consider conservation to be endangered by every dredge and fill project and place the burden of proving otherwise on the applicant." There is a conclusion in the first section of the report, which is written in bold face and it reads: "The Corps of Engineers should permit no further land fills or other work in the nation's estuaries or other waterways, except in those cases where the applicant affirmatively proves that the proposed work is in accord with the public interest, including the need to avoid the piecemeal destruction of our water areas."

The Fish and Wildlife Coordination Act also restricts the right of riparian ownership. It states: "Except as hereafter stated," in a section of the act which is not really applicable, "whenever the waters of any stream or other body of water are proposed or authorized to be impounded, diverted, the channel

deepened or the stream or other body of water otherwise controlled or modified for any purpose whatever, including navigation and drainage, by any department or agency of the United States or any public or private agency under Federal permit or license, such department or agency shall first consult the United States Fish and Wildlife Service, Department of the Interior, and with the head of the agency exercising administration over wildlife resources of the particular state therein, wherein the impounded diversion or other control facility is to be constructed, with a view to the conservation of wildlife resources by preventing loss of damage to such resources, as well as providing for the development and improvement thereof in connection with such water resource development."

And in another cite, federal controls over waterways and riparian lands have been upheld. And this incidentally held as far back as 1940, in a case U.S. versus Appalachian Electric Company. The cite will also be included later. The quote reads: In our view, it cannot properly be said that the constitutional power of the United States over its waters is limited to control for navigation. By 'navigation,' respondent means no more than operation of boats and improvement of the waterway, itself. In truth, the authority of the United States is the regulation of commerce on its waters. Navigability in the sense just stated is but a part of the whole. Flood protection, watershed development, recovery of costs of improvements through utilization of power, are likewise parts of commerce control."

With such lengthy precedents for regulation and control of water and riparian land, the New Jersey State Legislature need have no fears that they might be infringing upon or removing the rights of land owners by enacting A 572. Further, the Legislature must recognize that according to the 1970 Environmental Quality Improvement Act, the State is indeed obligated to enact legislation which implements such Federal policy on the state and local level.

The West Windsor Environmental Protection League hopes that A 572 will be enacted before the few remaining undeveloped

flood plains are destroyed for the financial benefit and to the detriment of many.

ASSEMBLYWOMAN MARGETTS: Thank you very much for your very excellent testimony.

Mrs. Kay Rapier. (No response.)

Miss Vivien Li.

V I V I E N L I: I am Vivien Li, of Ridgewood-Ho-Ho-Kus Students for Environmental Action.

Today we are discussing a bill which will have repercussions for years to come. What is at stake is not only the use of land for this generation, but future generations. One of the reasons I am here today is to address the need for foresight in an issue that will affect your generation, my generation, as well as our children's generation.

The problem of flooding is very real, particularly in New Jersey. During the severe storms last year, hundreds of millions of dollars of damage was done. Damage to trees, plants, and animals was irreparable. Fortunately, loss of life was minimal.

I work in the City of Newark, and the damage done during the storm was devastating. Life was thoroughly disrupted, particularly in the southern and eastern portions of the city. And, quite frankly, Newark has enough problems without having to worry about flooding. I would now like to offer some visual materials to further exemplify the damage and inconvenience caused to our citizens.

Do you want me to pass the photographs on to you?

ASSEMBLYWOMAN MARGETTS: Yes, if you would, please.

MISS LI: I am giving them to you in the order that I am going to explain them.

Exhibit 1. The problem of flooding has been plaguing us for a long time, and has continuously become more severe and frequent. This picture was taken March 6, 1967 along McCarter Highway in Newark.

Exhibit II. Taken March 8, 1967 on Frelinghuysen Avenue in Newark.

Exhibit III. A bus splashes through a newly-created lake, May 29, 1968. That is supposed to be a street.

Exhibit IV. A police wrecker hooks up a trailer for removal from the waters on Frelinghuysen Avenue as the next job, the panel truck, waits. That is also May 29, 1968.

ASSEMBLYWOMAN MARGETTS: The last one is Frelinghuysen Avenue?

MISS LI: Yes.

Exhibit V, the last one. A main street in Newark turned into a four- to five-block lake during the May 29, 1971 storm.

I live in a small residential town in Bergen County. Before it became polluted, a stream running through the town provided residents with the opportunities to fish, swim, and indulge in "good times." Because of this attractiveness, many large estates were built along the stream. What once could be used by developers to lure wealthy naturalists to these areas no longer is valid. With increased flooding from the stream, many are forced to leave areas that should never have been zoned for residential housing.

With the exception perhaps of taxes, no other recent issue has provoked the wrath of the citizens the way the question of flooding has. During the flooding incidents of last year, citizens who had never before attended a council meeting showed up in force. The people are annoyed, irritated, and want something done now.

It is because the municipalities have to respond directly to their constituencies that I feel they should have an opportunity to provide input into promulgation of standards. The Department of Environmental Protection should solicit opinions from the affected municipalities, and then consider these in the appropriate context.

It is because the municipalities have not demonstrated foresight that zoning codes presently allow for development of flood plains. However, as they say, "Better late than never." The opportunity to regulate and rectify is presently upon us.

Natural restraints to flooding do exist, particularly in the form of forests and vegetation, which absorb and utilize much of the excess water. In fact, vegetation and the soil act as a sponge to soak up the water, and then release it slowly over longer periods, helping to diminish erosion and sedimentation.

According to the Army Corps of Engineers' study of the Raritan River in April of 1969, the increase in flood potential of that area is due to an increase in the total acreage of impervious surfaces. It seems rather ironic that man, in his attempt to dominate a part of nature which he considers undesirable, is only furthering his "adversary."

Ian McHarg, noted landscape architect, planner, and founder of the Department of Landscape Architecture and Regional Planning at the University of Pennsylvania, has designated flood plains as one of eight significant physiographic phenoma. He claims that the potential of these areas for farm, park, and recreational use should not be underestimated. If the flood plains should overlap marsh lands, such as in the Meadows, they can be used for fishing, conservation, and nature study. If the areas are dry except during floods, they can still be used for picnic areas, access areas to marinas and fishing, streams, beaches - in short, for both water and non-water oriented activities.

I view the proposed adoption of this bill as another manifestation of the increasingly positive trend towards environmental awareness. For the first time, we will be controlling the flood plains in a desirable manner; that is, by allowing them to remain free from man's interference. For once, the interests of developers must be subordinate to the people's right and desire for safety and environmental protection, And that is something worth fighting for.

Thank you.

ASSEMBLYWOMAN MARGETTS: Thank you very much, Miss Li.
Mr. Oliver.

F R A N K J. O L I V E R: Mrs. Margetts, I am Frank J. Oliver, a resident of Teaneck, New Jersey, appearing as President of the League for Conservation Legislation, Incorporated, an organization of New Jersey citizens dedicated to the protection of the environment. Our league is sponsored by a dozen outdoor, hiking and nature clubs. Among our objectives are the protection of wetlands and the encouragement of the acquisition of additional state, county and municipal park lands, wild forest lands, open space and scenic values.

The League for Conservation Legislation favors bills that give municipalities and the State the authority to regulate land use in flood hazard areas. Our position is that flood plains should be left in their natural state. Either leave them as geologic factors created them or develop them as primitive parks with minimum structures. Some examples will be cited. But first let me quote some statistics on flooding in the bulletin, "Passaic River Basin Water Resources Development," issued jointly by the U.S. Army Corps of Engineers and the New Jersey Department of Conservation and Economic Development, in December 1968. In years preceding last August's flood, which was very spotty in character, the largest flood on record in the Passaic River Basin occurred in 1903 when 35,000 acres were inundated. Of this total, 19,300 acres, or 55 per cent, were classified as swampland, where no damage occurred. Rather, the swamps held back the flood waters. Most of the swamp acreage is above Two Bridges and includes Great and Little Piece Meadows, Troy, Black and Bog Meadows and the Great Swamp. No one has suggested making a Hackensack Meadowlands development out of the Great Piece Meadows. However, economic pressure from the expanding metropolitan area has encouraged the development of 8,000 acres of adjacent flood plains and thereby has contributed substantially to the flood damage potential.

The report cited named the principal flood damage potential as being along the lower Pompton, Rockaway and Whippany rivers and along the fringe of the natural detention areas, meaning the swampland. Yet, if U.S.G.S. topographic and county maps are

studied, one will find homes scattered along these rivers. In Lincoln Park, there are symbols for houses at the same elevation as Bog and Vly Meadows, with the Pompton River standing by at the east to raise the level the next big storm we have. The corps gives the 1903 flood a 166-year cycle, but does not pinpoint any date. It could happen next spring.

Before any developer was foolish enough to build there, Essex County acquired a large tract east of the Passaic River in West Caldwell and named it West Essex Park. It is undeveloped and is presently only accessible by canoe. In fact, the County Park Commission is promoting a "Canoe Trail". On the opposite west bank, in Morris County, a developer roughed out some roads, but it is obvious that spring floods have put a damper on home building in this particular flood plain. Morris County should follow Essex's lead in acquiring more open space.

Supported by conservation and citizens groups, Morris County is acquiring open space along the Whippany River to form the route of the Patriots Path along the bank, tying in with the Morristown National Historic Park. This 7-mile greenbelt is an example of community cooperation. Seven municipalities are involved. Geography is not constrained by political entities, and in solving the flood damage problem, cherished "home rule" can be an obvious detriment. Municipalities should adopt ordinances to restrict further building of homes or factories in flood hazard areas in their own bailiwick. It would be entirely selfish, however, to channelize a stream to remove a constraining bend, only to speed the flood waters to towns downstream. The S-bend in the Saddle River just before it enters the Passaic has been cited as a contributor to flooding in Lodi last August. Fill from a garden apartment project was also blamed. There is even talk of channelizing that stream.

Several ultra-modern highways, such as the interstates, are both a help and a hindrance in flood control. They fill swamp retention areas and increase run-off. Interstate 80 now forms a dike south of Great Piece Meadow and provides a barrier to homes creeping toward that large wetland area around which the Passaic River arches. To such physical barriers that stop builders should be added legal barriers.

As a minimum restraint on building on flood hazard areas, the League for Conservation Legislation favors Bill A 596 because it ties in the broad interests of the State, through the Department of Environmental Protection, with local ordinances, since as indicated earlier, floods are area oriented. The Department would obviously favor zoning of flood plains for park use, which is our primary position. We would prefer, however, to have the Legislature adopt Bill A 572. It is a stronger bill in that it directs the Department of Environmental Protection to promulgate minimum standards for the adoption of local rules and regulations concerning the development and use of land in floodways and flood fringe areas. The municipality is given the opportunity to adopt such rules, but if laggard, the Department rules will prevail. Penalties are provided in A 572; none are found in A 596. The arrangement is similar to Federal air and water pollution standards set by the Environmental Protection Agency and the necessity of meeting such regulations by the states.

Thank you very much.

ASSEMBLYWOMAN MARGETTS: Thank you very much, Mr. Oliver, for a very fine statement. Are there questions? (No response.)

Mr. Nathan Lev. (No response.)

Mrs. Mary Champenois.

M A R Y C H A M P E N O I S: The time is so late, I think you will probably not only permit me, but welcome the opportunity not to hear my entire formal testimony, if I could be allowed to summarize it.

My name is Mary Champenois, and I am the Vice Chairman of the Parsippany-Troy Hills Conservation Committee. I am here today not just to bring to the Committee the conservation point of view of our township - the conservation views have already been beautifully articulated today and I am sure I couldn't elaborate on them - but I am here to bring to the Committee the feeling of our township; our Mayor, our Council and our Planning Board are solidly behind Bill 572. I bring this feeling to the Committee today. I spend most of my formal testimony emphasizing this and not my conservation interest

because we feel it is an important change in climate of thinking from one several years ago of townships being very wary of State intervention in areas of this sort, to a feeling on the part of our town officials anyway of welcome relief that this kind of legislation is forthcoming.

Now, I do have a short informal addendum to my testimony and it is not printed in my testimony if you are interested in making a note or two and it is because my Council President called me very late last evening. He had intended to come today and couldn't. He had several suggestions for your consideration, motivated, of course, by our particular situation. We are an affected river community. He asked specifically - where the actions of one municipality have already caused additional flooding, either downstream or across river to another municipality, it would seem incumbent upon the EPA or the State to recognize the zoning disadvantage of the affected community and be made responsible for acquisition of the most heavily-flooded areas. In other words, while zoning to control future flood plain development and engineering works are provided in 572, such structures as levies, land fill, dikes, concrete walls and man-made structures already built and now causing harm can neither be removed nor penalized under the provisions of this bill. Therefore, the only alternative, it would seem, would be relief to affected communities and the logical form of relief is purchase. In other words, while we hope very definitely for the passage of 572, where there is a case of a community which has been affected in this manner, the land has been damaged already and if the zoning provisions of 572 are enacted, the landowner or whoever owns the land - they will be penalized further because it will be apparent that nothing can be done with this land because it is already damaged.

Several people spoke about funding in a different context. We wondered ourselves why this was a deliberate vacant part of the legislation. We are wondering if you would comment on that or if you have any ideas about your intent in this area.

ASSEMBLYWOMAN MARGETTS: Your comment is that this is a situation that requires immediate attention --

MRS. CHAMPENOIS: Probably.

ASSEMBLYWOMAN MARGETTS: (Continuing) -- and that the damage has been done.

MRS. CHAMPENOIS: Yes. It has been done. While the attempt of 572 is to equalize all municipalities in terms of their treatment viz-a-viz, what happens ---

ASSEMBLYWOMAN MARGETTS: I think that is another situation entirely that isn't encompassed in this proposed legislation. But if this has happened, here you need some immediate assistance, I would think, to prevent further damage from upstream.

MRS. CHAMPENOIS: That is exactly it. It is just a matter for your consideration.

His other question - he is interested in what exactly your standards for delineating "Flood fringe area" are. Do you use the Federal standard?

ASSEMBLYWOMAN MARGETTS: That is one criticism of the legislation, that it has not been spelled out in this particular bill, A 572, and that should be done.

MRS. CHAMPENOIS: Right.

ASSEMBLYWOMAN MARGETTS: And this could be done in committee.

MRS. CHAMPENOIS: Well, that is what we are hoping. That's all I have to say.

(Statement submitted by Mrs. Champenois
can be found beginning on page 119 A.)

ASSEMBLYWOMAN MARGETTS: Thank you very much.

Fred Ross. (Not present.)

Mr. DeStefano. (Not present.)

Is there anyone here from the Bernardsville News?

(No response.)

Carol Huber. (Not present.)

Mrs. Henry Arnold. (Not present.)

Mr. Gilbert? Mr. Gilbert, you had a long wait.

D U D L E Y A. G I L B E R T: I will be very brief.

My name is Dudley A. Gilbert of 275 Booth Avenue, Englewood, Bergen County. I am a member of the Save the Meadowlands Coalition. At the present time, I am its Acting Chairman.

Certainly one of the many concerns we have for what is being proposed for the meadowlands area, high on the priorities, is the flood plain protection situation.

There is probably no finer example of disregard for proper land use than exhibited by the densely populated areas of Bergen County, a prime example being its attitude towards the Hackensack River, its marsh estuary systems and flood plain areas.

Therefore, there is no question as to the need in Bergen County for an A 596 and an A 572. We, therefore, support the basic intention of these two measures. However, we see certain weaknesses which we will comment on in a formal statement to you.

In regard to compensation to owners of properties which might be taken out of development, we say that although we have no sympathy for those who build on flood plains and feel they should not get any local, state or federal funding for getting them out of trouble once they do so, there may be some validity for compensation. However, we think it is also a valid point that the New Jersey citizen deserves some compensation for the price paid for the destruction and the continued destruction of these areas. The price, of course, which I have referred to here is the cost of correcting water pollution, maintaining air quality and, in general, the cost of finding substitutes for irreplaceable natural resources.

In regards to municipal control, I would like to comment that I have for a number of years been involved in Connecticut. They have set up a vehicle that municipalities can take advantage of putting away lands under a land trust situation, which is another story, but I think something that ought to be considered in further legislation on this.

With that, I end. Thank you very much.

ASSEMBLYWOMAN MARGETTS: Thank you very much.
Are there any questions? (No response.)

Mr. Leo. (Not present.)

Mr. Stewart.

R O B E R T S T E W A R T: My name is Robert Stewart.
I am the President of the Monmouth County Conservation
Council, which is a loose confederation of conservation
groups, groups interested in it in different degrees, ranging
from Boy and Girl Scouts to Garden Clubs, sportsmen's groups,
etc.

We have a letter in support of 572 which we would
like to leave with the Committee.

(Letter can be found on page 122 A.)

We have surveyed our county regarding this problem
and our constituent groups have files of pictures and reports
of experiences and studies all over our county which indicate
to us that the municipal governments, the 53 local governments
in our county, have not been able to handle the situation
and apparently never will be able to handle the situation
adequately. And this is the main reason why we think the
State, as reluctant as we are in New Jersey with our fondness
for home rule, is the only answer. And 572 is a good basic
bill to start moving in the right direction.

I have a second letter to leave with the Committee.
This is from the Freehold Soil Conservation District, signed
by its Chairman, Edward Noller, and they also are in favor
of A 572.

(Letter from Mr. Noller can be found on page 124 A.)

I would like to leave these two letters to be made
a part of the record.

ASSEMBLYWOMAN MARGETTS: Mr. Stewart, did you say
there were 53 municipalities?

MR. STEWART: Yes, in Monmouth County, we have 53.

ASSEMBLYWOMAN MARGETTS: Would you have the cooperation
of these municipalities for State control under the Department

of Environmental Protection?

MR. STEWART: I don't understand.

ASSEMBLYWOMAN MARGETTS: Would you have the cooperation? You say that you cannot handle this -- the municipalities cannot handle this problem.

MR. STEWART: We have been around the county and looked at developments and talked to Planning Boards. It is our opinion, and the opinion of a lot of other groups that make up our organization, that there is just no hope as far as municipal government. The reasons for this are numerous and they are complex. We just feel, although they may be acting badly as far as Municipal Councils, etc., it is just a situation that they can't cope with.

ASSEMBLYWOMAN MARGETTS: The direction must come from the State.

MR. STEWART: That seems to be the only answer. As I say, this is our opinion.

ASSEMBLYWOMAN MARGETTS: Thank you very much.

This completes the list we have. Does anyone here wish to testify? (No response,)

I thank you hearty souls who held out to the last and I apologize for the long wait that some of you have had. I thank you very much for coming here today and thank the reporters for the long hours they have put in.

This will conclude our public hearing.

(Hearing Concluded)

ORDINANCE NO. 22-71
AN ORDINANCE AMENDING
ORDINANCE NO. 19-71 ENTITLED
"AN ORDINANCE DELINEATING
AND REGULATING
ENCROACHMENTS IN
FLOODWAYS AND FLOOD
HAZARD AREAS WITHIN THE
TOWNSHIP OF PASSAIC IN THE
COUNTY OF MORRIS AND STATE
OF NEW JERSEY"

Be it ordained by the Township
Committee of the Township of
Passaic in the County of Morris:

Section 1. Ordinance No. 19-71 is
amended as follows:

(a) In Article III, the words "(3) The
lowest elevation of the" are deleted
and replaced by the words
"Floodway: The channel and".

(b) In Article V, section (3),
"lowers" is changed to "lowest".

(c) Article IV, Sections (a) and (b)
are amended to provide that approval
is by the State Department of
Environmental Protection and the
Township Committee after review
and favorable recommendation by
the Township Planning Board.

Section 2. This ordinance shall take
effect immediately upon final passage
and publication as required by law.

NOTICE

The Ordinance published herewith
was introduced and passed upon first
reading at a meeting of the Township
Committee of the Township of
Passaic, in the County of Morris, New
Jersey, held on November 1, 1971. It
will be further considered for final
passage, after public hearing thereon,
at a meeting of said Township
Committee to be held in the
Township Hall in said Township on
December 6, 1971 at 8:15 o'clock
p.m.

Fred J. Rossi
Township Clerk
11-11-t1

**ORDINANCE NO. 19-71
AN ORDINANCE DELINEATING
AND REGULATING
ENCROACHMENTS IN
FLOODWAYS AND FLOOD
HAZARD AREAS WITHIN THE
TOWNSHIP OF PASSAIC IN THE
COUNTY OF MORRIS AND STATE
OF NEW JERSEY.**

Be it ordained by the Township Committee of the Township of Passaic in the County of Morris and State of New Jersey,

ARTICLE I. SHORT TITLE

This ordinance shall be known and may be cited as The Flood Plain Ordinance of the Township of Passaic.

ARTICLE II. PURPOSE AND POLICY

It is hereby found that the Passaic River and its tributaries in the Township of Passaic are subject to recurrent flooding, that such flooding endangers life and damages public and private property and facilities, that this condition is aggravated by developments and encroachments in the flood plain, and that the most appropriate method of alleviating such condition is through regulation of such developments and encroachments. It is therefore determined that the special and paramount public interest in the flood plain justifies the regulation of property located therein as provided in this ordinance, which is in the exercise of the police power of the municipality, for the protection of the persons and property of its inhabitants, and for the preservation of the public health, safety and general welfare.

Among the purposes of this ordinance are: (a) to prevent loss of life, (b) to prevent the installation of structures which increase flood heights, (c) to prevent excessive property damage, (d) to protect the public health, (e) to reduce public expenditures for emergency operations, evacuations, and restorations, (f) to prevent damage to transportation and utility systems, (g) to remove the impediment to community growth created by recurrent flooding and (h) to prevent further unwise development in unprotected flood plains, thus reducing future expenditures for protective measures.

ARTICLE III. DEFINITIONS

Channel: The bed and banks of a river, stream, drainage ditch or other body of water which conveys the flow that occurs most of the time.

Flood Plain: The relatively flat area adjoining the channel which has been or may be hereafter covered by flood waters.

Floodway: The channel and portions of the adjacent flood plain that carry the greater part of flood flow at greater depths and velocities than do the other parts of the flood plain, that constitute the minimum area required for the passage of flood flows without aggravating flood conditions upstream and downstream, that are necessary to preserve the natural regimen of the river and that are delineated in the flood map definition as "floodway."

Flood Hazard Area: The area of the flood plain that is subject to flood flow at lesser depths and lower velocities than occurs in the floodway and that are delineated in the flood map definition as "flood hazard area."

ARTICLE IV. GENERAL REGULATIONS

(a) **CHANNEL.** Within the channel of a river or stream no building or structure and no landfill or excavation operations are permitted except by public authority in connection with stream improvement or stabilization, without the specific approval of the State Department of Environmental Protection and the Township Planning Board.

(b) **FLOODWAY.** Within the floodway no building or structure may be erected and no landfill or excavation operations are permitted except by public authority in connection with stream improvement or stabilization, increasing the storage capacity of the stream, or in the general public interest, subject to the approval of the State Department of Environmental Protection and the Township Planning Board. Any existing building may be altered subject to the approval of the Planning Board provided that the alteration will not materially affect the floodway or increase the obstruction to the flow of flood waters.

Any other use is permitted within a floodway to the extent and under such conditions as they would also be permitted by the zoning ordinance and other ordinances in the zone in which the said areas are located provided that it is also subject to approval of the Planning Board of the Township, including but not limited to the following: (a) agricultural uses in the nature of farming, grazing, livestock raising, horticulture, nurseries and forestry; (b) recreational uses in the nature of parks, playgrounds, golf courses, boat landings, docks, picnic grounds, and outdoor shooting ranges; (c) commercial uses in the nature of parking areas, landing strips and railroad tracks; and (d) storage for goods which will not be damaged or carried away by flooding, for animals, and for equipment and goods which can be readily moved in time of flood, such as farm equipment and construction equipment.

(c) **FLOOD HAZARD AREA.** Any use is permitted within the flood hazard area to the extent and under such conditions as they would also be permitted by the zoning ordinance and other ordinances in the zone in which the said areas are located provided that they are also subject to the requirements in Article V. Nothing herein shall be construed to prohibit the alteration of existing structures provided that the alteration conforms to the requirements in Article V.

ARTICLE V. REQUIREMENTS IN FLOOD PLAIN AREAS

No structure shall hereafter be erected within any flood plain area unless a Site Plan shall have been submitted to the Township Planning Board for its review and approval.

Said Site Plan shall, in addition to the information required under other ordinances, show the following information:

(1) The existing and proposed contours at a contour interval of two (2) feet;

(2) The proposed elevations of the lands involved at the corners of the foundation of any structure or structures;

(3) The lowest elevation of the lowest proposed area within any proposed structure after its completion;

(4) The layout of existing and proposed public streets and the nature, extent and location of existing and proposed utilities servicing and to service the premises in question.

(5) The elevation of any existing or proposed pumping facilities.

The Planning Board shall not approve any Site Plan required in any flood plain area unless and until it is satisfied that the following requirements have been met:

(1) The lowest floor designed for human habitation or for the storage of valuable property or for the provision of essential services of any proposed structure will be higher in elevation than the flood hazard area elevation set forth in Article X.

(2) If a cellar is to be constructed, the lowest point where water flowing over the ground can enter will be higher than the flood hazard area elevation.

(3) Proper facilities will be provided for the disposal of sewage and of surface water;

(4) Any proposed structure, when built, can be occupied without peril to the health or safety of the occupant;

(5) Any proposed structure will not impede the flow of surface waters through any river, stream, or other water-course, natural or artificial.

In cases of doubt or uncertainty as to the exact limit of the floodway or flood hazard area in a proposed development, the Township Engineer may, upon the application and with the consent of the landowner, determine the precise location of a floodway or flood hazard area limit by close inspection, field survey or other appropriate method, and cause the same to be marked on the ground, notifying the landowner, the Building Inspector, and the Planning Board of the results thereof.

ARTICLE VI. TIME LIMITS

The Planning Board shall act upon any Site Plan provided for in Article V within sixty (60) days of the date of filing thereof or the date of approval by the State Department of

Environmental Protection, or other extension of time agreed to by the applicant. Failure of the Planning Board to act within the time limit or limits shall be deemed an approval of any Site Plan submitted under this ordinance. Planning Board disapproval shall include written findings upon any Site Plan element found contrary to the provisions or intent of this Ordinance.

ARTICLE VII. ISSUANCE OF PERMITS

No Building Permit shall be issued by the Building Inspector for any proposed structure to be located within any flood plain area unless the Planning Board shall have approved a Site Plan submitted in accordance with Article V. No Certificate of Occupancy shall be issued by the Building Inspector unless proof has been submitted to him that all conditions of Site Plan approval have been fully complied with.

ARTICLE VIII. APPEAL

If any person shall be aggrieved by the action of the Planning Board or Building Inspector, appeal in writing to the Township Committee may be taken within ten (10) days after the date of such action. The Township Committee shall fix and notify appellant of a time and place for a public hearing on said appeal, and the appellant shall cause notice of such hearing to be published in a newspaper circulating in the Township at least ten (10) days prior to the hearing. All parties in interest shall be afforded an opportunity to be heard thereat. After such hearing, the Township Committee shall affirm or reverse the action of the Planning Board, stating its findings and reasons for its action, and a written copy of such action shall be given to the appellant.

ARTICLE IX. STANDARDS

In reviewing applications submitted under Article V, the Planning Board shall consider and be guided by the general purposes and policies set forth in Article II, and, in addition, shall apply the following standards:

(a) As to development in the floodway, primary consideration shall be given to preserving this area for the passage of flood flows without aggravating flood conditions upstream and downstream.

(b) Encroachments in the floodway shall therefore be permitted only in cases in which the public interest will be served, including but not limited to bridges, roads, utility installations, and the like, or where the obstruction to the flow of flood waters is minimal, such as parking or recreational areas, open fencing, and the like.

(c) In no case shall landfill be permitted within the channel or floodway.

(d) As to development in the flood hazard area outside of the floodway, primary consideration shall be given to the protection of persons and property involved in the development, and such consideration shall not be avoided by the waiver of the applicant. Exceptions from the prohibitions of Article IV shall therefore be permitted only where the building or structure is not designed or intended as a human dwelling place, is of a monetary value less than ten percent (10) of the value of the lot or parcel of land upon which it is proposed to be installed, is not intended to house property of a value greater than its own value, and will not by reason of its size, shape, construction or location have any substantial adverse effect upon the functioning of the floodway.

ARTICLE X. FLOOD PLAIN MAP DEFINITION

(a) There are hereby created within the township the following flood plain regions:

Region A: All that area situated south of Long Hill Road and east of Morristown Road and its southerly extension.

Region B: All that area situated south of Long Hill Road and west of Morristown Road and its southerly extension and east of Northfield Road and its southerly extension.

Region C: All that area situated south of Valley Road and west of Northfield Road and its southerly extension.

Region D: All that area situated

west of Northfield Road and north of Valley Road and south of Stonehouse Road and Meadowview Road.

Region E: All that area situated north of Stonehouse Road and Meadowview Road and west of Northfield Road and south of Long Hill Road and Old Mill Road.

Region F: All that area situated north of Old Mill Road and south and west of the tracks of the Erie Lackawanna Railroad.

Region G: All that area situated north of the tracks of the Erie Lackawanna Railroad and Long Hill Road and south of Basking Ridge Road.

Region H: All that area situated north of Basking Ridge Road and west of a line lying parallel to and 1000 feet west of Old Forge Road.

Region I: All that area situated east of a line lying parallel to and 1000 feet west of Old Forge Road and north of Basking Ridge Road and Long Hill Road and west of Carlton Road.

Region J: All that area situated north of Long Hill Road and east of Carlton Road.

The above regions are delineated on a map called the Flood Plain Region Map which is on file in the office of the Township Clerk.

(b) The following elevations, specified as elevations in feet above the USC&GS mean sea level datum are established as the floodway elevations in the flood plain regions as follows:

Region A: 212 feet

Region B: 212 feet

Region C: 214 feet

Region D: 216 feet

Region E: 219 feet

Region F: 221 feet

Region G: 223 feet

Region H: 225 feet

Region I: 227 feet

Areas within these regions are determined to lie in the floodway when they are lower in elevation than the floodway elevation specified for the region. In Region J, the floodway consists of all areas situated within 50 feet of the banks of Black Brook.

(c) The following elevations, specified as above are established as the flood hazard area elevations in the flood plain regions as follows:

Region A: 215 feet

Region B: 216 feet

Region C: 218 feet

Region D: 220 feet

Region E: 222 feet

Region F: 224 feet

Region G: 226 feet

Region H: 228 feet

Region I: 230 feet

Region J: 232 feet

Areas within these regions are determined to lie in the flood hazard area when they are lower in elevation than the flood hazard area elevation specified for the region.

ARTICLE XI. SEPARABILITY

If any provisions of this ordinance shall be adjudged invalid, such adjudication shall not affect the validity of the remaining provisions, which shall be deemed severable therefrom.

ARTICLE XII. PENALTY

Any person, firm, or corporation who or which shall violate any provision of this ordinance shall be liable to a fine not exceeding \$200, or to imprisonment for a term not exceeding 90 days, or both, and each day in which such violation continues shall constitute a separate violation or offense.

ARTICLE XIII. WHEN EFFECTIVE

This ordinance shall take effect immediately upon final passage and publication as required by law.

NOTICE

The Ordinance published herewith was introduced and passed upon first reading at a meeting of the Township Committee of the Township of Passaic, in the County of Morris, New Jersey, held on September 20, 1971.

It will be further considered for final passage, after public hearing thereon, at a meeting of said Township Committee to be held in the Township Hall in said Township on October 18, 1971, at 8:15 o'clock p.m.

Fred J. Rossi
Township Clerk
10/7/71

SUBMITTED BY HARRY HOSKING

FLOOD CONTROL - THE MOUNT OLIVE
EXPERIENCE

This an appeal to the State to enact proper flood control legislation to effectively deal with the protection of property and the safety and health of people. The dearth of sufficient effective enabling legislation on the flood control problem is an example of the frustration of counties and municipalities thruout the state - we need sufficient tools to do the job properly.

Mount Olive Township, Morris County, has undergone years of frustrating experience attempting to deal with floods and flood problems, commencing in 1936. In 1964, at the time of Clover Hill development, the Morris County Planning Board warned of future floods along Drakes Brook. The predicted floods have occurred more than once. It can mean considerable more tax cost to control floods and to protect people and property, unless effective action is taken without further delay.

This is a problem that will not go away by itself. It will accelerate as building and growth increase. For Mount Olive, Morris County and similar areas thruout the state, particularly those also in the path of the flight from the cities, a proper solution is vital to economic growth and prosperity.

At present the Mayor, Council, Planning Board and Conservation Commission have under advisement the adoption of a moratorium on building in flood areas and in substandard areas of the Budd Lake watershed. The latter is important since there is some evidence of unsatisfactory septic conditions around Budd Lake. Should this develop or increase it could result in an order to exceed the debt limit and sewer Budd Lake with significant effect on taxes and private expenditures. It is onething to declare a moratorium on all building, good and bad. It is quite another to control substandard building in substandard areas.

It is planned strictly as a temporary interim measure pending enactment of State Enabling Acts such as Assembly 431, 572, 596 making it possible to deal effectively with the problem. The Governor, the Legislature and the State organization certainly

have the experience, wisdom and expertise required.

One of the difficulties of counties and municipalities is the lack of sufficient State Enabling Acts to properly deal with the increasing number of current and future problems. The extent of the latter particularly is becoming clearer all the time.

The enabling legislation should be broad, detailed and standardized enough that it would be uniform in application thruout the state. It is the kind of step to take toward using and exhausting all available means before the State feels impelled to take over and render " Home Rule " impotent.

We are critized for lack of action, for zoning against people. We are threatened that if we do not do the job that needs to be done the State and the Courts will take action.

WE SAY - GIVE US THE PROPER TOOLS SO WE CAN AND WILL DO THE JOB - THEN IT IS UP TO US.

AFTER ALL, WE ARE JUST ASKING FOR A FIGHTING CHANCE !

April 11, 1972

NOTE - Prepared for delivery at the Hearing on Flood Control legislation at the State House on April 11, 1972 at 10:00 AM by Harry Hosking, Chairman of the Mount Olive Planning Board Citizen Advisory Committee.

(Hosking was the First President of the New Jersey Federation of Planning Officials, member Cumberland County Planning Board, Chairman Livingston and Mount Olive Planning Boards. He was Founder of the Citizen Participation Legion dedicated to a better community with taxes people can afford to pay. Currently he is a columnist on CITIZEN PARTICIPATION in public affairs as a means of attaining these objectives.)

cc: Mavor Spangler, Council President Adonis and Planning Board Chairman Johnson.

To - Planning Board

March 16, 1972

From - Planning Board Citizen Advisory Committee

Subject - Flood Control, Pending Project 72-4

The attached report on Pending Project 72-4 outlines developments to date with suggestions for action on flood control by the Planning Board in accord with it's responsibility for preparing a Master Plan under Ordinance 7-68.

The Assembly Bills now before the Legislature offer some hope that a long awaited solution may now be at hand.

It is recommended that this project be activated to coincide with the reduction in the number of Garden Apartment sites, particularly in the Budd Lake bog and in the Budd Lake watershed area where there is evidence of unsatisfactory septic conditions.

The elimination of garden apartment sites in these areas will, ineffect, return the zoning to commercial and single family home classification including homes in the commercial zone. Under the garden apartment classification no single family homes were permitted and no garden apartments were allowed without adequate water and sewers approved by the state.

The recommendations made in this report will protect the flood plain areas both as to flood damage and health protection until such time as there is adequate protection by the State or otherwise.

Respectfully submitted,

Valentine Bandini

Valentine Bandini

Maurice J. Geiger

Maurice Geiger

Gerald W. Sheard

Gerald Sheard

Gerald Walter

Gerald Walter

Harry Hosking

Harry Hosking

Chairman

Introduction

There are two problems which require extensive consideration in planning for the future growth of the Balanced Community with a "Design for Total Living." One is Health protection, the other is Flood protection. They concern protection of life and property.

Both involve lakes, ponds, streams, waterways, swamps that cannot be drained and other areas questionably substandard for building. They also involve subdivision of land, building and building construction, change of summer homes to all year particularly in substandard areas, streets, roads, bridges, location of areas subject to flood, health protection standards, etc.

Research of the elements involved is contained in the following Master Plan documentations:

MP 69-3, "Budd Lake and Stream Protection."

Research for this section commenced in 1967 with the very able assistance of the South Branch Raritan Association. It continued as a Master Planning project supplementing the work of the Weed Control Association and the Budd Lake Civic Association. Both of these groups have rendered significant contributions to Budd Lake protection. It is now a coordinated function of the Health Board, Conservation Commission and the Planning Board.

MP 69-4, "Flood Control in the Balanced Community."

Research for this section of the Master Plan began as a research project of the Master Planning Committee and had the assistance and guidance of the South Branch Raritan Association. It is now a project of the Conservation Commission and the Planning Board, responsible for adopting a Master Plan. Of interest is a report on the Clover Hill area by the Morris County Planning Board dated March 12, 1964 which indicated the danger of future flooding along Drakes Brook. More than one flood has occurred since then, causing much damage, inconvenience and anxiety. Of interest also is the Master Plan and Zoning Ordinance of 1950 containing a requirement controlling building in flood areas. It was removed when the zoning ordinance was revised in 1958, about the time of Clover Hill consideration.

This section of Master Plan documentation has not yet been implemented though recommendations have been made that it should be done. Until proper action has been taken and a Flood Plain control has been adopted it is not even possible to qualify for flood insurance. The whole matter of flood plain has not yet been clearly documented by law and case law. What is needed is a courageous, forceful program to look ahead and to solve the problem before it gets worse. Waiting for the law to catch up is not the only way to take some action.

MP 70-1, "Planned Residential Control of Excessive Residential Development."

Control and elimination of substandard homes in substandard areas. Endorsed by Budd Lake Civic Association and Mount Olive Homeowners. Some steps already taken, others in process. The campaign in the Budd Lake area particularly to prevent and to remove substandard housing and to root out "slumlords" is in effect an implementation of "P R C".

Development

As predicted in 1964, there has been future flooding along Drakes Brook as well as elsewhere in Mount Olive. The Planning Board, Soil Conservation District, Conservation Commission, South Branch Raritan Association and others continued their efforts to develop some kind of solution to the flood problem.

On March 24, 1970 a map prepared by the U S Department of Agriculture, Soil Conservation Service, was presented to the Planning Board. It covered the complete area of Mount Olive and reflected in various colors the areas that are prone to be in flood zones. It was pointed out that as future developments are completed the flooding would increase. And, that construction of future homes within these areas be avoided, if possible. It was recommended that the map be adopted as part of the Master Plan. The map was adopted as a Master Plan report and was to be used in the case of future subdivisions to anticipate and avoid additional flooding.

On March 5, 1971, it was recommended that a moratorium be declared on building in Flood Plain areas to continue until plans are approved and implemented to control floods and to make it possible for homes in such areas to qualify for flood insurance. It was pointed out that this action would help to reduce overall residential construction, enable the School Board to more clearly decide where to build new schools and generally slowdown somewhat expansion pressure on the school system. The control and elimination of substandard homes in substandard areas had been approved previously as documented in MP 70-1. The effect would be to stop building either garden apartments or single family homes in the Budd Lake bog or elsewhere in the flood plain as shown on a map filed as a Master Plan report in 1970.

On July 19, 1971, the Board of Health urged a building moratorium in the Budd Lake watershed. A resolution involving the watershed urged the temporary moratorium be maintained until proper sewage systems are put in. The problem, the Board was told, is septic infiltration into the ground around the lake.

On September 13, 1971, the then Township Committee announced action to declare Sutton Park South a flood plain area to enable obtaining of flood insurance. It was pointed out that the action did not go far enough, that legislation should be enacted to prevent building in flood plain areas otherwise there would be more floods and more homes to cover with flood insurance. (Actually, the restrictions should apply to all Mount Olive not only Sutton Park South.)

On March 14, 1972, the Planning Board was requested to combine the flood plain insurance project with the flood control project and make appropriate recommendations as soon as possible.

At this time the New Jersey Legislature has before it Assembly Bills 431 and 596 relating to flood plain control. It is understood that hearings will be held in the near future. The proposed legislation would grant to any municipality the power to adopt ordinances regulating the use of property in flood zones and to prohibit building in such areas subject to certain conditions and regulations.

Statement of Assembly Bill 596:

- " This bill is designed to enable municipalities to protect their flood plains thru an ordinance which gives the department of environmental protection authority to grant permits only for those uses of land which are clearly in the public interest. It also provides that the municipality may regulate land use in flood hazard areas in order to protect persons and property."
- " It is extremely important to preserve the natural function and ecological integrity of inland flood plains. In places where natural limitations are ignored for private gain, the public has often been made responsible for large expenditures to correct flood damage and redeem losses. This bill allows a municipality to plan land use in such a way that catastrophic losses may be averted. "

Statement of Assembly Bill 431:

- " This bill would allow the State and local governments to take advantage of Federal funds for studies and construction of small flood control projects under section 205 of the Federal Small Flood Control Act. This legislation takes into account the limited resources of the State and local governments and allows for local participation, either by cash contribution or contributions in kind. This work is to be coordinated thru the State Department of Environmental Protection. "
- " This bill is additional legislation referred to in the recommendations of the Governor contained in his message in which he returned 1970 Senate Bill No. 298 for further reconsideration and for amendment. "

Finally, the South Branch Raritan Association will hold a public meeting on water supply and associated problems on Sunday, March 19, 1972 at 3:00 PM. It will take place at Hunterdon Central High School, Route 31, Flemington, N.J. Donation \$1, Student 50¢.

The whole problem of flood control and Budd Lake and Stream Protection is vital not only to Mount Olive - it is vital also the whole South Branch Raritan Association.

It is fitting at this time to acknowledge the great assistance of the South Branch Raritan Association to the planning and development of Mount Olive plans for the future, the Mount Olive Planning Board and the Mount Olive Conservation Commission. Also, the work of the Mount Olive Board of Health from the health protection standpoint.

Summary and Conclusions

Can Mount Olive avoid some of the mistakes that resulted in the obsolescence of the cities and the built up areas? Can Mount Olive create here the kind of new community of the future that many of us came out here to find? If so, the control of floods and the banning of substandard homes in substandard areas should be high on the list of priorities.

Significant steps in this direction would be to control building homes in the flood plain areas, other substandard areas and substandard building itself. The steps proposed to achieve these objectives follow:

1. Recommend, as a temporary interim protection measure, the passage of a moratorium on building:
 - .. in the flood plain area as shown by the Soil Conservation Service map adopted by the Planning Board as a Master Planning Report on March 24, 1970.
 - .. along lakes, streams and waterways where septic systems and water wells are not now permitted.
 - .. wherever in the Budd Lake watershed or other areas soil conditions or other factors indicate substandard conditions or substandard homes already exist.
2. Combine and coordinate with the Conservation Commission and other interested agencies to complete research leading to adoption of Master Plan 69-4, " Flood Control ", or other appropriate action, including the objectives of Master Planning Documentations 69-3, "Budd Lake and Stream Protection" and 70-1, " Planned Residential Control ".
3. Send representatives and recommendations to the hearings on the assembly bills as to the need for such legislation.
4. Complete the necessary research and if deemed feasible, practical and advisable, recommend any plan proposed to the Mayor and Council for implementation.
5. Act on the temporary moratorium depending on the Mount Olive action and the action by the legislature.

NOTE: Attachments on following pages.

Septic Tank Ban In Mount Olive?

By WILLIAM KELLEY

MOUNT OLIVE TWP. — Township Committeeman Paul Amadio, angered by recent pollution problems in Budd Lake, will present a motion before the board of health tomorrow night requesting the township committee ban the construction of all future residences which use their own septic systems.

And, the committeeman adds, if he does not get agreement from the local board of health and the governing body, he will take his request directly to the state Board of Health.

Amadio's announcement follows this weekend's closing of Budd Lake beaches due to a reported increase of algae growth in the water.

Health Officer Thomas Craig said last night, "We put chemicals in the water Friday night and closed the municipal beach. This was partly because of the chemicals and partly because some types of algae are toxic." Craig said he hopes to reopen the beach today.

The condition of Budd Lake was brought to the DAILY RECORD'S attention by the Rev. Thorwald Torgersen, a Smithtown Road resident and member of the West Morris Regional Board of Education.

Torgersen said the first thing he noticed was a stench emanating from the small tributary beneath the Maner House Road bridge and adjacent to the municipal building. Reporters investigating the report also found thick green foam heavily coating both the stream and its shoreline.

The stench and the foam "were caused by the reaction of the algae to the chemicals," Craig revealed last night. "The chemicals destroyed

plant life and some of the animal life that feeds on it and became septic."

Meanwhile, Committeeman Hubert Ashley, who is in charge of water and sewers, says the condition is fairly common at this time of year, and not solely confined to Budd Lake.

"It's a result of the hot weather," Ashley noted, "and many of the ponds and lakes in the township seem to be experiencing it. But we seem to have a lot more of it this year than before."

"It's got nothing to do with sewerage," he said, referring to Budd Lake, "although I'm not saying there's none in there. There's no negligence on anybody's part, that's for sure."

Amadio also said he has been in contact with Assemblyman Peter Thomas (R-Morris), who, in a letter dated July 31, told him, "If your board of health were to determine that further development in your township without public sewerage would create a hazardous situation, then I think it might be justified in refusing to issue any further permits or approvals."

Amadio said he feels a hazardous health condition does exist, pointing out that he wants all future residences of any type to be hooked into the public sewer system.

"I think it's time we stopped permitting Mount Olive Township to be a burial ground for septic tanks," said Amadio. "We've had reports of polluted wells, raw sewerage seeping into Budd Lake, and I just think it's time we finally took steps to preserve our lake. It could be our greatest asset."

Banning Detergents Not Answer

DENVILLE TWP. — If your house is on fire, you can merely run away, or you can call the fire department.

Community banning of detergents containing phosphates is a runaway, a red herring, a political football. Robert Grant, editor of Detergents and Specialties Magazine, charged today.

The magazine, he stressed, is "an independent, technical journal, connected in no way with any company producing consumer products."

The eutrophication process, by which vegetation grows and chokes bodies of water, is not affected appreciably by detergents, he believes. Only 13 per cent of phosphates going into streams, lakes and rivers come from detergents. The remainder is caused by industrial sources, air pollution and human wastes.

"The answer," said Grant, "is creation of advanced-stage sewerage treatment plants that would remove all pollutants."

His information, he said, comes from scientists working in universities and with Federal Water Quality Control.

He cited especially the proposed ban on phosphate detergents in Morristown and that in effect in Mount Olive Township. "In Mount Olive particularly it's ridiculous. Most residents there have cesspools and their waste matter has nothing to do with sewage systems. It goes into the surrounding soil, breaking down into components in the process."

Grant said he will attend the public hearing on the proposed ban at the April 26 meeting of the Morristown Board of Alderman.

"As usual, Morris County politicians are coming too late with a law that will do little good," Grant said. "What politicians and conservationists do not seem ready to admit is that phosphate bans have been written into law on the basis of speculation, not information."

The bans, he believes, cloud the real issues. "We have the technology, the know-how to do a thorough job of cleaning up our environmental problems, if we're willing to make sacrifices. It's been estimated that the nation's sewer systems could be made to do the job at a cost per capita of \$35 to \$40 over a five-year period. That would cost about a dime a day. Also, we have the ability to recycle many wastes."

It is yet to be proved, Grant said, that phosphates, and not carbon or

April 11, 1972

Assembly Bill #572

George W. Piche, Jr., CH.

NORTH JERSEY COMM. FOR FLOOD CONTROL AND
WATER PROTECTION

Statistics, economics and mathematical probabilities are always plentiful in any discussion of flood control. They are used to reach a logical conclusion or a self-indulgent rationalization. The State of New Jersey and its individual municipalities have been voting for self-indulgence for over two centuries. What is being discussed here is whether we will view the problem from this same perspective, and continue the mistakes of previous generations, or begin the long and difficult task of reversing the trend.

To many people, a Flood Plain Zoning Bill is a consumer protection measure. If we were gathered to discuss standards for the quality of hamburger meat, judging by what we are hearing today, we might expect to hear objections from a group with an investment in old horses. When we eat a hamburger, we assume that the state is protecting us, whether we spend a dollar and a half or nineteen cents. I believe that New Jersey does a good job in this area, even though Bess Myerson gets better publicity.

However, when it comes to the largest investment he'll probably ever make, a consumer is pretty much on his own.

There are thousands of hamburger outlets, and all a proprietor really has to do is grind some red stuff and cook it. Regulation is an awesome problem, requiring lab. tests and inspections. The planning of a housing development, though, is automatically monitored by many officials. At least a building inspector, probably a planning board, and possibly a zoning board and a town council, with various engineers and attorneys for each. County and State agencies may also be involved. When a builder sells a home in a flood prone area, all of these officials and boards are forced into the position of accessories to what looks very much like fraud. Most of them do not accept this willingly, but they have no statutes to help them.

At about midnight last August 29, I sat in the office of the Mayor of East Hanover Township and listened to a delegation from one of the newest developments in the township. Their road was under water, their houses were surrounded, and some of them had river water flowing through their living rooms.

This same river water, incidentally, I recently heard described by the head of a county mosquito commission. He will not allow his people near it without immunization for typhoid, cholera, and several other diseases.

These people wanted to know what the Mayor was going to do to help them. If he had been a lawyer, I suppose he might have advised "Caveat Emptor", which translates to "After all, you were the fool who bought the house.". What he did do was to assure them that there is a comprehensive plan to control all water problems in the Passaic River Basin. He did not have the nerve to tell them, that night, that the plan has been pending for many years, and that it would take fifteen years to complete if it were adopted tomorrow.

This brings us to a second category within which this bill falls, that of environmental protection. It's difficult not to approach this subject with a "gee-whiz" attitude. It's easy to become carried away with reams of scare statistics, since they can be only too true. That's not necessary in this instance. We are talking about something which happened only a few months ago, and happens every year, probably including this one - - - not some hypothetical prediction.

East Hanover Township is probably a stranger to many of the people here. It is situated at what geologists call "Lake Passaic". Lake Passaic is a glacial lake with many islands, fed by the Passaic river and its tributaries. It has a leak, through the lower river, and for this reason there is not usually much water in it. Many homes were built, years ago, on the higher islands, on the premise that you can usually reach neighboring islands, or the shore, across the mud flats. Most years, this might be difficult for a few weeks due to high water, but the residents were able to live with that. Over the years, as the high islands were taken, homes and factories were built on lower and lower islands. Now, most of these are also filled, and developers are insisting that they have the right to build on the mud flats themselves. Much of this has already been done in many areas.

A crime is then being committed against these new residents, but it does not end there. The leak which keeps the lake drained

is slowed considerably by any structures added to the flood plain. Anything which speeds the runoff of surface water, such as buildings, highways and shopping malls, also raises the over-all water level. The height of the flood water is therefore greater each year for any given amount of rainfall. More and more of the older residents, those on the lower islands, are beginning to find themselves below the surface.

If you are not familiar with Lake Passaic, I'll locate it for you. It covers large portions of Morris, Passaic, and Essex counties, and it contains dozens of municipalities and hundreds of thousands of people. The leak is to the North, through Paterson and then Newark.

Several of our member municipalities have already enacted Flood Plain Zoning Ordinances, and others are in the process of doing so. Some of these are ambitiously strong, some are compromises, and others are meaningless exercises. The profits realized by developers of the flood plain are large enough to permit legal fees comparable to the annual budgets of many municipalities. These governing bodies were not elected by the voters in order to bring about bankruptcy through empty gestures. No matter how sincerely concerned they might be, they are forced to limit the provisions of their ordinances to those easily defensible in court. Of course, even the most effective ordinance may only have the same tenure as the men who pass it.

The state must establish a uniform code to provide legal backing for the municipalities, commit itself to mutual defense of this code, and provide protection for the residents and neighbors of towns which refuse to act.

X The present threatening situation along the Passaic River and its tributaries has been building for over 200 years. Flood plain zoning is long overdue. Now that this menace is finally being publicized, and the Legislature is being asked for the tools to combat it, it is inconceivable that responsible men can allow it to continue. Failure to pass this bill would place the State of New Jersey in the position of condoning these crimes against our neighbors and our environment.

If we're not going to have this bill, we should at least decide on a formula for future guidance. We'll need to know how many lives and how much property loss and environmental destruction to allow for X number of dollars of profit or tax revenue.

AN ACT to amend the title of "An act concerning the delineation and marking of flood hazard areas; and prescribing the functions, powers, and duties of the Division of Water Policy and Supply of the Department of Conservation and Economic Development in connection therewith," approved April 3, 1962, (P.L. 1962, c.19), so that the same shall read "An act concerning the delineation, marking and land use regulation of floodways and flood hazard areas; and prescribing the functions, powers, and duties of the Water Policy and Supply Council in the Department of Environmental Protection in connection therewith, and to amend and supplement the body of said act.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

1. The title of P.L. 1962, c. 19 is amended to read as follows: An act concerning the delineation [and] , marking and land use regulation of flood hazard areas and floodways; and prescribing the functions, powers, and duties of the [Division of] Water Policy and Supply Council [of] in the Department of [Conservation and Economic Development] Environmental Protection in connection therewith.

2. Section 1 of P.L. 1962, c.19 (C.58:16A-50) is amended to read as follows:

1. It is in the interest of the safety, health and general welfare of the people of the State that legislative action be taken to empower the [Division of] Water Policy and Supply Council to delineate and mark flood hazard areas and floodways.

to adopt and enforce land use regulations for floodways, to adopt minimum land use regulations for flood fringe areas and to coordinate effectively the development, dissemination, and use of information on floods and flood damages that may be available.

3. Section 2 of P.L. 1962, c.19 (C.58:16A-51) is amended to read as follows:

2. As used in this act, unless the context indicates another different meaning or intent:

(a) "Department" means the Department of Environmental Protection;

(a) (b) "Division" means the Division of Water [Policy and Supply] Resources in the Department [of Conservation and Economic Development]

(b) (c) "Council" means the Water Policy and Supply Council in the [Division of Water Policy and Supply] Department;

(c) (d) "Flood plain" means the relatively flat area adjoining the channel of a natural stream, which has been or may be, in fact, hereafter covered by flood water and which, presently or hereafter, is ^{not} subject to the Wetlands Act of 1970 (N.J.S. 13:9A-1 et seq.), its amendments and revisions;

(e) "Mean annual flood" means a flood discharge equal to the mean of the discharges over a sufficient period of time in an annual flood series. Principles of regional runoff characteristics and statistical and factual correlation factors between similar or related streams may be utilized in establishing reasonably accurate mean annual floods for the purposes of this act;

(f) "Flood hazard area" means the channel of a natural stream and portions of the flood plain which have been covered by mean annual flood waters;

[(d)] (g) "Floodway" means the channel of a natural stream and portions of the [flood plain] flood hazard area adjoining the channel, which, according to relative risk, are reasonably required to carry and discharge the [flood water and] mean annual flood flow [of any natural stream];

[(e) "Flood hazard area" means the floodway and any additional portions of the flood plain, as determined by the council under section 3 hereof;]

[(f)] (h) "Relative risk" means the varying degrees of hazard to life and property in a flood hazard area which are occasioned by differences in depth and velocity of flood waters covering and flowing over it;

[(g)] (i) "Flood fringe area" means that portion of the flood hazard area not designated as the floodway;

[(h) "Department" means the Department of Environmental Protection;]

[(i)] (j) "Person means and shall include corporations, companies, associations, societies, firms, partnerships and joint stock companies as well as individuals, and shall also include all political sub-divisions of this State or any agencies or instrumentalities thereof.

4. Section 3 of P.L. 1962, c.19 (C.58:16A-52) is amended and supplemented as follows:

3. The [division] council shall study the nature and extent of the flood plains of the state. After public hearing upon notice, the council shall, from time to time, delineate [as] flood hazard areas [such portions of the flood plains, as, in the judgment of the council, the improper development and use of which would constitute a threat to the safety, health, and general welfare. Such delineation shall indentify the various subportions of the flood hazard area for reasonable and proper use according to relative risk, including the designation of floodways necessary to preserve the flood carrying capacity of natural streams] and floodways. The council may revoke, amend, alter, or modify actions taken as herein authorized, if [in its judgment the public interest] changes in a stream's mean annual flood so warrants. The resolution adopted by the council delineating any flood hazard areas shall be filed with the division and shall be distributed by the council in such manner and in such places as it may determine proper.

4. (a) The council is authorized to adopt, amend, repeal and enforce rules and regulations concerning the development and use of land in any designated floodway which shall be designed to preserve its flood carrying capacity and to minimize the threat to the public safety, health and general welfare, according to relative risk. Such rules and regulations shall not be so restrictive as to constitute a taking without compensation, since funds and powers are not provided herein therefore; and shall permit reasonable filling of areas that would not unduly interfere with the flood carrying capacity of a stream.

(b) No structure, enlargement of any existing structure or reconstruction of any existing structure shall be made in the floodway without prior approval and permit of the council in accord with the terms and conditions of said approval and permit. No such approval and permit shall impair or affect any property rights, otherwise existing, which might be invaded or impaired by such construction, alteration or reconstruction.

(c) The council shall, concurrently with the adoption of rules and regulations concerning the development and use of land in any designated floodway, adopt rules and regulations concerning applications, hearings, and other procedural matters for the issuance of the council's approvals and permits.

(d) The council may provide for a flood carrying capacity greater than the mean annual flood flow for bridges, public roads, public and governmental utility installations and any enclosed structure through which the waters of a natural stream are designed to flow, including but not limited to conduits, pipes and underground channels, which greater flood carrying capacity shall be established by rule and regulation as provided herein.

(e) In addition to the council's required approval and permit, any political sub-division of this State or any agency or instrumentality thereof vested with authority to adopt rules, regulations or ordinances concerning the development and use of land designated floodway may adopt and enforce, in accord with such authority, rules, regulations or ordinances more restrictive than those adopted, amended or repealed by the Council.

5. (a) The council shall adopt, amend and repeal rules and regulations creating minimum standards for the development and use of land in any designated flood fringe area which shall be designed to reasonably minimize mean annual flood damages and its threat to the public safety, health and general welfare, and make such minimum rules and regulations available to municipality and county governing bodies and responsible zoning officials. Any such rules and regulations shall provide for clustering or other methods of redistributing the development rights of a property owner, where a portion of his land is located in the flood hazard area and it is feasible to protect the value of the property by concentrating such development rights on the portion of land lying outside the flood hazard area. Any such rules and regulations shall also provide for reasonable filling of areas that would not unduly interfere with the flow of mean annual flood waters.

(b) Any political sub-division of this State or any agency or instrumentality thereof vested with authority to adopt rules, regulations or ordinances concerning the development and use of land in any designated flood fringe area may adopt and enforce, in accord with such authority, rules, regulations or ordinances which shall at least conform to, and which may be more restrictive than, the minimum standards adopted, amended or repealed by the council.

6. (a) Any person who violates a provision of Section 4 or a rule or regulation adopted pursuant thereto shall be subject to a penalty of not more than \$2,500.00 for each offense, to be collected by the council, in the name of the State, in a summary proceeding under the Penalty Enforcement Law (N. J. S. 2A:58-1 et. seq.), and in any court of competent jurisdiction wherein injunctive relief has been requested. The Superior Court, County Court and county district court shall have jurisdiction to enforce said Penalty Enforcement Law. If the violation is of a continuing nature each day which it continues shall constitute an additional, separate and distinct offense. The council is hereby authorized and empowered to compromise and settle any claim for a penalty under this section in such amount

in the discretion of the council as may appear appropriate and equitable under all of the circumstances.

(b) If any person violates any of the provisions of this act or any rule or regulation promulgated pursuant to the provisions of this act, the council may institute an action in a court of competent jurisdiction for injunctive relief to prohibit and prevent such violation or violations and the council may proceed in the action in a summary manner.

5. Section 4 of P.L. 1962, c.19 (C.58:16A-53) is amended as follows:

[4.] 7. (a) The division may conspicuously mark in the field (1) any [flood hazard area] floodway, and (2) any other area the council may deem necessary to effectuate the purposes of this act. The division may erect markers on any property belonging to the State, or any agency or instrumentality thereof. Such markers may be erected on any county, municipal, or private property provided that such county, municipality or owner shall have consented thereto.

(b) [Every] Any person [, corporation, municipality, or other public authority] removing, defacing or otherwise disturbing any marker erected under the provisions of this act shall be subject to a penalty not to exceed \$50.00 for each and every offense to be collected in accordance with [the penalty enforcement law (N.J.S. 2A:58-1 et seq.)] section 6 hereof.

6. Section 5 of P.L. 1962, c.19 (C.58:16A-54) is amended and supplemented as follows:

[5.] 8. The provisions of this act shall not affect or limit the provisions of Sections 40:56-1 or 58:1-26 and 27 of

the Revised Statutes, provided the council may alter any width, elevation, or condition, however established, upon finding such alterations necessary to effectuate the purpose of this act.

9. Agricultural and open space uses, being in the best interests of the State, are expressly exempted from regulation under Section 4 and 5 hereof.

10. This act shall be liberally construed to effectuate the purpose and intent thereof.

11. If any provision of this act or the application thereof to any person or circumstances is held invalid, the remainder of the act and the application of such provision to persons or circumstances other than those to which it is held invalid, shall not be affected thereby.

12. This act shall take effect immediately.

THE TOWNSHIP OF GREEN BROOK

COUNTY OF SOMERSET
NEW JERSEY

TOWNSHIP COMMITTEE

VERNON A. NOBLE, MAYOR
DAVID H. DICKINSON
LIONEL A. HOWARD, JR.
ARTHUR L. LEWIS
MAURICE MILLER, JR.

April 11, 1972

TOWNSHIP CLERK

ROTH C. BROWN
111 GREENBROOK ROAD
GREEN BROOK, N.J.
08812
(201) 968-1023

STATEMENT of The Township of Green Brook in support of
Assembly Bills 572 and 596.

Background:

The Township of Green Brook, in the County of Somerset, had a population in the 1970 census of 4,302. It is bounded on the south by the Green Brook, from which it derives its municipal name.

According to calculations made in January 1972 by the Somerset County Planning Board, this Township has 148.22 acres of land, not publicly owned, within the Green Brook Floodway. The Township's length along the Brook is approximately 22,400 feet, or more than 4 miles.

Adjoining this Township along the Brook, running upstream to downstream, are portions of the City of Plainfield, Borough of Dunellen, and Borough of Middlesex. Further downstream, between this Township and the Raritan River, are portions of Middlesex, Bound Brook and Bridgewater.

At the call of Green Brook Mayor Vernon A. Noble, in 1968 and 1969, the Green Brook Flood Control Committee was established. This committee is composed of representatives of nine municipalities [Green Brook, City of Plainfield, Borough of North Plainfield, Borough of Dunellen, Borough of Middlesex, Borough of Bound Brook, Borough of Watchung, Township of Bridgewater, and Township of Scotch Plains] and three counties [Union, Somerset and Middlesex]. The committee meets regularly each month, and has worked closely with the Division of Water Resources, and has been in constant contact with the U.S. Army Corps of Engineers.

This Committee also drafted the legislation adopted as Chapter 316, P.L. 1971, permitting counties and municipalities to form Flood Control Commissions, and the various member bodies are in the process of making the Committee a Commission under that statute.

In the late 1950s, the Township of Green Brook participated with four other municipalities in a project whereby the Corps of Engineers did some snagging and cleaning of the Green Brook.

The Township of Green Brook adopted its first Master Plan in 1957, and this included the designation of flood lands, thus implementing provisions of the "Municipal Planning Act (1953)" and particularly R.S. 40:55-1.11, and R.S. 40:55-1.20. The 1958 Township Zoning Ordinance further attempted to regulate building in the flood areas.

In 1971 a new zoning ordinance was adopted containing extensive flood plain regulation and floodway building prohibitions.

Mayor Noble is unable to attend this public hearing as he has an appointment at the same time with representatives of the National Oceanic and Atmosphere Administration concerning the installation of an early flood warning device upstream, to warn communities in the Green Brook Flood Control Commission of water stages as early as possible.

His representative, Harman R. Clark, Jr., has been Township Attorney since 1958, with the exception of 1961. He worked with the Corps of Engineers as early as 1957, in the snagging project mentioned above, and prepared the first drafts of Chapter 316, P.L. 1971.

Arguments in Support of Assembly 572 and 596.

These Bills will not solve the flood problems in the Green Brook basin.

Solutions to existing problems will take massive federal, state and county funds, with extensive deepening of channels, re-building of bridges, removal of shoals, and the like.

On the other hand, we have the obligation to do whatever can be done, not only to work for solutions of present conditions, but to prevent further problems and to keep from making the situation any worse than it now is.

We believe that Assembly Bills 572 and 596 can be significant for the latter purposes.

The attached sheet, prepared by the Somerset County Planning Board, shows various non-publicly owned lands within the Green Brook Floodway. It notes that "most, or a large portion, of the floodway lands in . . . " North Plainfield, Plainfield, and Scotch Plains, "is developed land".

When floodway land is developed, it hurts practically everyone except the developer (who has usually left the scene with his profit by the time of the next flood). It hurts areas downstream by no longer retaining water previously held in vacant areas.

It hurts the usually unsuspecting homebuyer who, having purchased a home near an apparently placid brook, finds that brook in his basement or living areas.

As is so often the case, the less affluent members of our society are the most likely victims of permitting building in the floodway areas. Homes built in such areas are likely to be less expensive than those built elsewhere -- for a combination of reasons, including initial land costs to the builder, and the fact that the more affluent home-buyer need not look in "marginal areas".

Specific reasons for this Township's support of these Bills, include:

(1) They would provide additional statutory support for regulatory measures already adopted by the Township of Green Brook.

Thus far the Township's flood plain regulations have not be successfully attacked in Court. However a municipality is a creation of the state and has only those powers delegated to it. Accordingly, we believe that these bills would provide added support for the acts already taken.

(2) They would provide for a more effective dual system of regulation.

This Township has found the Division of WaterResources to be most cooperative. However without a large staff it is difficult for a state department to cover the entire state of New Jersey, and that Division would probably be first to admit the need of local cooperation. By providing, as do these bills, for regulatory powers both locally and in the State, the bills seemed to recognize that both areas of control are required.

(3) These bills provide for control even if there is a default in local action.

This Township is concerned, as are most municipalities, with local control and "home rule". We believe that these bills recognize this. At the same time, if regulation were left totally with local officials, experience shows that not all municipalities would exercise the powers, or at least not promptly.

When we are dealing with a flood basin area, what happens in one area directly affects flooding in other areas. What is done, or not done, upstream, can add to our problems downstream in Green Brook. Thus we support the provision that would provide for state controls if the municipality does not act within a given time after promulgation of the guidelines.

(4) These Assembly Bills, and the regulations to be promulgated under same, do not take away property rights, but rather recognize conditions as they actually exist.

One argument sometimes made concerning regulation of building in a floodway area is "confiscation of property". We do not believe this to be the case. The legislation, ordinances or regulations do not create the "unbuildable" conditions -- such conditions exist and this legislation would recognize it. If a particular property does not have sewers available, and cannot obtain satisfactory percolation for an individual sewage disposal system, no building permit will issue -- it is readily recognize that a home cannot be built without provision for disposal of sewage.

The same principle should apply to lands where a home, if built, would be continually threatened with flood waters.

With regard to flood hazard regulations, these need not be total prohibitions; rather, they can look to the establishment of uses compatible with flood hazard areas -- such as the Swim Club property located in this Township.

Where particular property is unsuitable for any non-public (park) use, so that total building prohibition is necessary, we should not stop with prohibition. It is important to continue with and to expand federal and state green acres acquisition funds. We cannot expect a property owner to continue to own and pay taxes upon a property, however marginal, upon which no use is permitted. In those cases, as now recognized in R.S. 40:55-1.20, public acquisition should be made.

(5) Assembly Bills 572 and 596, are supported as being useful tools in a total picture of flood prevention. Two cautions are suggested:

(a) as has been stated above, in a sense these bills would give added statutory support to regulations already adopted by the Township of Green Brock and other municipalities. It is therefore essential that these bills be adopted. If they should fail of adoption, a person attacking our existing regulations could argue that by failing to pass these measures the Legislature "intended" that a municipality and the Division of Water Resources not have the powers it has already attempted to some degree to utilize.

Thus while the adoption of Bills 572 and 596 would provide added support to our regulations, the failure to adopt these bills at this stage could provide a Court with the basis to pull the support out from under us.

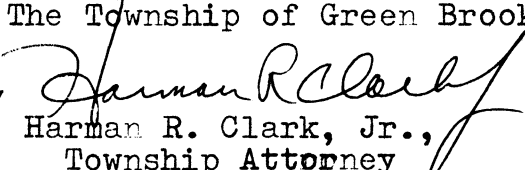
(b) as has also been suggested, we urge that the Legislature guard against the thought that the passage of these bills, important as they are, is all that is required in the area of flood control.

Rather, we urge that this Legislature continue existing program, and explore new areas, of green acres funding, state aid to brook clearance and bridge building, and other fields to alleviate the existing conditions.

Respectfully submitted,

The Township of Green Brook

By


Harman R. Clark, Jr.,
Township Attorney

LAND AREA* WITHIN THE GREEN BROOK FLOODWAY
BY MUNICIPALITY

MIDDLESEX COUNTY

Middlesex Borough	122.41 Acres
Dunellen	<u>35.22 Acres</u>
Sub-Total	157.63 Acres

SOMERSET COUNTY

Bound Brook	31.89 Acres
Bridgewater Township	62.60 Acres
Green Brook Township	148.22 Acres
**North Plainfield	73.18 Acres
Watchung	<u>21.11 Acres</u>
Sub-Total	337.00 Acres

UNION COUNTY

**City of Plainfield	99.17 Acres
** Scotch Plains	26.18 Acres
Berkeley Heights	<u>10.53 Acres</u>
Sub-Total	135.88 Acres

TOTAL 630.51 Acres

*Land already publicly owned not included
**Most, or a large portion, of the floodway lands in
these municipalities is developed land.

SUBMITTED BY PETER DONOVAN

Ordinance

No. 7-4-72

of the

1st Reading

CITY OF RAHWAY, N. J.

2nd Rdg. and Final Passage

Approved as to Form and Legality on Basis of Facts Set Forth

Factual contents certified to by

Date

Date to Mayor

Date Returned

Date Resubmitted
to Council

Corporation Council

Title

Councilman Presents the following Ordinance:

An Ordinance to prohibit the filling, excavating or modification of the original grades of lands abutting the Rahway River and its tributaries for a period of one year.

SECTION 1.

Whereas the City of Rahway in recent years has experienced severe flooding conditions along the Rahway River and its tributaries, and Whereas the inhabitants of the City of Rahway have suffered severe property damage in that foundations of buildings have been undermined by flood waters so as to render these buildings uninhabitable and unsafe, and

Whereas the public lands which include the Rahway Public Library, parks, and streets in the City of Rahway have been inundated with flood water with increasing frequency thereby precluding the safe and rightful use of these facilities, and

Whereas landfill operations on properties abutting the Rahway River and its tributaries pose the possibility of increased flooding to other properties, and

Whereas the exact form of flooding management regulations to prevent or correct the aforesaid flooding conditions and to provide for the orderly development of land use controls has not yet been determined by the municipal council, and because of the complex issues involved, such determination can not properly be made without extensive information, expert advice, and mature deliberation. It is the purpose of this ordinance to provide the necessary time for the city to develop and adopt such land use controls for the health, safety, and welfare of the general public.

SECTION 2.

No lands in the City of Rahway that abut the Rahway River and its tributaries shall be filled, excavated, or modified in any manner, whatsoever, from their original form, nor may any individual, corporation, or legal entity conduct any such land modification operations for a period of one year from the date of adoption of this ordinance.

For the purpose of this ordinance, lands abutting the Rahway River and its tributaries shall mean those properties whose average elevation shall be below the next highest 100 year flood elevation reference line and the "A" zone limits, as delineated on the map of the City of Rahway, entitled "Flood Insurance Study Map", dated August 1971, and included within a publication prepared by the Department of the Army, New York District, Corps of Engineers, entitled "Type 1C Flood Insurance Study, Rahway, New Jersey".

SECTION 3.

Any land modification operations that are presently underway or contemplated and designed with the specific intent of flood protection or prevention or for the purpose of alleviating flood hazards, and which can be clearly demonstrated and documented as serving that purpose, and will not result in a narrowing of the maximum floodway channel,^{REQUIRED FOR THE PROPOSED WORK} the conducting of additional flood water onto other properties, and will not cause an increase in upstream flood elevations, may be continued or instituted provided that all required permits, State, County, and City of Rahway have been obtained.

SECTION 4.

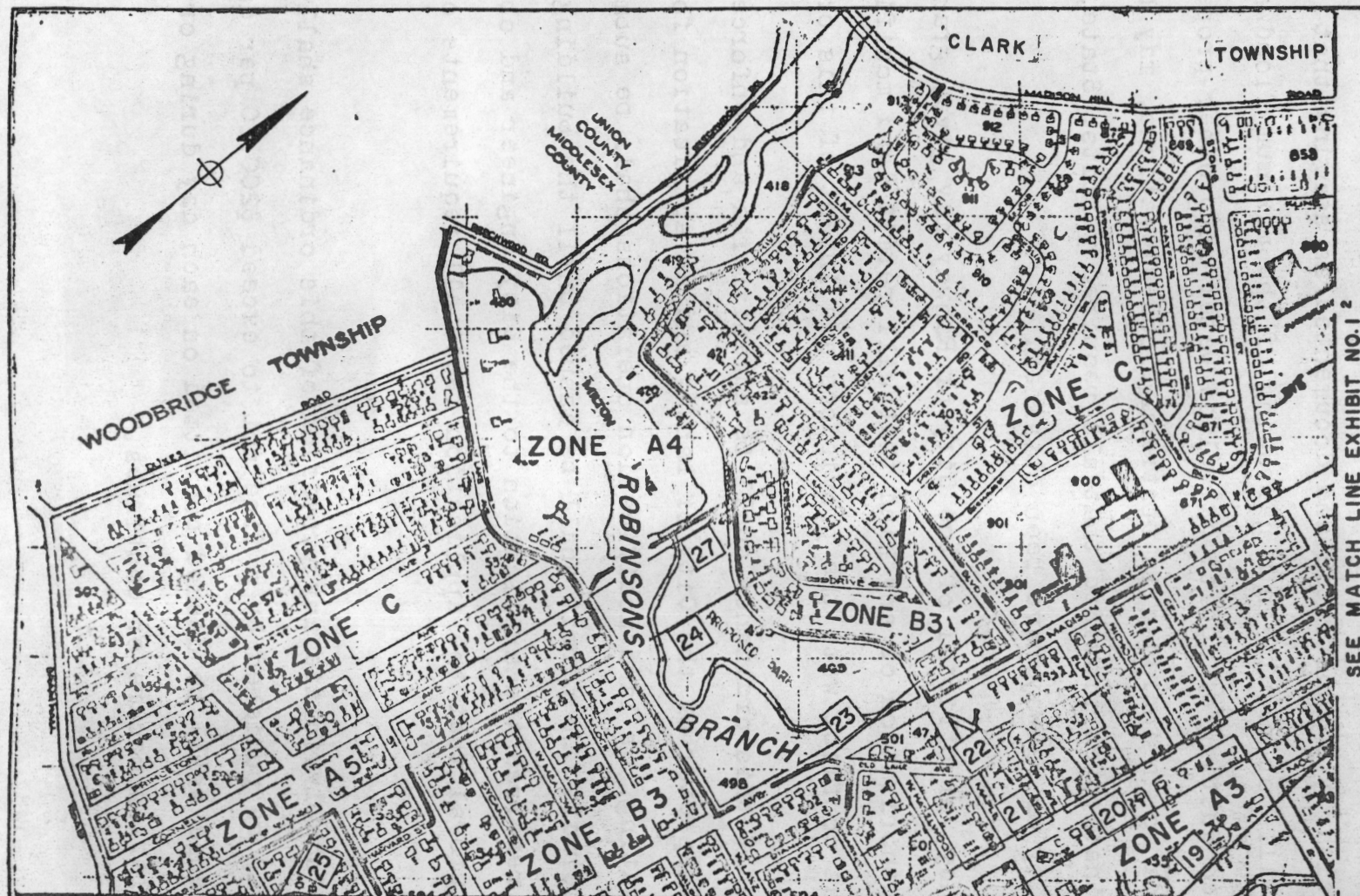
No Board, Agency, or Official of the City of Rahway may give, grant, or award an authorization of any kind that will permit land modification operations that conflict with the provisions and intent of this ordinance.

SECTION 5.

The provisions of this ordinance shall be administered and enforced by the Building Inspector of the City of Rahway and an application for filling, excavating, or land modification operations shall be submitted to him for a permit. No permit shall be issued until the building Inspector has referred the application to the City Engineer and obtained his written approval that the application meets all requirements of this ordinance.

SECTION:6.

Any person who shall violate any provision of this ordinance shall, upon conviction, be punished by a fine not to exceed \$200.00 per day. A separate offense shall be deemed committed on each day during or on which a violation occurs or continues.

**LEGEND**

27

100 YEAR FLOOD ELEVATION
REFERENCE LINE

— ZONE LIMITS

--- TOWNSHIP LIMITS

1	2
3	4 5
6	7

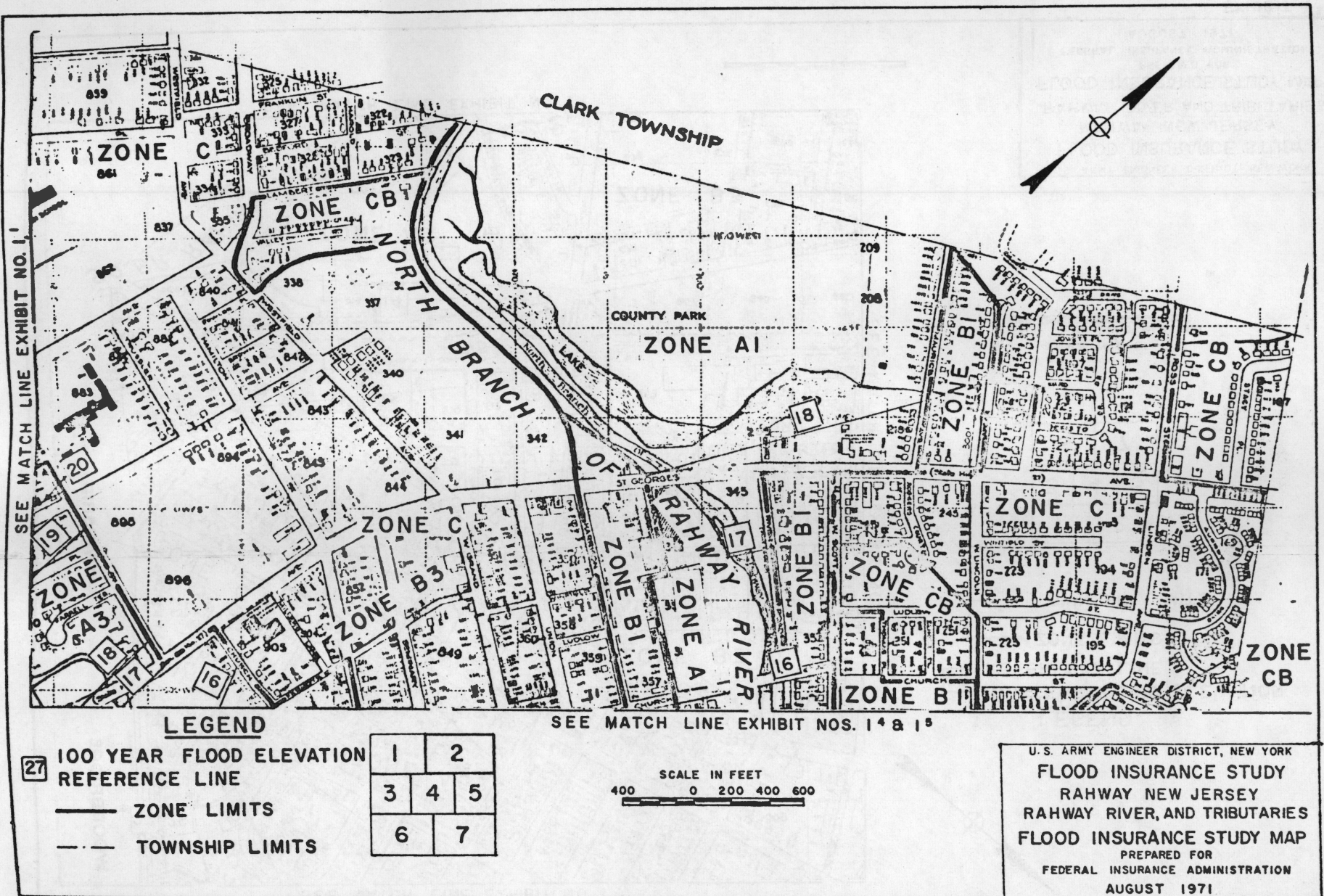
SEE MATCH LINE EXHIBIT NOS. 1³ & 1⁴

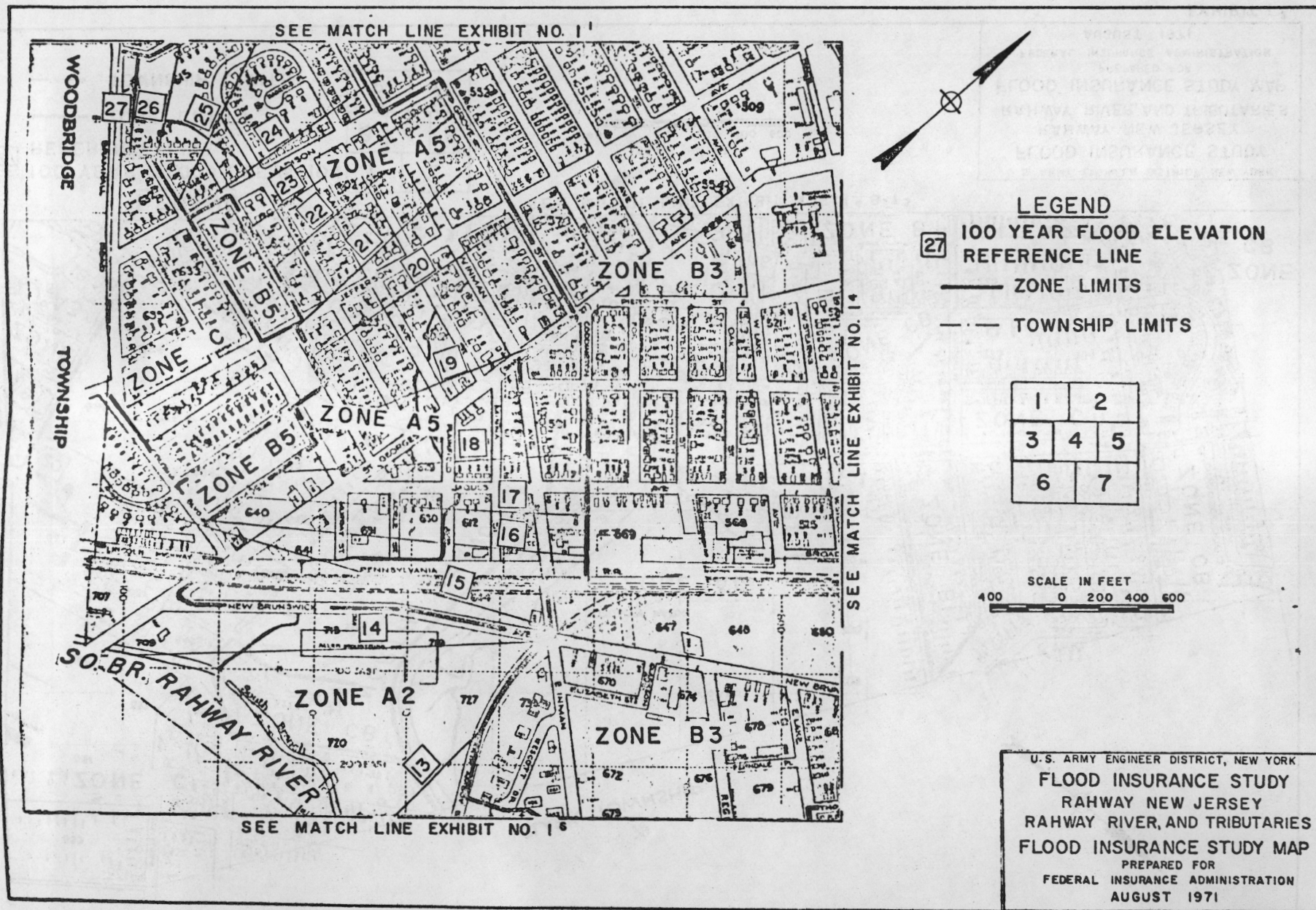
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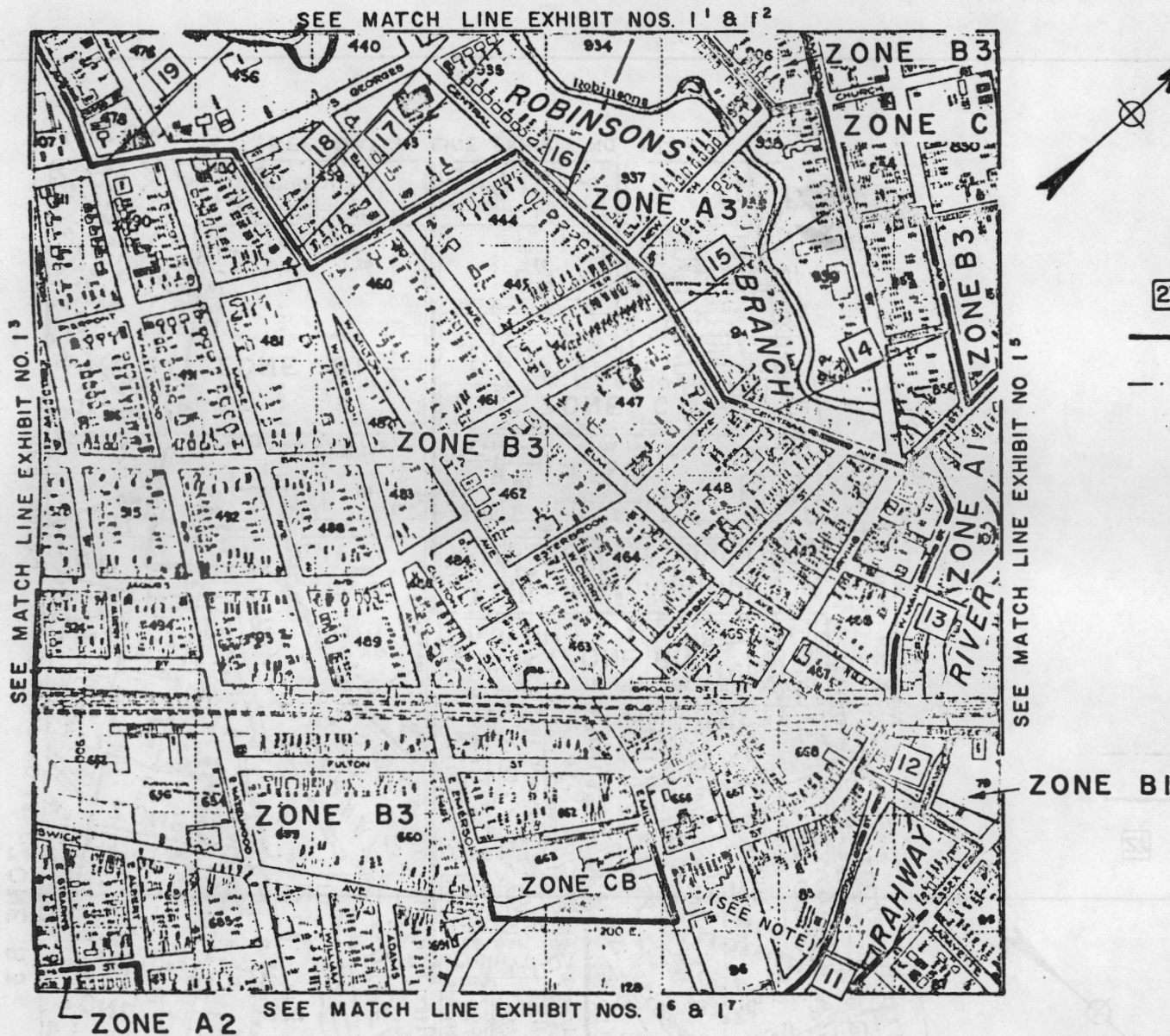
U.S. ARMY ENGINEER DISTRICT, NEW YORK
FLOOD INSURANCE STUDY
RAHWAY NEW JERSEY
RAHWAY RIVER, AND TRIBUTARIES
FLOOD INSURANCE STUDY MAP

PREPARED FOR
FEDERAL INSURANCE ADMINISTRATION
AUGUST 1971

EXHIBIT 1¹SEE MATCH LINE EXHIBIT NO. 1²







NOTE:

TIDAL BASE FLOOD ELEVATION
FOR REACH 1 AND 2, 11' M.S.L.

LEGEND

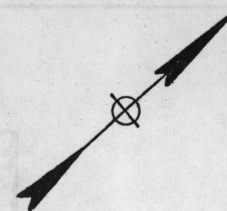
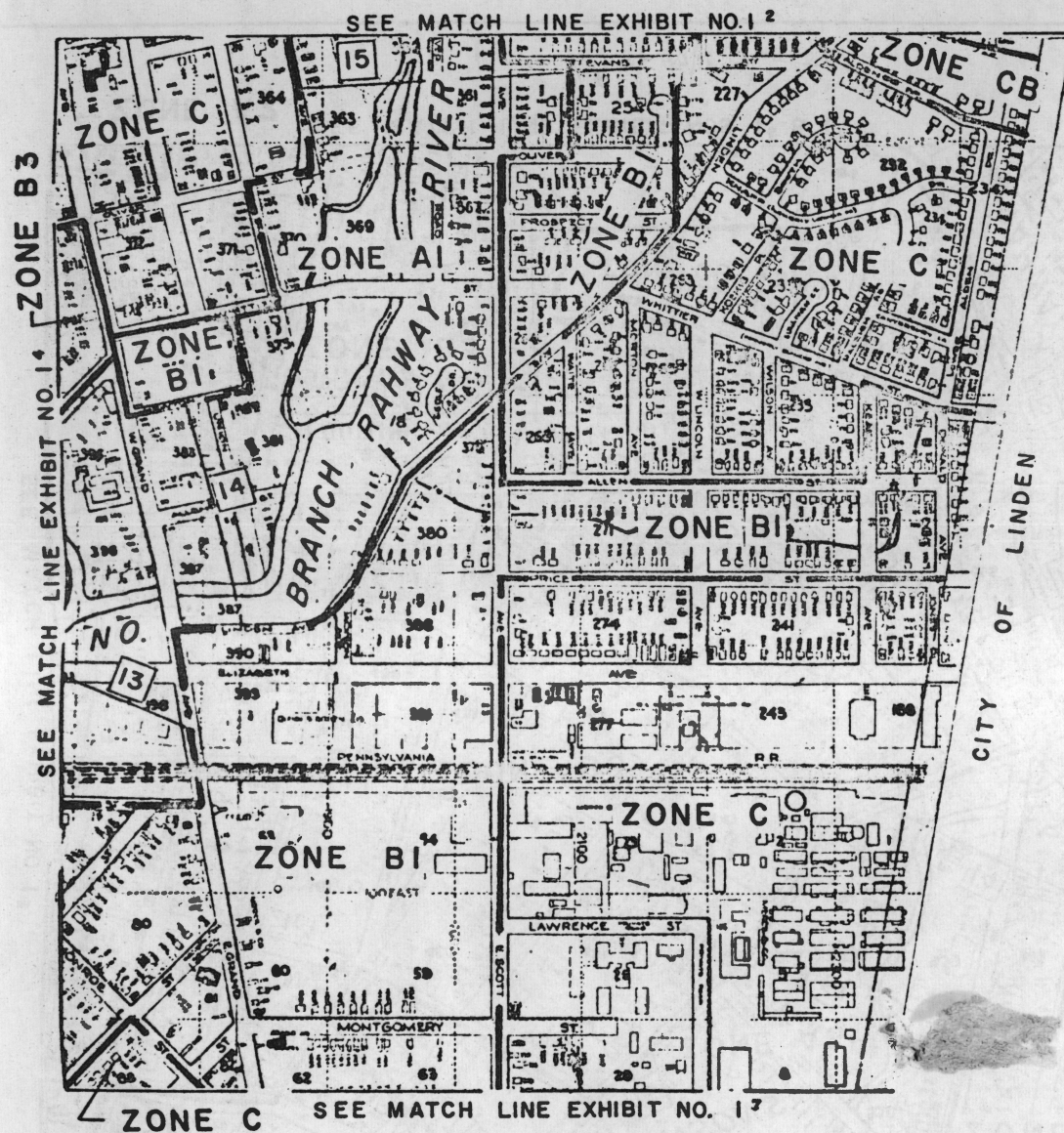
- 27 100 YEAR FLOOD ELEVATION
REFERENCE LINE
- ZONE LIMITS
- - - TOWNSHIP LIMITS

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U.S. ARMY ENGINEER DISTRICT, NEW YORK
FLOOD INSURANCE STUDY
RAHWAY NEW JERSEY
RAHWAY RIVER, AND TRIBUTARIES
FLOOD INSURANCE STUDY MAP
PREPARED FOR
FEDERAL INSURANCE ADMINISTRATION
AUGUST 1971

EXHIBIT 14



LEGEND

- 27 100 YEAR FLOOD ELEVATION
REFERENCE LINE
- ZONE LIMITS
- - - TOWNSHIP LIMITS

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SCALE IN FEET

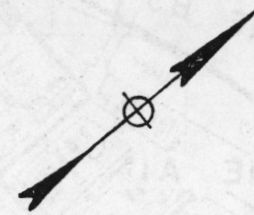
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U.S. ARMY ENGINEER DISTRICT, NEW YORK
FLOOD INSURANCE STUDY
RAHWAY NEW JERSEY
RAHWAY RIVER, AND TRIBUTARIES
FLOOD INSURANCE STUDY MAP
PREPARED FOR
FEDERAL INSURANCE ADMINISTRATION
AUGUST 1971

EXHIBIT 15

116 A

SEE MATCH LINE EXHIBIT NOS. 1³ & 1⁴



SEE MATCH LINE EXHIBIT NO 17

NOTE:

TIDAL BASE FLOOD ELEVATION
FOR REACH 1 AND 2, 11' M.S.L.

LEGEND



100 YEAR FLOOD ELEVATION
REFERENCE LINE

— ZONE LIMITS

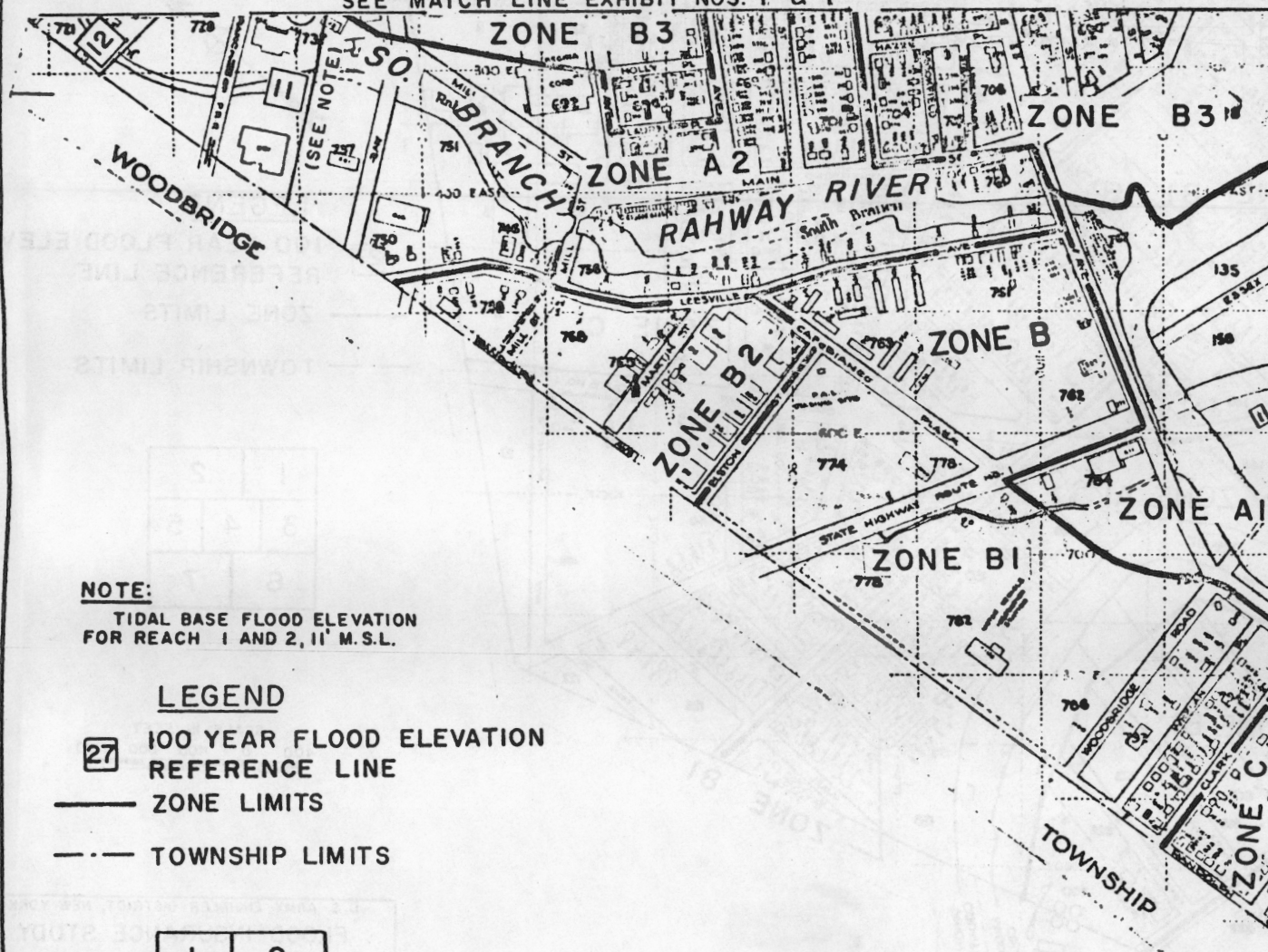
- - - TOWNSHIP LIMITS

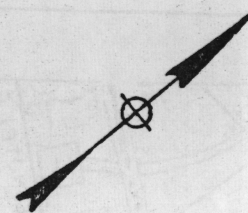
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U.S. ARMY ENGINEER DISTRICT, NEW YORK
FLOOD INSURANCE STUDY
RAHWAY NEW JERSEY
RAHWAY RIVER, AND TRIBUTARI
FLOOD INSURANCE STUDY MAP
PREPARED FOR
FEDERAL INSURANCE ADMINISTRATION
AUGUST 1971

EXHIBIT I



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U. S. ARMY ENGINEER DISTRICT, NEW YORK
FLOOD INSURANCE STUDY
RAHWAY NEW JERSEY
RAHWAY RIVER, AND TRIBUTARIES
FLOOD INSURANCE STUDY MAP
PREPARED FOR
FEDERAL INSURANCE ADMINISTRATION
AUGUST 1971

EXHIBIT 17

118 A



TOWNSHIP OF

Parsippany - Troy Hills

PARSIPPANY • NEW JERSEY

201 - 334-3600

April 11, 1972

CONSERVATION COMMITTEE

To the Committee on Air and Water Pollution and Public Health

Assembly Chambers
Trenton, New Jersey

Testimony on Assembly Bill 572 (Flood Plain Regulation)

My name is Mary Champenois, and I am the Vice Chairman of the Parsippany-Troy Hills Conservation Committee. In presenting testimony on 572 today, I would like to emphasize that I am here not ~~just~~ to represent local conservation interest in this matter of flood plain regulation, but I appear with the full support of our Mayor, our Council, and our Planning Board, all of whom are firmly committed to the passage of this bill. }

Parsippany, for legislators here who are unfamiliar with it, is a large suburban municipality of nearly 60,000 people, located in the northern half of Morris County. The Rockaway River, a tributary of the Passaic River, runs through the northeast corner of Parsippany and separates us from Montville on the other side, and it is this river which is our area of concern as far as flood plain regulation is concerned. As the Rockaway River is released from the Jersey City Reservoir, it can be a mere trickle in time of drought, or a swollen monster after heavy rains, consuming its low-lying banks with alarming suddenness. While we seek to protect those homeowners already situated in the obvious flood plain area, we are especially desirous of precluding future development on at least several hundred acres of flood plain land currently eligible for use. Considering the rate of population growth in Morris County, great pressure will doubtless be brought to bear for use of this land unless sound legislation is forthcoming to regulate its use.

At present it is self-defeating for a single municipality to zone its flood plain areas with restrictions, since it is apt, in the process of so doing, to lose a prospective industrial ratable to the next town upstream which has not seen fit to recognize flood plain problems. In addition, this town may then suffer from odors, or air and water pollution from the industry it has lost. Also, at the present time municipalities all work separately on flood control engineering projects, often to the detriment of neighboring towns by causing additional downstream flooding and silting.

572 represents the first major alternative to the above situation, both of which are motivated by the insatiable need for new tax ratables under the present property-based tax structure. Because of this it has been unthinkable until now for a municipality to favor legislation at the state level regulating home zoning powers. However, continually increasing flood damage costs, time and energies expended in protracted court actions, stormy public meeting, and adverse news coverage have all served to bring about changes in thinking on the municipal level. From a position of basic mistrust of state intervention there has been a shift to one of welcome relief that a higher authority will operate to cause all affected municipalities to share equally the responsibility for wiser use of flood plains. I am here to represent this change.

The growing interdependence of communities, the need for regional planning for development, and for recreation and conservation, and a realization that public benefit must at least balance the right to private profit have all helped to improve the climate for passage of legislation such as 572. Furthermore, studies such as the Decter Report on Surface Water Control in New Jersey have made it clear that engineering works alone have not and will not provide complete flood protection. There are experts here who will testify, or who already have testified today with more precise information on flood control engineering and its after-effects. My point is to

emphasis that wise zoning, with a stronger hand behind it, will far better serve both man and nature, and it is this view that Parsippany wholeheartedly supports and brings to this committee today. We urge not only swift passage of 572, but continuing efforts toward even stronger legislation in the future. Thank you very much.

Monmouth County Conservation Council

"For A Quality Environment"

20 Court Street,
Freehold, N.J. 07728

April 10, 1972

Assemblywoman Josephine Margetts
c/o Dave Mattick
Room 90, State House,
Trenton, N.J. 08625

Dear Mrs. Margetts:

The Directors of this Council, which includes some thirty-five County-wide conservation oriented agencies and organizations, strongly support A-572.

First, this bill extends the authorization to regulate land use of the flood fringe area. Many benefits can be obtained from such authority. It can control the gradual destruction of the flood storage capacity of flood plains, provide ample room for economical preventive maintenance of channels against flood and bank erosion damage, facilitate mosquito control by water management, help preserve the valuable natural regimen of stream and flood plain for fish and wildlife habitat, avoid need for costly and often damaging channelization and diking.

A recent study by the Freehold Soil Conservation District of four relatively small housing developments built adjacent to streams with State and local encroachment approval, show that now over \$3½ million must be spent to avoid flooding.

National figures support the urgent need for a change. They show an increase in flood control expenditures from \$300 million in 1960 to \$500 million in 1966 and instead of an attendant decrease in damage, damage jumped over threefold - from \$300 million to \$1 billion. Such disparity in expenditures and damages is still rising.

The grief of homeowners, the destruction of the natural values, siltation and many other problems must be added to the monetary costs.

We believe proper regulations under the proposed bill would have avoided these problems.

A second real need for A-572 is the provision for the State to set rules and regulations if the municipality does not.

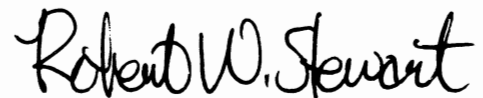
We are sure that municipalities have done a miserable job statewide in zoning flood plains and such zoning has come often only after severe flood experiences.

Here in Monmouth County probably less than six out of fifty-three municipalities have adequate flood plain ordinances.

Home rule has not done a job and it is time we adopted alternatives to protect the public, to protect the municipalities adopting adequate measures and to reduce the mounting waste of money and resources of all the people.

We urge the passage of this bill and its prompt and adequate implementation.

We wish this statement to be entered as part of the hearing testimony.


Robert Stewart
President

FREEHOLD SOIL CONSERVATION DISTRICT

20 COURT STREET

FREEHOLD, NEW JERSEY 07728

TEL: 201-462-1079

April 10, 1972

Assemblywoman Josephine Margetts
c/o Dave Mattick
Room 90, State House,
Trenton, N.J. 08625

Dear Mrs. Margetts:

The Freehold Soil Conservation District vigorously supports A-572. This bill incorporates two features we have long believed essential for avoiding the compounding of flood damages and required, and continually rising, corrective measures.

The provision in the bill to permit State promulgation and enforcement of rules and regulations for the flood fringe areas is long overdue.

Our recent study here in Monmouth County strikingly shows the inadequacy of our present State statutes.

Without going into details, this study indicates that in the case of four relatively small subdivisions, with encroachments approved under present laws, flood control measures of channelization and structures are now needed. These corrective measures amount to over three and one half million dollars. Additionally, a substantial recurring cost will be essential to maintain the proper functioning of these channels.

We believe adoption of proper standards for the fringe areas, as provided for in A-572, will eliminate most of the problems uncovered by this study.

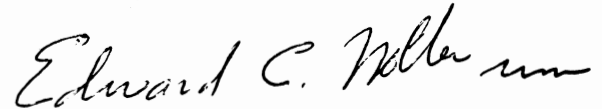
Proper standards will provide ample room for practical preventive maintenance of the channel to avoid excessive blockage and flooding, channel meander causing flood plain bank erosion, and stagnant pools resulting in mosquito control problems.

We hope that proper standards for the fringe area will mean retention of the flood plain largely in its natural condition, to perform its many flood stage functions. Likewise, natural conditions of the flood plains will enhance the habitat for fisheries and wetlands wildlife, and also provide linear natural areas for recreation, aesthetics and nature study.

A history of inadequate municipal flood plain zoning demonstrates that the provision in the bill permitting the department to set rules and regulation if the local municipality does not, is needed. Here in the Freehold District probably less than eight municipalities out of fifty-three have enacted adequate zoning. Often zoning is enacted only after serious problems have been experienced.

We do suggest that A-572 would be more effective if the department was authorized to directly enforce flood fringe area standards as it now controls the floodway area.

We wish this statement to be entered as part of the hearing testimony.

A handwritten signature in cursive script, reading "Edward C. Noller", followed by a horizontal flourish.

Edward C. Noller
Chairman

TESTIMONY ON A572 - MONMOUTH COUNTY LWV

I am **Mrs. Michael Huber** of the Monmouth County League^u of Women Voters. In vigorous support of this bill, ^{A 572} I would like to describe to you the experience of one of our local member leagues - that of Middletown Township - in trying to secure flood plain protection on the municipal level.

Much of Middletown lies in the coastal plain region of the State along side Raritan Bay - an area of low-lying marshy land laced with small streams which flow to the Bay from somewhat higher areas which are also within the Township. For years the community has been plagued with flooding problems, in the upland regions where houses have been built on filled land, but particularly in the Bayshore area where, during storms, excess run-off from upstream meets abnormally high tides. Flooded cellars, unforeseen lakes in backyards, and streets which water has made impassable are common occurrences to residents of Middletown. In many areas, septic tanks do not function properly because of poor drainage, and many people have experienced the back-up of these wastes in their yards and cellars.

In addition, our streams do not function properly. Erosion has taken place on banks which have been bull-dozed and the resulting siltation has increased the streams' inability to carry run-off. In many areas there is just no place for the water to go.

For many years the Middletown League has been aware of these problems and trying to do something about it. And they have been frustrating years. Because we were working at the municipal level, we concentrated on the purely local aspects of the problem and tried always to relate them to dollars and cents. We didn't dwell on

such intangibles as the loss of valuable recreational land, the depletion of aquifers, the destruction of wildlife, the deterioration of water quality, but related our concern to the everyday matters of property damage, inconvenience, hazards to health, and hardship to taxpayers. We pleaded for some kind of ordinance that would put a stop to further destruction to our streambanks and flood plains.

And we got nowhere. The developers continued to bulldoze the vegetation along the banks, to fill the flood plain, and to build houses on land that was never meant to be built on. In their never-ending quest for ratables, the governing bodies acquiesced in the use of this marginal land. And the flooding problems increased.

It is no wonder that we wholeheartedly welcome the prospect of help from the State. The three other leagues in Monmouth County (~~Red Bank, Matawan and Holmdel~~) have been through similar struggles to a greater or lesser degree, and all ^{four} have studied the problem in depth. The Monmouth County League of Women Voters feels that the State must be empowered to help us in our struggle and that it is time for legislation such as that proposed in A572. We endorse the dual concepts of regulation of the floodway by the Department of Environmental Protection and of minimum standards for the flood fringe area. We believe that such standards plus a twelve month period for compliance will act as a spur to local governments and persuade them to take steps which can only be to their ultimate benefit. We support the stiff penalties for violation of the regulations and the procedures for their enforcement. We feel strongly that this is not an unconstitutional

TESTIMONY ON A572 - MONMOUTH COUNTY LWV (cont'd)

taking of private property but a measure which is essential to the health, safety, and general welfare of the citizens of New Jersey.

To quote from a 1969 decision in Pennsylvania:

History has proven time and again that absolute and unbridled freedom of individual choice has resulted in improvident and ludicrous land use patterns which have obstructed the free flow of surface waters and thereby necessitated inordinately expensive public works or equally expensive disaster relief measures.¹

We would welcome the help of the State in putting a stop to such land use patterns within our county and indeed within the entire State.

1. Solomon et ux. v. Whitemarsh Township, 92 Montg. Co. (Pa.) L.R. 114, 116, 1969.

STATEMENT OF THE MIDDLETOWN TOWNSHIP CONSERVATION COMMISSION AT
THE LEGISLATIVE HEARING ON RESTRICTIONS ON THE USE OF FLOODPLAINS

April 11, 1972

The Middletown Township Conservation Commission heartily endorses Assembly bill 572.

Our municipality started to consider adoption of a flood plain and stream protection ordinance fifteen years ago. At that time, major subdivisions were just beginning to develop in what had been primarily a rural community, but it had already become apparent to the municipal engineer that streams were becoming heavily silted ^{in all the low-lying areas of the township} and flooding_A was presenting an increasingly serious problem. There were cases where certificates of occupancy had to be denied because of malfunctioning septic systems and perpetual flooding. In others, backyards were being washed into streams as waters, denied their floodplains, rushed down the channel. Further problems arose as trees that had grown in the flood fringe area died as a result of fill used to raise the ground enough to lay foundations. Accumulations of silt and debris in the streams were also causing ponding and, since houses and commercial establishments were dependent on septic tanks to handle their sewage, there were resulting accumulations of pollution. This was accompanied, of course, by unpleasant odors and complaints were becoming numbrous. The municipality found that ample easements were not being preserved to permit modern equipment to get to the streams to clean them. Nevertheless, in spite of these obvious problems and the fact that - 15 years later - major subdivisions have now proliferated to the point that open space in our 40-square-mile township is becoming scarce and there is no longer_A ^{any} such ~~x~~ thing as an unspoiled stream, we still do not have a flood plain ordinance.

The reason for this is not hard to find. It is, of course, the ever-present appeal of money in the pocket. In saying this, I do not mean to imply wrongdoing. After all, if 4 extra houses can be built in Farmer Brown's floodplain so that he can sell for a higher price and if Cousin Bob, the builder, can also profit thereby, who among friends is to deny them this privilege? The profit motive, in short, is universal and is not an easy thing to overcome, especially when it can so easily play a major role in the decisions of a neighborhood government. Nor will it be overcome by a change in the tax structure designed to relieve local governing bodies of the pressure to acquire ratables.

Furthermore, bad habits are insidiously easy to encourage. At least in large municipalities, the power of the people becomes diffuse as the township grows. Individual complaints of flooded conditions, impossible to rectify, become easy to ignore. Essential municipal costs to lessen major drainage problems are pretty well hidden in the budget and even the taxpayers who pay the cost are frequently unaware that their tax dollars are, in effect, subsidizing the builder and the man who sold the land. In short, the fact that unaware buyers are eager for houses near a babbling brook, has generally bothered no one except, ultimately, the buyer whose basement persists in flooding, whose yard erodes into the brook and whose trees mysteriously die long after the builder has made his profit and departed. Gradually, however, this story has been repeated often enough so that it is becoming obvious to more and more citizens who the real beneficiaries of improper development are.

Along with these citizens, the Middletown Conservation Commission believes that carrying individual rights to the extent of causing harm to the public in general and to the unaware buyer in

particular is neither right nor justifiable. Nor do we think it is realistic to count on the municipalities to act wholly in the public interest when land profiteering is inevitably involved. For this reason and because streams are regional in nature so that what is done by an upstream municipality inevitably affects conditions downstream - or vice versa - we believe that control of floodplains must be in the hands of a higher level of government.

Therefore, we wholeheartedly support A572 which ^{confirms} ~~gives~~ the Division of Water Resources' power to delineate and mark flood hazard areas and the Department of Environmental Protection power to adopt land use regulations for the floodway. In particular, we approve of the provision that requires municipalities to adopt regulations for the use of land in the flood fringe area that will at least conform to the standards set by the Department. We endorse the provision that, if the municipalities fail to act, the Department may, itself, adopt regulations for the area involved. We are pleased to see, too, that penalties are becoming stiff enough to discourage deliberate violations.

^{A572}
This bill, ~~in short~~, is a real and vitally needed step toward floodplain preservation. ~~and~~ We urge you to do everything in your power to facilitate its passage while there are still open areas and natural water courses left to preserve, ~~and before more millions of tax dollars are needlessly expended in trying to rectify damage that never should have occurred.~~

I thank you.

Mrs. R. O. Rippere for
Dr. L. U. Kibler, Chairman

^{direct}
We do not feel that compensation of the seller is necessary. Regulation, in effect, protects the ultimate buyer from purchasing land in an area that is hazardous both to his property and, in many cases, his life. We do, however, believe that some tax compensation might be considered for these lands.

TOWNSHIP OF CLINTON
HUNTERDON COUNTY

TOWNSHIP COMMITTEE

Ralph H. Walls
Floyd E. Hudson
Alvah J. Lindabury
Hermia Lechner
Ray Hillard



TOWNSHIP CLERK

Carol J. Barone

ANNANDALE, NEW JERSEY 08801

April 7, 1972

Honorable Josephine Margetts, Chairman
Committee on Agriculture, Conservation and Natural Resources
Assembly Chambers, State House
Trenton, New Jersey 08625

Dear Mrs. Margetts and Committeemen:

This letter is in support of the intent of A-572. As a township having considerable flood plain areas along one side of a river, we consider it advantageous to have uniform state minimum standards for floodway and flood hazard area regulation by municipalities. Since most river bordering municipalities have neighboring counterparts upstream, downstream or across stream there is also need for State action in the event municipalities fail to assume their responsibilities.

Floods are a moving hazard traveling from upstream to downstream and the flood channel cannot be designated or managed in piecemeal fashion. If there is reason to amend the legislation we recommend and request that the above mentioned features be retained in strong fashion. Thank you.

Very truly yours,

Clinton Township Committee

Ralph H. Walls
Ralph H Walls, Mayor

HM:cjb

STATEMENT TO THE NEW JERSEY STATE ASSEMBLY'S
COMMITTEE ON AGRICULTURE, CONSERVATION AND
NATURAL RESOURCES, PUBLIC HEARING CONCERNING
ASSEMBLY BILLS 572 AND 596, APRIL 11, 1972

Middlesex County Planning Board
April 11, 1972

County government in New Jersey has long recognized the need for better methods of controlling storm drainage and alleviating flooding and in recent years has begun to take an active role in coordinating and implementing storm drainage control.

First, County governments, as a long standing responsibility, construct and maintain culverts, bridges and other drainage facilities on County roads and, in the case of Middlesex County, some municipal roads where they cross streams, lakes and other elements of the County's natural drainage system.

Second, as a result of state enabling legislation, county planning boards review subdivisions and site plans along county roads with special emphasis on their provisions for storm drainage and the effects of such development on county drainage facilities.

Where drainage deficiencies are found to exist, the County can require contributions toward improvement of an inadequate downstream County drainage facility.

Third, the United States Department of Housing and Urban Development requires that municipal storm drainage projects must conform to a functional areawide storm drainage plan and program (certified by HUD) as a condition for eligibility for

Federal drainage improvement grants. For this reason, Middlesex County and other New Jersey counties have prepared or are preparing storm drainage plans to establish priorities for improvements and principles for management of storm drainage problems within each County.

One of the major objectives of Middlesex County's plan is to utilize regulatory and flood plain management techniques, including flood plain zoning, to the maximum extent feasible to alleviate existing and prevent future drainage problems.

The bills currently proposed (Assembly Numbers 572 and 596) are important steps in achieving this objective.

However, the implementation of flood plain zoning at the municipal level does not fully recognize that flood plains generally extend beyond municipal boundaries. Indeed, streams and rivers often are municipal boundaries. Thus, in order to maintain uniformity in regulations and in their application, municipal flood plain zoning should be implemented within the framework of regional plans, programs, and guidelines.

Therefore, it should be required within these bills that flood plain zoning ordinances meet the provisions of and be consistent with County or other areawide storm drainage plans where such plans have been prepared and adopted. This requirement will be of benefit to the maintenance of County facilities, including bridges and culverts, and help to insure conformity of regulations to regional plans.

STATEMENT OF ASSEMBLYMAN JOHN F. EVERS, (PASSAIC COUNTY)
TO THE ASSEMBLY COMMITTEE ON AGRICULTURE, CONSERVATION
AND NATURAL RESOURCES, ASSEMBLY CHAMBER, APRIL 11, 1972,
REGARDING ASSEMBLY BILL 572.

Madam Chairman, members of the Committee, I appreciate the opportunity of presenting this statement to you concerning the flood problem. I also wish to take this opportunity to congratulate you on your foresight in conducting this hearing and on your sincerity in taking time off from your many other duties to do so.

In a message delivered earlier this year, Governor Cahill emphasized the fact that greater controls must be exercised over the development of those lands located within flood zones.

"The memory of the severe rains which ravaged vast stretches of the State several months ago, causing death and injury to our citizens, damage to homes and business and financial hardship is still fresh in our minds. I am convinced, and I am sure that you agree with me, that we cannot continue to expose our citizens to these dangers.

Our recent experience has demonstrated dramatically that man's continual encroachment on flood plains and the excessive paving of run-off areas have contributed greatly to the amount and severity of damage caused by storms and heavy rains. The failure of municipalities to take effective measures to zone flood plain areas, combined with the failure to comply with federal law for participation in the Federal Flood Insurance Program, have resulted in great financial losses to the citizens of this State. Accordingly, I am proposing a Flood Plain Regulation Act which will empower the Department of Environmental Protection to make rules and

regulations concerning construction in certain areas so that damage during floods will be minimized or prevented. This power could be invoked in any municipality which, one year from the effective date, had not adopted regulations concerning flood-plain areas."

Those of us who were in the Legislature in 1969, will note that this is not the first time that the administration has recognized the need for taking action in this area, for at that time, Senate Bill 803 of 1969, contained detailed provisions for flood plain zoning enabling legislation. That bill which was sponsored by (former) Senator Knowlton, was popularly known as the "Land Use Planning and Development Law." Although the bill, in its entirety, did not meet with general acceptance by most of the members of the Legislature, it should be noted that no objection was made to those sections which dealt with flood control.

The Federal government has also long recognized the need for meaningful flood zone regulation as witness the fact that under the Housing and Urban Development Act of 1968, Section 1315, no new Federal flood insurance coverage will be provided after June 30, 1970, unless an appropriate public body would have adopted permanent land use control measures which the Secretary of Housing and Urban Development finds consistent with the comprehensive criteria of land management and use under Section 1361 of that act. Unfortunately, only a handful of communities affected by floods have seen fit to adopt and enforce such regulations.

Again those of you who were members of the Legislature during the period of 1968 through 1970 will well remember the rash of legislation that was introduced and prompted by the terrible floods of those years. Most, if not all, of those bills dealt with appropriations. Many passed and as a result, millions of dollars were devoted for emergency repair work and the rehabilitation of facilities. Other bills dealt with the clearing

desnagging and channelization of rivers and tributaries in flood areas. As a matter of fact, close to one and one-half million dollars is expected to be appropriated in the budget for fiscal '72-'73 for those purposes, with a like amount in the following two budgets.

I participated in the passage of those measures and although, at first blush they would appear to be "motherhood" type bills, their passage was most difficult and only after a long delay. Although, to a man, the legislators who opposed their passage recognized that the purpose to be achieved by those bills was a noble one, they nevertheless felt that much of the damage sought to be alleviated was brought about by the municipalities themselves through lack of foresight, through a lack of preventive maintenance so to speak, and through a lack of meaningful flood zone regulation.

A poll that I, and my staff, personally conducted in 1970 of forty-four municipalities affected by consistent flooding, proved that such objections were well-founded. It showed that less than twenty-five percent of the communities involved had adopted, by way of ordinance, any rules or regulations governing land use in flood areas. A review of those regulations which were adopted indicated that the majority of them were not worth the paper they were printed on, that others were not being enforced and that the enforcement of the more strict ordinances was being obviated through the granting of appeals by local boards of adjustment.

The underlying reasons for this attitude of municipalities are many and too far reaching for purposes of this statement. Suffice it to say, however, that many local governments simply do not possess the expertise, manpower and sufficient agencies to prepare such an ordinance that would stand the test of constitutionality and/or to strictly enforce such regulations. Other municipalities, in reply to my poll, indicated that the adoption of flood area zoning regulations was not the answer to the

problem; it being their feeling that this was nothing more than a negative approach to a problem that could only rightfully be resolved through positive action by government at a higher level through the adoption and implementation of an overall flood plan as developed by the Army Corps of Engineers, (i.e., Flood Plan C or III). Even if such an attitude was justifiable, the practicalities of the situation clearly indicate that this generation would never see the conclusion of such a plan. Further, it is a political fact of life that the Legislature, State and Federal, would be most reluctant to appropriate the billion dollars required to implement it. I hasten to point out that I am not condemning such plans. However, I do recognize that such long range plans are just that, and they would have no effect on a problem that demands immediate attention.

Other communities thought that such rules and regulations, to be effective would be too restrictive, and would therefore place an undue burden on the municipal tax rolls and perhaps an illegal burden upon the landowner. Some municipalities were totally unaware that they had the power to promulgate zoning regulations for the purpose of securing safety from "floods." This authority incidently is found in the addition which was made to R.S. 40:55-32 by the Laws of 1964, Chapter 150.

I have detailed the attitudes of various municipalities concerning flood area zoning for several reasons, all of which could be considered by the Committee in its determinations as to whether any legislative action should be taken and if so, which of the two bills presently before it, is best equipped to do the job.

The attitudes of the various local governments, no matter how unrealistic some may appear to be, are nevertheless very sincere, very genuine and are to be reckoned with in the consideration of legislation of this nature. The most effective

government is still that government closest to home and without the willingness to cooperate of the local bodies the best drafted legislation dealing with flood zone regulations, in its enforcement will be totally ineffective. On the other hand, all but the unreasonably obstinate local entity will recognize that in certain matters only the State is equipped to act in the first instance and in other borderline cases, the State must act if, within a reasonable period of time, local government does not.

As related to the subject before us, Assembly Bill 572 recognizes the local problems, arguments and frustrations, as stated earlier, and copes with them. A-572 leaves no doubt that the use of land in known flood areas is exclusively within the jurisdiction of the State. Section 4(a) states that the Department of Environmental Protection is authorized to adopt, amend and repeal rules and regulations concerning the development and use of land in any designated floodway which shall be designed to preserve its flood carrying capacity and to minimize the threat to the public safety, health and general welfare. Needless to say, with the passage of this bill, the Department will, in fact, take such action.

With respect to those lands not in the "floodway," but which are situated in the flood fringe area, A-572 in section 5 states that the Department shall promulgate minimum standards to serve as guidelines for municipalities to use in adopting their own ordinances. Of course, local government may adopt more restrictive requirements than those promulgated by the Department, as pointed out in section 8 of the bill. Sections 6 and 7 grant to local government a period of one year after Department action to adopt such restrictions and upon the expiration of that period, if the local body does not take appropriate action, the Department itself will enforce its own standards.

Not by way of criticism but only for the sake of comparison, Assembly Bill 596 does not recognize that, although hundreds of New Jersey's communities have suffered from floods for far too long, (the greatest flood occurred in 1903 although local thunderstorms as far back as 1819 created havoc), few have seen fit to take steps to cope with the problem, (as earlier stated). A-596 is too permissive and although that feature will certainly appeal to the "home rule" enthusiasts, it is that very same permissiveness which will, in my opinion, render the bill ineffective. Section 1 of the bill states that local bodies may adopt such ordinances; something which under R.S. 40:55-32 they are already authorized to do. Only after the adoption of such ordinances do the restrictions actually come into play. Section 1a. makes any and all building within the actual flood zone subject to approval by Environmental Protection while any and all buildings in the fringe area must first be approved by the local Planning Board.

In addition to the many pressures that will make it distasteful, to say the least, for local government to adopt such ordinances, in my opinion A-596, in its implementation presents several problems. First, not all affected communities will adopt such an ordinance at all which will result in a chaotic development which, because of lack of coordination could defeat the purpose sought to be achieved and penalize those communities that have seen fit to take action.

Secondly, human nature and the quest for the dollar being what it is, development of flood area lands in the unrestricted communities will be accelerated. The flow of tax dollars could easily contribute to an attitude already too prevalent in today's society, on the part of the officials who have imposed such restrictions, of "why should we, if the other guy doesn't." This, in turn, could lead to a repeal, an amendment, and/or a lack of enforcement of the ordinance.

Thirdly, the lack of uniform standards such as called for in A-572, would result in many different types of ordinances; weak, strong, constitutional and unconstitutional. No useful purpose could possibly be served in such case.

Furthermore, the validity of the action of Environmental Protection would, in turn, depend upon the validity of the local ordinance. Prudence would therefore dictate a review of every ordinance before any other action is taken.

Next, a review of every application by the Department of Environmental Protection in the floodway would place upon that department an intolerable burden. The same would be true of local planning boards which are made up of part time, unpaid citizens. In addition to its review of all applications in the floodway, the Department, through the Division of Water Policy and Supply, would also hear appeals from property owners who dispute a finding that their property is located within the floodway or flood hazard (fringe) area. Additionally, appeals from adverse planning board decisions would also be heard by the Division. The bill is silent with respect to appeals by landowners whose property is located in the floodway. In any event, in addition to the burden of review of applications, I can think of no reason to cloak the Division with quasi-judicial powers.

A-596, from a political point of view however, does have an advantage. As opposed to A-572, it should be more satisfactory to the proponents of home rule and in that regard, we must face the political reality that New Jersey is a "home rule" State. On the other hand, it should be noted that although A-572 represents more drastic action, it does not directly fly in the face of the home rule concept. Section 4(b) allows the Department to waive strict compliance with the rules and regulations where necessary to alleviate hardship and section 6 allows municipalities a period of one year to adopt their own regulatory ordinances for fringe

area development so long as they satisfy the Department's minimum standards.

Although the bill was introduced ten weeks ago and has received considerable publicity since, I know of no opposition nor have any of its co-sponsors, who represent Somerset, Bergen, Essex, Passaic, Middlesex and Camden counties, been contacted by any opponents to the measure.

Assembly Bill 572 is the culmination of long efforts by many people. It, of course, has the support of the administration. Involved in its preparation were both the Department of Environmental Protection and the Governor's counsel. In my view, and in theirs, it is carefully drawn so that it does not, in fact, amount to a taking of property for public purposes without compensation. Through the expertise of the State officials, I am confident that, in promulgating its rules and regulations, they will recognize that flood plain restrictions when coupled with other acceptable conservation restrictions will provide that broad public interest basis necessary to defeat such legal attacks. Other open space uses such as cropland, tree farms, grazing and fallow lands, game and wildlife preserves, forests and recreational areas, to name but a few, may provide a broad range of compatible uses which would overcome the narrow and restrictive nature of zoning solely for the protection from flood damage.

A-572, in my judgment represents the harsh yet fair, strict yet flexible, coordinated approach that this State must adopt if we are to cope with this problem. Close to seven percent of our lands is prone to flooding and yet, for reasons previously stated, speculators and developers are still permitted to build thousands of homes in these areas thereby trapping many unsuspecting homeowners. It is true that through the exercise of more farsightedness, perhaps the homeowner would not get caught in the middle. However, that fact does not alter our responsibility one iota to adopt appropriate rules and regulations.

Although I would prefer to think that municipalities could, by themselves, accomplish the task, that type of thinking is nothing more than a "head in the sand" approach. It is because of the failure of municipalities to take the necessary action, and to a certain extent due to the failure of the courts to uphold the ordinances when action was taken, that we are now faced with the problems of reckless development.

I cannot impress upon you enough the need for action and the need for immediate action for as Commissioner Sullivan has often warned, "If we don't take action, someday God will rezone the flood plains and the toll on life and property will be staggering."

Thank you for giving me the opportunity to testify. I'll be glad to attempt to answer any questions you may have either now or at any other committee meetings which you may have.

A statement submitted in support of the
"Coastal Areas Protection Act"
Assembly, No. 722, State of New Jersey

The coastal regions of New Jersey are extremely valuable resources for the State and should be protected against the detrimental effects that would result from further development of heavy industry in these regions.

Estuaries and marshes found in coastal areas are among the most productive natural ecosystems. Comparable figures for various kinds of ecosystems found in New Jersey are as follows: grasslands and pastures, 2,500 Kcal./m²/year; temperate forests, 8,000 Kcal./m²/year; estuaries, 20,000 Kcal./m²/year (Odum, 1971). Organic matter is removed from the highly productive marsh areas and is distributed throughout the coastal waters by the tide (Teal and Teal, 1969). The high organic content of the waters ultimately results in large populations of fish and other organisms. In addition to species (e.g. oysters, crabs, and sea trout) that spend their entire lives in estuarine areas, these habitats support many offshore species (e.g. flounder, menhaden, mullet, shrimp) that migrate into estuaries to feed, spawn, or mature. The numbers and health of the populations of fish and of every other component of coastal ecosystems depend on the presence of undisturbed marshes and estuaries and on the absence of noxious chemicals from the waters. Further, it is not sufficient to preserve a few restricted areas in this condition; a continuously healthy environment along whole lengths of coastline is necessary for maintenance of normal populations of coastal animals and plants. "Fish and birds have evolved depending on finding marshes all along the coast, wherever they wander. The preservation of a few marshes

here and there will not serve for their existence" (Teal and Teal, 1969).

New Jersey possesses productive shellfish, commercial fishery, and sports fishery industries. The total catch of fish and shellfish for 1968 in the State was 126.8 million pounds, worth 17.1 million dollars (U.S. Dept. of Commerce, 1968). There are approximately 400,000 acres of potential shellfish-producing waters in New Jersey; 200,000 acres are in the Delaware Bay area and are ~~uncondemned~~ at present. The remaining 200,000 acres are in the Raritan Bay and inland waterway areas; 100,000 acres of these are already condemned (Bureau of Shellfish Control, 1971) due to pollution. In short, we have already lost one-quarter to one third of our potential shellfish producing areas to industrial and domestic pollution. The addition of heavy industry to the remaining acreage would certainly jeopardize these areas.

The coastline of New Jersey is also a flourishing recreational fishery for a variety of marine species, the volume and value of which are difficult to assess. In New York State, it is estimated that there are one million anglers who contribute 10 million dollars to the local economy (Wallace and Jensen, 1967). It has been estimated that there are one to two million anglers in New Jersey (Hamer, personal communication). In 1953 the estimated number of sports fishermen on the New Jersey coast from May to September was 1.3 million (Division of Fish, Game, and Shellfish, 1953); at present, the number is believed to be eight to ten times greater (Hamer, personal communication). In Egg Harbor alone, the 1971 figures for May to September are as follows: total number of man-days spent in recreational fishing, 36,278; total catch, 93,000 fish (Division of Fish, Game, and Shellfish, 1971). The total New Jersey figures must

Undisturbed coastal areas constitute an effective buffer against storms. A case study in New Jersey by Mc Harg showed that erection of structures on coastal features such as dunes, beaches and barrier islands eliminates the natural ability of the topography to protect the shoreline from storm damage. A violent storm in 1962 caused extensive property damage, injury, and loss of life in New Jersey: there was 80 million dollars worth of damage; 2400 houses were totally destroyed; 8300 houses were partially damaged; several people were killed and many were injured (Mc Harg, 1969). These losses would not have occurred if the shoreline topography had been undisturbed. Further, studies on the North Carolina coast show that artificial methods of shoreline stabilization are at best ineffectual if not detrimental (Dolan, 1972).

The coastal areas of New Jersey also have great value for purposes of recreation and scientific study. We will not consider the economic aspects of this matter, except to point out that the tourist industry of these areas is extremely active and lucrative. Clean water, undisturbed beaches, and open areas are already in short supply in our overpopulated State. The remaining coastal areas should not be industrialized but should be preserved for recreational, aesthetic, and scientific purposes.

Ecosystems consist of many species which may be grouped into trophic or feeding levels that are intimately interconnected. The linkages between the various components of these systems often mean that detrimental effects on even a single species are felt by the whole ecosystem. An increase in heavy industry would cause widespread destruction of coastal ecosystems through physical disruption and chemical pollution. Heavy industry results in the introduction into

the environment of a bewildering variety of chemicals that are usually absent from coastal ecosystems. The introduction of these chemicals into balanced natural ecosystems even in sublethal quantities gives rise to detrimental long-term effects on the ecosystem that are often not noticed until serious and usually irreversible damage has been done. For example, there are about two dozen metals that are highly toxic to plants and animals. The most toxic, persistent and abundant include mercury, lead, arsenic, cadmium, chromium, and nickel. Many experimental and field investigations indicate that aquatic organisms concentrate heavy metals in their tissues above concentrations existing in surrounding water, both directly from the water and indirectly from food. Thus toxic substances are biologically magnified and function as cumulative poisons. One of the best documented cases of the extreme toxicity of heavy metals is that of mercury. Among the principal users of mercury in the U.S.A. are the electrical apparatus, paints, pharmaceuticals, and paper industries. In Japan, 46 deaths resulted from the consumption of shellfish contaminated with mercury from a coastal acetaldehyde production plant that had used and released mercuric oxide. In the U.S.A. recently we have seen evidence of mercury contamination in swordfish and tuna fish; the mercury concentrations found in the fish were judged too high for human consumption by the Food and Drug Administration.

In addition to the continual introduction of relatively low levels of industrial pollutants, destruction of natural ecosystems is caused by industrial accidents. Well-documented examples are oil spillages. Oil released in deep water from the Torrey Canyon tanker and the Santa Barbara oil well killed many birds and other organisms (Holme, 1969; Holmes, 1969), although the effects were probably minimized by the dilution and evaporation of the toxic fractions before

the oil reached the shore. Relatively small spills in shallow waters can have catastrophic effects, since organisms are affected before dispersal of the more toxic fractions can occur. A spill of about 250 tons of oil near West Falmouth, Massachusetts, in 1969 immediately killed massive amounts of fish, lobsters, molluscs, and marine worms (Blumer, 1969; Hampson and Sanders, 1969).

The urbanization that follows industrial development leads to further destruction of coastal environments. In addition to lead pollution from automobile exhausts, the accumulation of garbage, and physical disruption of these systems, urbanization introduces large amounts of sewage into the surrounding area. Eutrophication of waters through overfertilization (nitrogen and phosphorous are the principal nutrients in domestic sewage) produces an excess of living organic matter. The decomposition of this organic material removes oxygen from the water and thus kills marine organisms in many cases.

For the above reasons we advocate passage of the Coastal Areas Protection Act and urge that its provisions be strictly enforced.

Co-authors:



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Zoology Department
Rutgers University
New Brunswick, N.J.



Peter Edwards
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Botany Department
Rutgers University
New Brunswick, N.J.

Supporting signatories:

 Marine Sciences Center

Harold H. Haskin, Julius Nelson Professor of Zoology and Shellfish Investigations

References Cited

- Blumer, M. 1969. Oil pollution of the ocean. Oceanus, 15.
- Bureau of Shellfish Control, 1971. Condemned Area Charts 1-10.
New Jersey State Department of Environmental Protection.
- Division of Fish, Game, and Shellfish of New Jersey. 1953. New Jersey's Marine Sportsfishing Inventory.
- Division of Fish, Game, and Shellfish of New Jersey. 1971. Studies of the Great Egg Harbor Estuary.
- Dolan, R. 1972. Barrier Dune System along the Outer Banks of North Carolina: A Reappraisal. Science 176: 286-288.
- Harmer, Paul. 1972. Division of Fish, Game, and Shellfish of New Jersey. Personal communications.
- Hampson, G.R., and Sanders, H.L. 1969. Local oil spill. Oceanus, 15.
- Holme, R.A. 1969. Effects of Torrey Canyon pollution on marine life; in Oil on the Sea, D.P. Hoult, Editor. New York: Plenum Press.
- Holmes, R.W., 1969. The Santa Barbara oil spill; in Oil on the Sea, D.P. Hoult, Editor. New York: Plenum Press.
- McHarg, I.L. 1969. Design with Nature. New York: Doubleday.
- Odum, E.P. 1971. Fundamentals of Ecology (3rd. Ed.). Philadelphia: W.B. Saunders Co.
- Teal, J., and Teal, M. 1969. Life and Death of the Salt Marsh. Boston: Little, Brown, and Co.
- U.S. Department of Commerce, 1968. Fishery Statistics of the United States. Statistical Digest No. 62.
- Wallace, D.H., and Jensen, A.C. 1967. Coastal wetlands and our marine fisheries. Suffolk Outdoors 2 (10).



P.O.Box 771, West Caldwell, N.J. 07006

April 19, 1972

The Honorable Josephine Margetts, Chairman
Assembly Committee on Agriculture, Conservation
and Natural Resources
Trenton, New Jersey 08625

Dear Mrs. Margetts:

I am enclosing Judge Camarota's decision on West Caldwell's flood plain ordinance, to be attached to the testimony which I presented on April 11, 1972, on behalf of the West Caldwell Residents' Association.

We appreciated the opportunity to present our views on flood plain regulations.

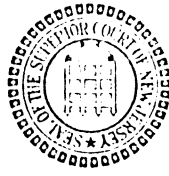
Sincerely,

Julia B. Held (JEL)
(Mrs. S.K. Held)

JBH: jel
enc

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SUPERIOR COURT OF NEW JERSEY



CHAMBERS OF
WILLIAM J. CAMARATA
JUDGE

ESSEX COUNTY COURTS BLDG.
NEWARK, N.J. 07102

April 12, 1972

John H. Dorsey, Esq.
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John J. McDonough, Esq.
Attorney for defendants
Mayor & Town Council of
The Borough of West Caldwell
550 Broad Street
Newark, New Jersey

Re: Anthony Pio Costa & Rosalind Pio Costa,
his wife, v Mayor & Borough Council of
the Borough of West Caldwell, a municipal
corporation.
Docket No. L-8889-71 P.W., L-9093-71 P.W.
L-9545-71 P.W. Consolidated Actions

Esther Chazen v Borough of West Caldwell,
a municipal corporation.
Docket No. L-8889-71 P.W., L-9093-71 P.W.
L-9545-71 P.W. Consolidated Actions

Pan-Con, Inc., et als v Mayor & Town Council
of the Borough of West Caldwell.
Docket No. L-8889-71 P.W., L-9093-71 P.W.
L-9545-71 P.W.

Gentlemen:

These actions in lieu of prerogative writ challenging the validity of an amendment to the Zoning Ordinance of the Borough of West Caldwell, adopted on October 19, 1971, were consolidated for trial. The plaintiffs are hereinafter referred to respectively as Chazen, Pio-Costa & Pan-Con; the defendant West Caldwell as Borough.

CHAZEN

This property is located on Bloomfield Avenue and is known on the tax maps of the Borough as Block 93, Lot 22. It consists of one acre with a frontage of 115 feet on Bloomfield Avenue depth of 400 feet and zoned B-3 Highway Business Zone.

PAN-CON

This property is known on the tax maps as Block 84, map 10, Lots 2T and 2U approximate acreage 45.70 and zoned M-1 Light Manufacturing Industry. Many buildings have been erected for manufacturing purposes which front on street either known as Fairfield Place or Fairfield Crest. The streets have been dedicated and accepted by the Borough. The street level is less than 176 feet above sea level.

PIO-COSTA

This property is known on the tax maps as Lots 84 through 92 on Block 96 - total acreage of approximately 60. It is vacant land zoned Residential R-3 with minimum lot sizes of 14 thousand square feet. A portion consists of a strip 150 feet wide, 500 feet long running south from Bloomfield Avenue zoned B-3 Highway Businesses.

The amendment referred to (copy of which is annexed hereto as Schedule P-2) does not change any use in a zone- it has for one of its purposes the confinement of periodic floods to reasonable limits. It refers to "flood plain areas". The erection of any building or structure is prohibited unless the elevation of the finished lot grade is maintained at 176 feet above sea level and the basement at least 174 feet above sea level. The filling of any lands in the "flood plain areas" is

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prohibited including the use of earth. There is no provision in the Zoning Ordinance, or other ordinances setting forth norms or standards to be followed in the event of an application to the Board of Adjustment for a special exception or variance.

Thirteen witnesses testified, two on behalf of the Borough the others for the plaintiffs.

The Mayor, the Business Administrator, the Building Inspector (the present Consulting Engineer of the Borough) were amongst the witnesses called by the plaintiffs. Dirck C. Hoffman, an Engineer of the New Jersey Division of Water Resources Department of Environmental Protection testified on behalf of the Borough.

The Borough and other municipalities in the area have for many years experienced difficulties on lands in the municipalities as a result of the flooding of the Passaic River. It is not unique to the Borough.

There have been many studies made by the State of New Jersey from 1928 through August 1969. In a booklet published in 1961 entitled Flood Damage Alleviation in New Jersey, certain recommendations were made on an area basis which would require federal, county and local financing.

A booklet issued by the United States Army Corps of Engineers and the Department of Conservation published in 1968 entitled Passaic River Basin Water Resources Development, also contains similar recommendations. The documents mentioned are incorporated herein as if set forth at length.

From all of the foregoing plus photographs and maps it is clear that this flooding problem has been in existence for over 44 years.

Mr. Hoffman was of the opinion that a problem exists in the West Essex area of Essex County known as the Passaic River Basin, which as stated includes municipalities other than the Borough. They have been flooded by the waters of four rivers that flow into the Passaic River. The Passaic River Basin is a natural central basin collecting the waters from these

April 12, 1972

rivers and upstream areas. When there is a heavy rainfall the basin cannot handle it - it becomes flooded and overflows. He agreed with Mayor Dodge's opinion that the filling of this land would cause any water on the land to be expelled and cause some damage to adjoining properties.

In August of 1969, an agency of the State of New Jersey passed a resolution advocating "Plan C" in the booklet dated 1968 suggesting the following: a reservoir, flood retention, dyking, land reclamation, channel improvement at an estimated cost of \$700,000,000. to be borne by the federal government, local municipalities, county and state. Senate Bill #298 passed in 1971 Chapter 110 provides for an interim program and appropriates \$4.1 million to implement it.

Peter Marra, the present Consulting Engineer of the Borough of Caldwell (since March 1, 1972) a civil engineer for 30 years and presently Municipal Engineer for East Hanover and Lincoln Park is very familiar with the flood problem in all of the areas mentioned; he has prepared site plans for several buildings erected in this area of the Borough. He pointed out that in the Borough there is a sewer plant owned by Caldwell which serves the Borough, Caldwell, Essex Fells, North Caldwell, Roseland and that the effluent therefrom together with the water from certain storm drains finds itself into the Passaic River. It is apparent that this in some way contributes to the overflow of the Passaic River. The course of the Passaic River starts in Mendham, to Chatham to the Two Bridges in the Borough area and continues northerly. The Two Bridges, the Pompton River and other tributaries meet in the Passaic River. It was his opinion, as well as Mr. Demarest's that the Borough could not correct the problem but it must be done on an area basis. This also appears to be the intent of the Legislature as evidenced by an article in the Newark Star Ledger on April 9, 1972, entitled:

"TRENTON SEEKING WAY TO CONTROL FLOOD-PRONE LANDS"

The article in part stated:

"One of the most critical areas is the Passaic basin, which takes in a thousand square miles and which has about three million inhabitants..... The environmental department.....will establish minimum standards for the adoption of local rules and regulations concerning the development and use of land in the "flood fringe areas." The standards

will be designed to minimize the "threat to the public safety, health and general welfare."

The flood elevation in East Hanover which is across the river from the Borough is 180 feet. This is based on custom and not on formal regulations. The Borough of Fairfield (part of Pio-Costa's land is in Fairfield) has by its Zoning Ordinance provided that in sub divisions of land the finished surface shall be 170 feet above sea level with certain exceptions to be determined by the Municipal Engineer.

Mr. Marra was of the opinion that the best use of the Pio-Costa land would be for industrial uses, this was concurred in by Mr. Demarest. It was his opinion that a drainage study must now be made by the Borough. None has been made to date.

The total acreage in the Borough that lies between elevation 172 and elevation 176 as shown on the Robinson Aerial Survey is 174 acres and the land lying beneath elevation 172 is 857 acres.

Mr. Demarest, a qualified civil engineer, using a rain gauge located at the bridge on Route 46, during the height of the storms in August 1971 and September 1971, noted that the water reached an elevation in August of 170.35 and in September 171.14. These figures would be the same for the Bloomfield Avenue bridge. He concurred with Mr. Marra as to the cause of the flooding. In his opinion the elevation for the lands in the Borough should be 172 feet.

The Building Inspector testified that on many buildings in this flood basin area on which he issued building permits and certificates of occupancy, nothing structurally has happened since their erection as a result of any flooding and that most of the elevations of these buildings were less than 176 feet.

In connection with the Pan-Coa property, Mr. Conte testified that he spent \$60,000. for fill to bring the elevation up to 174 feet and spent \$40,000. for plans to erect an addition (a 42 thousand square foot building). This site plan was approved by the Planning Board on April 27, 1970. However, because

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of the tight money market he never applied for a building permit but is now desirous of doing so.

About a year previous to December 1971, Mr. Pio-Costa had requested the Planning Board of the Borough to rezone his property for industrial use; it was denied. In his opinion residences can be erected on his property on a slab with no basements, the sewage to be disposed of by the flow of gravity.

George Malanga testified concerning property owned by certain companies he is interested in. Since 1958 five buildings have been erected on two of the 13 acres for industrial use. They spent \$150,000. on fill and elevations are in the area of about 173 feet. He and other owners on the Pan-Con property testified there was no damage due to flooding.

The plaintiffs' properties fall within the amendment's definition of "flood plain areas" and most of their properties will not meet the required elevation set forth in the amendment.

The Borough offered no proof as to how the elevations mentioned in the amendment were arrived at; nor were any studies made prior to the enactment of the amendment; nor was a planning consultant consulted. That this should have been done is indicated by the court in Morris County Land v Parsippany-Troy Hills Tp., 40 N.J. 539, 553 (1963). The Borough Master Plan was adopted in 1958, it does not contain any reference to required elevations.

In the opinion of Mayor Dodge, a long time resident of the Borough and a Councilman for seven years, the amendment was necessary to protect future homes that might be built and to assist Borough residents in obtaining federal insurance under the Federal Major Disaster Plan.

The Borough Administrator has been bearing the brunt of the complaints of residents as to flooding. The court asked him why the Borough enacted the amendment. His reply in effect was that the Borough had to stop the condition somehow until the Borough or someone figured out what to do. The figure 174 feet and 176 feet elevation he said was based on the marks placed on a map by one of the Councilman.

April 12, 1972

The minutes of the Borough Council of July 20, 1971, discloses amongst other things a discussion of this flood problem, also, that information had been received concerning the "Passaic Model River Program" but because of lack of funds it had been cancelled.

The Borough Administrator had contacted the Environmental Protection Office of the State of New Jersey and was informed that the agency would frown on any buildings or in structures being constructed below elevation 172 which is the flood plain in the plans of the Army Corps.

On September 21, 1971, the amendment in question was passed on first reading. Before its passage the acting Mayor stated that its passage was a condition precedent to the securing of coverage under the National Flood Insurance Program. The amendment was then submitted to the Planning Board on October 4, 1971; the minutes of that body are not detailed as to what transpired except to state that it was approved.

N.J.S.A. 40:55-35 gives the Planning Board 30 days within which to consider the amendment and to make a report. No report appears in their minutes. The fact that only 14 days transpired from the introduction of the first reading to October 4th indicates to me, and I so conclude, that the Planning Board acted hastily and in a perfunctory manner. The amendment was passed on October 19, 1971. To be noted also is the passage of the amendment to the close proximity to the storms of August and September 1971.

In a resolution passed on October 19, 1971, the interest of the municipality in obtaining flood insurance coverage is set forth; the resolution speaks for itself.

The Borough Administrator had attended meetings prior to the enactment of the amendment involving 112 municipalities. His frank statement that something had to be done as hereinabove indicated, and the close proximity to the enactment of the amendment to the storms in August and September; the reference to the federal insurance program; no engineering study; no planning consultant's opinion; the Administrator's reason for passing; the perfunctory approval by the Planning Board lead me to the conclusion that the amendment was hastily conceived and passed as a stop gap measure pending some help

from federal or state authorities for this flood basin area.

The attorney for the Borough is of the opinion that the plaintiffs can apply to the Board of Adjustment for a variance or special exception to the terms of the amendment. However, no reasonable norms or standards are set forth in the amendment under review or any other ordinance of the Borough. Ward v Scott, 11 N.J. 117, 123 (1952); Cammarata v Essex County Park Comm'n., 26 N.J. 404, 410 (1958). Any possible relief by variance does not cure the unreasonableness or constitutionality of the amendment. Glen Rock, etc v Bd. of Adjust., etc., Glen Rock, 80 N.J. Super 79, 87 (App. Div. 1963).

A municipality has the right to pass an amendment or a zoning ordinance promulgating regulations to secure safety from floods etc. N.J.S.A. 40:55-32. This section amongst other things provides:

"Such regulations shall be made with reasonable consideration, among other things, to the character of the district and its peculiar suitability for particular uses, and with a view of conserving the value of property and encouraging the most appropriate use of land throughout such municipality."

The amendment is presumed to be reasonable and proof of its unreasonableness is on the plaintiffs. Marie's Launderette v City of Newark, 33 N.J. Super 279, 284 (1954). I conclude that the plaintiffs have met their burden and have shown that the amendment unduly burdens the beneficial use of their land, in effect depriving them of its use. Spiegle v Beach Haven, 46 N.J. 479, 489 (1966).

Private property may not be taken for public use without just compensation. N.J. Const. Art. 1, par 20.

The amendment not only raises the elevations but prohibits a property owner to fill his land. An owner is entitled to the full use of his property and where the regula-

April 12, 1971

tion goes too far it amounts to a taking. What the Borough seeks to do now is to alleviate a long existing flood condition by the enactment of this amendment. Their purpose is not to be questioned but it does not cure its basic unconstitutionality. Morris County Land v Parsippany-Troy Hills Tp., supra, p.55.

The Borough submitted no cogent proof as to the reasonableness or basis for the amendment. Morris County Land v Parsippany-Troy Hills Tp., supra.

Several courses are available to the Borough. N.J.S.A. 40:69-4.2 permits a municipality to acquire by purchase or otherwise property for flood and drought control, and can condemn property for that purpose.

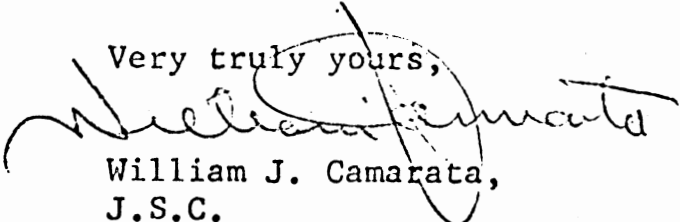
To now saddle the solution of this problem on the plaintiffs in the manner proposed is unfair and unreasonable. The court concludes that the amendment is arbitrary, capricious and unreasonable. It amounts to a taking of land without due process of law and just compensation in violation of the State and Federal Constitutions.

The claims of the plaintiffs for relief under the Eminent Domain Act of 1971 and an abatement of real estate taxes is denied.

Counsel for the plaintiff Pan-Con will prepare proper order and have it consented to as to form by all the other attorneys.

Counsel for the plaintiff Pan-Con is directed to contact Leon Pollak, Court Clerk, and pick up all exhibits and deliver them to the respective attorneys.

Very truly yours,


William J. Camarata,
J.S.C.

WJC:am

Ord # 644

Adopted 10-19-71



**BOROUGH OF WEST CALDWELL
PENDING ORDINANCE**

**AN ORDINANCE TO AMEND
AN ORDINANCE ENTITLED
"AN ORDINANCE LIMITING
AND RESTRICTING TO
SPECIFIED DISTRICTS AND
REGULATING THEREIN
BUILDINGS AND STRUCTURE,
ACCORDING TO THEIR CON-
STRUCTION AND THE NATURE
AND EXTENT OF THEIR USES
AND THE NATURE AND EX-
TENT OF THE USES OF LAND
IN THE BOROUGH OF WEST
CALDWELL, ADOPTED JUNE
17, 1958, AS AMENDED AND
SUPPLEMENTED"**

**BE IT ORDAINED BY THE
MAYOR AND COUNCIL OF THE
BOROUGH OF WEST CALDWELL,
IN THE COUNTY OF ESSEX AND
STATE OF NEW JERSEY, AS
FOLLOWS:**

That an Ordinance entitled "AN
ORDINANCE TO AMEND AN
ORDINANCE ENTITLED "AN
ORDINANCE LIMITING AND
RESTRICTING TO SPECIFIED
DISTRICTS AND REGULATING
THEREIN BUILDINGS AND
STRUCTURE, ACCORDING TO
THEIR CONSTRUCTION AND THE
NATURE AND EXTENT OF
THEIR USES AND THE NATURE
AND EXTENT OF THE USES OF
LAND IN THE BOROUGH OF
WEST CALDWELL", ADOPTED
JUNE 17, 1958, AS AMENDED AND
SUPPLEMENTED", be and the
same is hereby further amended and
supplemented as hereinafter set
forth.

1. Article 4, General Provisions,
Section 402, Subparagraph (e), be
and the same is hereby amended to
read as follows:

(e) For the purpose of promoting
public health, safety and general
welfare through the confinement of
periodic floods to reasonable limits,
by regulating and restricting areas
of development subject to flooding of
Passaic River and those water
courses which are subject to
flooding of adjacent premises within
said area as herein defined, all those
lands and premises in the Borough
of West Caldwell presently existing
at and below Contour Line 176 as
shown on Aerial Surveys made by
Robinson Aerial Surveys Inc. and
Aeroflex Corp. Robinson Aerial
Surveys Division for the County of
Essex, prepared by photo-
grammetric methods, be and they
are hereby determined and declared

to be flood plain areas.

No building or structure shall be
erected, built or placed on any lot or
parcel of land located in any part or
section of any flood plain portion
thereof which is subject to flood by
the waters of the Passaic River,
unless streets, drives and walks and
finished lot grading are constructed
and maintained at an elevation of at
least 176 feet above mean sea level,
and that the basement level of such
building or structure shall be at an
elevation of at least 174 feet above
mean sea level.

As used herein "basement level"
means the floor of the cellar or
basement of any such building or
structure or the highest point of the
concrete slab used as the floor of the
building where there is no cellar or
basement.

No filling of any lands within the
flood plain area as herein defined, in
any manner, shall be permitted by
the deposit of earth, ashes, rubbish
or other waste material of any kind.

Nothing herein contained shall
prevent the use of said premises as
authorized by the regulations of the
Zoning District except that the
construction of buildings therein is
prohibited.

2 This ordinance shall take effect
immediately upon adoption and
publication according to law.

DONALD E. WEST,
BOROUGH CLERK.
ADMINISTRATIVE OFFICER.

NOTICE OF HEARING

The foregoing ordinance was
introduced and passed on first
reading at a Regular Meeting of the
Mayor and Council of the Borough of
West Caldwell, New Jersey, held in
the Fire Headquarters, Fairfield
Avenue, West Caldwell, New Jersey,
on Tuesday, September 21, 1971. A
hearing on said ordinance will be
held in the Fire Headquarters,
Fairfield Avenue, West Caldwell,
New Jersey, on Tuesday, October 19,
1971, at eight o'clock in the evening
or as soon thereafter as the matter
can be reached, at which time and
place any citizen or person in-
terested will be given an opportunity
to be heard. After said hearing, the
foregoing ordinance will be con-
sidered for further passage and
adoption.

DONALD E. WEST,
BOROUGH CLERK.
ADMINISTRATIVE OFFICER.
CALDWELL PROGRESS
SEPTEMBER 30, 1971
\$40.56



REPRINTED FROM

Caldwell Progress

SEPTEMBER 30, 1971

April 15, 1972

A STATEMENT TO THE GENERAL ASSEMBLY OF THE
STATE OF NEW JERSEY

RE: A.572, "An act concerning the delineation and marking of flood hazard areas..."

The West Windsor Environmental Protection League is offering its strong support to Assembly bill 572. We believe the bill is long over due from the standpoints of environmental realities, political realities, tax and economic realities, and federal policy and statutory realities.

Environmentally these flood hazard or riparian areas must be recognized as areas of great sensitivity and high biotic potential, and they would be worthy of protection from natural, esthetic, and wildlife standpoints alone. But their value goes well beyond these considerations. Protection of these areas from development allows the growth of natural buffers along waterways; this growth significantly reduces the runoff of pollutants from nearby agriculture, construction, industry, and transportation. Protection of riparian lands further results in more stability of stream banks thus reducing erosion and sedimentation, and it screens construction activity from those areas where excessive flooding and high water tables create severe sedimentation and erosion conditions.

The flood control aspect of A572 touches both environmental and economic concerns. The ever increasing development of our State has created ever increasing storm and drainage runoff which has been channeled through storm sewers, drainage ditches, and the like, into streams and waterways which were over-burdened years ago. As a result municipalities have turned in ever increasing numbers to channelization and other flood control projects at an ever increasing cost to the taxpayer. But while tax monies are being spent for flood control on the one hand, these same municipalities are allowing flood plain development through variances granted in existing flood plain zones as well as through permitted uses in flood plain areas which were improperly zoned to meet fiscal needs rather than sound land use needs. This approach has turned out to be penny wise and pound foolish as the actual costs in property destruction to riparian development have mounted up to the millions of dollars. With

the cumulative and incremental development of each riparian site, flood plains and their ability to absorb water become more reduced, and stream flow becomes more constricted not only jeopardizing those properties in the actual area of riparian development, but also threatening property owners upstream where flooding becomes more and more severe. As flood destruction costs mount, and flood control projects proliferate, the tax payer is being asked to carry an ever increasing burden to protect the property value of riparian developers who never should have been allowed to construct in flood plains to begin with.

In many cases the tax structure has encouraged this type of abuse because land in these marginal areas is often less expensive, and the tax ratable benefits to the municipalities assuage any misgivings of the municipal bodies. But in other cases the motives of municipal officials may be less community minded. Being elected officials, most fear the wrath of the riparian landowner, who opposes flood plain zoning on the grounds that it deprives him of the right to use his property as he chooses. But more importantly, these landowners believe such zoning would limit their profit margins in the resale and/or development of their land. The profit is, of the two, the seemingly more central reason for opposition to flood plain control. Land seems to be the only speculative quantity with which the investor will brook no capital loss. Somehow investors have come to believe that it is a fortune of war to have to sell securities or commodities below or at their purchase price, while, at the same time they are convinced that it must be their right to be able to sell their land at many times the original price. It is even more astonishing to realize that the majority of municipal zoning and planning boards have reinforced this notion by acquiescing to the demands of developers and land investors to the detriment of environmental quality.

While it is illogical and unacceptable to exclude land investment from the rules governing any other area of speculation, such arguments in favor of the regulation of flood plains may appear to be small consolation in light of the very real political concerns which, no doubt, plague State Legislators as well as municipal officials. Yet the facts remain: with every year of development, flood damage has increased; this increase has been shown time and time again to be related to flood plain development; and unless immediate steps are taken to halt riparian development, danger to life and property will continue to mount. The choice is clear. There will always be administrative problems, enforcement problems, and in this case mapping problems, but we must not become so preoccupied with these difficulties that we fail to act on the central issue. Dwelling upon the many difficulties involved in enacting flood plain controls without devoting time to the solutions of those problems can only be interpreted as a lack of commitment to the public welfare.

The need for flood plain control is not only a moral responsibility to the public; it is also a legal obligation. Common law and federal policy and statutes leave little doubt that the fear of infringing upon landowner rights is groundless. Beginning with the Doctrine of Riparianism under the Natural Flow Theory, no riparian owner may

impair or diminish the flow of a stream to the detriment of any other riparian owner; all are entitled to have the stream flow past their land precisely as it did in its natural state. Diminished flow down stream also results in increased flooding upstream, and, needless to say, development along flood plains drastically changes the natural state of the stream itself. Far too often land ownership is interpreted as the right to exploit and destroy at will. The Riparianism Doctrine clearly rejects that right; instead it underscores the duties that accompany the right to own land.

On the federal level, riparian ownership has long since been subjected to restrictions in the public interest. Further, federal policies with regard to the improvement of environmental quality are expected to be implemented on the state and local level. According to the Environmental Quality Improvement Act of 1970:

*Sec. 202(a) The Congress finds--

- (1) that man has caused changes in the environment;
 - (2) that many of these changes may affect the relationship between man and his environment;...
- (b) (1) The Congress declares that there is a national policy for the environment which provides for the enhancement of environmental quality. This policy is evidenced by statutes heretofore enacted relating to the prevention, abatement, and control of environmental pollution, water and land resources, transportation, and economic and regional development.
- (2) The primary responsibility for implementing this policy rests with State and local governments... (emphasis supplied).

The Federal policy which State and local governments are expected to implement is expressed with particular relevance to A572 in the report of the House Committee on Government Operations, March 17, 1970, which is based on a study made by its Conservation and Natural Resources Subcommittee. The report, "Our Waters and Wetlands: How the Corps of Engineers Can Help Prevent Their Destruction and Pollution," (H. Rep. No. 91-917, 91st Cong. 2d Sess.) states: "As the Committee views it, not only should the Corps consider conservation, but it should consider conservation to be endangered by every dredge and fill project and place the burden of proving otherwise on the applicant." The conclusion of the first section of the report also has a bold face type recommendation: "The Corps of Engineers should permit no further landfills or other work in the Nation's estuaries, rivers, and other waterways except in those cases where the applicant affirmatively proves that the proposed work is in accord with the public interest, including the need to avoid the piecemeal destruction of these water areas." (page 6)

The Fish and Wildlife Coordination Act also reflects Federal policy in its restrictions on the rights of the riparian land owner: "except as hereafter stated in subsection (h) of this section (not appli-

(A statement to the Assembly on A572)

—4—

cable), whenever the waters of any stream or other body of water are proposed or authorized to be impounded, diverted, the channel deepened, or the stream or other body of water otherwise controlled or modified for any purpose whatever, including navigation and drainage, by any department or agency of the United States, or any public or private agency under Federal permit or license, such department or agency first shall consult with the United States Fish and Wildlife Service, Department of the Interior, and with the head of the agency exercising administration over the wildlife resources of the particular State wherein the impoundment, diversion, or other control facility is to be constructed, with a view to the conservation of wildlife resources by preventing loss of and damage to such resources as well as providing for the development and improvement thereof in connection with such water-resource development." (16 U.S.C.A. §622(a))

Federal controls over waterways and riparian lands have been upheld as far back as 1940 in the United States v. Appalachian Electric and Power Co. (311 U.S. 377, 423-27 61 S. Ct. 291,—, 85 L. Ed. 243, 261-63). The decision in this case states: "...In our view, it cannot properly be said that the constitutional power of the United States over its waters is limited to control for navigation. By navigation respondent means no more than operation of boats and improvement of the waterway itself. In truth the authority of the United States is the regulation of commerce on its waters. Navigability, in the sense just stated, is but a part of the whole. Flood protection, watershed development, recovery of the cost of improvements through utilization of power are likewise parts of commerce control..." (emphasis supplied)

With such lengthy precedent for the regulation and control of water and riparian lands, the New Jersey Legislature need have no fears that it might be infringing upon the rights of landowners by enacting A572. Further, the Legislature must recognize that according to the 1970 Environmental Quality Improvement Act the State is, indeed, obligated to enact legislation which implements such Federal policy on the State and local level. It is for this reason that we prefer A572 instead of A596. Local governments have demonstrated that their cooperation as a whole can only be insured if State Legislation renders such cooperation mandatory. The pressures of neighbors and powerful landowners with political muscle have effectively blocked flood plain control at the local level.

The West Windsor Environmental Protection League hopes that A572 will be enacted before the few remaining undeveloped flood plains are destroyed for the financial gain of the few and to the environmental detriment of the many.

Respectfully submitted,


Helen P. Chase, Chairman
Clarksville Rd.

Princeton Jct., New Jersey 08550

STATEMENT OF ARTHUR J. HOLLAND, MAYOR, CITY OF TRENTON
TO THE ASSEMBLY COMMITTEE ON AGRICULTURE, CONSERVATION
AND NATURAL RESOURCES
REGARDING ASSEMBLY BILL 572

The advantages of the flood plain approach in providing for development compatible with flood water retention are, I am sure, well-known to the members of this Committee. What I would like to emphasize in this statement is not the effectiveness and efficiency of the flood plain approach, although that is important to consider, but the need for comprehensive flood control regulation as provided for in Bill 572, and the urgency for enactment of such regulation.

The regional aspects of the flood problem can easily be seen with reference to the Trenton area. As urbanization increases in the Assunpink Creek drainage area, which surrounds Trenton, the increased water run-off and channeling of water downstream will increase the flood potential in the highly developed areas in Trenton along the Assunpink. Considering the prospect for future development in surrounding townships, it is not hard to imagine how great the flood problem could become. As an indication of the effect of development in raising the level of flood waters, State records indicate that since 1923 the water level of the Assunpink has risen one and a half feet as a result of development since that time.

Once flooding is viewed as a regional problem, it is easy to see that the problem in terms of flood damage is downstream, while the problem in alleviating this damage is upstream. I would like first to elaborate briefly on the extent and nature of the downstream damage problem with reference to Tropical Storm Doria of last August.

The disastrous conditions created in the wake of Doria are well-known--hundreds of homes had to be evacuated, approximately six hundred in Trenton and Hamilton Township alone; millions of dollars in property damage resulted with the loss in the Trenton area estimated to be over five million. Yet, however great this loss and human suffering, the potential for future loss is so much greater if remedies to the flood problem are not found promptly.

Faced with the threat of future flooding, industry located near the Assunpink Creek may move from the City. Already one major manufacturing concern and a trucking firm have announced their intention to relocate and another firm has transferred some of its major equipment to another plant location. Since much of the major industry in Trenton is located along the Assunpink, the consequences of plant relocations could be truly disastrous for Trenton. If the industries most seriously affected by the Doria flood were to relocate, the loss in tax revenues would amount to over \$200,000 while thousands of jobs would be lost. In view of the City's financial status and unemployment rate, the City is in no position to bear such losses.

With regard to a solution to the flood problem that is regional in scope, Trenton, with its small, highly developed land area, is obviously not able to do much about the consequences I have described. The major responsibility for avoiding these consequences lies with these municipalities located upstream in the Assunpink basin. There is in fact no real incentive for many such municipalities to enact flood control ordinances. This is because the benefits of regulation would go to people outside their borders while the burden of land use

restriction by way of a loss in ratables, if any, would fall on the municipality. Thus, it is in the economic interest of upstream municipalities to channel water downstream. The failure of municipalities to enact flood control ordinances is an indication of this lack of incentive. In Mercer County, for example, only one out of thirteen municipalities has enacted a flood control ordinance even though a task force of Mercer County officials, formed in response to the Doria storm, has recommended such ordinances.

Even municipalities which would benefit from the creation of flood plains have little incentive to regulate if municipalities in areas upstream do not enact similar regulations. It is obvious to these municipalities that effectiveness of the flood plain approach can only be realized by regulation on a regional basis. This points to the need for legislation (as represented by bill 572) which guarantees a comprehensive solution to the flood problem, by providing for State action in the event of municipal inaction.

If the solution to the flood problem rests solely upon the initiative of individual municipalities, the present inequitable situation will persist whereby municipalities by reason of their downstream location bear practically all the burden for flooding. It is incumbent upon the State to insure that those communities in a position to alleviate the flood problem accept some of this burden by way of land use restriction. In many cases land use restriction would not mean a loss of ratables or jobs, but instead a channeling of development to other areas. However, if it is a matter of weighing the loss of existing ratables and jobs in a developed area such as

Trenton, against the forfeiture of future ratables and jobs in other municipalities, the interest of preserving the existing ratables and jobs would seem to be paramount.

In closing, let me emphasize the importance for prompt passage of this flood plain legislation. I have already pointed out what effect the mere threat of another devastating flood, such as accompanied Doria, will have in Trenton. Assurances must be given now to industry in Trenton that something will be done to alleviate flooding if Trenton's economic plight is not to become even more critical. As I have indicated, the only adequate solution is to control the pattern of development in regional areas, but this solution may not be available to us for long. The rate of development is accelerating in many drainage basins. If we are to avoid the consequences of unplanned growth and development, the time for action is now, before the situation becomes more critical.

ASSEMBLY, No. 572

STATE OF NEW JERSEY

INTRODUCED JANUARY 31, 1972

By Assemblymen EVERS, EWING, REID, DENNIS, McDONOUGH,
SINSIMER, PELLECCIA, H. KLEIN, RAYMOND
and DE KORTE

Referred to Committee on Air and Water Pollution and Public Health

AN ACT to amend the title of "An act concerning the delineation and marking of flood hazard areas; and prescribing the functions, powers, and duties of the Division of Water Policy and Supply of the Department of Conservation and Economic Development in connection therewith," approved April 3, 1962, (P. L. 1962, c. 19), so that the same shall read "An act concerning the delineation and marking of flood hazard areas; and prescribing the functions, powers, and duties of the Division of Water Resources and of the Department of Environmental Protection in connection therewith, and authorizing the adoption of land use regulations for the flood hazard area," and to amend and supplement the body of said act.

1 BE IT ENACTED *by the Senate and General Assembly of the State*
2 *of New Jersey:*

1 1. The title of P. L. 1962, c. 19 is amended to read as follows:
2 An act concerning the delineation and marking of flood hazard
3 areas; and prescribing the functions, powers, and duties of the
4 Division of Water **Policy and Supply** *Resources and* of the
5 Department of **Conservation and Economic Development** *En-*
6 *vironmental Protection* in connection therewith, *and authorizing the*
7 *adoption of land use regulations for the flood hazard area.*

1 2. Section 1 of P. L. 1962, c. 19 (C. 58:16A-50) is amended to
2 read as follows:

3 1. It is in the interest of the safety, health, and general welfare
4 of the people of the State that legislative action be taken to empower
5 the Division of Water **Policy and Supply** *Resources* to delineate
6 and mark flood hazard areas, *to authorize the Department of En-*

EXPLANATION—Matter enclosed in bold-faced brackets [thus] in the above bill is not enacted and is intended to be omitted in the law.

7 *Environmental Protection to adopt land use regulations for the flood-*
 8 *way, and to coordinate effectively the development, dissemination,*
 9 *and use of information on floods and flood damages that may be*
 10 *available.*

1 **3. Section 2 of P. L. 1962, c. 19 (C. 58:16A-51) is amended to**
 2 **read as follows:**

3 2. As used in this act, unless the context indicates another or
 4 different meaning or intent:

5 (a) "Division" means the Division of Water **[Policy and Sup-**
 6 **ply] Resources** in the Department of **[Conservation and Economic**
 7 **Development] Environmental Protection;**

8 (b) "Council" means the Water Policy and Supply Council in
 9 the Division of Water **[Policy and Supply] Resources;**

10 (c) "Flood plain" means the relatively flat area adjoining the
 11 channel of a natural stream, which has been or may be hereafter
 12 covered by flood water;

13 (d) "Floodway" means the channel of a natural stream and
 14 portions of the flood plain adjoining the channel, which are reason-
 15 ably required to carry and discharge the flood water or flood flow
 16 of any natural stream;

17 (e) "Flood hazard area" means the floodway and any additional
 18 portions of the flood plain, as determined by the council under
 19 section 3 hereof;

20 (f) "Relative risk" means the varying degrees of hazard to life
 21 and property in a flood hazard area which are occasioned by differ-
 22 ences in depth and velocity of flood waters covering and flowing
 23 over it~~it~~;

24 (g) "Flood fringe area" means that portion of the flood hazard
 25 area not designated as the floodway;

26 (h) "Department" means the Department of Environmental
 27 Protection.

28 (i) "Person" means and shall include corporations, companies,
 29 associations, societies, firms, partnerships and joint stock com-
 30 panies as well as individuals, and shall also include all political sub-
 31 divisions of this State or any agencies or instrumentalities thereof.

1 4. (a) The department is authorized to adopt, amend and repeal
 2 rules and regulations concerning the development and use of land
 3 in any designated floodway which shall be designed to preserve its
 4 flood carrying capacity and to minimize the threat to the public
 5 safety, health and general welfare.

6 (b) Provision may be made by the department for the waiver,
 7 according to definite criteria, of strict compliance with the rules
 8 and regulations, where necessary to alleviate hardship.

1 5. The department shall promulgate minimum standards for the
2 adoption of local rules and regulations concerning the development
3 and use of land in the flood fringe area designed to minimize the
4 threat to the public safety, health and general welfare.

1 6. Within 12 months after the delineation of any flood hazard
2 area, and at least 12 months after the promulgation of standards
3 by the department, the affected municipality or other responsible
4 entity shall adopt rules and regulations concerning the development
5 and use of land in the flood fringe area which at least conform to
6 the standards promulgated by the department.

1 7. If any affected municipality or other responsible entity fails
2 to adopt or fails to enforce rules and regulations concerning the
3 development and use of land in the flood fringe area which at least
4 conform to the standards promulgated by the department within the
5 specified period, thereafter the department may adopt such rules
6 and regulations which shall be applicable to the particular flood
7 fringe area.

1 8. Any municipal or other entity vested with authority to adopt
2 rules and regulations concerning the development and use of land
3 may adopt requirements more restrictive than those contained in
4 the rules and regulations adopted by the department for the flood-
5 way and than those contained in the minimum standards promul-
6 gated by the department.

1 9. (a) Any person who violates a provision of this act or a rule
2 or regulation adopted pursuant to this act shall be subject to a
3 penalty of not more than \$2,500.00 for each offense, to be collected
4 by the department in a summary proceeding under the Penalty
5 Enforcement Law (N. J. S. 2A:58-1 et seq.), and in any court of
6 competent jurisdiction wherein injunctive relief has been requested.
7 The Superior Court, County Court and county district court shall
8 have jurisdiction to enforce said Penalty Enforcement Law. If the
9 violation is of a continuing nature each day which it continues shall
10 constitute an additional, separate and distinct offense. The depart-
11 ment is hereby authorized and empowered to compromise and
12 settle any claim for a penalty under this section in such amount in
13 the discretion of the department as may appear appropriate and
14 equitable under all of the circumstances.

15 (b) If any person violates any of the provisions of this act or any
16 rule or regulation promulgated pursuant to the provisions of this
17 act, the department may institute an action in a court of competent
18 jurisdiction for injunctive relief to prohibit and prevent such viola-
19 tion or violations and the said court may proceed in the action in a
20 summary manner.

1 10. This act shall be liberally construed to effectuate the purpose
2 and intent thereof.

1 11. The powers, duties and functions vested in the State Depart-
2 ment of Environmental Protection under the provisions of this act
3 shall not be construed to limit in any manner the functions, powers
4 and duties vested in the State Department of Environmental Pro-
5 tection under any other provisions of the law.

1 12. If any provision of this act or the application thereof to
2 any person or circumstances is held invalid, the remainder of the
3 act and the application of such provision to persons or circum-
4 stances other than those to which it is held invalid, shall not be
5 affected thereby.

1 13. This act shall take effect immediately.

STATEMENT

These amendments to the law authorizing the department to delineate flood hazard area recognize the need to regulate land use in flood threatened areas. It is not enough to delineate and to warn people of the existence of these areas. It is essential to regulate the use and development of these lands to insure that the objectives of minimizing flood losses and protection of the environment will be achieved.

ASSEMBLY, No. 596

STATE OF NEW JERSEY

INTRODUCED FEBRUARY 7, 1972

By Assemblywoman FENWICK, Assemblymen KIEHN, BASSANO,
MANNER and Assemblywoman MARGETTS

Referred to Committee on Agriculture, Conservation and
Natural Resources

AN ACT to regulate the use of property located within flood hazard
areas and floodways.

1 BE IT ENACTED *by the Senate and General Assembly of the State*
2 *of New Jersey:*

1 1. The governing body of any municipality may adopt ordinances
2 regulating the use of property located within flood hazard areas and
3 floodways within the municipality as the same are defined in this
4 act. Said ordinances shall:

5 a. Prohibit the erection of any new building or structure and the
6 exterior alteration or enlargement of any existing building or struc-
7 ture and the storing of material or equipment or the substantial
8 alteration of the elevation of any land within the floodway without
9 the prior consent of the State Department of Environmental Pro-
10 tection;

11 b. Prohibit the erection of any new building or structure and the
12 exterior alteration or enlargement of any existing building or struc-
13 ture within the flood hazard area without the prior consent of the
14 planning board or the governing body.

1 2. As used in this act:

2 Flood Map means the map or sketch prepared by the Department
3 of Environmental Protection, the Army Corps of Engineers or the
4 Municipal Engineer, designating and determining the flood hazard
5 area and floodway of any river, stream, creek, drainage ditch or
6 other body of water within the municipality. Flood maps prepared
7 by the municipal engineer shall conform to the standards estab-
8 lished by the Department of Environmental Protection.

9 Channel means the bed and banks of the river, stream, drainage
10 ditch or other body of water which conveys the normal flow that
11 occurs most of the time.

12 Flood plain means the relatively flat area adjoining the channel
13 which has been or may be hereafter covered by flood water.

14 Floodway means the channel and portion of the adjacent flood
15 plain that carries the greater part of flood flow at greater depths
16 and velocities than do the other parts of the flood plain that con-
17 stitute the minimum area required for the passage of flood flows
18 without aggravating flood conditions upstream and downstream,
19 that are necessary to preserve the natural regimen of the stream for
20 the reasonable passage of the floodway design flood and that are
21 delineated on the flood map as "floodway."

22 Flood hazard area means the area of the flood plain that is sub-
23 ject to flood flow at lesser depths and lower velocities than occurs in
24 the floodway, that are inundated by the flood hazard area design
25 flood and that are delineated on the flood map as "flood hazard
26 area."

27 Design flood means the relative size or magnitude of a flood
28 expressed as a design discharge in cubic feet per second developed
29 from hydrologic criteria, representing a major flood of reasonable
30 expectancy, reflecting both flood experience and flood potential and
31 is the basis of the delineation of the floodway and the flood hazard
32 area.

33 Design flood profile means the elevation of the water surfaces of
34 the floodway design flood and the flood hazard area design flood
35 as shown on the flood map.

1 3. a. In reviewing applications for permits under section 1a.
2 of this act, the Department of Environmental Protection shall give
3 primary consideration to preserving the area defined as the mini-
4 mum capacity required for the passage of flood flows without aggra-
5 vating flood conditions upstream and downstream. Encroachments
6 in the floodway shall be permitted only in cases in which the public
7 interest will be served, including but not limited to bridges, roads,
8 utility installations, surface parking, recreation areas and the like.

9 b. In reviewing applications for permits under section 1b. of
10 this act, the planning board or municipality shall give primary con-
11 sideration to protecting persons and property. No dwelling struc-
12 ture shall be permitted. No structure shall be permitted which
13 equals or exceeds in value 10% of the value of the land upon which
14 it is proposed to be erected. No materials shall be housed within any
15 structure which exceeds the value of the structure. No structure
16 shall be erected which would have substantial adverse effect upon
17 the function of the floodway.

1 4. a. Any property owner whose land or any portion thereof has
2 been shown on the flood map prepared by a municipal engineer as

3 being within the floodway or flood hazard area and who disputes the
 4 finding of the said municipal engineer, may appeal to the Division
 5 of Water Policy and Supply for a ruling on the accuracy of the
 6 flood map. No building or structure shall be erected, exteriorly
 7 altered or enlarged pending said appeal.

8 b. Any property owner who has been denied a permit to erect,
 9 exteriorly alter or enlarge a building or structure within the flood
 10 hazard area by the planning board or governing body may appeal
 11 the denial to the Division of Water Policy and Supply. Said appeal
 12 shall be in writing and shall be filed within 30 days after the decision
 13 of the planning board or governing body. The Division of Water
 14 Policy and Supply shall, within 30 days after receipt of notice of
 15 appeal, conduct a hearing, at which time the affected property
 16 owner and the planning board or the governing body shall be repre-
 17 sented and shall be entitled to present evidence on any matter relat-
 18 ing to the denial of the permit. The Division of Water Policy and
 19 Supply shall, within 30 days after the conclusion of the hearing,
 20 render a written decision affirming or revising the decision of the
 21 planning board or governing body and stating the reasons therefor.
 22 No building or structure shall be erected, exteriorly altered or en-
 23 larged pending the decision of the Division of Water Policy and
 24 Supply.

25 c. Any person aggrieved by the decision of the Division of Water
 26 Policy and Supply may appeal to the Superior Court of the county
 27 wherein the affected property or portion thereof is located by filing
 28 of notice of appeal within 45 days after the decision of the Division
 29 of Water Policy and Supply is rendered.

1 5. This act shall take effect June 30 next following its enactment.

STATEMENT

This bill is designed to enable municipalities to protect their flood plains through an ordinance which gives the department of environmental protection authority to grant permits only for those uses of land which are clearly in the public interest. It also provides that the municipality may regulate land use in flood hazard areas in order to protect persons and property.

It is extremely important to preserve the natural function and ecological integrity of inland flood plains. In places where natural limitations are ignored for private gain, the public has often been made responsible for large expenditures to correct flood damage and redeem losses. This bill allows a municipality to plan land use in such a way that catastrophic losses may be averted.

DATE DUE

BRODART, INC.	Cat. No. 23-221

BRODART, INC.

Cat. No. 23-221

