Chairman Ciampi presiding:
Sens: Gunther, Zajac
Reps: Ciampi, Stoffolino, Miller, Iwanicki, Platt, Matthews, Clark, Johnson, Hogan, Costello, Lavine, LaRosa, Harlow

Chairman Ciampi: I'd like to call this meeting to order. I know there are ar great many groups here that want to speak and I hope that all of them are not going to do it individually. If you would just pick a leader from each group and have him or her get up and speak it would be a great time-saver. We have everything down on tape and it will be typed out.

Richard Maloney: I speak as an individual, as a citizen of the town of Canton, particularly the Collinsville section of that area through which the Farmington River runs. I am now on a quest to save the river that passes through the border of Collinsville. In that regard I read an article, I'm simply one individual who started who needs direction. There are a few sources for that direction and in that regard, yesterday I contacted a Miss Cooper of the Nader Group. The Connecticut Citizens Action Group and through this group I learned of your hearing today. Now I don't know if what I have to say is of any merit, I'm seeking help, I would hope that you are, and I think we perhaps have a common destination. I should like to relate my experience in the town of Canton and see whatever benefit it might be to you in the deriving of legislation. In any event I think that Collinsville might well be a microcosm, for you to work within. It represents all the ills, all the good, all the pressures, all the variables which may be necessary for you. It is still a centrally virgin territory, the river, and hence would give you something meaningful to work toward the saving of that river. I'm a Boston boy, Boston born, I came here 17 years ago, a night law student, graduate of the University of Connecticut. I'm a former member of the Board of Finance of that town and the present time a States Attorney in the State, Hartford County. George Weiss of the Water Resources, let me go back if you will, Collinsville, the section I'm from is essentially a town which had but one industry and it was settled by Samuel Collins who used his water power for the sharpening of axes and machettes which he had there. There are various rights which take certain amounts of water off the river which runs up as far as the Osus Reservoir and the Collins Co. which has now left there. There is no industry in the downtown section and as a result of that to broaden the tax base all boards in the town has taken which they determine will be advantageous to the tax payer but which I would present to you. They have not understood the long range results from their decisions which they are making today. Now in any event it's essentially a country town which is right on the verge of a explosion, the both banks of the Farmington River have been bought up by land promoters. High density zoning has now been allowed, the condiminium concept with beaches by the developers on the Farmington
River. Let me tell you how this all came about. Seven or eight years ago George Weiss came to town, a very aggressive, a very dedicated individual of the the Water Resources Commission. After a number of hearings he recognized he was not getting anywhere with the citizenry in respect to the correction of raw sewage flowing into the Farmington River at six or seven points. But this was a minimum flow, in any event one of the members of the board of finance thought that these would be corrected with a large septic system of some sort. In any event Mr. Weiss quite correctly threatened injunctive action against the town and correction on the part of the State with the bill going to the town. As a result of that it started some sort of a correction was started. We ultimately had a sewage plant built and naturally the first one to recognize the benefit of sewage in any town are the developers, and of course with the ecology kick with people and the search for country land, immediately developments started out there. These sewer lines proliferated about the town to satisfy those permits that had been issued by the zoning board, there was no plan and there still is no plan for sewage. Now about a year ago the condominium concept was approved for the town and that question is still before the zoning board appeals at this time. But, in any event in a magnificent area which has now been completely stripped of woodland at 23 acres, and it's strictly a rural residential zone which was zoned through the concept of the floating density cost of concept of condominiums. They stripped it down and the condominiums are now being built in there or will be built very shortly if the appeal is voided. But in any event once the mainline of sewage was on Dire Avenue, once that line turns and is hooked up to the condominiums than it must flowed to the plant which is on the Farmington River and that's on the flood plain. In keeping with this the Farmington River Water Shed Commission has issued now after three years of study it is my understanding flood plain zoning regulations which are recommended to the towns, but which the zoning boards must pass after public hearing. In any event we now have condominiums on the Farmington River with the owners of that condominium using the Farmington River for their purpose. The purpose of cleaning up the Farmington River, the payment for the cleaning up of the river I would submit to you dictated or indicated that the river was to be used for the recreational use of people in that town. Once the developers have now seen the recreational possibilities of that river they have now swarmed in, bought both sides of the river, and there is no flood plain zoning in that whole area which can allow the environmental department or in fact the zoning commission to in any way orderly or otherwise to control what goes on that river plain. I would submit to you within the next three years this all being special use, there will be gas stations, car washes, high density zoning all along that river, and forever it will be lost to the citizens of that town and not only citizens of that town but the citizens of that whole Farmington Valley and those that come out there.
I would invite you and I will be your host if you will come out there and see exactly what could be done with the town of Canton and Collinsville, and the salvation of the Farminton River. I thank you.

Rep. Ciampi: Thank you very much. I don't want to put a limit on anyone's speech but I think about five or ten minutes will be enough for anyone to say what they have to say. I want to call Russell Brenneman please.

Russell Brenneman: Thank you Mr. Chairman. My name is Russell Brenneman, I'm special counsel to the Department of Environmental Protection. I'd like to present the views of the Department as they now exist with the respect to the management of inland-wetlands and I wish that they were more precise, perhaps more comprehensive than they can be but I think we're dealing with a question that is a very ramified one. I suppose we first have to ask ourselves whether we have here a resource which in some way should be managed and how should it be defined? If management is needed can it take place in the private sector or is the government going to be involved in some way? If the government is involved, what level or levels should the government be involved? What procedures are supposed to be followed in imposing management policies and how do we protect the legitimate property rights of the people that are affected by these policies? How I mention these things because these questions are not all patly resolved and I think we're at that point of sophistication in dealing with environmental problems, where we all have to deal with these questions with an open mind. The Department feels first of all that we do have in the state inland-wetlands that should be managed, and the government has to be involved in that management. We do not believe that the fate of inland-wetlands can be left to the decisions of the private sector. The Department is not certain in all cases about how this can best be accomplished and one reason Commissioner Luftkin has asked me to be here this afternoon is as much to listen, to hear what the citizens say as to speak. The Department is willing to use its resources and personnel to work with this committee and with the General Assembly to the extent where we are requested to do so, to try to work our sensible solutions in this area. We do have one specific recommendation and that is this. The Department recommends the enactment of a bill which authorizes the Commissioner of Environmental Protection to impose protective orders on inland-wetlands on a step-by-step basis. The closest analogy is the Massachusetts Coastal Wetlands Law whereby the Commissioner of Natural Resources in Massachusetts has gradually brought their coastal salt marshes under control by a step-by-step process of imposing a specific order on specific areas of land. It did not drop down all of the piece on all the wetland all at once. We feel that this is the advantageous approach for several reasons. The first reason is that as I'm sure your all aware if suddenly we begin controlling all of what
might be called inland-wetlands in the State of Connecticut, we will impose administrative burden on this Department which it simply is not able to handle at this present time. We would prefer to pace this control if the Legislature feels it is needed in a series of protective orders, which might first deal with the most threatened areas, the areas of greatest need and further which would be tailored to the individual needs of the particular resource. You look at inland-wetlands, the same type of control is obviously not needed for every category of resource that might fall within the description of inland-wetlands in the statute. We feel that the description of inland-wetlands should be worked out very carefully and as Mr. Lavine, your Sub-Committee Chairman knows we have already begun work in that direction and are prepared to continue working with him on that subject. With respect to other aspects of inland-wetlands management regrettably I can't be more specific, but I should say if it is the Committee's desire to adopt a bill similar to the one that I have mentioned we feel that there should be an appropriation attached. There even at this scale and this pace there's going to be considerable involvement of personnel and administrative effort. The figure that has been picked out of a hat is $250,000 for the year. The Department favors the amplification of a municipal powers to deal with their inland-wetlands management. We feel that the zoning enabling act may not sufficiently broad to enable the towns to act in this area as they wish and should. Similarly the omnibus municipal powers statute which non charted communities operate under seems not to broad enough to encompass the management of inland-wetlands. A rather simple technical amendment might take care of these deficiencies. It may be worth considering using the conservation commissions which exist in many of these towns as in some role as far as the municipal regulatory action is concerned. Finally if this approach is adopted there should of course be specific provisions in statute to the effect that the town program should not supercede or conflict with state programs. With respect to protective rivers, the Department is in favor of the concept, we frankly have had difficulty and have not arrived at any specific solution to the use of this technique. One problem that, if I may speak personally, one problem that I have had with it as a lawyer is the rigidity perhaps of a protective rivers system. If you classify all or a given river in a certain way then the statutory concept is that certain restrictions are to apply. It is quite possible I should think to draft a protective rivers bill which would be both constitutional and which would have a little lea way in it. But we have a further problem here in how you involve the legitimate needs and authorities of the municipalities where the resource lies and the state program. I think there is a lot of thinking to be done about this bill. We basically favor the bill and are prepared to continue to think about it with you. Finally, I'm not sure if this is within the amid of the call Mr. Chairman but with respect to coastal wetlands we would like to offer a technical amendment which would add certain further plans to the biological description that is in the
present statute to enable us to get farther up the estuarine systems and we now can. We find that we're regulating part of a system but not all of it. That concludes my formal remarks.

Mr. Chairman, I do not have anything in writing for the committee unfortunately.

Rep. Ciampi: Any questions from the committee?

Sen Gunther: Mr. Brenneman, we have discussed in the past these two bills relating to the water needs of the state and particularly the protective scenic river bill in this way. Would you see that as one viable constitutional route to take?

Russell Brenneman: It is our assumption and conclusion that as a Department that protected a protected river system does relate to the need of the state more in the future than at the present time for an adequate water supply, this would be one of the reasons in supporting that bill that we feel is present. The question brings up I think an important concept which the committee in my judgment should have in mind and that is that what you do in the way of exercising the police power or the regulatory power of the state should be tied in your own minds and on the record in the committee and I'm hopeful that this record will begin to be made today with hard, scientific data relating specifically to human welfare. I think that one reason some of these people are here is to demonstrate that need.

Sen Gunther: Actually again, what your talking about in the inland-wetlands is setting up steps for proglagating regulations by the Department for the control of inland-wetlands, not a specific bill similar to the tidal wetlands? Is this correct now on what your saying?

Russell Brenneman: That is correct Senator Gunther. The concept that we have in mind would be to authorize but now direct. The Commissioner to establish protective orders in a series of administrative action rather than in the case of the coastal wetlands where everything comes into effect as soon as a wetland is inventoried.

Sen. Gunther: So actually by setting up the mechanics for establishing regulations you feel would be sufficient?

Russell Brenneman: That is our feeling, there is some feeling that also Senator we could go into this area with alittle humility and we hope that by a step-by-step process we might make each step alittle better than the one before.

Sen. Gunther: Now on the scenic rivers, this is off the top of my head, would you be interested as a Department in having us set up performance standards and allow the municipalities themselves to take and force these standars? Do you think the state has to take a real stand in the scenic river?
Russell Brenneman: We would be very happy with any mix of municipal or state action which results in the protection of the river system. The judgment which we haven't been able to make is what that mix should be and I'll be here with my ears open to hear what the citizens have to say about that.

Rep. Lavine: Mr. Brenneman, the language of the courts have been in terms of irreversible damage and if we can determine that portions of the inland-wetlands can be irreversibly damaged I would assume that the Department would have really no objection to being directed where these lands have been identified as such and the step-by-step basis could proceed from that.

Russell Brenneman: I don't believe that we have any problem with that whatsoever, our problems are primarily with respect to the administration of the statute. We don't want to say that we want a statute which we know we can't administer and when you consider the magnitude of the resource we're talking about it is a considerable undertaking. I don't believe that there's so many resources threatened to the degree you suggest that we couldn't be mandated to take action in those cases.

Rep. Ciampi: Thank you Russ. Next speaker will be Montgomery Hare.

John E. Hibbard: Mr. Chairman, member of the committee I have some statements, copies of statements pertaining to inland-wetlands and I have some drafts pertaining to scenic river protection and regulating wetlands and water courses at the local level. The information, excuse me I'm John E. Hibbard, I'm secretary forester of the Connecticut Forest and Park Association and I'm speaking in that capacity, also as Chairman of the Hebron Conservation Commission on regulating activities pertaining to wetlands and water courses at the local level. The committee will recall that during the 71 session there was a bill introduced with the objective of protecting inland-wetlands, the committee will also recall that it was cautioned about the passage of that particular bill S.B. 631 as it was written and it would super impose and inland-wetland definition over the existing coastal wetland definition and would impose a much broader responsibility on a limited capability within the then Department of Agriculture and Natural Resources. In this memorandum I have outlined some things which the states of New Hampshire and Massachusetts have considered in inland-wetlands regulations in those states. I also have some information relative to the inland-wetlands resource in the state of Connecticut. I have obtained this information from Mr. James Bishop from the Department of Environmental Protection and from publications of The Fish and Wild Life Service of the Department of Interior, dated 1958 and 1959. This information leads me to believe that the inland-wetland resource of inland-wetlands over 10 acres in size in private ownership and inland-wetlands over 5 acres in size in public ownership total some 90,828 acres. While these figures are not recent there are considered to be a good approximation of the resource. Again, this memorandum does outline
the approach in Massachusetts and New Hampshire relative to regulation and I think that if we, there is the necessity to protect these inland-wetlands resources the funds will have to be found to administer a protection system appropriate. It would appear that the inland-wetlands resource is threatened in varying degrees in varying parts of the state. I do not believe that in certain parts of Windham, Tolland, New London, or Litchfield counties that some of these areas are particularly threatened at this time. However, we would expect threats to the resource to be most apparent in those portions of the state which are developing most rapidly. I'd also like to review this draft that I have relative to wild and scenic rivers. You will all I'm sure recall the proposal which you had before you in 1971 which enjoyed a broad base of public support, it set about to classify rivers in 3 main areas, I think these main areas of classification are valid and could be employed today. That proposal you will recall also provides for the establishment of ten so called river basin commissions and these river basin commissions would logically follow if that were the route the committee chose to follow. Whether or not the commission approach is one that should that should be used is something that the committee will have to study further. Perhaps the state itself through the Department of Environmental Protection can be involved in setting up standards which could be adopted and administered on these unique areas which are relatively special and they are hard to come by even in a state like Connecticut. Now the third area which I would like to comment on briefly is this matter of protecting Inland-Wetlands or wetlands and water courses at the local level. In recent months there has been a considerable interest in developing improved methods of regulating various activities that take place in or near wetlands water courses and their immediate environments. The need for developing these methods are particularly great if a town such as Hebron located about 15 miles from the greater Hartford area is a town which is experiencing relative rapid growth. Most of the land area in the town is within the water shed of the Salmon River which the 1971 session designated as a class A stream so that we have some compelling reason to regulate land use in this particular town more than we would more than would be normally expected in some other towns of the state. Now at the present time the only thing that we have to regulate activity close to these wetlands is the state health code which requires that no septic tank or waste disposal field will be located within 25 feet of streams. This is not really an adequate restriction but it does offer something. The new state health code that imposed improved restrictions on a location of drainage fields and other drains but it is still considered to be inadequate especially in a town where up to 90% of the land is in the water shed of a class A stream. We had hoped that we could urge our planning and zoning commission to adopt regulations prohibiting this type of activity within 75 to 100 feet of these streams. Other towns in the state have
included river zones in their new plans of development.

Coventry has done this and an appeal against the activities conducted in these zones was lost in the town was upheld. Near the own of Marlboro which is recently changed its zoning regulations and its town plan of development, the placing of a septic tank system or a waste disposal system would within a 150 feet of these areas is allowed only with a special exemption being granted by the zoning board of appeals. Mansfield is interested in doing something in the way of adopting some wetland or water course ordinance or regulation. We reviewed some of these ordinances or regulations suggested by the open-space institute, we have reviewed one which is in effect in Massachusetts. However, there are several questions which come to mind in studying this approach. The first of these is that while the conservation commission might logically be an agency to test such an ordinance at the local level, we question whether or not the commission has this statutory power under the provisions of such 7-131 of the statues. In other towns the planning and zoning commissions might be appropriate bodies to administer such an ordinance or boards of selectmen might. However, there are questions of rather an odd these boards or an agency of the town have this power under the statue so that I would hope the committee would look into this and authorize this type of activity, to be conducted and regulated at the local level. We would recommend or regulate in our town lands which have soils which are poorly drained or very poorly drained. This might come out to as much as 10-20% of the total land area of the town however, we are trying to regulate the activity within these areas and not prohibit all activity. I hope that the committee will look into this and I would be certainly available to provide additional information to you in the future and I will get this memo duplicated and into your hands within the next few days. In conclusion I wish to underline the fact however, that while it may be desirable to allow municipalities to regulate this activity, this type of permissive legislation is no substitute for protecting inland-wetlands at the state level, and it is no substitute for providing protection for wild or scenic rivers at the state level or through some river commission concept which might evolve during the legislative session. This ability to regulate activity on wetlands and water courses is but a tool which could be used to do a much needed conservation job at the local level. It is not that we can look through to solve many of our environmental problems. If there are any questions I'd be more than willing to answer them.


Montgomery Hare: I'm Montgomery Hare of the Housatonic Valley Assoc. and I have here copies of my remarks that I will make. With me are Miss Susan Tooley, executive secretary and Mr. Calhoun our treasurer and I'm sure many of your committee are acquainted with Mr. Calhoun's great work as Chairman of the Agriculture Committee. I shall simply read our statement which is brief.
The Housatonic Valley Association, of which I am now President, was reorganized in 1969 for the sole purpose of protecting and wherever and whenever possible restoring the natural beauties and resources of the Housatonic River Watershed. Presently the Association has roughly 400 members, and a directorate which represents the Valley from the Massachusetts line to Long Island Sound. The Housatonic Valley Association, here by invitation of the Committee, is primarily concerned with education, and therefore it is not our policy to promote or lobby for specific legislation. However, since we have been invited to testify, we would like to make the following facts emphatically clear: 1. Some legislation to adequately protect and restore the Housatonic River Valley is long past overdue. If such legislation is not now forthcoming, the people of Connecticut will shortly find themselves without one of the great natural recreational areas of the State, despoiled as it will be by senseless exploitation, both commercial and otherwise. 2. Any legislation to protect and restore the River Valley should begin where it is most feasible by restricting the despoliation of those lands immediately adjacent to the River and its many tributaries which remain relatively wild. 3. Wetlands and flood plains must be included in such restricted areas, simply because, however remote they may seem, they are potential sources of contamination that may infect the entire downstream watershed, much as a seemingly innocuous scratch can poison one's entire bloodstream. 4. Since the Housatonic River Watershed cannot, repeat not be organically divided by the many towns through which the River flows, the Housatonic Valley Association believes that the protection and restoration of this great natural resource is primarily the responsibility of the State of Connecticut, though of course the states of Massachusetts and to a lesser degree New York bear responsibility also. Therefore the Housatonic Valley Association recommends that at this session of the legislature some truly effective legislation be passed making the conservation of the Housatonic River Watershed mandatory only to the degree that it is necessary. We thank you for this opportunity to testify, and pledge ourselves to help you in any way we can in the difficult task of both politically difficult as well as technologically, of leaving to our children and our children's children a land at least as beautiful, if not more so than we found it. Thank you. Montgomery Hare.


Garrett Nevius: I'm a resident of Farmington, I'm a member of Executive Committee of the Connecticut Group of the Sierra Club and it has asked me to speak on its behalf today to you gentlemen. We have over 1200 members of the Sierra Club in Connecticut and nationally we have about 140,000 members. The Sierra Club is aware, concerned, and involved in the support of the ideas in these two bills. We welcome an opportunity to carefully review the contents of the bills with the idea of offering constructive comment. Thank you for this opportunity.
F.H. Borman: Gentlemen of the committee and Mr. Chairman, I'm F.H. Borman, Ecologist at Yale University and I thank you for the opportunity to make a few statements about some ecological aspects of the preservation of inland-wetlands. I have here an article that more or less will parallel some of the things I'm going to say. I hope I have some copies. I don't think I need to go into the question of the importance of inland-wetlands in terms of storage areas, purification of water, sinks for heavy metals, pesticides. Their function for recharging (inaudible), their function in larger ecological questions, such as, migratory birds, the function in the sulphur nitrogen cycles, which is quite important and the terms of recreation, education, and other aspects of that. I would address myself to the notion that you cannot consider inland-wetlands or any other ecological unit in this state as separate unit, cannot make a kind of bookkeeping approach and say this is a pigeon hole into which you thrust everything. The reason for that is quite simple, ecological principles tell us very clearly now and everyday in a very much sharper image how how everything is connected with everything else. The inland-wetlands are intimately connected to the rest of the state, mainly by what we call the great circulatory system, the earth, the air, the water. These are like communication systems, like telephone lines are rolled and they hook up everything to everything else. So, one must really consider the environment as totality or your on the wrong track, and what I'd like to point out today is the relationship of the inland-wetlands to some other problem. Briefly, I would like to say, and I will not go into this at all, that it is very intimately connected to the air pollution problem and there's increasing evidence in Scandanavia that air pollution is degrading inland-wetlands over a very large area. Same situations may be happening in New England, but we really don't know yet. But, today I'd rather talk about fact that every inland-wetland is only part of a larger water shed and what happens to the inland-wetlands. Now I have a couple of slides and with your permission if it works I'd like to try and show those. Dr. Sicama hopefully will set this up and show it on that wall over there. In the meantime I'll just go ahead and say that for the past eight years as many as 35 scientists, including myself, have been studying the water sheds and how treatment of water sheds effects the water draining from those water sheds and other materials draining from water sheds. Our study is located in New Hampshire and it is, I think, the most intensive study of its type in the world. What we use is a basic unit of study and it is a small water shed, maybe thirty to a hundred acres in size and we measure everything we can about that water shed in the hopes of finding out how it works. Now what we do is we look at it first in its pristine forested condition and it gives us what you might call ecological baseline, and then we use those baselines data to attempt to evaluate what human manipulation of the water shed will do to the water draining from the water shed and to the waters receiving that drainage water. So, having a little difficulty here, there's an old adage about "too many cooks", hope it's not working here. We have
one missing ingredient, electricity. This is just to give you an idea of the kind of place we are studying. This is in New Hampshire, it's a hilly area, vegetated with hard wood forest, like much of Connecticut. Now this is a large water shed, 7500 acres, you notice in the top there are a number of smaller water sheds and we've done much study on them. Those are the ones we study and we study everything that goes into and out of those water sheds and we've done it for eight years, we know a great deal about them now. These are the kinds of streams that drain from those water sheds, rather small streams. We measure everything, all the water, everything that goes over that metal blade is recorded and we know the water record now for eight years running and we can predict pretty well what kind of water will run out when certain kinds of rain occur. We measure everything that comes into it with these rain gaging stations, of which we have eleven. Incidentally, we measure all the chemicals, all the particulars, all that comes in and out of these water sheds. Now the thing I want to deal with specifically today is erosion, and here we're measuring material that washes out of these forested water sheds. Now the thing I want to deal with also is weighing all of that stuff and to analysis it chemically. We also measure what comes out in the water, we collect it in the nets and we weigh that and we measure it, then we take other water and we filter it and we weigh that and we measure it. We have a very good record of what actually comes out of the water shed. I might say that in terms of erosion something like 7 tons material per square mile is removed in the water sheds, that is a very small amount of material per year. The same amount occurs similar measurements have been made in Maryland and in Kentucky, and probably applies to forested water sheds in Connecticut, so that is our baseline measure. Now we wanted to find out what removing the vegetation would do, so we took that one water shed #2 and we completely forested it, we cut everything, but we made certain that we didn't harm the surface ground, we wanted to know what the removal of the trees alone would do and this is the way the water shed looked. We sprayed it later on to keep the vegetation down, that's the way it looked after cutting it. We found as a result of that as long as the forest floor was left intact that the amount of the material washed out of that water shed tended to be very low. If you will notice those points on that draft, the black line represents a forested water shed, and you can see the amount of material washed out of that water shed tended to be very low. You can see not much came out of the forested one, the black line. The dash line represents the cut one. For a period of two years the amount of material that came out of that water shed was not greatly different from the amount that came out of the uncut one. But then, after two years time the water shed started to fall apart and it began to export large quantities of material. There's an important point here, as long as the forest floor is left intact export of material from water shed generally will not occur. If you cut a forest and don't injure the forest floor you'll allow it to grow, not much in the way of sediment will be lost. I'd
like to just give you a little data here now, in our forested or deforested water shed at the peak when the point is highest there is a loss of 111 tons in that water shed. Remember the forested loses 7, the 111 one is roughly 15 times more. However, if we had cut over that water shed and built roads and not done a very good job the loss would have been 862 tons per square mile, over a 100 times more. If we had cleared it for farming operation and took agriculture precautions it would have been 10,000 tons. The most amazing figures however, and these are data that come from the Washington-Baltimore area, is that in construction work in the Washington-Baltimore area losses up to 140,000 tons per square mile have been recorded. These are not uncommon and I might say I suspect that similar losses may be appearing in Connecticut under various kinds of construction situations. Here are a couple of examples of kinds of things that are happening in Connecticut. This is a road built on or under a power line with no precautions to prevent erosion, we measured the amount of erosion there and in terms of tons per square miles this area is something like 850 tons of eroded material per year per square mile. This gives you an idea of what happens when careless construction, and all that stuff runs down in to the wetlands which fills them up and causes other damage. This is a road in Wallingford that carelessly bulldozed, it's now eroding and that material is moving down into the streams. This is an area in Branford, it's a gravel pit that been handled in a very bad way, no effort has been made to contain the drainage and it's losing material rapidly. This shows some of the sediment moving down a slope into a stream carrying large amounts of sediment. We've measured a buldozer at least 200 tons of material have been deposited on a forest floor, perhaps an equivalent amount in a wetland. This is holding basin that they constructed at that site improperly, it broke and all the material went down. This is another view of eroded material from that same place. Another, still another. This is a little stream going into a lake, it's at the height of the hurricane we had last summer. It drained the woodland, you can see the water is perfectly clear, this is the same stream. Now these are some sediments samples taken, #1 is from the stream, #2 & #3 come from drainage from under that power line, #4 & #5 come from drainage from under that power line and drainage of another stream below that gravel pit, you can see there's a large amount of very fine sediment held in suspension moving down the stream. This is the recipient of that material before the water arrived from that peak storm, as you can see it's rather clear water. This is the way it looked afterwards. This colloidal material has been moved down into the stream, into this lake and so in addition to bottom filling you get a colloidal filling which prevent light from entering the stream and disrupt the biology and also muchly lower the recreational effects of the area. Just another view. I just threw that in, that's an aerial view of some strip lining which we have some of in Connecticut and that's very disasterous for wetlands because it promotes a tremendous amount of sediment movement and chemical movement into the drainage waters. Well, that's the last slide, if we could on the lights I'll sum up briefly.
Rhe point I would like to make is that, when we convert our woodlands to other things whether it be highways or construction or whatever, the land once the forest cover is broken is tremendously subject to erosion. This will vary from place to place and it's not equal in every geological region but nevertheless it generally holds. As a result of that materials are moved out of a construction site, they tend to be moved progressively to lower and lower areas, they will ten in places where deposits are large to destroy the bottoms of strange streams or to fill wetlands, they'll disrupt the biology in that way, and where there's fine sediments, very fine sediments like clays they will introduce colloidal material into water which will take some time to clarify and can have a very bad effect. So, what I would suggest ten is that if writing legislation that some thought should be given to the fact that land managers should bear the responsibility to hold soil in place on their own property, or at least to restrict it if it moves it ought to move only on their own property, and the affluence should not be dumped on some one else's lands or into public waters where it will have these bad effects. I think somewhere along the line some thought ought to be given to writing into the law the fact that road builders, particularly our state road builders and others should have responsibility when they design construction to worry about erosion and to worry about minimizing it as so far as possible, some will always happen. There are some kinds of engineering solutions that are possible, holding tips and things like that. But I have noted too that many private construction people engage in a practice that I think is very deleterious, they take to buy of forest land and then they clear it and they bulldoze it and they leave it there for years before they ever construct anything. I think wetland is the most vulnerable kind of land, it has the least resistance to erosion and the highest rates in erodibility and some thought ought to be given to that. A another point is that in working with land that engineers and others should be urged to revegetate any site that they disturb in the course of construction as quickly as possible. Thank you.

Rep. Lavine: You began by saying that you were going to skip over some of the effects that and you touched on them very briefly for inland-wetlands relating to air, relating to laboratory, and a variety of other things. I wonder if you could reflect for a moment the definition of inland-wetlands as we consider this legislation and whether we can identify inland-wetlands which are vital to preserve and draft legislation around that.

Dr. F.H. Borman: I wonder if I could pass that on to my colleague who is going to deal with that specifically.

Thomas Siccoma: Gentlemen, I'm Assistant Professor of Forest Ecology at Yale University, I did my graduate work at the University of Vermont working on the Green Mountains and since I've been here in Connecticut I've done some work on heavy metals and
salt marshes, wandered around a few salt marshes and dug a few soil pits, and I have been working with a class on studying a small forested water shed which contains a red maple swamp in the town of North Madison. Several weeks ago a group or several people asked me if I would be willing to come up here and comment to you on some aspect to my views to inland-wetlands and at that time they handed me several copies of, I guess, you gentlemen refer to them as bills, since we use the word ecosystem you probably know what the word bill means. These are proposed things, I guess, over the past several years and they dealt with definitions and working and to apply to inland-wetlands. In reading those over I detected in them a distinct relationship that people are making a finite association of coastal wetlands with the words inland-wetlands, and I think that in the public image if the message comes across that there is going to be some action to protect inland-wetlands in the same connotation as protection of "coastal wetland." This implies an image which isn't quite true. The coastal wetlands are relatively in terms of comparing to inland-wetlands. However, when it comes to inland-wetlands the things that I read indicated that people were going to go out and draw lines or the Commissioner was going to assign people to go out and draw lines, and they were going to draw lines on aerial photographs or maps, these lines were going going to be drawn based on vegetation. Now in the case of the coastal wetlands the vegetation things is probably acceptable in the sense there are some very nice - a salt marsh is a salt marsh with marification but it's not a (inaudible)mas compared to a flood plain as compared to a red maple swamp. So, after Eric Eggman suggested that I come and talk to you people I took out the tote map and I put it on the kitchen table and I said to myself, what in the world are we going to do in trying to translate legality into protecting pieces of that real estate in terms of some of the things that Professor Borman talked about and looking at it from the point of view of vegetation I decided that probably would be the wrong route to take, per se, if one in fact takes the route of drawing maps or lines and at the same time I had available the Soil Conservation Service maps which are probably the ultimate in Connecticut in drawing lines on maps. I know that several of the counties in Connecticut are presently so mapped and they are down to within the vicinity of a couple of acres or less. For putting words together with lines defining something which they recognize as a unit or surface. So, it is my suggestion that any bill which gets put together should not overlook the ability of one component of our population who have many many years of experience in drawing lines on maps, those being the Soil Conservation or soil scientists. The real basis of deciding what constitutes a wetland boundary should be somewhat heavily weighted toward using the soils approach. If the actual drawing of lines is going to be the one that gets used, I would recommend that be a relatively high priority in building the bill. Before Herb and I came in we spent about half an hour down in the mens room discussing this thing and mostly in relation to, I suppose that's where you gentlemen get your information sometimes too, but we were talking about several things, let me just say this, if one looks at the State of Connecticut and says the words lakes, ponds, currents, rivers, stream,
flood plains, marshes, swamps, parks, and then one scientifically looks at these words and one can get a couple of paragraphs in a textbook which will define them, you can look at them quantitatively and answer certain questions such as what is their function? How do they tie in the system? And each one differs. So we were talking about some of these things, each of these possibly serves as a storage spot for run off water. This has been in those publications that I've read, a swamp will rise so much and slow the rate of run off in to the adjacent stream. Secondary each one of these will perform as a sediment trap, we ecologists sometimes call it a sink, that the hole that everything goes down but basically water coming off this muddy water that we saw on the wall, when that water leaves that particular wet area it will be cleaner than when it entered, cleaner in terms of sediment. O.K. at the same things like pesticides, heavy metals which are dissolved in that water either in particulate matter or in solution have a very high probability of being on the bottom and not leaving with the water when it leaves. Another thing that each of these various sub divisions might do in relation or relative amounts is serve as an acquirer recharge area, the longer that you can hold water out of Long Island Sound and keep it sitting on the surface area of Connecticut the greater the probability that it is going to go down and not off. Where at the business of bird migration, all of these wet spots that you see on the map at one time or another are inhabited by the migratory fowl, and there's no question that you could probably fill a pack of them and only reduce the bird population by some small amount, but eventually if you paved off all of New England there would be less birds, it's a piece by piece business. Hunting and recreation, something which I guess there's money in when it comes to writing bills, but obviously if you protect these various game birds for hunting each of these systems performs in that way. We were talking about educational uses, many of these wetlands in the vicinity of our schools are actively used by students in learning about the sort of thing you are talking about. And quantitatively chemically we were discussing their behavior in nutrient cycles, such as carbon cycle, nitrogen, and sulphur, which are converted to gaseous phases as they go through some of these marshes, you all know how a marsh "stinks" even though that is an ecological sound phenomenon and does not represent pollution. So, the main point really was this business of using soils and experience that goes with them as a criterion for drawing lines. Thank you.

Dorothy McCluskey: Mr. Chairman, members of the committee, my name is Dorothy McCluskey, I'm from North Branford and I am reading a statement from or prepared by William A. Niering, Chairman of the Department of Biology of Connecticut College, New London. As one of the most densely populated states in the nation, it is essential that immediate action be taken to protect the remaining unspoiled watersheds in the State. It is now recognized that rivers, continuous flood plains and associated wetlands such as marshes, swamps and bogs contribute significantly to the man's welfare if left in their undisturbed natural state.
The following are among the values these aquatic resources serve.

1. Hydrologic: They are of major significance in our hydrologic regime. Wetlands have a high water holding capacity, acting as storage basins, minimizing erosion and reducing destruction of floods. As we become more urbanized with thousands of more acres of concrete these liquid assets will become even more valuable to the citizens of Connecticut. It has been well documented that urbanization intensifies rapidity of run off and flooding. Every effort must be made to preserve these natural water absorbers that play some role in ground water recharge basic to the continued supply of water for those dependent upon wells for their water source. Floodplains represent one of the most significant landscapes where no other land use than agriculture and recreation should be permitted. These geomorphic features have evolved as part of the river's system to serve in moderating flooding. They are built-in-flood-control devices designed by natural forces. Every floodplain should be under State protection and control.

2. Pollution Filtration: Recent data from studies of aquatic ecosystems, primarily rivers, marshes and contiguous flood plains, document the role of wetlands in pollution filtration. With great quantities of organic matter, bacterial populations are very high. Under these circumstances polluted waters with sewage or other organic wastes can be purified after passing through an aquatic system of natural origin where marshes or swamps are associated. Levels of nitrates, phosphates, and BOD are decreased greatly where as the oxygen production is greatly increased. As Connecticut continues to grow, it will need every possible pollution filtration mechanism possible, both natural and man-made, to maintain a quality environment.

3. Scenic and Psychic Values: It is becoming increasingly apparent that man needs open space and contact with the natural world to keep from being dehumanized in a world dominated by technology and affluence. It is no coincidence that man's highest optical acuity is in the green band of the spectrum. We have evolved from a natural ecosystem. Only 12,000 years ago we were predators with the sabre-tooth tiger. This heritage is still imprinted in our genes. One only needs to look at the Madison Avenue advertising techniques to understand what really is basic to man's needs. Greenery, open space, clear rapid unpolluted streams are constantly featured. Considering our adaptive inheritance, we basically will always need some aspect of the natural world to remain as well-balanced and productive human beings.

4. Education and Recreation: Natural ecosystems offer to mankind the answers to his environmental problems. Basically four principles operating in all biological systems maintain stability and harmony. These are (a) recycling; (b) stability of biological diversity; (c) non-cyclic degradation of energy; (d) limited carrying capacity. Since man is countering these basic principles, we have an environmental crisis, not only in our State as revealed in the report An Environmental Policy for Connecticut 1970, but in our Nation. Maintaining sizable areas of open space near and within every community of Connecticut will enable our schools to increase student contact with the natural world from which they
have evolved and introduce to these students the ecological processes that maintain harmony in natural landscapes. The lesson is that man must also apply these same basic principles in his human ecosystem. The educational value of scenic riverbelts for future generations would be great. Finally the recreational values since man will have more and more time on his hands in the future. Natural open space will be a premium item by the year 2000 in Connecticut. In conclusion: every effort must be made to save those lands in open space that should not be developed by man. The state has an obligation to protect all citizens from the acts of the minority who would tend to modify those resources that serve their highest and best use to all the citizens of the State as being left essentially natural or carefully managed to maintain ecological diversity, a stabilizing force in natural landscapes. Thank you.

Rep. Matthews: I'm very interested in your comments in your report, are you in a position to answer this question, is it the wisest for us in the State and this country to endeavor to legislate to save our country from environmental destruction or is it better to attempt and dispend our efforts in money on educating people from various low grade up into the aged group, or is it better to attempt to introduce in the mid-years of ones life a greater responsibility for the needs of those who will come after us so that they will be provided for a country that is essentially environmentally nice or pleasurable or useful and how do you feel about this, where do we spend our energy, what is the best approach, do you have any answer to that kind of a question?

Dorothy McCluskey: First of all the statement that I read is William Niering's statement, it is not mine, and I can not speak for him. I can only add my own comment, I think that all of these avenues are important, I think education is one of the most important, last year I tried to support education bill that would require environmental education to be taught in all of the schools at all levels from kindergarten through graduate school, along with regulatory measures like the ones that were proposed last year regarding wetlands.

Rep. Matthews: I think one of the things I'm trying to get at is this, if we passed legislation and force things to be accomplished by adults, are the efforts going to be successful if we do not indoctrinate our youth into the factors and needs of our environment? Now I think possibly they are indoctrinating us into what the environment really means. But this may last only for one generation and then it may disappear as youth seem to take a strong position on certain things in our Country and I think this generation has picked on environment very specifically and rightly so.

Dorothy McCluskey: I think your right that the youth is certainly telling us what we should do now that we have made things rather a mess in many areas. I think that we need to heed their advice and to have both educational programs and regulations.
Collin Tait: Good afternoon ladies and gentlemen, I'm Collin Tait, I'm a Professor of Law at the University of Connecticut Law School and a practicing lawyer myself. I just want to comment briefly on some of the legal aspects that have been raised about this sort of legislation. Many of you have familiar with much of the case names that come down from our Supreme Court, there are a fair number of other cases around the country and I would like to leave with your committee a recent article on environmental affairs, November 1, 1971, that discusses quite a few of these cases as to why the courts have gone which way. Your basic problems range from police power, which is authorizing zoning and that sort of stuff, with the problems of eminent domain and actually taking peoples' property without compensation. It's a fine line to weave. I don't think I can or any member here can tell you where a court would come out on a particular issue. But any legislation should provide a mechanism for resolving that problem, you can't tell in advance how a court will feel, whether it finds it is an unreasonable taking or a substantial taking to warrant compensation. Our tidal wetlands bill has a provision along that measure if a court does, then the Commissioner abandon his regulation or can pay money damages that the court finds warranted. I think there are some other approaches that give the Commissioner or the State a few more options in this event. I certainly think any legislation be it given to the state, regional authority of the Watershed Commission, or even a local zoning commission ought to authorize at least regulation other than wetlands with some standards of what they can do. What they in fact do may be challenged as being too severe or too substantial, and a court at that point could determine its views as to what was involved. If the court on the one hand found it to be alright within the police power and payment would be necessary, it would be an ordinary zoning concept, which wouldn't cost the town or the authority any problems, if the court on the other hand found particular restriction placed on or the totality of the restriction placed on did amount to an unreasonable taking or substantial taking to warrant compensation I would think that you could give the town or the authority several options, one, they could pay if they wanted to and the money was available as you could in a domain proceeding for other needed public measures for road schools, if this in environmental area that's needed by the state, the state certainly would be justified in paying money for it, and yet we may not have the money around. I would think that, New Hampshire has a wetlands bill that has sort of negotiation period of time, that the court can modify the degree the regulation so that it does fall within permissible restrictions or can have a 90 or 60 day period of time wherein the Commissioner can file a modification of its regulation to comply with the courts orders so that instead of having no restriction. When you throw out zoning as being unconstitutional you wind up with nothing. An apperative pond in which developers come on in and establish a non-conforming use, I would think apperative pond within which the Commissioner could decide what it wanted to do within the courts dictate as
to what it has done. A chance to talk to the home owner or the property owner to negotiate something that makes sense to both of them. Where the zoning authorities have gotten into trouble with the Duley case and the Bartlett case is where the authority is basically said, no activity, except recreation, no structure. Whereas the Bartlett's case which was a coastal line case which I guess, the citation to that is in that article, but if you want it's the Bartlett vs. Water Resources Commission, 146 Connecticut, 650. The Water Resources Commission said, you can't build this sort of structure in the encroachment line of the stream, it didn't say you couldn't build any structure, it just said, this structure or particular one. I think that's the distinction that will save this sort of legislation. Instead of blanket prohibitions you allow the authority to deal with problems as they arise within some very firm ecological standards, that are warranted by the testimony you have heard here today. But, for instance, most of the things then can probably be tailored to suit the needs, those that have gone too far the state can then decide its priority. If this is the only way we can do it we better pay for it, the amount will be determined by the court and a funding provision will obviously have to follow with it, but funds are not necessary if you provide a provision in the bill which is a perative time I believe where there can be a modification of the degree a chance to negotiate a settlement with the homeowner or a chance to say, we better start again. I have another article of which you might be interested dealing with the various ways of acquiring and preserving open space, which talks about some of these concepts that might be of interest to your counsel. I'd be happy to work with the committee, sub-committees if you'd like to meet further date, I'm very interested in the area, I teach environmental law at the Law School, and have been active in legislation and this sort of thing for some time.

Sen. Gunther: Wouldn't a permitted use section cover the same area your talking about, in other words your talking about 60-90 days, some modification of that. If you set up the same provision as a or we do under the permit under the tidal wetlands wouldn't this also suffice, because you'd have lets say a

Collin Tait: After the decision has come down that there has been a taking the state's not left with an either or, either pay or get nothing, I'd like a period of time where things are frozen there's no taking in this relatively short period of time, where they've got a chance to turn around to change, modify the degree, work out with the property owner, or decide what they want to do.

Sen. Gunther: What your talking about, after a permit type hearing?

Collin Tait: Yes, after permit type of hearing has been, lets assume, been turned down(by the home owner or peoples) the home owner appeals of, and he's found to have substantially lost his property, yes that would be a typical way, I think flat prohibition
in statues run problems that you can avoid by having a permit thing with adequate ecological standards, like we heard today would make a sensible permit system and then abuses of that to be appealed.

Rep. Lavine: I follow how this would work for the inland-wetlands, I wonder if you could perhaps indicate how it might go with the protected rivers?

Collin Tait: I think a similar sort of proceeding could be done with the scenic river system, whereas whatever use controls are placed upon or how far back they go, if you gave an authority the right to settle these controls without legislating what they are and then have abuses of that be appealed with this and then a period of time that if the authority has set too stringent a provision, the homeowner appeals and is successful, I would think the same sort of holding period to change or modify the degree or then actually pay for it, but rather leave it unprotected, right now if it's unconstitutional, it's unprotected, you immediately have development and non conforming uses that you can't get rid of.

Walter Hyevla: Mr. Chairman, members of the committee, I'm going to wear two hats today, I'm President of the Connecticut Wild Life Federation, this is a Connecticut affiliate of National Wild Life, we're the largest conservation organization in the world. And I'm also Chairman and Founder of the Quinnipiac River Study Committee which is a citizen group formed by people starting in Plainville going down in Southington, Cheshire, Meriden, Wallingford, North Haven, Hamden, and New Haven. The Quinnipiac River Study Committee is primarily concerned with the preservation of natural resources of the Quinnipiac River and try to revert it from a gusrial sewer back to a class B stream, which I almost think is impossible. Let me say after following this act of the educated relative to the professor of ecology and the lawyer, I'm a lay person here and all I've got to say is, fellow you have your work cut out for you, because I can see it's quite difficult. The only thing I see is that you might use in protecting our river system and that is the flood plain zoning stream bank and channelization, personally I think that the State, the whole State should be master plan for a complete flood control program and we in the Wild Life Federation are in favor of this scenic river bill and the inland protection bill. I still say that your problem is difficult because I'm quite familiar with the local situation particularly in the Quinnipiac River valley area and I just can't see how the state is going to control all the wetlands relative to this drainage system and how they are going to serve them and to decide what to do with them. I personally think, as I say, one vehicle is the flood plain zoning etc., we are in favor of this bill. I'm in favor of education, but I think it's up to you people that represent the people of Connecticut to get on the ball and get some good bills and get it going fast because as you well know there are many exploiters in this state who are just interested in the fast
dollar, they are not concerned with the aesthetics, not con-

cerned with recreation, they are out of or out to make

money and we insist that you people come up with some kind

of a good bill, I still say that you have your work cut out

for you, and it's going to be a difficult one. Thank you very

much.

Roy Hemmingway: I'm a Yale Law student, I'm in my third year there, I

would like to speak a little bit about what people are saying at

the Yale Law School about the type of land use restrictions that

are being considered under protected rivers and inland-wetlands

acts. But I think Professor Tait has covered that quite well,

I certainly agree with his observations from my research and

those are the opinions of the people I've been working under at

Yale. I would like to use my chance to speak here to tell a

little story that you might find amusing. I was in Washington

state this summer, I was fortunate to be out there working in

Oregon and my interest in protected rivers comes from about six

years of recreational use of rivers, using rubber rafts for float-
ing down rivers, just a little Japanese life raft kind of thing,

and whenever I get the chance I blow mine up and take it down a

river whenever I can. We were doing this last summer in Wash-

ington, we were going down Stillaguamish River, a tame river with a

few rapids, we came down one area around a bend and came into

some rapids and right across the river was a tree. We paddled

like crazy to try to get away from the tree but we couldn't

avoid it and the three of us, my friend, his wife, and myself

went right into this tree and when it was all over we were on

top of the tree fortunately about 30 feet from the bank and our

boat was underneath the tree. We were a little wet, and we were

a little cold because this river had just originated off some of

the glaciers in the Cascades. But we were alright, but our

boat was wedged underneath the tree and all of our gear, which

included sleeping bags and packs and things was wedged inside ½

the boat and rapidly getting water logged. If you want to see a

funny sight it was my friend and myself sitting out in the

middle of the water on this log arguing about whether we should

cut open the bottom of his boat to get out my sleeping bag be-

fore they got so water logged that they sank and would be be-
yond retrievable. We argue about that for about twenty minutes

before finally the river made the decision for us and freed the

boat. I told this story because to talk a little bit about ob-
stacles in rivers and because I floated a number of rivers in

many of the states in this country. We aren't so afraid of trees

we think there are the kind of thing we normally can get around

and normally the thing doesn't damage our boats too much. The

thing that we find the most hazardous in rivers are the things

that man put there, whether he put them ther intentionally or

through neglect I can't really say all the time, but very often

we have to steer around car bodies, tires, and huge almost au-

mobile size blocks of concrete with big reinforcing rods coming

out. The greatest hazard to rubber boaters and we almost have

nightmares about this is running into barb wire. Sometimes there

will be a submerged barb wire across the stream and you hit

that and your boat sinks in about 3 seconds. If you lift my boat

you'll see that there's like a crazy quilt on the bottom with all
of these places where I've had to patch it, mostly due to things man has put there. Also it's not very pleasant to turn over in one of these boats when you're just downstream from somebody's affluent field where he's had his summer house or somethin with inadequate sewage. I have enjoyed floating rivers, we've never normally we don't use anybody's property when we do it, we start in a public place get off in a public place, and I think this has been a valuable experience for me, I've learned a lot, it's been a good way for me to see nature without much expense. I would recommend it to anybody, but there is a threat and I hope that you people can come up with something that can protect the rivers of this State.

Edward Klinchammer: I will be speaking mainly as an ecologist and an educator today, on the secondary school level. Accompanying me today are students on the secondary level who are involved with a program called the politics of pollution. They are mainly studying such things as environmental problems and working on legislation to do something about it. Some of the previous testimony that has come before me has bought up quite a bit of the things I wish to have bought out, so I'll try and keep it short and give you a few examples which can be documented of course, as to why we need legislation on these two issues. As far as the protective river system goes the main principle according to environmental and ecological is just that they are systems. They are extremely important systems and extremely complex systems, every system is made up of far smaller systems, so no matter what we do to any one system, whether we flush our toilet, whether we throw a cigarette butt into a river it affects a larger system somehow. We have inputs and outputs in each and every system, and as far as protective river systems goes the inputs beneficial are that the watersheds provide which are clean water, a place for wildlife to live, and of course recreational facilities. The destruction of these areas by irreversible damage such as filling, building, pollution of them, erosion, and of course paving over, of course distracts from the entire system which is what we call the environment. The detrimental inputs which we subject it to such as pollution, industrial wastes, and by the way Connecticut shares national recognition with Ohio in one respect, the Cuyuga River in Cleveland and the Naugatuck River in Connecticut are reportedly the only two rivers in the world that are capable of spontaneous combustion, that is they can burn at any moment. That is a direct cause of industrial waste, the Cuyuga River of course has burned, the Connecticut or Naugatuck has not, as yet. Municipal sewage is of course our number one problem, what to do with that which comes out of normally. Most of it come out in form which we commonly know as coliform bacteria. Coliform bacteria is produced in the large intestine or the colon, it is extremely important in that without killing it we cannot drink that water. Of course I have one documented example of that which is my own case. Eye, nose, throat infections are attributed directly to coliform bacteria and certain specific cases
of hepatitis and jaundice in August of 1970 I was a victim of the hepatitis condition complicated slightly by jaundice which was attributed directly to the contact with coliform bacteria. I had made the mistake of swimming in Connecticut waters that summer. Of course we need our drinking water, court water doesn't have to be quite as pure, the drinking water is the primary food source, fish, shell fish, and game birds. At one time the shell fish industry was one of the largest in Connecticut, we have come down from approximately five years ago we were grossing approximately 81 million dollars due to the oyster industry. Wild life contributing to the ecological balance of course can bring in such cases as the mosquito, the gypsy moth, and the span worm. Mainly because of the bird decline, of course we get another complication in here because pesticides have quite abit to do with this. Of course if you destroy the habitat of these animals you don't start with anything. Recreation of course, we mentioned fishing, boating, and swimming are extremely important to us in the mode of life that we now have because of course recreation is at least some way of getting out of the normal routine. If you walked out of your house nowadays, most houses should say in urban areas all you see is concrete. Sometimes concrete can get away from us alittle as you can see if you walk out of the Capital building. We have one highway which seems to have run away from us and ends on the capital lawn. As far as inland-wetlands are concerned acre for acre they're the richest and most productive natural habitation on the face of the earth, once we destroy them they're gone. Out of it we get, of course, fish, shell fish, esthetic values, of course, we can eat them and forget the esthetic values. Without fish shellfish, and other food that these wetlands produce there is no going on. They are spawning areas for several important species of fish, fresh water if your talking about inland, they are nesting areas for the birds which has given us much of our insect problem, I should say would have taken care of much of our insect problem, either because we have a lack of them, we do have an insect problem. They protect of course for flash floods because the owlands, the flood plains, etc., help to absorb all of the water that hits them and they give it up very slowly, if you fill in a wetland it's almost guaranteed you are talking such chances as flashfloods, which have been happening in Connecticut in recent years. It prevents run off, the prevention of run off, of course, is directly related to erosion, and of course it insures ground water supply. It feeds springs deep wells, and tributaries, which of course is directly clean water. Wetlands including marshes, bogs, swamps, most flood plains in Connecticut are not suitable for building which you might get in further testimony. They are by no means suitable for building, you can bring in any example, one with which I was concerned with was West Haven High School, which was built on a highly productive marshland. It took about 9.4 million
dollars to build the high school, mainly because of the pylons that had to be drilled down to keep the high school from sinking. Since 1965 when I graduated from high school, West Haven High School has sunk 7 feet. Also, West Haven High School is now concerned with such problems as subsidence which is uneven settling, so that the high school is cracking. You might be aware also that West Haven High School hockey rink which was built two years ago and was only opened this year because it settled in the middle and had a rise of approximately two feet. Anyway as far as closing commons go an educational level of course is important but it's rather ambiguous for me to educate students on the secondary level when they go out and see what I am telling them happening in those bogs, wetlands, protected rivers, or should be protected rivers, are now being filled, so that by the time they are out and part of the working force it's too late for them to do anything about it. Educationally we can tell them about it but unless legislation stops the destruction of it, it's rather hypocritical to even be here. Any question?

Arthur Rickerby: Rep. Ciampi, ladies, gentlemen, it's a pleasure to see you again. I shall be just about as brief as I possibly can. I'm Chairman of the Fairfield Environmental Council, last year our members supported the productive rivers bill, this year they have not changed their views. On their behalf I am here to urge you to consider legislation that will have the substitute bill that was approved by this committee in March of 1971. It is my opinion it is firmly sound, defensible in its' ecological foundations, its' economic implications, and its' constitutionality. It's a landmark legislation waiting to be wise and orderly land use and land development. In 1967 the nationally eminent William White was invited to Connecticut and after considerable study presented to the state government the proposal for action. Since then the legislation has passed many fine bills, but I maintain that there have been bits and pieces that are still uncoordinated whole. The fit bill in my opinion is to first piece of full scale legislation effort to allow and promote a wise and intelligent educated program of land development. Charles McCuskey, our State Forester, discussed a need for a land development code for Connecticut. It is my opinion the said bill would permit and implement the actualities and the problem he discusses. The bill recognized the fact that land abuse has occurred and still continues to occur. For example, elsewhere I would direct you to the current issue of National Geographic, and a long three-page article by Richard Curtis Davis in the New York Times entitled, The Seven Wonders of the Polluted World. Connecticut not only has the right to protect its rivers it has the obligation. I and every professional, I believe will be ready to testify to the
irrefragable damage that will be done and is being done by un-
controlled land development. The inland-wetlands is so impor-
tant to flood control, artesian and water table aquifers, air
shed over rural agriculture and the forest lands absorbing the
pollution from urban areas plus scenic, recreational uses, only a few of the many situations linked with crowding of Con-
necticut. This bill will bring us one step closer to the reali-
zation of the aims. I thank you for your attention.

Rep. Ciampi: Excuse me please, it states here Elizabeth May represent-
ing thirty-five high schools has to leave soon and wants to say
her piece. So if Elizabeth May will come up and say her piece.

Elizabeth May: Thank you. The organization which I represent is called,
Earth, it's the environmental regional action task force of Hart-
ford. As you mentioned we have chapters in thirty-five high
schools. I just came here to voice the concern of the group for
the preservation of the inland-wetlands and the river systems in
Connecticut. The testimony that you have heard is so much ex-
pert that I won't even attempt to say why I think it's so impor-
tant. I just beg you please to draft and help pass legislation
that will protect these areas for the future. Thank you.

Diana Cooper: The Connecticut Citizen Action Group is an environmental
consumer public interest advocacy group, funded by the citizens
of this state. We represent the hundreds and perhaps thousands
of citizen volunteers who are working with us now, currently at
work building the citizens lobby. We also have chapters of
hundreds of high school students who have organized platform
concern through out the state to draft a CCAG sponsored politi-
cal platform on the environment, the politics of pollution that
these people here are representatives of that group. CCAG urges
the environmental committee to see todays gathering of citizens
and groups and experts as evidence of the state side organized
concern for strong environmental legislation, and for concerted
environmental action on the part of our representatives. Be-
cause of this concern and in the light of the limited notice pro-
vided to this hearing the records of this hearing should be kept
open as long as possible to receive further written testimony.
The issues under consideration today concern one of the basic
systems supporting life on earth. Protection of inland-wetlands
and river areas goes beyond the simplicitic idea of water as a
commodity and it gets to the root of the problem, protection and
preservation of the total hydrological system on which we all de-
pend. Can we afford to continue to approach the problem of water
resource management on a chance, shot-gun basis? In the light
of enormous development, pressure, and urban pressures, and in-
creasing demands on the water resource, and on land, does the
hit and miss approach to protection make any sense? Individual
groups have made valuable contributions by perserving a swamp here
a stream there. But should individuals be forced to shoulder
the responsibility for the protection of a resource that is so
important to everyone? Will the legislature stand by while pri-

private interest, industries, and agencies undermine and despoil
bit by bit a resource so vital to the public interest to the state?
The answer to all these questions of course is a resounding NO.
By establishing laws to protect inland-wetlands in river and watershed areas, the legislature would make a decision that would be far reaching, it would be rational, it would be sensible. Such action recognizes that the water resource protection is a very complex matter. It involves not only water but cold watersheds, ground water recharge areas, water storage areas, wildlife habitat protection, flood control, erosion control, water quality protection, recreation and education use. These two bills would cover all of those areas in a very down to earth and basic sense. CCAG suggests that under pressures of population and development inland-wetlands and river areas face an emergency situation. Damage done to these components of vital life support system by stripping, draining, filling, damming, polluting, can not in most cases be reversed. For example, unwise development of upland watershed area simultaneously increases the erodability of the site and it drastically increases the amount of run off that must be handled by the natural drainage system of the watershed. Once paved an area is very difficult to unpave. Once paved, an area of land which could formerly absorb heavy rain fall can not be stopped from sending that water rapidly into over loaded streams. Wetlands provide water absorption and storage capacity which can be especially significant in minimizing erosion and flood damage. Particularly during heavy down pours, once filled or drained a wetland area can no longer do the job. When all these effects are combined to the state and its municipalities are forced to assume heavy costs for flood control, soil, water, vegetation, and wild life suffer irreversible damage. The quality of life for human beings declines. Nature would have handled the problem, she would have done the job for free, by then it's too late. This is the only one example of the fact that protection of wetlands and river areas amounts of a common sense approach to the management of this resource and to land management as well. Unless the emergency non reversible nature of the problem is understood, the state and its citizens will continue to be faced with the cost and discomforts of the damaged environment. Inland-wetlands and river and watershed areas are vitally important to the health and welfare of Connecticut people. Damage done to these areas is usually irreversible but it will continue without legislation protection. CCAG urges the legislature to establish such protection and offers its assistance in rallying citizen experts and power to establish the best possible legislation for Connecticut. Thank you.

Stanley Quickmire, Jr.: Mr. Chairman, members of the committee, this testimony is behalf of National Audubon Society of which I'm the Northeast Field Representative with my office in Harwinton, Connecticut. As regional representative for the National Audubon Society I am pleased to have this opportunity to testify on Scenic River and Inland Wetland protection before the Environmental Committee of our legislature. The National Audubon Society has nearly 200,000 members throughout the Nation, with fifty chapter and affiliated groups in Connecticut. We see the grow-
effort to protect and enhance the environment as a basic condition to the preservation of the quality of life in America. We in Connecticut are fortunate to have a concerned citizenry which almost daily grows in awareness that we must not let natural resources be wasted by failure to act on matters within our control. Like many other citizens, we recognize the substantial legislation that this Committee has sponsored in the last session of the General Assembly, and believe that you can enact this session than a Scenic River and Inland Wetland bill. These measures seek to protect and preserve the water resources that make this State productive and attractive; they recognize that our watersheds are not limitless, and that the future water needs of the State may go unfulfilled without safeguards. These bills highlight an important principle: that man is part of the environmental balance, and that only he can preserve that balance. The inland wetlands play vitally important roles in the life support systems of our landscapes, and our rivers link many of them in a balanced network. The legislation you are considering seeks an orderly and responsible perpetuation of these waterways in a healthy and usable condition. It would define areas as yet unscarred by careless action and preserve these for our own and for future generations. Both bills are a design for a living environment. Mr. Chairman, my organization is involved in several national discussions of the importance of sound waterway protection and, with your permission, I should like to submit additional documentation to substantiate the importance of maintaining sound ecological balance in these protection efforts, material I am sure this Committee would find helpful in its deliberations. I do not have them at this particular time. Last year, arguments based on legal technicalities were presented to throw into question the State's right to protect its resources. Even in the few short months since these arguments were made there has accumulated an impressive body of court decisions which provide substantial legal precedent attesting to the fact that the State may, can and should protect those natural resources it deems vital to its welfare. We are confident that the General Assembly will pass these bills in response to the increasingly evident desires of the citizens of our State, and thank this Committee for inviting this testimony on behalf of the Audubon Society's Connecticut members and friends. Thank you very much.

Rep. Lavine: Has the Audubon Society done any work on legal decisions?

Stanley Quickmire, Jr.: Well, I think our department in New York had done some, yes. I think some of this material that I mentioned will be that, I haven't seen it personally.

Rep. Ciampi: I think we skipped over A. Hoover, I'm sorry.

A. Hoover: Mr. Chairman, members of the Committee I'm speaking for Mr. Gary Soucie, writer and conservationist, who is living in Norfolk. I better read his statement because I can't keep changing. For the past five years I have been professionally involved in natural
resource and environmental conservation as Eastern Representative of the Sierra Club, an Executive Director of Friends of the Earth. Because of the primary importance of fresh water streams and water sheds in ecological and environmental maintenance, I've been involved in numerous plans, programs, and controversies involving the nation's rivers, including the establishment of the national scenic and wild river system, authorized by Congress in 1968. I have addressed the Institute of Water Resource at the University of Connecticut on watershed reclamation. The people of the State of Connecticut are indeed fortunate this committee is addressing itself to the subject to water and river shed protection. For the uses and misuses of fresh water streams constitute the key sounds in state or region environmental quality and predetermine the ability of that state or region to plan for or guide its development. Considering the population density of our state, Connecticut is lucky that there are still streams and watershed in reasonably good condition. I use the work Lucky carefully for there's little evidence the wide range of opportunities for stream and watershed protection remaining to us have resulted from wisdom, foresight, or planning. I grew up in Illinois, a state which like Connecticut had its natural vegetated cover virtually stripped early in its development. Fortunately for Connecticut and unfortunately for Illinois the period of intensive agriculture was short in the former and long in the latter. The hard wood forest and tall grass prairies of Illinois have been replaced by the environmentally indefensible practice of cash crop monoculture which in turn is giving away to unplanned residential and industrial development. The result, two summers ago not a single stream in Illinois was recommended for primary contact recreation. On the other hand Connecticut farmland has gradually reverted to forest. Without this heavy forest, where would the state streams and watersheds be? With more than four hundred people per square mile of land and nearly 1900 people per square mile of inland water. Some of the States principle waterways are in poor shape, showing the evidence of rapidly increasing nutrification, a word new to most of our vocabularies and few of us understand it well. I'm strying to shorten this up a little bit.


A. Hoover: This is my only copy may I get one to you?


Carolyn Chavack: I represent the Connecticut Citizens Action Group chapter in Hamden. We feel that as concerned citizens and voters of this State it is essential that proper legislation be passed to preserve, maintain, and protect the inland-wetlands, and waterways of Connecticut. Not only are the wetlands and waterways are essential to a sound ecological balance but they also provide an excellent form of recreation.
like fishing, swimming, and boating. And also a place where students such as ourselves to study wild life in its natural habitat. We feel it is the responsibility of the State to see that legislation is passed to make sure that we are guaranteed to have a future, to have some kind of decent ecological future. Your action has to be taken now to insure that these beneficial resources are available to citizens in the future. Thank you.

Evon Kochey: I'm President of the Ecology League, the Ecology League is an organization of professionals and interested laypeople in the field of Law and Environmental Sciences. As you see I have a three page statement, I'm going to refrain from doing it and just get in a couple of points that I feel are important. I think we're going to have strong scenic and protective legislation in this inland-wetlands legislation eventually, whether we decide it or not it's not going to be up to the people of Connecticut or really the Legislature, it's going up to the environment and I think that we each recognize that this is the time when we still have choices and when we're just becoming aware that we need to act forcefully and we need to act actively. It's awfully easy after it's too late to try and go back and do things, there's lots of scientific testimony available that we are well along in that crisis now. We've made a lot of mistakes in the past and you gentlemen now have the opportunities to move before we reach that point in time. We can't maintain population density in our urban areas without having large areas of open space nearby to provide the clean air and water to absorb the byproducts of urbanization. Connecticut's position as a relatively far suburban in the midst of a growing megalopolis, we're not able to use our state borders to keep out of the problems of Massachusetts and New York, they're coming in. You may not know it in terms of facts as yet, but the facts are there and if you want them we'll get them for you. Some of the people you heard today I'm sure told you new things about the problems, they certainly told me new things about the problem. I hope that in deciding what you do that you will try and take the broadest view. There are many things that we can approach, certainly flood plain zoning is important but that's only part of the problem. We need to approach it from that point of view, lets go ahead and keep Connecticut in the forefront in environmental legislation. We certainly have been there in the past. There's precedent for this kind of legislation, the national wild and scenic rivers act was passed by Federal Government some years ago. Twelve states already have passed their own protective rivers legislation. Certainly there's much that we can do in this area, I think that I'll stop there. Thank you.

Tom Sharpless: I'm Connecticut Coordinator of the Connecticut River Ecology Action Corporation. I have a brief statement also but I think to save time I will simply submit it, most of the points have been made already. I would just like to say that I also endorse and this isn't included in the written statements here,
the concepts of delineating wetlands and flood plains on the basis of soils, soils mapping, and we very much are in great favor of the whole environment approach to the preservation of natural lands, including consideration of air pollution, land use, and water quality. In addition to the statement I would also like to provide the committee with a copy of a great publication which related more directly to flood plains and damming of rivers, but there is information in there particularly some hydrologic information which pertains very much to protected river idea. Thank you very much.

Don Klotz: I'm President of Wilton Environmentalists, when I came in the door I thought I was signing in and not signing up to speak, I'll be brief, we support as our environmental organization supports most of these things that have been said today. We're 128 members in Wilton concerned with the increasing encroachment on environment. These particular problems that have been mentioned today we favor legislation and quick legislation to protect our wetlands and protected rivers. I do have a question in wind up here, will we be permitted to write in and will this hearing be kept open so that other members and people interested, citizens can write in further statements? Thank you.


Joyce Shaw: I'm President of Mill River Wetland Committee Inc., in Fairfield and I direct a study group which is the major activity of that city. We have been involved for the past six years a four years active, studying exactly what a river is and where we live. I think there have been many explanations and descriptions of why we must do something about wetlands and why it's not just a matter of wetlands, why it's a matter watersheds including all the sponge areas as recycling areas, as nurseries, as sponge areas, as well as every part of the flood plain. I don't think one thing has been made completely clear, we've got our tidal wetland legislation struggle as we do with it and we're very aware of the fact that we are a coast line community, we're a coast line state. But, I would encourage you very urgently to enact legislation to protect the coast line because it is our responsibility not just for Connecticut, it is of economic importance of the greatest kind, both hydrologically and in preserving the web of life, which determines the continuance of our life, it's importance to us as Connecticut people. But as every watershed eventually comes to the coast line of which we enjoy a large portion of this hemisphere, it is very incumbent upon us to see that the quality of what goes out the main drains or main veins as we call them, of that watershed affecting our coastal areas, which affect the life of the coastal portions of this hemisphere, which determine a portion of the 70 per cent of the oxygen that you, I, every industrialist, every student, everybody breathes which is produced by the plankton and proteus pastures of our coast lines will survive. The coast line is some-
thing that we must protect and this plankton matter can only be turned up to light where there are shallow areas of the hemispheres and banks. I was very much moved by the question of Mr. Matthews, when he said, "where do we approach the problem, what is the action we can take which is really going to help us as a people?" We are approaching it from three levels in Fairfield, our group educates adults to take out children in all thirteen schools in Fairfield, grades 3 through 6, so this involves our age with learning how we can back legislature as well as teaching the children how to be aware of the future. So all involved, teachers, administrators, everybody together in learning process. We have to have the law and now. We feel desperate all the time because the revision of teaching, the development of one simple program trying to teach children where they live in watersheds is so time consuming that we don't have time to be on the action front all the time. So it is essential and I am very much impressed with work that has been described to me being done using these soils map and the vegetation together. I certainly agree with tht person who said, you can not draw a line and if there is any way in which can come out with a total hydrological protection plan this is what we need. You really need watershed protection plan. I would encourage you also having tried some what last spring to turn my mind in a few moments to the legislature's problem to what we're stuck with is a lochan problem which identifies our main property, our main rights to happiness is being identified with property, and it seems to us that what we're trying to debate here is that we have a deeper things determining our happiness, whether we can indeed live and perhaps if you keep that in mind, that we have in our very constitution that naive statement, we're all entitled to the pursuit of happiness. Maybe sometime we can make that come alive, and I offer you our services in any way that we can be of help to you. Thank you.

Margery S. Silk: I welcome the opportunity of endorsing whatever you can do to protect the inland-wetlands, I am President of the Saugatuck Valley Audubon Society and I participate in volunteer environmental teaching program in Fairfield of the Audubon Society State of Connecticut. In that program I always make an effort to pick up some nice wet moss, hold it up in front of the children and squeeze it and let them watch as a volume of water comes out and try to get the point across of what an inland-wetland does to help all of us. At the same time I know that perhaps their fathers even are asphalting over a parking lot or their playing on a new field which should never have been made. We need this kind of legislation, I wish you speed and wisdom and drafting it, I will hope to be able to see some of that draft and to help support it in being passed. One further thing I hope you will not attempt to add it on to the 695, the legislation to protect tidal wetlands, which is lumbering along with some degree of success at this point as we have had the bad example in Massachusetts of the (inaudible) being challenged, I would not want to have us in Connecticut face the same problem, thank you.
Karen Clark: Yes, I will be very brief, I am a member of the Farmington Watershed Association and I would just like to say that the Watershed urges you to bring to 72 Assembly a bill that will protect the scenic rivers and the inland-wetlands. I have many points to make but I will only make one of them. That is that much of our conservation legislation that has been passed is contributing the urgency of this protecting of the rivers, in that the because we are now protecting our rivers, rivers such as the Farmington that have not been used because they have been polluted are now going to be very much in demand from a recreational view point and the building view point. Also the fact that we are now in Simsbury putting sewer lines right through the flood plain that is going to open up that flood plain development where it never was opened before. So some of the things that we are doing to improve the rivers are going to damage the entire ecology and then therefore I urge you to act in this Assembly.

Doris Goss: I'm not going a statement, I just want to say that I'm Director of the Housatonic Audubon Society and we strongly endorse what has been said here and hope that legislation will be passed to protect our rivers and our wetlands.

Rep. Ciampi: I know you've been sitting there trying to take it all in, that's what we're doing, trying to take it all in, trying to come up with some kind of solution. I hear a lot of philosophizing and all that but our main function is to get direction, and that's what we had this public hearing for, for direction, we have a sense of direction and we'll try to pursue it.

Robinson Leech: I'm from Salisbury, Connecticut and I'm speaking here as a Director of Ecology League, I have no prepared statement and many things have been said here this afternoon which are very pertinent to the point and all I would like to ask you as members of this committee to do is to give this your best thinking and come up with some kind of legislation similar to the bill that we introduced last session for our protected rivers. I think the time has now, we need it, and I think many things have been said to show that we need it badly. Thank you.

Samuel Hill: Mr. Chairman, members of the committee, I learned of this meeting, My name is Samuel Hill, Chairman of the Redding, Connecticut Conservation Commission, I learned of the meeting last night about 5:30 so I don't have a prepared statement and in fact even not being able to consult with my colleague. I would like to expand a little bit on what Mr. Hebert and Mr. Brennaman said and perhaps I can introduce that by reading one paragraph of a letter I wrote to Commissioner Luftkin on the 5th of January, I suggested an amendment to the act establishing your department to provide municipal conservation commission can establish by regulation rules intended to deal with such matters as air and water pollution and protection of the natural resources of a municipality providing such municipal rules are no less stringent that
promagated by your Department. Such an exception will be neces-
sary to prevent municipalities from undermining by local rule
state wide programs of your Department. I have in mind, of
course, that there are areas within the State that should im-
pose more stringent regulations that might be imposed by your
Department. For example, a more stringent wetland regulation
should probably adopted in writing that in a state as a whole
because 90% of the town is in the watershed of a public water
utility. Mr. Hibbard said that there are about 90,000 acres of
wetlands in the State that might need protection, I think that's
a gross understatement of what actually needs to be done, be-
cause in our town we have a standard soil survey made by the
Soil Conservation Service and about 14.3% of the land area of
the town turned out to be what one would regard as wetlands.
That we believe should be regulated by the municipalities and
we've prepared an ordinance to be administered by the Conserva-
tion Commission which would do the job. I strongly urge there-
fore that you involve municipality and in particular the Conser-
vation Commission in any wetlands control measures which you
may adopt at this session of the General Assembly. We have dis-
cussed this matter with our planning and zoning commissions and
I feel that they are charged with responsibility of over seeing
the development of a town, the conservation of a towns' natural
resources is something that should I think, logically and pro-
bably at laws as well belong to a conservation commission.

Thank you.

Eugene O'Meara: I'm First Selectman of the town of Kent, Mr. Chairman,
ladies and gentlemen, I'm going to confine myself to a plea for
our area because the town of Kent which has 49 square miles and
through which the Housatonic River flows is as yet an unspoiled
area and you have an opportunity to do it now, ahead of time,
rather than try to undo damage done. There is approximately 18
miles of river bank within the town. The population is under
2000 and because we're ahead of the game and most of the bene-
ficiaries lie to the south of us I am going to enter a plea for
action now on a strong river protection system bill. Our town
planning commission is considering a technical details of this
and I would suggest that they forward these to you. Thank you.

Rep. Ciampi: Anyone else care to speak? Well, that will be the end of
the meeting then.
INFORMATION SUBMITTED TO THE COMMITTEE ON THE ENVIRONMENT ON INLAND WETLANDS

As Secretary-Forester of the Connecticut Forest and Park Association, I am appreciative of the opportunity to present the following information which we have gathered on the subject in recent months.

The protection of inland wetlands has been recommended by many private and governmental organizations in recent years. During the 1971 Session of the General Assembly, Senate Bill 631 was introduced as a possible means of implementing recommendation number 46 of the Environmental Policy Committee to assure the protection of inland wetlands. At that time the committee was urged to review the matter and hopefully arrive at a method of protection of wetlands other than amending the existing coastal wetlands law and superimposing the protection of inland wetlands on the limited staff currently involved in the protection of coastal wetlands.

This suggestion is still valid at the present time and it would appear that inland wetland protection proposals should include a broad statement of purpose. An example of such a statement of purpose may be found in legislation introduced in New Hampshire in 1971, in House Bill 228 which said, "It is found to be for the public good and welfare of this state to protect and preserve its submerged lands under fresh waters and its inland wetlands, as herein defined, from despoliation and unregulated alteration, because such despoliation or unregulated alteration will adversely affect the value of such areas as sources of nutrients for fish and wildlife of significant value, will damage or destroy habitats and reproduction areas for plants, fish and wildlife of importance, will eliminate, depreciate or obstruct the commerce, recreation and aesthetic enjoyment of the public, will be detrimental to adequate ground water and stream flow levels, will adversely affect stream channels and their ability to handle the runoff of waters, will disturb and reduce the natural ability of wetlands to absorb flood waters and silt, thus increasing general flood damage and the silting of open water channels, and will otherwise adversely affect the interests of the general public." The Massachusetts "Inland Wetlands Act" passed in June of 1968 included the purpose, "of promoting the public safety, health and welfare, and protecting public and private property, wildlife, fisheries, water resources, flood plain areas and agriculture."

In the New Hampshire legislation inland wetlands were defined as being "any wetland other than those subject to the action of salt water and/or soil designated tidal marsh by the National Cooperative Soil Survey. New Hampshire defined wetland to include any marsh, swamp or bog subject to permanent or periodic flooding, including the surrounding shore and including any soil designated as very poorly drained by the National Cooperative Soil Survey. The Massachusetts definition is less specific and means "any swamp or marsh or swamp bordering on inland waters of that portion of any bank which touches any inland waters, or any marsh or swamp subject to flooding by fresh water."
It seems both possible and desirable that these definitions should be expanded to include plant communities and soil classifications in Connecticut. If this is done, some commitment should be made for the early completion of soils mapping in areas where it is incomplete.

While New Hampshire established a "New Hampshire Inlands Authority" to determine the law, administrative functions should logically be placed within the Department of Environmental Protection. In Massachusetts the law is administered by the Commissioner of Natural Resources. Both the New Hampshire and Massachusetts legislation provide for appeal from the decisions of the regulatory agency and purchase of lands by eminent domain.

In New Hampshire regulated activities include excavation, removal or dredging of any bank, flat, marsh, bog, swamp, lake bed or stream bed; placing of fill stabilizing of shore or bank areas; prospecting and mining for valuable mineral, metal deposits, the removal of sand and gravel or other materials; construction of a breakwater, wharf, dock pier, mooring, slip, channel, canal or boathouse; and any other project which the authority determines will cause a change of the bed, shoreline, or character of inland waters of the state.

In Massachusetts the Commissioner of Natural Resources, with the approval of the Board of Natural Resources may "adopt, amend or repeal orders regulating, restricting or prohibiting dredging, filling, removing or otherwise altering or polluting inland wetlands."

Information on the inland wetland resource in Connecticut is limited. However, we have gathered information from the former State Board of Fisheries and Game on the acreage of inland wetlands over 10 acres in private ownership and inland wetlands over five acres in public ownership and have determined the area of inland wetlands over 40 acres which were inventoried by the Fish and Wildlife Service of the Department of the Interior in 1958. We acknowledge that some of these areas have been lost but we feel that the total of 90,820 acres is a fair approximation of the inland wetland resource in Connecticut.

It would seem appropriate to develop institutions and regulatory procedures to protect these resources.

Respectfully submitted,

John E. Hibbard
Secretary-Forester
The ayes have it. The Bill is passed.

THE CLERK:
Calendar No. 360, File No. 347, Favorable Report, Joint Standing Committee on the Environment, Substitute House Bill 5257, AN ACT CONCERNING INLAND WETLANDS AND WATER COURSES.

THE CHAIR:
Senator Prete.

SENATOR PRETE:
I move acceptance of the Joint Committee's Favorable Report and the passage of the Bill, as amended by House Amendment, Schedule A.

THE CHAIR:
Will you remark, sir?

SENATOR PRETE:
This is the third of three major pieces of Environmental Legislation which has come before us tonight and of the three, in my opinion, is certainly the most important to the environment and the effort to protect our environment in this State. The inland wetlands are - the Bill are similar to the tidal wetlands legislation which we passed two years ago and provides for the protection of this very vital part of our life chain in this State. The inland wetlands provide for, in a natural way, flood control, replenishment of underground springs and water and need play a most vital part in the balance that is nature in this State. The Bill was the subject of considerable controversy and considerable investigation and study was put into it during the course of the last few months. We have before us now, a Bill that has gained the support of virtually every major environmental organization and agency including the Department of the Environment, including former mentors of this
April 13, 1972

Bill. It is polished to the extent that it is ready to go and perform its job in protecting the inland wetlands of this State. The Bill provides for initially, it will provide for three steps. The protective apparatus necessary, the local community is, until 1974, in complete charge of providing regulations and the means on their own, in their own way, to protect their own wetlands. The Bill also provides for Districts between groups of towns to accomplish this purpose. The State Department of Environmental Protection in 1974, at that point, will become the agency which will administer entirely and control the regulations and the protective effort that is encompassed in this Bill. It's good legislation. It's important legislation. I think, in the last several years, the single most important piece of environmental legislation to come before this body. It's a model for other States. I have had the privilege of being able to say that in Connecticut several times. This is a model for other States. We hope that other States will follow this kind of exemplary legislation and move in this important direction. I urge everyone to consider the Bill carefully and vote for it.

THE CHAIR:


SENATOR HAMMER:

Mr. President, I support this legislation. The House Amendment was quite considerable. We've had it explained to us in our caucus. Mr. President, I wonder is there any procedure by which we could have a copy of the House Amendment? Not before we vote on the Bill but, in order to have with us. We will go home from here in a day or two and everyone will ask us about the inlands wetland Bill and it will be a long time before we can get
THE CHAIR:

Well Senator, I think very simply. Get a copy from the House Clerk.

SENATOR HAMMER:

Someone gave me one. But does that take care of everybody else?

THE CHAIR:

Well, I have a lot of concerns. I do my best.

SENATOR HAMMER:

Thank you.

SENATOR PRETE:

Mr. President.

THE CHAIR:

Wait just a second. The Clerk is explaining to me. Just a moment please. Senator Prete, a suggestion?

SENATOR PRETE:

I have a suggestion. I'd be very happy to supply the necessary - in fact I thought I already did. I'd be happy to supply the necessary copies of the

THE CHAIR:

Will you place it on every Senator's desk tomorrow and that will solve the problem? Thank you. Thank you, Senator Prete. Senator Hammer. Senator Eddy.

SENATOR EDDY:

Mr. President, before I say a very few brief words, I would tell anybody interested I have about four copies or five copies of the complete Bill with Amendment on my desk here which anybody might have. Very briefly Mr. President,
April 13, 1972

It's always of interest to me to see how a major piece of legislation such as this, which may well be the single most important legislation we have had in this Session and it could become more important as the years go by. It is always fascinating to me to see how it can pass with no controversy after a great deal of work on the part of a great deal of people. This Bill is really a monument to a lot of work. The Environment Committee Chairman, all the various legal minds that had some objections, all of which were met and solved. I think it's a wonderful Bill. I'm proud to have had a very small part in it. I think the entire General Assembly deserves a great deal of credit, including Commissioner Lufkin who worked hard on it and I think it's a wonderful piece of legislation and I'm happy to be here to support it.

THE CHAIR:

Senator Gunther.

SENATOR GUNTHER:

Mr. President, I'd like to associate myself with the remarks previously made on this Bill. This is, of course, one of the major pieces of Environmental legislation that is going to be passed this Session. I do think though, that too often they are associated entirely with the Environment Conservationists and this is really a people's Bill that has long overdue. It been worked on for many years and I think that the people themselves are going to benefit by this and I'm very happy to see it before us tonight.

THE CHAIR:

Senator Rimer.

SENATOR RIMER:

Mr. President, I too, rise in support of this Bill and I'd like to echo
April 13, 1972

the words of Senator Eddy. I think the first draft of this bill that was presented by the Committee had some legitimate objections and I think in the spirit of compromise, these objections have been taken care of by the Amendment and I'm proud that the General Assembly was able to come up with this truly landmark legislation. I'm happy to support it.

THE CHAIR:
Will you remark further? Senator Petroni.

SENATOR PETRONI:
Mr. President and Members of the Circle, I certainly am one who believes that control of this kind of legislation should be left with the Legislative body of the Town or City and clearly, under this bill, it has retained control there, where it belongs. I feel that if we're ever going to make progress, in this field of conservation and for that matter in any field, we must motivate the lowest unit of government and I think in this case, it follows that concept. As we said before, I think it was the Senator from the 18th, that he is opposed to the trend that we are mandating actions to local governments and usually without funding and in this particular case, we avoided it. And I think that's got a that has a fine principle that this Bill contains. It also protects the property owner and I think that's very important in this field. Never lose sight that the individual property owner has rights. And those rights are protected in the Bill and they were improved in the House Amendment and I certainly am glad that the individual rights have been protected and I hope this Bill passes unanimously.

THE CHAIR:
Senator Cashman.

SENATOR CASHMAN:
April 13, 1972

Mr. President, I'd simply like to associate myself with the remarks of all those who spoke in favor of this Bill. Excellent, exciting, dynamic, these are the kinds of adjectives which I think can be applied to this piece of legislation.

THE CHAIR:


SENATOR DOWD:

Mr. President, I rise to associate myself with those in favor of this Bill and I think it will go a long way toward meeting serious problems and avoiding others.

THE CHAIR:

Senator Power.

SENATOR POWER:

I too, would like to briefly associate myself with the remarks made by all of the speakers. The subject has been thoroughly covered. I would like to pay tribute to a lady who is sitting in the Chamber. She is the President of the Ecology League of Northwestern Connecticut. She has spent much time in the past several weeks in the corridors of the Capitol and I imagine she is quite delighted tonight because it's obvious that this Bill is going to pass. I think she has some other people from Northwestern Connecticut with her. Congratulations, all of you.
April 13, 1972

We are very happy to have you here and to have you see your baby be

SENATOR MONDANI:

Mr. President, I rise in support of this measure. Again, echoing the
sentiments of all of you. You threw me with that last remark. I urge its
adoption.

THE CHAIR:

Remark further? Senator Buckley.

SENATOR BUCKLEY:

Mr. President, I certain subscribe to the worthwhile purposes that are
contained in this Bill. But I have some reservations concerning the effect
of it and I would disagree with some of the things Senator Petroni said. In
that the local municipalities are given total control over the control of
these inland wetlands. As I read the Bill, the Commissioner in his regulation
will be controlling after a certain date, 1974. So, municipalities don't act.
The Commissioner and the State powers will be enforced upon municipalities.
I also have some serious problems about the effect of Section 15 on page 4 of
the Bill. I don't have the Section number. Section 4, Subparagraph 15 on
page 4, in which the definition of which wetlands are controlled - inland
wetlands - says soil types designated as poorly drained, very poorly drained,
alluvial, flood plains by the national cooperative soil survey and may be
amended from time to time. Now, I don't know what the survey of the national
cooperative soil survey is. I don't know whether that covers the high water
mark on the flood of 1955, in my own District, where the waters went up to
two or three blocks and climbed hillsides and I don't really know whether that
gives the powers of regulation that are contained in this Bill, to the
Commissions or the boards or the Commissioner of Environmental Protection within that area. It is a problem to me. I don't object to the Bill as such. I say that some very close scrutiny should be given to these definitions. Unfortunately at this point in time, at this late hour of our Session, I am unable to answer these things. If there is a reasonable definition of these areas of coverage, I would certainly be for it. If it covers areas extraordinarily large within the normal control of municipalities, being a person who believes in local control wherever it is possible, feasible and reasonable, I would have to be opposed to it. I stand tonight admitting that I am in a quandry as to the scope of the Bill and hope that some future Session of this General Assembly does not have to correct some problem that we might create here tonight that is done as a result of the ecological movement that exists in the State of Connecticut now and that I think is, like most things that come to public attention and get great public fervor involved with them, sometimes in fact, many times, the pendulum swings passed the point of reasonableness or middle ground. I hope that this has not happened in this Bill.

THE CHAIR:
Will you remark further, Senator Prete?

SENATOR PRETE:
Fortunately, we are the pendulum and should the need arise and it very often does, whatever Amendments have to be made to this forerunner, this trial airplane, in order to make it fly and continue to fly better and better, then we're here for that purpose. And we meet annually now for that purpose. Should the implementation of the Act run into difficulties. However, on the two points that Senator Buckley raised and I can understand his concern about
April 13, 1972

both points. They were matters that were discussed in some detail and so I do have some knowledge of them. The Bill provides for a survey by the Commissioner on the Environment similar to the survey which was conducted and in fact, is still being conducted on the tidal wetlands. The National Cooperative Soil Survey is, of course, a geological survey which will serve as a reference point for the subsequent survey done by the Department. So and again, this survey is subject to any landowners appeal, any municipality's appeal if anyone feels some injustice is worked upon them, either by the survey or by any definition of this Act or the inclusion of their land or indeed any regulation of their land, there is appeal provision and liberal ones in the Bill. As far as the implementation in 1974, and as far as the concern about the local community maintaining control, this is a fact. The local community does maintain control. It is true the Department of Environment and this is not unusual in any set of circumstances such as this, the Department of the Environment will promulgate regulations which serve as a general guideline. However, and this would be immediately, however, at the same time, the communities will promulgate regulations of their own and those regulations, provided they conform to the general guidelines, again this is not uncommon in Government, will be the regulations that will apply to that community or district. So, in a very real sense, the community does maintain final control and again, these are concerns that were raised and many, many concerns that were raised with this Bill. However, we can't stay on one point. We can't stay today. We have to make provisions for tomorrow. And these are provisions that perhaps should have been a long time ago or we wouldn't have found ourselves in the environmental bind that we are in now.
April 13, 1972

So, again the legislation may not be perfect. I don't know. I think it is. But it may not be. If it isn't, we'll be back next year. Or some of us will.

THE CHAIR:

The question is on passage of the Bill. Will you remark further?

Senator Crafts.

SENATOR CRAFTS:

Mr. President, as one other Senator remarked here this evening, everyone should get in his ten points on a Bill such as this. It's quite a popular measure and I rise to support it. However, I would like to point out that in one Section 3, subparagraph 16, there is a reference to natural or artificial public or private water containers, such as swimming pools and so forth. I think that the people that are fostering this measure should have a look at the regulations to make sure they don't try to take my swimming pool for a fish pond. The strict letter of this law, I think my little swimming pond might go to the Commissioner for the purpose of a fish hatchery. I think the Bill is good. I sincerely believe it will help clean up our inland waterways and I ask Senator Prete and Senator Gunther to have caution when they get to my house. I don't want to surrender my swimming pool.

THE CHAIR:

Let the legislative record show there is no intention of invading Senator Craft's swimming pool and or fish pond. Will you remark further?

Hearing none, all those in favor of adoption of the Bill signify by saying aye. Opposed, nay. The ayes have it. The Bill is passed.

THE CLERK:

Calendar No. 361, File No. 382, Favorable Report, Joint Standing Committee on the Environment, Substitute House Bill 5256, AN ACT CONCERNING

FRANCIS W. CIAMPI:

Mr. Speaker, I move for the acceptance of the Committee's favorable report and passage of the Bill.

MR. SPEAKER:

Will you remark.

FRANCIS W. CIAMPI:

Mr. Speaker, the life blood of the environment, the economy and the health of the State of Connecticut is the supply of fresh water. We do not know enough about this precious resource or the future needs for water in the State to risk doing irreversible damage to the source of our water supplies, which are the water courses and the ground water recharging areas such as marshes, bogs and swamps. This is why this Bill is most essential to the people of Connecticut. If we do not take a stand now our water supply in the year 1980 will almost be depleted, and then we will have to take drastic actions. Why wait. Let us act now, and pass this most important Bill. I move for its adoption, Mr. Speaker.

MR. SPEAKER:

Will you remark further on the Bill.

DAVID LAVINE:

Mr. Speaker, the Clerk has an Amendment.

MR. SPEAKER:

Will the Clerk call House Amendment Schedule "A".

THE CLERK:
Monday, April 10, 1972

House Amendment Schedule "A", offered by Mr. Lavine, of
the 73rd, consisting of two pages.

DAVID LAVINE:

Mr. Speaker, if I might be able to summarize.

MR. SPEAKER:

Is there opposition to the gentleman outlining the
Amendment? Hearing none, would the gentleman please proceed.

DAVID LAVINE:

Mr. Speaker, the Amendment is upon the desks of every
Member in the Assembly, but I should like to call attention, if I
may, on the second page, Line 61. Line 61 should now read, "De-
lete Lines 294 and 295 in their entirety." Line 62 is crossed
cut. Lines 63 and 64 are crossed out. Then, at the end on Line
72, put a period after the word "easements", and the quotation
and the rest of Line 72 is out, Line 73 and Line 74 is out. Mr.
Speaker, if I might very briefly go through the major items with-
in this. Lines 75 to 78 now says, "construction and operation of
dams, reservoirs and other facilities necessary to the impounding
storage and withdrawal of water". Mr. Speaker, this is to pro-
tect the reservoir systems, the water systems within our State.
Mr. Speaker, the next substantive Amendment that we have is in
Line 70...is in Line 84, where we have a definition of property.
That definition is such property defined as the largest minimum
lot size permitted in each municipality. And further, after Line
84, insert the new sub-section which reads as follows: "a resi-
dential home on a division lot, which subdivision has been ap-
proved as of the date of promulgation of municipal regulations".
Mr. Speaker, briefly, the...this is so that there can be the en-
joinder and maintenance of property as a right within this par-
ticular Bill. Furthermore, if someone has already purchased a
subdivision for residential home prior to the time that the muni-
cipality has promulgated the regulations, that person will have
that home lot as a right. Finally, Mr. Speaker, if we turn the
page, top of Page 2 where we see any municipality acting through
its legislative body may authorize the Conservation Commission or
other boards or commissions as they may be authorized by law to
act. Mr. Speaker, briefly, what that does is say that once the
municipality has acted in conformity with the regulations put out
by the Commissioner that municipality then no longer has to go
through any further regulations by the Commissioner, and it is
then the sole agent for the licensing of the regulated activities.
And in the event following right after that, if the municipality
does not act my 1974 the Commissioner shall take the action in-
cluding the licensing. Mr. Speaker, I think that the other A-
 mendments are...let me just go down to the final one, Mr. Speak-
er, which goes to the section 8B. Mr. Speaker, deleted from that
is the...this is to protect the rights of the homeowner, Mr.
Speaker, and to firmly see that they are protected and that there
cannot be any unreasonable taking, and that there would not be
any unreasonable court delay. Mr. Speaker, I move the Amendment.

MR. SPEAKER:

Will you remark further on House"A".

PHILIP N. COSTELLO, JR.:

Mr. Speaker, I rise to support this Amendment, which
contains a composite of suggestions received over the past several days by many Legislators. It eliminates certain words which were harsh and unappetizing. It adds certain protections for private property which greatly soften the impact of the Bill. I might say that many people have volunteered ideas and suggestions for further improvements in the Bill. I think that the feeling of fellows in the Environment Committee are that if you would extend your indulgences with new ideas so that we could pass this...get this legislation promulgated and under way, there is no way that it's going to be fully implemented for at least a year, so that we would have an opportunity to consider further improvements in it during our next Session. But I think this Amendment goes 90% of the way to making this an excellent Bill, and certainly the State needs protection of its inland wetlands, so I would, too, support this Amendment.

MR. SPEAKER:

Would you remark further on House "A". If not, the question is on its adoption. All those in favor of House Amendment Schedule "A" will indicate by saying "aye". The Chair will withdraw posing the question. The gentleman from the 177th speaking on House "A".

MORRIS B. HOGAN:

Mr. Speaker, I understand there's quite a few Amendments to go onto this Bill, and I haven't drawn any Amendments, but I have done a little work on the Bill itself pointing up the need for Amendments, and perhaps if I could just read a little of a written thing that I have here it would point up these Amendments
that are so badly needed and possibly save time in the long run. If you'll bear with me. When this Bill was Inland Wetlands it really was not so bad, but when they added water sources then you know that you've been had. If your cat digs in the sand for a place that she can sit in, she is violating the law and becomes a no-good kitten. If you've invested in real estate, you may feel you can relax. But, brother, you don't own it. You just pay the tax. If there's a hollow in your pasture that's always full of muck, the cows must wade around in this because you can't dredge or dig or suck. If you have a swamp that breeds poison sumac or mosquito you can't touch it until you see Dan, or if you're lucky talk with Reba. Of course, if you don't like the taking, you can go to Court with an appeal and probably after two or three years you will get yourself a deal. But when the Court informs the Department that they must do their bidding, the Commissioner can say, "Forget it, Judge. I was only kidding." So, my friends, please give some thought. Don't be so rash and experimental before you build a backlash against things environmental.

MR. SPEAKER:

Having heard from the poet's corner, are there further remarks on House Amendment Schedule "A". If not, I'll put the question to you. Question is on adoption of House Amendment Schedule "A". All those in favor will indicate by saying "aye". Opposed. House "A" is adopted. The Chair rules it is technical. Will you remark further on the Bill as amended.

DAVID LAVINE:

Mr. Speaker, considering the time of night, I'm going to
be very brief about this. Mr. Speaker, this Act that we have before us is an Act for the 1950's and 1960's, but we're getting to it in 1970. So (inaudible), Mr. Speaker, the land and the water within the State of Connecticut. We are faced in the future with a very serious water problem. We do not want to have to cope with this particular problem under the threat of restrictions which are completely unpalatable. We want to plan for our growth. We want to plan for our residential needs. We want to plan for our industrial development. Mr. Speaker, what this Bill does is strike a balance. It strikes a balance between the needs of the State and the protection of the people who have property within the State. Mr. Speaker, I like to just call your attention to the permitted activities and particularly to the permitted activities in Section D where we recognize that the farming industry is of prime importance to this State, and we do protect the grazing, farming and nursery garden and harvesting. It's our intent... legislative intent within this, Mr. Speaker, to see to it that this is interpreted in the widest possible way. We recognize that these are our conservationists, and we want to see them continue their sensible practices. Mr. Speaker, I believe that this Bill answers the problems that we are confronted with, and I hope that the House will join tonight in giving a rousing vote in support of protecting our inland wetlands.

MR. SPEAKER:

Will you remark further on the Bill.

GERALD F. STEVENS:

Mr. Speaker, I'd like to...
Lavine and champions supporting this legislation. I think the 1972 session of this General Assembly in Connecticut, which is hopefully fast drawing to a close, will certainly have hallmark legislation in the area of the environment. 1971 saw the creation of the Department of the Environment, and now in 1972 the Inland Wetlands Bill. This is a fitting Bill seeing that in 1969 we took steps to protect our tidal wetlands. We are now recognizing that in a state as small as Connecticut we must also have effective legislation to cover the water sources which are so important to our State. It's a meaningful piece of legislation which I'm pleased to join in supporting.

MR. SPEAKER:
Will you remark further on the Bill as amended.

JOSEPH T. GORMLEY:
Mr. Speaker, I rise to support this Bill. In the 1969 session we enacted the Tidal Wetlands Bills which effected our shorelines wetlands. The Bill before us is what could be called a companion Bill to the Tidal Wetlands Bill in that it concerns inland wetlands and water courses. The people in my town of Fairfield want it. In fact, I have received many letters and phone calls all in favor of it. I did not receive one letter or one call against it. The previous speakers have outlined to you in great detail all the good points of the Bill. I'm in accord with their views favoring the Bill. It's a good Bill needed by our people. I will vote for it. Thank you, Mr. Speaker.

ARTHUR DELLE VECCHIA:
Mr. Speaker, I support this Bill. Some people think that
we should not act now to protect our wetlands and water courses, but the need is too great to ignore. Other states, like Massachusetts, Rhode Island, New Hampshire, Michigan and Washington have recognized that need and have passed legislation to protect wetlands and water courses. We are all aware that this is important and powerful legislation, but if Connecticut is to be included among these states that have met the challenge of creating a healthy economy and a healthy environment, we must act favorably on this Bill. Thank you.

MR. SPEAKER:

Will you remark further on the Bill.

RUTH H. CLARK:

Mr. Speaker, I would like to commend very highly the drawer of the Amendment, Representative Lavine. I think a great many of the objections that I had previously to some of the tidal wetlands Act have been removed by this Amendment, especially the addition after Line 84 where one of the uses is spelled out to be a residential home on a sub-division lot. And, furthermore, the addition on Line 198, which means the Commissioner cannot just withdraw after an appeal in the Courts has started without paying damages, and I think that this Act is in a very acceptable form now. I urge its passage.

MR. SPEAKER:

Will you remark further on the Bill as amended.

THOMAS M. KUBLIK:

Mr. Speaker, I rise I have to say reluctantly to support this Bill, because I feel it's a Bill that is extremely poorly
defined...very poorly defined. It's a Bill that has a great purpose, however. And it's for this purpose that I will support it. Also, with the representations that it won't be ready to be enforced by the Environmental Department and that a Legislature will be back and hopefully refining this Bill. It will be a tool for the Commissioner to remedy certain problem areas that he currently has no power to rectify. However, before we run to support a motherhood Bill, and this is what it is, I'd like to refer to Lines 149 to 158, which define wetlands. Wetlands means land which consists of any of the soil types designated as poorly drained, very poorly drained, alluvial and flood plain by the National Cooperative Soil Survey as may be amended from time to time of the Soil Conservation Service of the U.S. Department of Agriculture. Now, I didn't know what that meant. I asked Representative Lavine, and I asked how much of the State do you think this might cover. And I admire his candor. He said, "Well, this could cover 25% of the State of Connecticut." Now, others have said it could even cover more than 25% of the State of Connecticut. What we're doing in this Bill is we're saying to the Commissioner that particularly if a town doesn't do anything that you can effectively control the fate...economic fate...of 25% of the State of Connecticut, particularly when we're talking about the regulated activity that will have regulations determining the effectiveness, really, of the ordinances that are enacted locally. Now, poorly drained it seems to conjure up the ideas of marshes and birds and ducks and cattails and everything else inland. That's not so. Poorly drained...I called an engineer. I said, "Well, look, I'm a lawyer. I don't know that much
Poorly drained, for instance, he told me, could take care of half the Town of Suffield. Now, I don't think that the downtown district in Suffield is what is intended as the subject matter of this Bill. Nor, for instance, poorly drained would also cover a mountain slope. Now, I'm sure that's poorly drained. Under this, this is exactly what we've given the Commissioner the right to regulate. Next, I've asked, "Well, if this is the case...if we're giving him one-fourth the State to regulate, let's at least look at a map." You know it might...I know that in my town, which is Wethersfield, it's a little deal that's flood plain, and we're all covered by it anyway, and I'm happy to say that for my own conscience, you know, we have a...we have flood plain zoning, and the people there are aware of the water concerns. But I was concerned about other areas in the State, and I said, "Well, where are we affecting development." And, really, when you come right down to it, the mapping is so incomplete. I asked if there was a map available earlier, and the Representative indicated to me that well here in Hartford County you have nothing to worry about because they don't have it mapped. And, then, I scratched my head again, and I was told, "Well, don't worry about it, because it's not affected in the sense that, you know, that if you don't know if you're wetland or not", and I don't know really how you're going to see...to determine whether it's a wetland...it won't be affected. To me this is a lousy way to legislate. If we've got a problem with pollution...we want to keep pure our waters...we want to create a bird sanctuary or preserve our
wildlife...or do something specific...fine. But this is so im-
precise that it really takes a lot of twisting...and not arm-
twisting...but, you know, twisting because of the good purpose of
this Bill to say that you'd even vote for it. And I just say that
maybe, between now and then, between now and the next Session, may-
be someone will read the Bill...I got cards saying, "Please vote
for the Wetlands Bill." I doubt that they knew what the devil
wetlands were. I think they had the idea, as I and a lot of the
rest of the laymen have of ducks and bird sanctuaries. But that's
not what is in this Bill. And it's like using an atomic bomb to
take care of something that you need a little bit of dynamite for.
And there's an awful lot in it where it's a potential step toward
State zoning. No question about it. Maybe you're happy about
that. I don't...I'm not particular...but there are a lot of
things in it, and (inaudible) I'll buy it for now, but I don't
know how long.

MR. SPEAKER:

Will you remark further on the Bill.

JOSEPH PUGLIESE:

Mr. Speaker, I will support the Bill, but I also feel
that it is necessary to point out that this is far from a perfect
document... Many of the failings in the original Bill were taken
out in the Amendment... enough of my own objections so that I
withdrew the Amendment I had prepared. However, there were other
objections, some of them just expressed. I, too, have heard from
many of the conservationists throughout my part of the State...
all of them in support of the Bill as originally drafted, and in
speaking with many of them found that whenever I was able to bring up a point where the Bill did infringe on local zoning, did infringe on Home Rule, did infringe on many of the other things, they agreed, but they all said, "We're in favor of the Bill." And I think the reason they said that is because they all realize that we have to get the foot in the door on the Inland Wetlands. And there you have the concept of this Bill. I think the concept is worthwhile. I think it is worth passing something. And I'm very sure that next January we're going to up here amending this Bill when we will know a little bit more about it.

MR. SPEAKER:

Will you remark further on the Bill.

OTHA N. BROWN, JR.:

Mr. Speaker, I've been informed that the bussing Bill is over. I would like to stand and support this Bill for all of the many good things that have been said about it. There are some who have said it will solve our water problem...that it will help us plan for better residential use. However, I must express some concern that I have as a result of attending several meetings in many of our small towns throughout the State that there are some who see this legislation as a possibility of greater use of the police power of the State in the matter of local zoning to such an extent that it will preclude or prevent perhaps the building of low and moderate rental housing. Now, I'm hopeful...I'm hopeful that this is not done. I know that the people who have worked very hard on this Bill are for this Bill being able to solve our water problems to be able to plan for better residential use and all the good
things. But I do think that we have to keep in mind that there are some who see this as a big boon in order to keep some of our communities in this State closed to what we would consider those who are undesirable. I do express this concern. I'm hopeful that I'm wrong. I'm hopeful that it will not be used in this way. And I'm certainly hopeful that what we do here tonight will not be spoiled by an Act which I would consider inimical to the best interests of the people, but that will be in line of those who have worked so hard on this Bill, and on that basis I will support it.

MR. SPEAKER:

Will you remark further.

HOWARD A. NEWMAN:

Mr. Speaker, I'm not supporting this Bill reluctantly. I'm going to vote for it enthusiastically. It may have many imperfections, but it's a step in the right direction and it permits the camel to get its nose under the tent, and next time we can have another round at it and improve it and remove the imperfections. And anyone that lives along the shoreline certainly should have an interest in the inland waterways, because eventually these waters reach the shore...the Sound...and if there is pollution in the waters, it adds to the pollution in the Sound. And the purpose of this Bill is a very simple one, although we've heard a lot of rhetoric about how it's going to put everyone in a bind. The Bill merely tries to make provision for the protection, preservation and maintenance of our inland water courses and wetlands with the idea of minimizing the disturbance and pollution
of these bodies of water. I say it's a good Bill, and I'm voting for it, and I hope it passes.

DAVID H. NEIDITZ:

Mr. Speaker, I share some of the concerns of the gentleman from Wethersfield after reading the Bill. I think that the Bill handles turbidity with some turgidity, and I think that we have some utrification of the Statutes involved here. Though I'm not a soil scientist as defined in the Bill, and I've only been able to make an on-site inspection of the matter, I'll still vote for the Bill with some faith in the Commissioner to make reasonable regulations with the knowledge of the fact that those regulations will be submitted for review to the Regulation Review Committee and ultimately to the next Session of the Legislature and hope that our concern about our wetlands, our fish, our insects, and our trees will lead us in the future to share and have the same concern for our disadvantaged people, including women in this State. Thank you.

MR. SPEAKER:

Remark further on the Bill.

MARILYN PEARSON:

Thank you, Mr. Speaker. I rise to support the Bill, and I'm happy that earlier today we also added a few more species of vegetation to...that an indigenous to these wetlands, and that are connected to our tidal streams that will then provide full protection for them in our entire tidal system. The State of Connecticut has passed the Wetlands Act, and I think that most all of the inland waterways that we have in Connecticut actually
Affect the wetlands that we now have. In my own town of Stratford, we have a variety of areas that are considered inland waterways...specifically one that runs over one of all of the main streets of Stratford and empties into our Johnson's Creek, and Lewis Scott and Long Beach and finally out into Long Island Sound, as Representative Newman has just referred to. I think as taxpayers and residents, not only of my town of Stratford, but of the State of Connecticut, that we want to see all inland waterways protected from any of the misuse that we have seen in the past and that's currently happening and the pollutants that are actually getting into these waterways and out into the Sound. I think, and I would hope, that most all of the towns and through their administration and through their local government would urge the citizens within their town to join in with this effort and to urge anyone and all individual citizens whose land also abuts any of the waterways to help keep them clean along with the efforts that the State is showing here tonight...what the State of Connecticut wants to do. I hope the individual citizens also join in and really do something in this area. This will now provide documentation of our environment, and I don't think there's any doubt about it that this Bill will be an excellent Bill, especially to help with our 1899 Federal Refuse Act that we now have which has been of great help and our Coast Guard has been able to use where pollutants and people have disturbed many of our inland waterways. So I certainly urge passage of this Bill.

MR. SPEAKER:

Will you remark further.
WILLIAM LYONS, JR.:

Yes. Thank you, Mr. Speaker. I rise, Mr. Speaker, because the gentleman from southern Norwalk spoke in relation to his disturbance as to what this may do in relation to housing projects, and he's right. We normally build those in swamps. But, what I rise actually for, sir, is through you, sir, a question to Mr. Newman.

MR. SPEAKER:

Please frame your question.

WILLIAM LYONS, JR.:

Thank you, Mr. Speaker. In understanding Representative Brown's statement, I would like, Mr. Newman, if you would explain what the camel sees when he looks under the tent.

MR. SPEAKER:

Does the gentleman care to respond?

ROBERT S. ORCUTT:

Mr. Speaker.

MR. SPEAKER:

Excuse me, sir. I think the gentleman's prepared to respond.

ROBERT S. ORCUTT:

I yield to the gentleman from the 146th.

MR. SPEAKER:

We all thank you, sir.

HOWARD A. NEWMAN:

I believe the camel when he sticks his nose under the tent will see a great future for conservation and the protection...
of our inland waterways.

UNIDENTIFIED REPRESENTATIVE:

He'll see the other side of the tent.

ROBERT S. ORCUTT:

Mr. Speaker, I rise to support this Bill. I think that the Amendment certainly makes a Bill that, in my mind, had some defects into a Bill that will be a step forward for Connecticut. I'd like to give a vote of thanks to Representative Costello, who has worked so hard on this Bill, and I think that to him a great deal of credit is owed by all of us in working on these matters and getting this matter in shape. But this Bill does set forth public policy and this is a most important thing for us to do in this Session. It's a public policy to preserve our inland wetlands, and this, I think, is an historic action for this General Assembly. I hope in the years to come we can improve on this Bill.

MR. SPEAKER:

Will you remark further on the Bill.

RICHARD B. EDWARDS:

Mr. Speaker, I rise to support the Bill and echo Representative Orcutt's remarks. I think it's very commendable in this case that those involved in the drafting of the Bill showed a great deal more cooperation than sometimes is done and be willing to compromise...to iron out some of the difficulties that were with the original Bill. I think this is part of our process, and I think in this particular Bill it is shown off as one of our better efforts and one of our better results. Whereas I was doubtful at first, I now wholeheartedly support it. I wish only
that the same spirit...the same support...the same enthusiasm that has been behind this Bill, which is for the future of the people, particularly the young of our State...I wish that same enthusiasm could be put behind housing and a standard of need for those that don't have enough. I think then we'd really be off somewhere.

MR. SPEAKER:

Will you remark further on the Bill.

RONALD A. SARASIN:

Mr. Speaker, I rise to support the Bill. That should be enough said. I get the terrible feeling as I listen to people standing here on the floor of this House rising to support and without really trying to be critical of anyone, in a great measure being very redundant. I would hope that when we have an issue of this type, or any type, where there really isn't any opposition to the Bill...at least I haven't heard any...no one has come out and said they were going to oppose the Bill...everyone has said that for one reason or another it's a good Bill...maybe a little reluctant...but I have the feeling that because there are people in the gallery taking down names, and we're going to go through that crazy rating system that we found ourselves with in the last Session...when we do not do anything and do not rise simply to hear ourselves talk or to have our name placed in the Journal, we're penalized because for some reason we're somehow treated as being against a piece of legislation. I would hope that this is not the reason people are rising on the floor today simply to have their name registered by this group. I think it's certainly can be a credit to everyone in this Assembly that the Bill is here...the
Bill will be passed...and it should be equal credit to all of the people who are here supporting it, whether they actually stand on it to speak on it and delay the other business of this Assembly or not. Thank you, Mr. Speaker.

MR. SPEAKER:

Does the gentleman from the 95th care to have his remarks stricken from the Journal? Will you remark.

RONALD A. SARASIN:

Mr. Speaker. Point of personal privilege.

MR. SPEAKER:

Please proceed.

RONALD A. SARASIN:

If I were to have my remarks stricken I wouldn't get ten points.

MR. SPEAKER:

The Chair having duly noted ten points for the gentleman from the 95th, are there any further ten-pointer that would care to speak on behalf of the Bill.

GERARD S. SPIEGEL:

Mr. Speaker, in deference to the honorable gentleman from Beacon Falls, I'd like to rise to oppose this Bill. I came to this debate with an open mind. I've listened to about a dozen speakers, and everybody has so many reservations, and everybody has so many sincere hopes that we'll be back next January with Amendments to improve the Bill, that I've concluded that it's got to be a bad Bill. And I'm going to take everybody off the hook, and suggest that they vote against it and come back with a better
Bill next Session.

MR. SPEAKER:

Will you remark further on the Bill. Representative King...Representative Robert King. The Chair would note that there have been 13 speakers on this Bill. I understand there are two further Amendments in the possession of the Clerk.

ROBERT D. KING:

Mr. Speaker, it is with not a little but a lot of reluctance that I think I'm going to have to vote against the Bill. Mr. Speaker, it pains me very seriously to have to say this and to have to do this, because I think as an expression of principle for what the framers of this Bill, who have worked long and hard, who have been cooperative in getting out the Amendments, as a statement of principle one cannot fault it. But, Mr. Speaker, principle alone not supported by a sound, mechanical structure is empty, and that is what we have here...an apple pie and motherhood issue on principle where the mechanics to carry out this principle are so totally lacking in common sense that it would throw this State into chaos if this Bill went into force without further Amendments. I must say that I agree with Mr. Spiegel...that if we cannot support the Bill...and I submit to you that anyone who reads the Bill and analyzes the mechanics...the basis for carrying out the principle...that there isn't a person in this House who can support it. I think in time these matters can be worked out, and the hour is late and I do not want to burden the House with a recitation of the horrible situations that arise. But let me give you one example. Suppose, as provided in the Bill, the Court enters a
judgement in favor of the landowner. How, then, is this judgement carried out? The town has to appropriate money...the town has to appropriate money to pay the judgement. The Bill is completely silent. And what happen if the town meeting refuses to appropriate the money? Now, this is one of a dozen similar situations within the Bill which has no answer. And, Mr. Speaker, in terms of establishing principle and leaving the principle dangling in thin air, supported by no rational system of mechanical or legal system...to me it's bad legislation. The recitation as to the faults of this Bill could go on endlessly, and I am convinced by the laudatory statements that we have had from otherwise knowledgable people that they even hadn't...haven't read the Bill, or that they are willing to overlook these basic and fundamental faults that it contains. I, for one, Mr. Speaker, although I think the principle is an absolutely necessary one and must be established, that if we have to do it in this manner, that we may very well engender a backlash against the whole program. And as for the rating system which was mentioned, I don't care whether Professor Sharpless or Professor Witless, or whoever, is sitting in the gallery, I wish to express my views on this, and rating or not, I'm going to vote against the Bill.

NICHOLAS A. LENGE:

Mr. Speaker, I rise to support the Bill as amended, and I think that we're really drifting with a lot of fantasies and shadows and lack of reality in things that people fancy may be in the Bill or may not be in the Bill. It doesn't infringe on local zoning or local Home Rule, and there is no denial of due process.
in the protection of private property. And it is not for bird sanctuaries. This Bill is for people. It's for the people of the State of Connecticut. And actually what we're talking about when we boil it all down is a positive position in terms of protection of the total natural resource of inland wetlands. And this is a must piece of legislation at this time, and I think it's time we stopped talking in fantasies about what it may harbor and what it may not in terms of the things that are maligned here but not specifically pointed out. It's a good Bill, and if there's any poor draftmanship, and I'm not really concerned that there is, what is it in comparison to the poor drainage in this State... 400,000 acres. What about all the rest of the plus factors in what this Bill is aimed at protecting. This is a must Bill for the resources of the people of the State of Connecticut, and we must pass it tonight, and let's not drift any further in any fantasied or fancied deficiencies in the Bill.

MR. SPEAKER:

Will you remark further on the Bill.

OWEN L. CLARK:

Speakers here, I'm afraid that I'd be all wet if I didn't vote for this Bill.

MR. SPEAKER:

Will you remark further on the Bill.

AUDREY P. BECK:

Mr. Speaker, I think we all know that we're dealing with a very complex issue. Many of us are not experts in drafting legislation as comprehensive as this is, and I think we do all
recognize the absolute need to protect our wetlands. But I do think that it is very important that we do recognize the point of view expressed here, which is one of concern about the scope of powers which we are granting and the direction which we are taking. And I think it's terribly important that we direct ourselves to these points here where we delegate to the Commissioner of the Environment the power to establish regulations under this legislation in order to implement the Act, and I do believe that we are entering an area where it may very well be the case that Court decisions, in looking over this legislation, will not find precise guidelines...will not, in fact, be in a position to make some very important determinations. As only one example, on Page 6 in your file, Line 214, we have in here among the considerations which must be taken into account by the Commissioner, irreversible and irretrievable commitments, the character and degree of injury to or interference with safety, health, etc., and I think that we do have to recognize that we have not pinned down these words very precisely and that we are, in fact, delegating to our Regulations Review Committee a tremendous responsibility in carrying out the powers under Section 5, Subsection F, Line 191, directing the Commissioner to promulgate such regulations as are necessary to protect the wetlands or water courses, etc. I do think that the Regulations Review Committee should be urged by this body to get the best possible scientific and legal thinking in going over these regulations. They should take into account our existing local Soil Conservation Service...Services...they should take into account the experiences of other states...and I do want to express
my deep concern that we have not unnecessarily taken onto ourselves powers which we may later have to return to our private citizens and municipalities. Mr. Speaker, I am going to support this legislation. I think it's vitally necessary and important. I have many people who have expressed their concern to me. But I think we all do have to recognize that the Amendments came to us very late in our deliberations...that this has been a highly controversial piece of legislation...that we are, in fact, dealing with people's right to private property...and I do hope that the Regulations Review Committee particularly recognizes that it has in its hands the responsibility which we, 177 of us, have delegated to it. And I do hope that we have a thorough report before this General Assembly by the next Legislative Session. Thank you very much.

MR. SPEAKER:
Are you prepared to vote?

EARL T. HOLDSWORTH:
Mr. Speaker, my remarks are going to be very short. Mr. Speaker, I live on an inland waterway, and I can tell you this that the contamination problems today are increasing continuously with the building programs that are going on in the State. The area that I live within we have four brooks of (inaudible) Lake, and all of these brooks are becoming contaminated and contaminating the lake. I only hope that this Bill will give the Commissioner the power and authority to correct the ever-ending problems that are arising relative to this. I also hope that the Commissioner can clean up Lake Zoar and Lake Mincha for if there
was ever two eyesores in the State of Connecticut...two inland bodies of water...the odor from these two lakes is just out of this world, and I'm sure that the...this Bill will give the Commissioner the necessary authority to take action.

MR. SPEAKER:
Will you remark further on the Bill.

GEORGE C. GUIDERA:

Mr. Speaker, one point that I'd like to bring out about this Bill that I don't think has been brought out, and I rise in support of the Bill, it seems to me that the main thrust of this Bill is to protect the rivers which are now not polluted...to protect them in that condition for many, many years to come...for perpetuity, if you will. I think that the Fairfield County Legislators are probably most aware of the kind of pollution that can occur to otherwise pure rivers. Twenty years ago most of the rivers in the Fairfield County area were as pure as the driven snow. Today we're faced with pollution of rivers that are far inland...the Saugatuck River as far up as Redding-Weston area, and I think it just protects those rivers. If next year we can come up with a Bill which does something to really clean up the polluted rivers now, I think we'll be in good shape. And for that reason, Mr. Speaker, I must rise in support of this Bill.

MR. SPEAKER:
Are you prepared to vote. Question is on acceptance of the Joint Committee's favorable report and passage of the Bill as amended by House Amendment Schedule "A". All those in favor will indicate by saying "aye". Opposed. The Bill as amended passed.