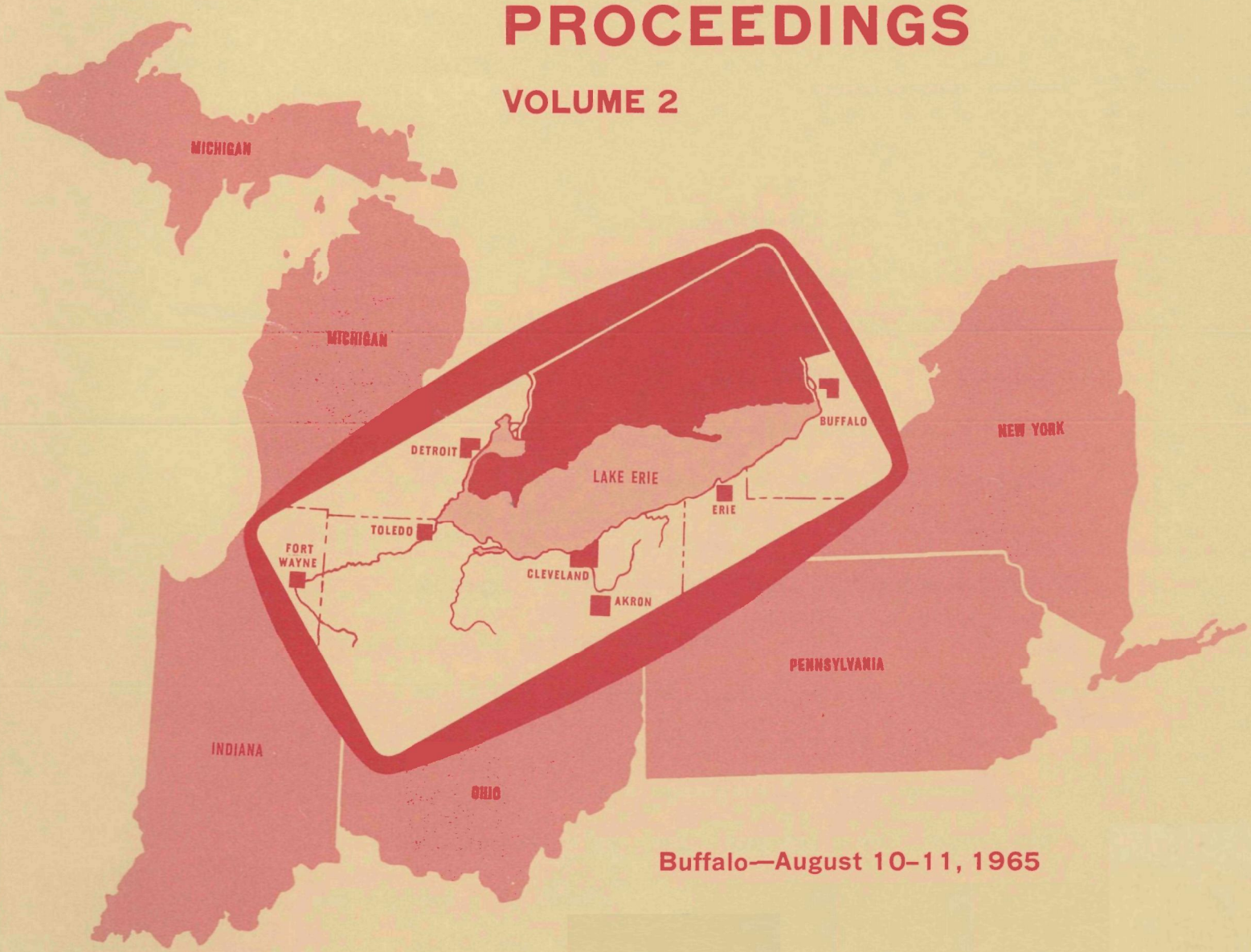
PROCEEDINGS

VOLUME 2



Buffalo—August 10–11, 1965

Conference

In the matter of Pollution of Lake Erie and its Tributaries

FEDERAL WATER POLLUTION CONTROL ADMINISTRATION

CHAIRMAN STEIN: May we reconvene. Last evening when we recessed, the Federal Government had completed its main presentation.

At this point, we would like to open the conference for questioning from the conferees. Are there any questions or comments from the conferees to the Federal representatives on this portion of the report. Mr. Boardman?

MR. BOARDMAN: The first question I have is for Mr. Cook, I believe. It is on Table 8, on the soluble phosphate inputs to Lake Erie.

CHAIRMAN STEIN: Mr. Boardman, on your questions, I think it might be better if you would identify the page.

MR. BOARDMAN: Table 8, which is the very last page of Volume 1, page 50. How were these numbers of pounds of phosphates arrived at? For Pennsylvania, for instance, it says Erie, 2,600 pounds per day, other sources 2,900. Where did these numbers come from?

MR. COOK: I think Mr. Megregian can better answer that than I can.

MR. MEGREGIAN: Insofar as Pennsylvania is concerned the information that is presented here is based on population equivalent of the territory covered by the City of Erie. For instance, note the 2600 and reduced by 35 percent for secondary treatment, which would be the expected normal reduction if the plant were operated according to conventional methods.

MR. BOARDMAN: So these are estimated values, not measured values.

MR. MEGREGIAN: They are estimated with respect to the municipalities only. However the tributaries and the Michigan values are measured values.

MR. BOARDMAN: But the Pennsylvania values are estimated.

MR. MEGREGIAN: That's right.

MR. BOARDMAN: Let's go back to Volume 3 for the moment, on page 106, in the paragraph talking about municipal wastes, the report states that "Bacterial tests of Mill Creek and Garrison Run indicate that they are receiving domestic wastes." Are you referring to the stormwater overflows of domestic sewage as the source of these wastes or do you have information that there are other sources?

MR. MEGREGIAN: We are referring to stormwater runoff and malfunctioning relief systems as well as some industrial waste.

CHAIRMAN STEIN: I think it might facilitate matters somewhat for both of you if you have someone in the audience who has worked specifically on this, don't hesitate to call him up and ask the question. I think we can get at the answers more readily that way.

MR. BOARDMAN: On page 107, on the industrial wastes, when talking about the Hammermill Paper Company's installation

of deep well disposal, the sentence follows which says, "However, this will not alleviate the problem caused by the discharge of tannins and lignins from spent pulping liquors."

This statement concerned us a little because, from our information, the material to be injected into the well is the spent pulping liquors. Do you have another source of information or are we wrong that these wells should alleviate this problem? They may not eliminate all the discharge 100 percent. But from every indication we have this problem should be alleviated quite a bit by the installation of these deep wells.

MR. MEGREGIAN: This information is entirely from your sources.

MR. BOARDMAN: I sort of find it hard to believe that the people would tell you that the deep well disposal wouldn't alleviate the problem of this discharge. Of course, I may be interpreting the word "alleviate" wrong. It may not eliminate them all, but it certainly will help alleviate.

I have one other question. Mr. Stein asked Dr. Wilbar a similar question yesterday. It concerns the statements in the conclusions about the polluted tributaries and the condition of Pennsylvania's streams.

When you read the section on page 106 on "Fish and Aquatic Life," which says "Excellent year-round fishing exists in many of the area's streams. Twentymile Creek, Trout Run and Godfrey's Run are good trout streams," and then we talk about

the polluted tributaries, it makes me believe, too, that we are talking about two different reports.

The same question arose on page 107 in discussing Erie Harbor. When I read this paragraph I almost envisioned a sterile body of water from the description of the color, the bottom deposits, the bacteria. Would you like to comment on the type of aquatic life that is present in Erie Harbor and the type of bottom life that your biologists found in this area?

MR. MEGREGIAN: With the permission of the conferees, I will pass the ball.

MR. CASPER: I am Vic Casper, Chief Biologist, Great Lakes-Illinois River Basin Project, Lake Erie Field Station. As far as aquatic life in Erie Harbor, we found a fairly good variety of organisms, including something like 9 to 16 different genera of bottom dwelling animals. We had quite a few species of snails, etc. In general, it was a fairly diverse variety, although nothing compared to what you would find in the open lake, but it was a fairly diverse bottom fauna. It showed some effects of pollution but not the gross effects that you would find in the Cleveland Harbor or Buffalo or some of these other tributaries.

MR. BOARDMAN: When I read the paragraph I didn't get that impression. But I understood from some of the conversations I had with some of your people in the Lake Erie study that this was the case at Erie Harbor. Thank you.

MR. COOK: I would just like to add there, Mr. Boardman,

that for Mr. Casper's sake his report was very conclusive and in order to reduce the size of our report here, we edited out some things we shouldn't have.

MR. BOARDMAN: In the continuation of that paragraph it indicates also that the concentration of coliform organisms and the presence of Salmonella organisms were found in the Erie Harbor.

Here again, do you have any idea what the source of these organisms might be--whether it be a continuing raw discharge or, again, possibly the combined sewer system and some malfunctioning relief?

MR. MEGREGIAN: This is, undoubtedly, the same reason that we mentioned before, both stormwater overflow and malfunctioning.

CHAIRMAN STEIN: If there is malfunctioning, that might be a continuing discharge.

MR. BOARDMAN: Well, I don't know if that would be malfunctioning, and I don't know if there is or not. We hope that there isn't.

CHAIRMAN STEIN: Well, I would say this, Mr. Boardman: For purposes of clarification of the record for the people who read this later, I think that we have possibly three points - (1) continuing discharge from dry weather sources, (2) stormwater overflows, and (3) malfunctioning, which may be continuous or may be intermittent.

Now, those are the three logical possibilities. I don't know. What is your view concerning where these coliforms might come from? We want the answer, but we want to clarify the question--that in your opinion it is not from dry weather discharges.

MR. MEGREGIAN: This is not from dry weather discharges from a sewage treatment plant.

CHAIRMAN STEIN: Then you believe that this is malfunctioning that might cause a dangerous flow of materials which causes these coliforms?

MR. MEGREGIAN: Yes, definitely.

MR. BOARDMAN: Well, this is one of the things that Erie is looking into, this combined system of their storm sewer problem.

Back in Volume 1 in the conclusions which were not read yesterday, they are still a part of the report, page 1, I think. I probably asked the same question in Cleveland, but I would like to ask it again now, the very first sentence, "Lake Erie and its tributaries are polluted." Perhaps I read this statement a little wrong, but do you mean all of Lake Erie and its tributaries are polluted?

MR. COOK: No, I think this is qualified. Where we mentioned, for instance, in Pennsylvania, there were some trout streams and in New York there were some trout streams, certainly not every single stream is polluted.

MR. BOARDMAN: The thing that concerned me was the

conclusion was already in the interim conclusions that were read for the Michigan, Indiana and Ohio portion and I just wanted to get that point clarified.

MR. COOK: I think we could safely say that the major tributaries are polluted with no qualifications.

MR. BOARDMAN: Do you consider Pennsylvania as any of the major tributaries of Lake Erie?

MR. COOK: No, I think historically the tributaries in Pennsylvania have been considered minor tributaries.

MR. BOARDMAN: They are all very small streams. Some of these streams are what we would call no more than a good sized sewer.

MR. COOK: That is correct.

CHAIRMAN STEIN: Did you say some of these streams are no more than good sized sewers? Do you want to correct the record?

MR. BOARDMAN: No, I would like it to stay in the record. You were asking Dr. Wilbar about some of the Cascade Creeks, the Mill Creek, some of the polluted tributaries Dr. Wilbar described, and these streams, which are tributaries--and the reason maybe I say "sewers" is because of the fact that some of these are actually carried in pipes through the town and they are more like a sewer as far as their appearance and size than a tributary you might expect, such as one the size of the Buffalo River. I don't want anyone to get the

impression that we have any real large streams discharging into Lake Erie. Perhaps my choice of words was bad.

CHAIRMAN STEIN: You know, out in Kansas City there is an old stream out there that's covered up, called Turkey Creek, Turkey Creek Sewer and that runs underground through Kansas City. By the way, that was a very interesting case because that stream goes back and forth across the State line several times and was covered up many, many years ago and no one knew who owned it and where the jurisdiction was, but we finally got that worked out. While that stream was no more than a sewer, it sure contributed to the pollution of Kansas City and was one of the main sources.

Now, exactly what you mean is that this isn't really an open situation like the Cuyahoga and the Buffalo River in Cleveland or Detroit. I'll take Detroit out of there, Cleveland and Buffalo. Of course, the Cuyahoga is in Cleveland and, of course, Buffalo River is in Buffalo.

The advantage Mr. Oeming has is that he has the Detroit River running past Detroit and, of course, while his river, the Detroit River, absorbs a considerable amount of flow, they have many more cubic feet of sludge going by. While it gets to Lake Erie probably as effectively, maybe even faster, the river itself from a visual appearance doesn't look as bad as the rivers you have in Cleveland or in Buffalo.

MR. BOARDMAN: Again, on page 1 of the conclusions,

I hope I'm not repeating too much about what we talked about yesterday, but in the last paragraph where we talk about interstate pollution, do you recall on what specific evidence the conclusion was based that interstate pollution is occurring?

MR. MEGREGIAN: The conclusion which was reached with respect to interstate pollution was based on the contribution of phosphates by all of the areas draining into Lake Erie. This is the basis upon which we considered Lake Erie is polluted and this is an interstate pollution.

MR. BOARDMAN: It was arrived at though, for instance, by measuring phosphate levels in the waters in the Pennsylvania area. Is this correct?

MR. MEGREGIAN: Yes, we have measured phosphate levels in Pennsylvania.

MR. BOARDMAN: Are they above the water quality criteria level that has been set? You have used, what is it, 300ths of a miligram per liter as the level of interstate pollution, the level below which you don't have it, is this correct?

MR. COOK: No, let's get that straight. We haven't set 300ths of a milligram per liter of soluble phosphate as a level of pollution. This is the point at which prior to the growing season you can expect nuisance conditions of algae. We are not saying that this is a standard or a receiving water criterion, not at all.

MR. BOARDMAN: Do you have a standard or receiving water criterion?

MR. COOK: There is none as far as I know.

MR. BOARDMAN: If Pennsylvania discharges water contributing to interstate pollution, then you couldn't tell us what levels of phosphate our people could discharge without causing interstate pollution, is that correct?

MR. COOK: All we know now is that we have to remove as much phosphate as we can, that every pound that we do it is going to do some good.

MR. BOARDMAN: If we can explore that point just a little further. Somewhere in the report it indicates that secondary treatment is capable of removing 65 percent if operated at optimum phosphate removal levels. I understood yesterday that someone had talked about the Chicago plant as one that had had extremely high phosphate removals. I understand there also that they burn their sludge wet. Is that correct?

MR. MEGREGIAN: They burn their sludge after they go through vacuum filtration.

MR. BOARDMAN: They don't digest it, though?

MR. MEGREGIAN: No, that is they do not digest the bulk of their sludge at present. They do have a digestion process called the Zimmerman Process which is very new.

MR. BOARDMAN: I wonder, then--again we talked about this in Cleveland--that with a more conventional type treatment plant if we could expect this type of phosphate removal by just

some slight modifications in operation or if we are really talking about something beyond the operation of a sewage treatment plant?

MR. MEGREGIAN: I believe that was partially answered yesterday. However, from our own reviews of the phosphate removals that were brought out in the literature as to the methods by which this can be done, it is quite apparent that with some slight modification of secondary treatment operations that up to 65 percent can be removed, which, at the present time, many plants are operating much lower than that.

The processes that might have to be altered to do this are principally the supernatent return from sludge digestion, and perhaps such things as increased aeration in the activated sludge tank and greater return of the activated sludge to the aeration to pick up more phosphate--things like that, which we are prepared to detail if necessary to the conferees later.

MR. BOARDMAN: O.K., fine. I don't want to get into a detailed discussion here. On page 2 of the conclusions, there is a paragraph which is the third one which I like to refer to as "Pennsylvania's paragraph" because it talks about Pennsylvania which indicates that Lake Erie and its tributaries are polluted.

Now we all know that the definition of pollution is one that varies. Dr. Tarzwell gave a pretty good definition of pollution yesterday, and we know that various degrees of pollution can occur.

I would like your opinion as to the category you would classify water quality in the Pennsylvania portion of the Lake Erie Basin. How does it compare, say, to Cleveland or to Detroit or to the Buffalo areas? Would you like to comment on that, please?

MR. COOK: Did you say the streams?

MR. BOARDMAN: Water quality in the general area.

MR. COOK: Well, I think you are very fortunate. Pennsylvania streams are pretty clean. I think they are probably some of the best in the Basin. Of course, everybody knows and the conference has heard how the waters around Presque Isle are used by so many tourists. No, I think Pennsylvania is lucky. They have pretty good water.

MR. BOARDMAN: Well, do you consider that lucky or do you consider that we might be doing a fairly decent water pollution control job?

MR. COOK: It might be a combination of both.

MR. BOARDMAN: Thank you. We think that we have done a fairly good job.

One more and one final question. In that paragraph that I am talking about, there are a number of things that you indicate are pollution problems in Pennsylvania. One is that Lake Erie is polluted by discharges of municipal and industrial wastes.

Now, we certainly acknowledge that we have some local

problems of industrial waste that, as Dr. Wilbar's presentation outlined, the industries all have schedules to which very soon they will have solutions to their problems.

Now, the other problem is the treated effluent from secondary sewage treatment plants which we have kicked around here just a few seconds ago, and I think it's pretty clear that we don't really have the full answer to remove all of the pollutants even from sewage treatment plant effluents that receive secondary treatment. Is that assumption correct?

MR. MEGREGIAN: I believe that you are correct in that assumption.

MR. BOARDMAN: Technically, we can distill it, but from a practical standpoint, without going to very expensive treatment processes, we still have some problems--well, with removing the nutrients from a secondary treatment.

MR. MEGREGIAN: This is the principal problem at the present time. However, there are two intervening problems in the locality of Erie, Pennsylvania, with stormwater overflow...

MR. BOARDMAN: Well, I want to keep going, because I have just broken down that the problems that you point out in pollution are (1) these discharges of treated effluents to which we don't really have the practical solution, and (2) pollution from combined sewer overflows. Now, what solutions do we have to these problems?

MR. MEGREGIAN: What solutions does Pennsylvania have

to these problems?

MR. BOARDMAN: No, I assume that you fellows can give us some help on some of these problems. We don't know what we can do about combined sewer overflows, again, that is practical. Do you have any practical suggestions for Erie's eliminating their combined sewer overflow problem?

MR. MEGREGIAN: I believe that was partially covered in the general recommendations with respect to metropolitan planning, the separation of sewers with urban renewal and the building of separate sewers in new areas and the like.

We do not have a specific treatment regimen at the present time to, what should I say, recommend, since this is under study by our Department.

MR. BOARDMAN: And also, it is a financial problem, too, isn't it, as I understand it? With Erie, it would be a $20,000,000 expenditure and it would be quite expensive to separate sewers.

The third pollution problem you pointed out was the accidental spills from vessels and industries. Do you have a surefire method for preventing accidental spills? We have been looking for one. I am talking about spills from industries and vessels which is one of the items that is specified as a pollution problem in Pennsylvania.

MR. MEGREGIAN: We believe that some prevention within industry can be engineered with this in mind. There are, of

course, engineering devices for petroleum storage tanks whereby there is a retaining wall, for instance, to hold back any oil that might spill from a tank or if a tank should break.

Things of this kind are certainly possible. We do not have any details or specifics. This is a plant by plant subject.

CHAIRMAN STEIN: If he is talking about preventing accidental spills from industry, well, Mr. Boardman, I'll give you my experience through the country. Perhaps this is also borne out by Mr. Poole's experience. I find that the best way is to have a monitoring device and a good checking device and report accidental spills and then take action on it.

We were plagued in various areas by accidental spills, sometimes because they created critical odors and tastes in water supplies and sometimes because they were radioactive wastes.

There was a uranium company owned by a very influential Senator at one time--partially owned by him and his corporation--and they had a series of accidental spills. We had visits from the engineers and the lawyers of the company, but we proceeded with the case and it came out in the paper. Strangely enough, that was the last accidental spill we had from the uranium industry.

I think if you get certain devices--and I know we have discussed this with Mr. Poole--where you have an industry dealing with a real highly toxic waste like cyanides, you deal

with it where you don't have drains going into the sewers.

I think this is a question of assiduous policing--of going through the plant and putting in remedial systems. You can find that you are with an active water pollution control program and you can really cut down on accidental spills. This is just the question of a will to do it and a rigid enforcement of the law.

MR. BOARDMAN: I would like to say, Mr. Stein, that our people have been in business for sometime, too. We have been working quite a spell to prevent accidental spills because we know we have problems in these areas. I wondered if people had found any places where we have had what you might consider unaccidental-accidental spills that caused this recommendation to be put in.

First of all, I might say, too, that I didn't know that we had many problems of spills from vessels. They haven't been reported to us. But do you know of any particular places that we have had accidental spill problems? We have had fish kills, but these have not been necessarily accidental spills. These are caused by the industries usually that we have on the list of causing violations and working toward solving their problems.

MR. COOK: In the history of the Great Lakes, Mr. Boardman, there are many cases of spills from vessels.

MR. BOARDMAN: In the Lake Erie area?

MR. COOK: I don't know of any specific instances in the Lake Erie area or Erie area. However, it was interesting to me to learn that the President of the Great Lakes Pilot Association, who works out of Duluth, is much concerned about this and has gotten his organization concerned. They are going through a program of education of ships crews to prevent this sort of thing. We have had serious spills in the Chicago area that cause all kinds of trouble and they certainly could happen in the Erie area.

MR. BOARDMAN: Don't get me wrong. We are as interested in making sure that there are no spills as anyone else. Yet in the paragraph about Pennsylvania you pointed out that we should take some action to eliminate this pollution problem.

MR. COOK: Well, I would hope that that would be done in Erie Harbor and all of the rest of the harbors.

MR. BOARDMAN: Then the next one is waste from lake vessels which we certainly acknowledge as a problem. Here, again, we are looking for a solution just like everyone else is.

The last one was land drainage. Do you have any recommendations for the prevention of pollution from land drainage?

MR. COOK: What kind of pollution are you referring to here?

MR. BOARDMAN: The pollution you pointed out in the paragraph about Pennsylvania, it says from land drainage.

MR. COOK: I think we are talking about nutrients

here. When we went into this before we realized that there are problems to which we don't have answers. However, we have some ideas which we would like to get the Soil Conservation Service and other departments going on a real, solid action program to prevent this sort of thing or to reduce it.

MR. BOARDMAN: Then possibly this should be included as one of the recommendations when the conference concludes.

The reason I asked these questions again is that Mr. Stein read this paragraph to Dr. Wilbar yesterday to tell us how bad things were in Pennsylvania. I don't believe they are quite as bad as he made it sound. I think the answers you've given may indicate that we have some problems here and we don't know exactly what to do about them and I don't believe anyone does yet.

We are certainly willing to go along with any programs that are developed to eliminate them.

CHAIRMAN STEIN: Mr. Boardman, I don't quite understand what you said there. You said it wasn't as bad as I made it sound. I just read a report--a paragraph from the investigators' report.

Now as I understand what you are saying when you talk about land drainage, you are talking about this problem; you are talking about technical solutions to the problem. But you don't say you don't have the problem.

Now I don't see by just saying that you don't have

a definitive solution and admitting that you have the problem that you made the paragraph any less effective or descriptive of what is going on.

If you have pollution from land drainage, then you question someone and you ask what's to be done about it. Then I think we are getting at the problem of land drainage. Suppose you don't have a definitive answer, you can't come back, it seems to me, in a logical way and say you have dealt with the problem and things aren't as bad as they seem because we just dealt with the question of remedial action but not conditions as apply from land drainage.

MR. BOARDMAN: I believe that the answers given by Mr. Megregian have indicated that there is somewhat of a question as to just how extensive these problems are. This is the point that I wanted to make--that they aren't very extensive.

CHAIRMAN STEIN: Well, the way I understood Dr. Wilbar, he stated at least twice--and I think the record will show that--that the wastes from Pennsylvania were contributing to the putrification of the Lake. I think we have a meeting of the minds on that. I don't think there is a difference.

MR. BOARDMAN: That's all the questions I have for the moment.

CHAIRMAN STEIN: Any further questions?

MR. HENNIGAN: Mr. Chairman, may I ask a question? Could you please discuss New York State's relative contribution

of inputs to Lake Erie in relation to the total inputs to Lake Erie.

MR. COOK: Well, if we speak of phosphates, referring to page 50 of the report, we say that about 4800 pounds of phosphates originate in New York contributing to the pollution of Lake Erie. That would be somewhere in the area of about 2 percent.

If we went down the list, taking each parameter as it goes, we could arrive at a percentage figure that would be very small.

MR. HENNIGAN: Very small. I took some of the tables and tried to arrange these things in light of the information presented, and I'd like to read these results if you don't mind.

Nitrogen inputs - New York State 0.24%; Chloride inputs - New York State 0.33%; suspended solids inputs - New York State 0.9%; soluble phosphate inputs - New York State 2.84%. Do you think that my calculations are reasonably accurate?

MR. COOK: They agree with mine.

MR. HENNIGAN: Thank you.

CHAIRMAN STEIN: Are they both reasonably accurate or don't you want to comment on that? I think we should clear up the record. You know, the record gets read. Yes, here is the question. I know they agree with yours and you believe that they are reasonably accurate, is that correct? Both of you?

MR. COOK: Yes.

MR. HENNIGAN: Thank you. Another thing that is in the report. People talking about the Niagara frontier automatically include the Erie-Niagara section because of the fact that it is a single economic entity. However, I think that it's a fact that the Niagara River is not included in the agenda for this conference. In the report itself I think it's excluded from the waste inputs when they were calculated. It would have to be or they would have never been so small. However, the Niagara River is included in some of the narrative sections relative to degree of treatment and I would like to have that point clarified.

MR. COOK: In the beginning, Mr. Hennigan, when we started developing this report we included all of the Buffalo-Niagara area. Then learning that the conference area did not extend beyond the headwaters of the Niagara River, we somewhat hastily withdrew all of the information from the report that we could regarding that section of New York.

Unfortunately, some things did remain that we weren't able to pluck out of the report.

MR. HENNIGAN: Part of Senator Kennedy's statement yesterday referred to the degree of treatment and extent of primary treatment in New York State.

His statement would have been correct if the Niagara River was included, but with the exclusion of the Niagara River, it was not, in terms of the amount of sewage

originating and the percentage of primary treatment being provided.

The Buffalo River has been a great subject of discussion, particularly here in Buffalo. Could you go into the question of some of the hydraulics and other factors about the Buffalo River?

MR. COOK: To what extent, Mr. Hennigan?

MR. HENNIGAN: I'm no expert on the Buffalo River. Probably everybody in the room knows more about the Buffalo River than I do. But from what I heard here, I get the impression that you've got a dead stretch of stream which is used and recirculated by a group of four to five industries. You have a situation where you're drawing in water for industrial process use which is probably of poor quality and you add some more contaminants to it; you return it to the Buffalo River, you pull it back into the plant and you keep going on. This type of situation, it seems to me, is bound to build up considerable concentrations of all kinds of contaminants in the river.
Is that it?

MR. MEGREGIAN: That's a pretty good description of what we had in mind during dry weather flow, yes.

MR. HENNIGAN: Well, it seems to me that the main problem in the Buffalo River area would be when you had a sudden rainfall or freshet which would carry out from the Buffalo River this relatively large concentration of waste. Is that a

reasonable statement?

MR. MEGREGIAN: I believe it is, yes.

MR. HENNIGAN: Now the next thing, could somebody discuss, to some degree, some of the hydrology of the Buffalo River-Buffalo Harbor area and try to explain what happens to this water when it leaves the Buffalo River. Where does it go? In other words, what is the particular problem?

MR. MEGREGIAN: I think I know what you're trying to ask. Our studies have indicated that the Buffalo River discharges move predominantly along the eastern shore and ultimately into the Niagara River with some dispersion into the Lake Erie waters. During the times of high flow in the Buffalo River and adverse weather conditions on the Lake which would tend to move the waters away from the Niagara, this water does go into the Lake in a more concentrated mass and thereby not only pollutes Lake Erie, but I understand also interferes with the water supply of the City of Buffalo.

MR. HENNIGAN: There is one other item I would like to take up which seems to be....

MR. OEMING: I don't want to interrupt you, Mr. Hennigan, but I feel we have caught the significance of the answers to your question.

Are you saying that there is a current reversal at the lower end of the Lake which reverses the Buffalo River so it discharges into Lake Erie?

MR. MEGREGIAN: I didn't say it reverses it. I said the wind and weather conditions move the waters of the Buffalo River that are flowing on the eastern shore out into the Lake. The surface waters of the Lake move with the wind, and thereby they do take this water--the surface water--and can move it out, and have, in fact, interfered with the Buffalo water supply at times.

MR. OEMING: Does this mean that in the Niagara River itself.....

MR. MEGREGIAN: No, we didn't say anything about the Niagara River. The Buffalo River discharges into Lake Erie rather close to the mouth of the Niagara River by the headwaters.

MR. OEMING: I see.

CHAIRMAN STEIN: Let's see if I understand this correctly. During the freshets, described by Mr. Hennigan, when this comes out you say this occurs? In other words, most of the flow from the Buffalo River, in the condition it is, may go down the Niagara River. But when it really flushes out and the big slug of pollution comes out then it goes into Lake Erie.

MR. MEGREGIAN: I didn't say that. The condition here would require a wind counter to the normal movement of the surface waters.

MR. HENNIGAN: Would this discharge from the Buffalo Harbor go out the upper harbor entrance or the lower harbor entrance? Is the hydrology or the hydraulics ever that the waste

discharge would go out the upper harbor entrance?

MR. MEGREGIAN: Well, I'm not sure about the geography there. Are you talking about the harbor entrance, down where Bethlehem is, is that what you mean, the lower harbor entrance?

MR. HENNIGAN: Right. What I am trying to find out is if the major portion of discharge takes place at the end of Buffalo Harbor, whether or not there is a section of the Lake in the upper reaches almost of the Niagara River which have low depths and a rapid current? I don't know whether this is true or not. This is just a point of information I am trying to clarify.

CHAIRMAN STEIN: Do you have a man who might be able to answer this better than you people?

MR. MEGREGIAN: I am not sure. May I ask if Mr. Hartley can give us any further facts on this?

MR. ROBERT HARTLEY: I am Robert Hartley, an oceanographer with the Public Health Service. As I understand it, you want to know if the storm discharge from the Buffalo goes out into the Lake or goes behind to the Niagara River.

MR. HENNIGAN: That's the fundamental question.

MR. HARTLEY: I think, in the first place, it depends on the amount of rainfall, but it can very definitely reach out into Lake Erie. I think probably anywhere from three quarters of the flow at any time would be out the Niagara River, storm or no storm.

CHAIRMAN STEIN: Thank you.

MR. HENNIGAN: This question of the furnishing of information on industrial waste outlets, we asked our Attorney General to check into the New York State Penal Law since the time of Senator Kennedy's appearance is the first time I ever heard it was illegal, under New York State law, to give out industrial waste data, so I thought we had better check to make sure we weren't arrested and put in jail. There is nothing old or new in the Penal Law with reference to secret information concerning industrial waste outlets. The only restriction would be if there is a prosecution underway, you couldn't give out evidence to prejudice the case, as far as I know. Our files, as far as I am concerned and as far as I can determine, are completely open.

MR. POSTON: Does this mean that they are open to the Public Health Service?

MR. HENNIGAN: I know of no instance where they have been closed.

MR. POSTON: My people have been unable to obtain quantities and quality data on industrial waste. Mr. Megregian and your staff members here, Mr. Day, would you indicate what industrial waste information you have requested from the State of New York?

MR. DAY: I am Robert Day, Chief of the Planning and Report Section of the Lake Erie Program Office.

We have carried on some waste surveys up in the Buffalo-Niagara area and back in October of 1963, we wrote a letter to Mr. Bernhardt requesting information from many companies. We have a letter regarding Bethlehem Steel and we have not received an answer to this letter to date.

MR. HENNIGAN: No request was made to me for any industrial waste information. If there was, you would have gotten it. Secondly, it hasn't been the policy to withhold this information and there isn't going to be and there is nothing in New York State law that requires us to withhold the information.

MR. POSTON: Well, I think this is a very excellent indication.

MR. HENNIGAN: We are happy to hear it. I have no further comments.

CHAIRMAN STEIN: Yes, Mr. Oeming?

MR. OEMING: I have a few supplemental questions for Mr. Megregian and Mr. Cook that have come up here since our conference in Cleveland, but first of all, I wonder if you could identify what you call other sources of phosphate inputs to Lake Erie under Pennsylvania and New York.

These are just generalized and I wonder if you could identify these any better than this when you say other sources?

MR. MEGREGIAN: No, this is the cumulative total of t population draining into Lake Erie other than the cities.

MR. OEMING: This is related totally now to people, not land runoff or industrial wastes or any other things?

MR. MEGREGIAN: No.

MR. OEMING: All right. Now, would you tell me what is your value that you use to apply to population for phosphate input on, let's say, a raw basis, if it were raw sewage?

MR. MEGREGIAN: I would have to get that from my records, Mr. Oeming. I don't have it in my head at the moment.

MR. OEMING: Well, you must have had something here, Mr. Megregian, to reach these poundage figures, mustn't you?

MR. MEGREGIAN: Yes, that is correct. I believe the value is something like two pounds per capita per year.

MR. OEMING: Two pounds per capita, and what is that as--how do you express that?

MR. MEGREGIAN: As phosphate.

MR. OEMING: As PO4?

MR. MEGREGIAN: As PO4.

MR. OEMING: Now this table, does this represent actual inputs or does it represent inputs after some treatment is applied here? This keeps confusing me because sometimes you talk about it as after treatment.

MR. MEGREGIAN: This represents, according to our best calculation, what the soluble phosphate contribution is today. That includes treatment as well as no treatment.

MR. OEMING: Untreated.

MR. MEGREGIAN: That's right. In other words, where there is a known treatment plant such as the Cleveland Easterly Plant, we have calculated a 35 percent reduction in the per capita phosphate and have given them the balance here as inputs.

MR. OEMING: That is calculated. That is not actually measured. You don't know, do you, whether Easterly actually removes 35 percent?

MR. MEGREGIAN: No one knows this at the present time because this measurement has been carried out very seldom at treatment plants.

MR. OEMING: Mr. Megregian, what is the source of this two pounds per capita? How did you get at this?

MR. MEGREGIAN: This is a number arrived at through rather extensive research in our Great Lakes Illinois River Basin Project office in Chicago.

MR. OEMING: A whole series of raw sewage samples were run and you have something that you feel now is as reliable as the 0.17 pounds of BOD per capita? Would you say that it is in the same category of reliability?

MR. MEGREGIAN: Not yet. There is a problem with phosphates which I am sure we are all aware of and that is that you can base a fairly solid figure on the basis of human inputs, but you cannot, this figure of two pounds may not stand up very long because the greater bulk of the phosphate inputs today are from washing compounds and the increases in usage of these

materials may certainly change the per capita figure.

MR. OEMING: Well, in view of the recommendations here and the attempt to get at this whole problem of phosphates in Lake Erie, wouldn't you feel more confident if you had actual information on these inputs from these various sources?

I don't speak only of Pennsylvania and New York, but I mean from all of these sources. You did it in the Detroit area. I think you're fairly confident there. You didn't have to apply some figure, you actually measured it, but you didn't do very much measuring, did you?

MR. MEGREGIAN: That is correct, we did not.

MR. POSTON: Could I interject here, all of the figures for Michigan are the result of actual measurements, isn't that right?

MR. MEGREGIAN: That is correct.

MR. POSTON: And some of the measurements on other streams are actual measurements, isn't that right?

MR. MEGREGIAN: All of the values for tributaries in Ohio are measurements, the average results.

MR. POSTON: And laboratory analyses?

MR. MEGREGIAN: That is correct. It is the result of whatever the tributary contains at its mouth, above the Lake affected area.

MR. POOLE: I thought the answer today was that the table reflected only people's contribution and that, if I

understood correctly in Cleveland, and if I understand it correctly now, isn't exactly so.

Take the Maumee as an example, and that's a measurement of the phosphates in the Maumee which would include land runoffs.

MR. MEGREGIAN: Let me clarify the record then for your benefit, Mr. Poole, measurements were made for the discharge from Lake Huron, the municipal contributions and industrial contributions and tributaries in Michigan.

Measurements were made for the tributaries in Ohio, Maumee River, Portage, Sandusky, Black, Rocky, Cuyahoga, Chagrin, Grand and Ashtabula. All the other values on that table are based on population equivalent estimates.

MR. POOLE: I do understand correctly then, that when you measured the stream, your measurements would include land runoff as well as people's contribution.

MR. MEGREGIAN: Of course, yes.

MR. POSTON: Your estimates, then, with population come primarily in the large cities listed under Ohio, Toledo, Sandusky, Lorain, Lakewood, Cleveland?

MR. MEGREGIAN: Those are municipalities that have direct discharges to the Lake. That is why they are included separately there.

MR. POSTON: And those are estimates?

MR. MEGREGIAN: That is correct.

CHAIRMAN STEIN: Are there any further questions?

MR. OEMING: Yes I have some more. Mr. Cook, a question was asked you of what you thought would be of value for phosphates that would help this situation, and I now ask you again, can you give any guidance to this conference as to what value we should be shooting for on phosphates in the Lake?

MR. COOK: I think the immediate concern is reduction, any reduction. This is absolutely required. Beyond that, I think that if in the next year or two years, we can reduce the concentration in all three Basins by .01 milligrams per liter, we are going to see a great improvement in Lake Erie.

That would bring it down to .03 in the Western Basin, and .02 in the Central and Eastern.

MR. OEMING: Now is this something we're shooting for? Would you say that we're shooting for these values in the Western Basin and the Eastern Basin?

MR. COOK: We didn't say this in our report, however, personally I think we should, yes. I don't mean to say that this is a goal or a level at which we should be satisfied. We should try to go below this, reduce the concentration just as far as we can.

MR. OEMING: Well, at the Detroit conference, if you remember, Mr. Cook, we went into this. I don't know whether you were there.

MR. COOK: Yes, I was.

MR. OEMING: But you answered the question. I think I got the answer that we are relying upon .015 phosphorus as a desirable objective or goal to seek in whatever program the state adopts, and this is for the Detroit River now.

Now, do you wish to change this in any way?

MR. COOK: This isn't changing it, this is just to give a little bit of explanation. The .015 was S.P., Soluble Phosphorus, S.P. Soluble Phosphate as PO4 is three times that, that would be .045. Unfortunately, the figure used there was not what I would depend on. I would say .01 S.P.

This came about as the result of some confusion in the literature when Dr. Sawyer proposed .01 for the Madison Lakes in Wisconsin, he also put out another paper where he had .015.

I think, from what I have heard, it may have been a typographical error. In fact it went into the paper as .015. Most biologists in the United States today will accept the figure of .01 as S.P. rather than .015.

For instance, we found that in Lake Michigan and we are finding in Lake Ontario and Lake Erie that .045 S PO4 is too much. We are getting problems with this level. .01 S-P is the point at which we have problems, so we've got to reduce it below that.

The thing that we were faced with, we were perfectly aware that .015 figure in the Detroit report, very frankly, we didn't want to perpetuate that error here in Lake Erie, and I

consider that an error, that .015. We should have said .01.

MR. OEMING: You were in the same ballpark when you were recommending both in the Detroit report and in the Lake Erie report a coliform index not to exceed 1000 for certain uses. Would you say that there is the same degree of certainty with respect to your phosphate figure as there is with respect to your coliform figure?

MR. COOK: May I go back just a minute, Mr. Oeming, to the phosphates again. The value of .01 in the Detroit River or .015 would never cause problems in a river like the Detroit River. A flowing stream just does not develop problems like a quiet body of water does. The purpose there in Detroit of .015 in the Detroit River was to guarantee that there would not be a large input or as great an input of phosphates to Lake Erie, which we are more concerned with as far as phosphates are concerned.

MR. OEMING: I understand, but that was for the protection of the western end of Lake Erie.

MR. COOK: Yes, that's correct.

MR. OEMING: I think then, that s correct, Mr. Cook, that this was all related not to the problem in the Detroit River.

MR. COOK: I just want to make that clear.

MR. OEMING: But to the western end of Lake Erie, and my question at that time and it still applies, it still rests

here, is the .015 for the Detroit River sufficient to protect the western end of Lake Erie or is it not and what is the degree of reliability of this figure?

MR. COOK: I would say .01.

MR. OEMING: You would change it now to .01, so now we have a discrepancy here, because you differ from somebody else.

MR. COOK: Yes, I do, if you want to put it that way. I certainly do.

CHAIRMAN STEIN: As I understand it, Mr. Cook is speaking for our entire investigators' group and all our biologists who specialize in this. I don't think this is a question of differing. When you are dealing with as vital a number as this and you're coming up with the best possible estimate you can on present knowledge, if there is some situation, whatever the explanation for another figure getting in a previous report, I don't know that we should take the latest figure, but I would not, as I understand, Mr. Cook, indicate that there is a difference of opinion among the aquatic biologists or the biologists who are dealing with this problem.

They are pretty much agreed, as I understand it, on the latest figures that Mr. Cook has given rather than the one that happened before, and perhaps the explanation is as simple as a typographical error, but whatever it is, I don't want the impression, as I understand it, that there is a substantial

difference in expert opinion as to what the critical point is. There is pretty much agreement.

MR. OEMING: I am not trying to make a point, Mr. Chairman, about a difference here. All I am trying to say is that somebody is going to have to ask a municipality to do something on the basis that we have a phosphate problem.

Now, when we do this, whether it is the State or the Federal Government, we have to have some degree of reliability that we're asking for the expenditure of money.

CHAIRMAN STEIN: Well, that comes to your next question. I don't know, and again, I want to try to get this as fast as possible, but Mr. Oeming, for example, asked how reliable the figure was. The way he put the questions was, "Do you think this is as reliable as our coliform counts?"

You know, you're asking him for an analogy in a field which may or may not be his, but go ahead.

MR. OEMING: I don't care who answers it, Mr. Stein, but I think over the years there has been a great deal of information accumulated to establish 1000 index, relatively certain.

CHAIRMAN STEIN: That's right.

MR. OEMING: Now, are we in the same position today with phosphates?

MR. COOK: I think the figure we are using for phosphates is more precise than the coliform figure.

MR. OEMING: Okay. Now, it has been cited in both

the Cleveland conference and this conference, the results of tests made in the Chicago plants, and I assume that these are the three plants, the Northside, the Westside and the Calumet plants, and I am familiar with these plants. Well, first of all, you indicated that there was a change or a variety of removals achieved here from, what, 30 percent to 70 percent?

MR. MEGREGIAN: I believe I mentioned that.

MR. OEMING: What plant had the high removal of phosphate?

MR. MEGREGIAN: The largest plant, it was West-Southwest.

MR. OEMING: And what is there peculiar about the West-Southwest plant that might relate to the removal of phosphate?

MR. MEGREGIAN: That's a hard question to answer.

MR. OEMING: This is something Mr. Hennigan touched on here and I want to bring this out.

MR. MEGREGIAN: The one fundamental difference between that plant and most conventional activiated sludge plants is that they do burn their sludge. In other words, their sludge disposal is by reduction through ash in most instances, in most cases anyway.

MR. OEMING: Yes, now this then is primarily, or is it not, the basis upon which you are predicating a 60 some percent removal over the basin, that is, on the West-Southwest

plant at Chicago? You are not predicating it on the Northside plant or the Calumet plant?

MR. MEGREGIAN: This is correct.

MR. OEMING: And this plant is peculiar because it has a Zimmerman Process, which is the only place in the country where this process operates at a scale of this magnitude.

MR. MEGREGIAN: No, sir, that is not correct. The Zimmerman Plant at the West-Southwest has only been in operation for about two years and it only takes about 10 to 15 percent of the daily sludge output of that plant. The normal operation of that plant is by drying and burning of the sludge itself without the Zimmerman entering into it.

The Zimmerman is an addition to handle the increased sludge capacity and I believe some day they may convert entirely to Zimmerman or they may not. I don't know what their actual operations are there.

MR. OEMING: Well, I think the point here is you are dealing with a particular case, and you have indicated a few moments ago that you do not have the explanation as to why this removes 69 percent versus other activated sludge plants in the Chicago area under the same operating supervision, which do not remove as much phosphate.

MR. MEGREGIAN: We have not studied this, no.

CHAIRMAN STEIN: I think, again, for the record, and you have made these comments before, again, you know when you

begin asking an expert an expert question without definitive studies you get this kind of an answer. But I do think, Mr. Megregian, as I understood you before, you indicated you had a pretty good hunch as to whatever has happened, and that is because they didn't put this sludge back into the process. Isn't that correct?

MR. MEGREGIAN: This is fundamentally the basis for the removals that we have calculated.

CHAIRMAN STEIN: I think that covers the question. Are there any other questions or comments?

MR. OEMING: I'll have some comments later in my formal presentation. There are no more now.

CHAIRMAN STEIN: Thank you very much.

MR. POSTON: I would like to proceed with Colonel Neff, District Engineer here in Buffalo who would like to make a brief presentation in addition to the one he made in Cleveland.

COLONEL NEFF: Mr. Chairman, members of the conference, ladies and gentlemen. I will not repeat all of the remarks which I gave in Cleveland.

I pointed out over there that the Corps is involved in both regulatory and operational activities, and I will not comment further on the regulatory activities. Anyone who is interested in this can get it from the record or my office can furnish the data.

I also believe there has been particular emphasis on

this point of dredging and most of my remarks will be addressed in that direction.

The procedures and practices of the Corps of Engineers involving the construction and maintenance of navigation structures and channels, flood control works, and other public projects seek to preserve the rights of many interests involved in the use of our water resources. This includes all aspects of navigation, industrial use, recreation and conservation.

Recently, there have been a number of charges regarding the dredging practices of the Corps. The need for maintenance of river channels and harbors seems to be clearly established. Many great industrial centers began and flourished simply because of their proximity to waterborne transport.

It is recognized that the deposition of dredged material in the Lake affects localized sedimentation rates but we have been unable to confirm that these operations have been detrimental to shore installations or beaches.

Any pollutants from the rivers and harbors, which may be deposited in the Lake by the dredging operations, would eventually be carried out by a natural current action. While the dredging and disposal operation may accelerate the movement of solids and to a minor extent, liquid wastes, it does not add pollutants to the waters.

I tried very hard to make the point that we don't manufacture anything and put it in the water.

A decision to curtail the use of Lake Erie for disposal would require the availability of alternate areas if deep draft navigation is to continue to serve the states involved. There exists the possibility of the disposal of dredged materials behind dikes or bulkheads. This is being accomplished in the Detroit and Toledo areas; however, in both these areas, this method of disposal is more economical than hauling the material long distances for disposal in deep water in the Lake.

Within a densely populated metropolitan area as we have in Buffalo, where land filling areas are scarce, it is difficult to find suitable disposal areas. We were able to find such an area here in Buffalo last year when we used Niagara Frontier Port Authority land for a disposal area for deepening the outer harbor.

In accordance with present practice, local interests assumed the additional cost of providing dikes to retain the dredged material, and I might just depart from the text here a moment and say that this has been Congressional policy and practice, that any time we deviate from this normal dredging procedure, that local interests are expected to pay the additional cost, whether this be dikes, whether this be additional handling or all the other things involved.

The shore disposal at Toledo has been accomplished by direct pump out of the Hopper Dredge MARKHAM, which is operated by the Buffalo District. The Hopper Dredge HOFFMAN,

also operated by the Buffalo District is being modified this fall in order to be able to perform the same operation in the Rouge River near Detroit.

It should be noted that any pollutant in liquid form is not eliminated by this type of disposal since dilution water must be drawn off during the disposal operation.

I believe it appropriate also to comment on questions that have been raised regarding our dredging practices here in the Buffalo River. There have been objections to the practice of maintenance dredging sediment from the Buffalo River and placing it in Lake Erie at our dump ground opposite the Bethlehem Steel Plant.

Currently, the material is taken from the river by clamshell, and taken aboard dump scows to the Lake. This operation is the most economical we have been able to devise and still remain within the parameters of the movement of sediment as performed by nature. Those materials which lie in the river beds are moved into the lakes at one time or another by natural currents.

There are many alternative methods of disposal of this material which also, in our opinion, will cost appreciably more. Ultimately, it may be necessary to remove all of the sediment regardless of cost.

But I submit that the millions of dollars, which might be expended if the practice is adopted throughout the

Great Lakes of removing all dredged materials from the waters, can better be spent at this time on correcting causes of pollution. The maintenance funds which we utilize have their origin in the project authorizations issued by Congress.

In my opinion, it would be necessary to obtain Congressional approval for any significant changes in maintenance procedures and personally, I would hesitate to recommend that public funds be provided for special handling of foreign substances which shouldn't be there in the first place.

I would further propose for the committee's consideration the examination of the outflows from Lake Erie to ascertain what effect the cyclical behavior of the water levels of the Lake have on pollution.

During the period from 1951 to 1954 the outflow average from Lake Erie down the Niagara River was some 218,000 cubic feet per second. From 1961 to present, the average outflow has been 179,000 cubic feet per second, a change of almost 20 percent downward.

The reduction of the natural purging capability of the Lake may well be a factor in some of the recent manifestations of pollution. If there is actually an identifiable relationship between the rate of Lake outflow and pollution, it might be necessary during periods of low Lake levels to implement extraordinary pollution enforcement measures.

The lower Lake levels are related, in my opinion, to

the reduced rainfall in the basin, which amounts to a total of some 14 1/2 inches of precipitation over the past 3 1/2 years. The reduced rainfall naturally diminishes the capability of small streams to move and dilute foreign substances.

The point to make, I believe, is that to make an objective and complete review of this problem, we must examine natural causes as well as man-made ones.

In summary, it appears that future disposal of most dredged material will of necessity continue to be in Lake Erie, and that control of the spread of pollutants must come through the elimination of the pollutants at their source.

If you want to change this, only Congress can do it. This is where we get our authorization.

Since most forms of pollution reach navigable waters via sewers in liquid state and do not cause any obstruction to navigation, the Corps of Engineers does not have a legal basis for attempting to eliminate them. There is legislation pending in Congress at this time which proposed to eliminate this provision from the law, and I won't go into details on that here today.

From my office in Buffalo, where I observe the Niagara River and its inexorable flow which averages some 130, this is an average, 130 billion gallons per day and in 957 days is equivalent to the total volume of water in Lake Erie,

one is impressed by the natural forces which are operating to assist in keeping the water clean.

In the interest of economy, it would appear wise to take advantage of these natural forces and the application of pertinent statutes and foresight to accomplish the desired end of reducing pollution. Thank you.

CHAIRMAN STEIN: Thank you, Colonel. Are there any comments or questions?

MR. POSTON: I would like to comment to the fact that I, as a conferee, feel that there is a problem. I think this problem results from pollution from industrial and municipal wastes depositing in the stream and dredging this material. And moving it out into the Lake is the transfer of a pollution problem from one area to another so that the practice can continue.

I think the conferees, in making their recommendation relative to dredging, doubt that this is a problem that has been brought to their attention in the Cleveland area. I should speak for myself there. And that the solution to pollution is not dilution or transportation, it is eliminating this. And I think the resolution says that representative of the United States Corps of Engineers recommends that the representatives of the United States Corps of Engineers meet with the conferees and that jointly they develop into action a satisfactory program for disposal of dredged materials in Lake

Erie and its tributaries, which will satisfactorily protect water quality.

I think some of the things that might come out of this is who pays the dredging costs. Could this not be assessed to the pollutor and assign some of the cost of removing this material and depositing it within some confined area, might this not be assigned to the pollutor?

I think that much can come of this by a discussion with the Corps. Who pays presently for deposits that come out of sewers, organic materials, maybe toxic materials, deposits on the bottom of the stream, who pays for transportation of this material into Lake Erie?

COLONEL NEFF: As I mentioned in the regulatory section of this report, which I also would like entered in the record, I believe this was done previously.

CHAIRMAN STEIN: That will be done. (statement appended)

COLONEL NEFF: I pointed out that we had an enforcement case in the Calumet River in Illinois, where three steel companies were involved in a flue dust case, and after some nine years of litigation, the case was dismissed but with a stipulation that the steel companies agreed to pay for the removal of flue dust deposited in the Calumet River and we now do this with a payment from these companies.

Where you have a number of industries operating in the same area, I don't think I have to tell you how complicated

it gets to try to divide this up and assign responsibility in this sort of thing.

As I said in my statement, additional investigations are now being undertaken in view of this precedent that we had over on the Calumet River, and I think that there will be additional action in this direction.

MR. POSTON: I fervently hope that the conferees at the time of their meeting with you would be able to assure you of some assistance that they might render in defining sources of these polluting materials that must be dredged by the Corps of Engineers. Thank you, that's all.

CHAIRMAN STEIN: Are there any further comments or questions? If not, Colonel, thank you very much.

I would like to say I agree with you thoroughly about this notion of removing wastes at the source. I couldn't agree with you more. I think this is like the augmented low flow statute we have. You just can't expect Uncle Sam to provide water or drag away your wastes in lieu of treatment at the source and I, personally, am fully in accord with the Colonel's views on that.

Are there any further comments or questions?

MR. HEINE: I would like to have a statement of a Mr. Gene Heuser of Erie put into the record.

CHAIRMAN STEIN: Without objection, that will be done and entered into the record. (statement appended)

I think before we go on with the New York presentation, we will take a ten minute recess. Thank you.

(WHEREUPON A SHORT RECESS WAS TAKEN.)

CHAIRMAN STEIN: May we reconvene. Mr. Hennigan?

MR. HENNIGAN: Mr. Chairman, fellow conferees, ladies and gentlemen, we have a lot of material that we would like to present to the conferees and a report which we would like to brief somewhat. Copies have been furnished. I would note that I will probably depart from the text and the copy at considerable points.

My name is Robert D. Hennigan. I am Director of the Bureau of Water Resource Services of the New York State Department of Health. The Bureau is responsible for developing and carrying out the State's water quality management program as promulgated by State law and policy determinations of the Governor and Commissioner of Health.

I was appointed to the position of Director on June 10, 1965. Prior to that time for a five year period, I was Principal Engineer with the New York State Office for Local Government. During that period of time, my activity was devoted to trying to set up procedures and develop programs which would make it feasible and possible for our municipalities to implement water pollution control objectives, and anybody that is familiar with local government, particularly in New York State, knows that this isn't a particularly easy task.

During that particular time, a series of reports were prepared, five in number, entitled "A Study of Needs for Sewage Works in the State of New York." This is a copy of Report No. 1. I think the conferees have received sometime in the past a complete set of these documents which outline the New York State problem, programs, and plans for the future.

Some of this work was, I think, the genesis for the Pure Waters Program which is now being put into operation.

Governor Rockefeller and Commissioners Ingraham and Wilm have already spoken to you and presented the broad State policy on water resource control and water quality management.

In essence, it is a call for Federal, State and interstate and local cooperative efforts, which will minimize the inherent liabilities at each level, to the end that water resource development and water quality management goals can be met in an effective and timely manner.

This conference can be an effective vehicle to further the cooperation that is so essential to success and can help mitigate the natural tensions in the Federal system and produce sterile or negative results. The choice is our to make.

It is easy to fall into the trap that effective water pollution control is purely a technical problem. Studies are carried out delineating the sources of waste, their effect on receiving waters and the physical, bacteriological, chemical,

biological and hydrological factors involved. Conclusions are reached and recommendations are made. What then?

At that point, other facets come into play; they are the social, political, legal and economic factors which are as fully important as the technical determinations. This should be obvious to all who have participated in or are attending this conference.

In other words, the essential ingredient, after competent technology, is widespread popular support; with it success is inevitable; without it, failure is probable.

We welcome this opportunity to present to our sister States on Lake Erie and to the people of the Niagara Frontier the facts concerning present conditions, existing facilities, ongoing programs and plans for the future.

State concern over the Great Lakes pollution problem prompted Governor Harriman in 1955 to request an IJC reference for Lake Erie, Lake Ontario and the St. Lawrence River. This request was again made by Governor Rockefeller in 1961. The purpose of a reference is to determine conditions, establish quality objectives and standards and to carry out a remedial program. The reference was finally made in 1965. The State has had a pollution program, an abatement program, since 1949. It has undergone continuous change due to many factors and program implementation reflects such change.

Basic considerations include factors associated with

program development and requirements for treatment facilities, municipal and industrial.

The enactment of the Water Pollution Control Law (Article 12 of the Public Health Law) in 1949 established the basic objective of the State, e.g. "to abate existing pollution and to prevent future pollution" by requiring the use of all known available methods of treatment.

Since that time the State has undergone a continuous period of dynamic growth. This period has been marked by the evolvement of a broadening State interest in water quality management. This evolving and expanding interest has been demonstrated by:

(1) Constitutional and legal changes to make local government more responsive and flexible to increasing demands, particularly in the water quality management and water utility service areas, which have taken place. Such changes include: Sewer Rental Law; County charter government; Suburban town law; intermunicipal cooperation statutes; the provision for intermunicipal survey committees; the formation of county water and sewer agencies; and a whole new amendment to the Constitution that was enacted last year.

(2) Reorganization of State Government in the water resource field and establishment of the Water Resources Commission.

(3) Initiation of a comprehensive water resource planning program.

(4) Definition of the needs for sewage works by the Office for Local Government study in 1962, and resulting program recommendations.

(5) Numerous amendments to the water pollution control laws so as to maintain pace with the changing conditions, particularly since 1962.

(6) Enactment of the Comprehensive Water Supply and Sewer Works studies programs, under State sponsorship, concerning organizational and fiscal aspects of sewer and water utility service in order that it may be provided in an economical and timely manner.

(7) Overwhelming citizen support of the Constitutional amendment exempting sewage works from the municipal debt limit approved by a two to one margin in 1963, and incidentally, it was defeated by a two to one margin in 1955, indicating a little change in public response to the whole question of water pollution abatement.

(8) The establishment of coliform standards for specific water uses, and the elimination of the referendum when municipalities are under an order of the Commissioner of Health or court to abate pollution, both enacted into law at the 1965 session of the Legislature.

(9) Adoption of the "Pure Waters Program" at the 1965 session providing for massive construction grants, operation and

maintenance aid, automatic water quality monitoring network, industrial incentives, increased research, expanded comprehensive study activity, streamlined enforcement procedures and completion of construction of State institution facilities.

Further evidence of expanding State interest has been the growth of interstate agency programs in water resource control and water quality management. This is shown by the establishment of the Delaware River Basin Commission in 1961, and the study now under way concerning the establishment of a Susquehanna River Basin Commission. Both of these Commissions are Federal and State Commissions.

Other interstate activities include the growing programs of agencies such as the Interstate Commission on Lake Champlain, the Interstate Sanitation Commission, New England Water Pollution Control Commission, the Ohio River Valley Water Sanitation Commission, the Great Lakes Commission, the International Joint Commission on the Boundary Waters between Canada and the United States.

Contributing to this growing interest has been the expanding population, increasing demands for water for all uses, particularly water supply and recreation, the widespread use of insecticides, fertilizers and herbicides, and industrial growth, development and expansion.

An additional major element is the national interest

which is shown in the enactment of the Federal Water Pollution Abatement Program in 1948 and the subsequent amendments in 1956, and in 1961 and the changes now before the Congress.

The State Water Pollution Law provides methods to abate existing pollution and to prevent new pollution, the first, classifying waters according to their best social and economic use, and establishing standards for each such use; the second, by a plan review and permit system, both augmented by appropriate rules and regulations. The purpose being to eliminate and minimize pollution, not to use all the waters of the State for maximun waste loadings.

State concern is not limited to evaluation of proposals and their immediate effect. Rather it involves future growth and development, the demands of a dynamic changing situation, the organizational and economic factors, and the total impact on overall State water resource development and effective water quality management.

State responsibility also includes the added public health emphasis accorded public water supply, shellfish production and bathing waters.

In order to fully reflect the present State concern, the basic program of the State Department of Health concerning waste water treatment facilities is as follows: Comprehensive utility studies, both water and sewer, are necessary in all

major urban counties and in all other urban situations wherein intermunicipal action is indicated in order to provide facilities in an economic and timely manner. Such studies will usually be a prerequisite to receiving State construction grants.

Engineering studies are to be required in every city utilizing a combined sewer system in order to evolve a plan to minimize overflows, establish continuous surveillance and to provide treatment of such overflows where indicated.

Multiple treatment facilities and outlets are to be discouraged. Wherever feasible, connections are to be made to existing sewer systems rather than creating new outlets. The basic assumption will be in favor of the sewer connections instead of additional outlets.

Outlets into lakes, impoundments, and ponds and their tributaries used principally for water supply and recreation will be discouraged in favor of trunk sewers to remove waste water from such watersheds to a treatment plant in the outlet stream where feasible.

Effects of waste water discharges into surface waters shall be evaluated on a perspective condition thirty years in the future and based on a consecutive 7 day low flow with a return period of once every 50 years.

Outlets into intermittent streams with little or no flow shall be discouraged, when absolutely necessary they will be preceded by tertiary treatment and chlorination.

Outlets into surface waters covered by Rules and Regulations enacted by the New York State Commissioner of Health or the Commissioner of the Department of Water Supply, Gas and Electricity or the Board of Water Supply of New York City and all waters classified "AA" shall be discouraged, when absolutely necessary they will be preceded by tertiary treatment and chlorination.

Outlets into any stream or lake where there is a downstream or parallel water supply or shellfish use shall be preceded by continuous effective chlorination in addition to other treatment required.

Outlets into waters classified "A" shall be preceded by secondary treatment and continuous chlorination.

Outlets into waters classified "B" shall be preceded by secondary treatment and seasonal chlorination from May 1 to October 1 each year.

Outlets into waters classified "C" shall be preceded by secondary treatment.

Outlets into waters classified "D" or up shall be preceded by primary treatment.

Stated treatment requirements are minimums. Individual evaluation of a specific project may require additional treatment to meet quality standards. Downstream water use will control minimum requirements for treatment facilities.

Treatment requirements for outlets into waters classified "A," "B," "C," "D," "E," or "F" will be raised if necessary to protect a higher existing or future use downstream.

Industrial wastes vary to a great degree. However, all such outlets will be preceded by treatment facilities which will produce effluents comparable to results from primary, secondary and tertiary treatment of sewage for outlets into classified waters such as noted previously.

This means reduction of waste loadings by inplant control, treatment to remove floating and settleable solids, BOD reduction, disinfection and reduction of all other pollutants to a degree consistent with existent and future water use, coupled with a continuous surveillance and control program.

This program statement is augmented by the department through appropriate and detailed rules, regulations, and bulletins. Public hearings will be held to protect the public interest and to aid in evaluation of a comprehensive study of an individual project when deemed appropriate by the State Commissioner of Health.

This program implementation applies to all new outlets, to all applications for renovations, additions or alterations, to all applicants for operation and maintenance assistance, to all applicants for State construction grants, and to all applications for a new or modified permit to discharge waste water.

I would like to explain very briefly the New York State

classification system in order that these requirements make a little sense.

Basically, the system has seven alphabetical classes. It's "AA" down to "F." "AA" is water supply with disinfection only. "A" is water supply with full treatment. "B" is bathing and recreation. "C" is fishing. "D" is industrial and agricultural use. "E" is navigation and "F" is waste disposal.

A publication explaining the system and the quality standards is attached to this report. You will note that in addition to the basic classes, classes have been established for ground water, salt water and special classes for unique situations such as the Niagara River.

This assignment of classifications and the start of an abatement program is carried out by a series of actions. They include, first of all, a pollution survey of a drainage basin. Copies of such pollution survey are included in this material.

Publication of a survey report with recommended classifications, a public hearing on the proposals, adoption of final classifications by the Water Resources Commission, preparation and adoption of an abatement program.

Classifications will be completed for the entire State by the end of this calendar year; the abatement program by the end of calendar year 1966.

A map of the State is appended showing the status as of December 1964.

In the Lake Erie Frontier area there are five such pollution survey reports. They include the Big Sister Creek Drainage Basin, Silver Creek, the Erie-Niagara Basin, Cattaraugus Creek and the Lake Erie West End Basin.

Silver Creek and the Lake Erie West End are included in the Western New York section, and the remainder in the Erie-Niagara section in Part 3 of the United States Public Health Service report. All of the waters have been officially classified. Abatement plans are under preparation for Cattaraugus Creek and Lake Erie West End.

Of major interest to the people of the Niagara Frontier is the ongoing program of activities and the general status of waste discharges. In order to clearly delineate the situation, exhibits and tabulations have been prepared. Detail is presented on three drainage basins which are similar to the U.S. PHS report. They include the Western New York area, the Lake Erie area and the Niagara River area.

The Niagara River area was separated out since it is not included in the call for the conference, being neither Lake Erie nor a tributary of Lake Erie. Furthermore, the exhibits and the tabulations include all the drainage area in these respective basins, that is, both intrastate and interstate situations.

It is to be fully understood that the call for the conference included only interstate water of Lake Erie as far as the State of New York is concerned.

Both the Niagara River and all the intrastate waters were included for the purpose of clarification and full understanding by the conferees, and the people of the Niagara Frontier, not to submit them for inclusion on the conference agenda.

The major programs now under way can be broken down into five major areas--local planning and engineering studies, regulatory control, fiscal incentives, research and special studies and staff and administration.

Commissioner Wilm mentioned the fact that there is a program for regional water resources planning. A comprehensive regional water resources program is under way in the Erie-Niagara area which represents about 84 percent of the New York State drainage into Lake Erie. This study has been under way since 1963 when the Erie-Niagara Regional Water Resources Planning and Development Board was appointed.

Water quality management and pollution control are basic parts of the study and planning to evolve a framework for future development. A copy of the report is available and we will furnish it to you. The study represents a local, State, Federal venture.

We will submit for the record this plan of Cooperative Study so that it will be available to the conferees. Personnel and staff of the local Regional Board are present to answer such questions as the conferees may have.

In addition to the overall water resources planning program, which is an attempt to delineate the water needs of an area and come up with solutions, we have the comprehensive sewage study program which takes us down a step to the utility needs of an area. This program was enacted by the 1962 Legislature and became effective on April 4, 1962.

Funds were provided in the following manner--in fiscal 1962, $1,000,000; in 1963, $1,500,000; in 1964, $1,500,000; in 1965, $5,000,000.

Since the start of this program, 53 contracts for studies in major urban areas have been executed with grants totaling approximately $4,000,000.

The objectives of the comprehensive sewage studies are: (1) the determination of the logical and economic service area for sewage disposal projects irrespective of

municipal boundaries; (2) the development of an economical project for the collection, treatment and disposal of sewage; (3) the development of basic plans so that any system may be enlarged to include contiguous urban areas as they develop; (4) preparation of reliable estimates of first costs and total annual costs for the construction, operation and maintenance of recommended facilities.

Details of the program for the Erie-Niagara area are attached.

Under the regulatory effort, one of the major concerns is, of course, water quality surveillance. At the present time, there are nine sites in the Erie-Niagara drainage basin in which some type of surveillance is being carried out.

Of the nine stations four are being operated by the International Joint Commission, one by the Public Health Service and Erie County Lab, two others by the Erie County Laboratory and one exclusively by the Department of Health. Notes are available from the data from these stations and it is available here and will be distributed.

The Niagara River's classification being special is shown contrary to quality standards at two water quality network surveillance stations. Phenol has been the only known pollutant exceeding the standard limit of five parts per billion. In reviewing this material we caution you that the number of samples taken or their frequency is not nearly enough to really

establish what the conditions are in the river. They are just an indication of how conditions were at this particular time when the samples were collected.

In addition, we also have a plan review and permit system which is very similar to the usual control measures. In other words, before people make an outlet into the waters of the State, they must submit plans, they must be approved and they must receive a permit from the State and there isn't any more need for much more detail on that.

However, in the Erie-Niagara Basin from January 1964 to January 1965 the value of plan approvals in this area was $16,720,600. This did not include $1,600,000 for the city of Batavia. It does include, however, $1,642,500 for waste treatment works for Union Carbide and Metals.

A major cost expenditure in this area as you can imagine is for sewers. It represents 74 percent of this total.

Of interest in this whole question of pollution abatement enforcement, the State pollution abatement program is under no misgivings about some of the problems which this particular area has presented. Part of the Pure Waters Program, which was enacted this year, was a change in this whole question of enforcement procedures.

Specifically, the following changes were made: it provides that an application for reclassification of waters would not be of itself sufficient to delay enforcement

proceedings.

It gives the Health Department the power initially to establish a reasonable timetable of necessary pollution abatement action to be taken by judged pollutors with provision for appeal to the Water Resources Commission and to the courts.

It eliminates the automatic one year delay before Health Department abatement orders become absolute. It eliminates the possibility of two separate appeals from Health Department decisions by reporting a choice between an immediate appeal to the courts and an appeal to the Water Resources Commission.

It reduces the time within which an appeal from a Health Department order may be taken to the Water Resources Commission from four months to 60 days.

Now, a statement that was made by Congressman McCarthy in which he said, "The new State law still enables the municipality or industry to stall for an additional five years before ceasing its pollution of our waters" is an incorrect statement. That was repealed when this new law was put into effect, the law of 1965, Chapter 180, repealed this provision.

Any administrative action by the Commissioner of Health or the Water Resources Commission is subject to judicial review under Article 78 preceding, as is any administrative action by any State agency. This will never be removed

from State law, nor should it be.

CHAIRMAN STEIN: On the last statement, did you say that it will never be removed from State law?

MR. HENNIGAN: Sure, because it won't.

CHAIRMAN STEIN: I wish I were confident about speaking that way about the Congress. Maybe Mr. Poole can speak that way about Indiana's legislature, I don't know.

MR. HENNIGAN: In addition to the change in law, the Attorney General has increased his staff so that he now has three full time attorneys working on this program and the State Health Department will have three full time attorneys working on the enforcement provisions of the New York State Water Pollution Control Program.

In addition to this, you are all familiar with the activities of the Conservation Department under Conservation Law, Section 180, in reference to fish kills and the assignment of penalties.

A further part of this program is the operation and maintenance grant program. Under this program, a municipality in the State which properly operates treatment facilities is eligible for a grant equal to one-third of the direct operation and maintenance cost.

This grant program acknowledges that any single treatment facility is not just a benefit to the community that it serves but also is beneficial to downstream users, hence

the State acknowledges the help of any single municipality to properly treat its wastes by making financial grants available.

The anticipated grants, $8,000,000, has been appropriated for the program this year and range from several hundred dollars for the smallest installation to several million dollars for a large city such as New York.

The purposes of this program are to increase the extent of the quality of the surveillance of the State Health Department over the operation of sewage treatment plants in the State, to provide financial assistance to those municipalities which are properly operating sewage treatment works, to make an available administrative tool with which the State Health Department can provide effective leadership and assistance to municipalities so that operational performances of sewage treatment plants is improved, and to give greater incentive to construct or expand sewage treatment facilities so as to provide adequate public sewage treatment in all areas.

Some of the requirements include planned operation under the supervision of a treatment plant operator qualifying as meeting State requirements, proper plant operation including performance that require laboratory tests, maintenance of operation and maintenance records, evaluation of effects on the plant discharge in receiving waters and assurance, and this is a very important factor, that the waste from the area tributaries of the plant actually reach the plants for treatment.

You know, there are many situations, particularly in

combined sewer systems where the biggest problem is getting the sewage into the treatment plant. Areas of the sewage treatment works are constructed and operated in substantial compliance with plans approved by the regulatory agency. Establishment and enforcement of a local sewer use ordinance. Evidence that the plant discharge is not violating stream classifications as set up by the State Water Resources Commission.

An estimate of the amount of money involved in this program in the Erie-Niagara area, tributary to Lake Erie, is based on estimates submitted to the Department, $408,000, to the Niagara River, $1,284,000. That isn't to say that everybody is going to get this amount of money, but this is what has been submitted for our review.

In addition to that, we have a State construction grant program which, of course, is fully dependent upon approval by the people in November, although, as I noted before, there seems to be a great shift of public opinion. Like Victor Hugo once said, "There's no stopping an idea whose time has come," and I think we happen to be in a situation now where the time for effective water pollution abatement has come. I think this is true because the people in New York State and across the country are concerned and are willing to get behind and support such a real effort.

The State construction grant program will facilitate a tremendous acceleration of construction improvement. We

know that the municipalities rely upon the support of grant monies for construction purposes and this can be documented in New York State.

A review of our records of treatment plant construction in New York State since the year 1890 shows that 58 percent of all construction took place in a 17-year period. This period includes the WPA program and the present Public Law 660 program.

We are all concerned with the fact that construction of necessary facilities in New York State has been delayed somewhat because of the fact that Federal grant funds are not adequate. The State construction grant program we feel will remedy that situation.

Although in its initial phases, the State will carry the giant share of financial burden, the Federal Government is involved in each approved project. This has been accomplished by a section of the State law which mandates that a local municipality apply to and make reasonable efforts to secure financial assistance.

We appreciate the active assistance that representatives of the United States Public Health Service of New York and Washington have given our staff in preparing the administration of this program. It is clear to us that the Public Health Service is prepared to join with us in the implementation of this program.

The proposed State construction grant includes

several safeguards which ensure that construction will comply with both State and Federal needs. I have already mentioned the prior approval requirement by the Public Health Service.

This guarantees that all proposed works will be in alignment with Federal requirements. State needs will be met by further requirements, that the permit has been issued by the State Department of Health for the proposed waste discharge, that the proposed treatment facilities in accord with applicable comprehensive studies and reports made of regional and intermunicipal needs made under the comprehensive sewer studies program, that the proposed treatment facilities conforms with applicable rules and regulations of the State Health Department, that the proposed facility is necessary to the accomplishment of the State water pollution control program.

Legislation has also been enacted which provides indirect financial assistance to industry for the construction of waste treatment facilities. This is accomplished and this is repetitious, but I believe it is worth repeating, by permitting a rapid depreciation of industrial waste treatment installations for corporate tax relief and exemption for real property taxes and treatment works.

In order to take advantage of these programs, industry must secure a certification that the waste treatment facility has been constructed and is operated in a manner approved by the State Department of Health. In other words, the

State Commissioner of Health actually must approve each application.

Terms of treatment plant construction, under Public Law 660 and also for accelerated public works in this general area, the total project cost approximates $29 million and the grants made under both these programs approximate $8 million.

I am going to skip over a lot of this material. In addition to the material that I have spoken into the record, there is other material in here in reference to inputs into Lake Erie which has already been discussed. There is a table on municipal sewage treatment plants in the Erie-Niagara River area which shows their location, the plant name, the year built, tributary population, the designed flow and the treatment provided.

There is a table in here on the status of municipal industrial sewage treatment facilities on all of these drainage basins that we mentioned. There is a table on industrial waste status and what the story is in the basins.

In addition, you might have noticed that out in the foyer here, there are three maps which show each individual discharge into the waters in these three drainage basins and attached to each one of those maps is a list and a number by which you can locate each individual discharge and what it is for your information.

In addition to this material, there is a list of the

comprehensive sewer study program and its status. There is a list of all the discharges in the Western Basin which will be included in an abatement program as soon as it's worked up, and in the blue folder there is other material relating generally to the New York State program.

Now, if I may, I would like to address some comments relative to the recommendations which have been made concerning this conference, rather, which have come out of this conference or similar conferences.

CHAIRMAN STEIN: Before you finish this, do you want this whole thing, Mr. Hennigan, to appear in the record?

MR. HENNIGAN: Yes. Oh, in addition to all the other material, there is a set of the new State laws which were enacted at this session of the legislature.

I have before me recommendations made in Parts 1, 2 and 3 abbreviated. They were made in the Public Health Service report, also the conclusions and recommendations resulting from the Federal conference on the pollution of the Detroit River and the Michigan waters of Lake Erie, and also recommendations and conclusions which came out of the Cleveland meeting and dated August 6, 1965.

It seems to me that one thing is common to all these recommendations and conclusions, first of all, what I would consider the legal foundation to establish, the Federal interest in this matter, and I have no particular quarrel with any of

these determinations. Others relate to treatment requirements combining sewers, etc. Now, as far as the State of New York is concerned, it seems to me that most of these recommendations are well thought out and can be supported.

However, they represent, in many instances, a minimum effort and also there is a danger of speaking in generalities when we have some awful specific situations to deal with, and my comments relative to expanding or changing some of these recommendations would include such things as the combined sewer situation, we think we can have an arm in getting this under some control by use of the operation and maintenance program. That is why we put in the operation and maintenance program a specific requirement that all the sewage reach the sewage treatment works.

Now, in addition to that, as you know, combined sewers present a very tough problem and New York State is one of the older States and we have combined sewers in any number of large, urban areas, extending from the City of New York to Buffalo. Many of these cities are huge and a surveillance program presents a very difficult situation.

It has also been my experience that a surveillance program doesn't last very long because when somebody wants to cut down the budget, that's usually one of the items that goes out the window.

I think we've also found in these combined sewer

systems that it's axiomatic that you're going to have overflows from these overflow structures, so it seems to me that one or two things are needed, and I think if we could make a real interstate-Federal effort in this area, first of all, I think some automatic method of surveillance must be developed for the combined sewer systems which will furnish some kind of record to sewage treatment plant operators so that you'll know every time the overflow trips and for how long it discharges. Also, the maintenance of the combined sewer system is a real tough problem, and it is something that is continuous.

In addition to that, we are always searching for a means to face up to this, but we are far from having solutions. The City of New York is now undertaking a special pilot study in terms of treating some overflows from combined sewers, and you must remember that it takes very little rainfall to exceed the capacity of most of these combined sewer systems. You don't have to have a torrential downpour. In fact, it takes one-tenth of an inch of runoff or less to start discharging most of the combined sewers in the City of New York.

I think that as a group that is very seriously interested in this and which is a Lake Erie problem, that as part of our final recommendations, we should set up some type of committee or somebody should be given the task of going into this combined sewer problem so that we can present some kind of a united front and see in which direction we can proceed on

a practical basis, both in surveillance, which I think we have the technology to do now, and secondly, to incorporate better design into these overflow structures so that we can have a practical approach to minimizing the problem.

At one point in the proceedings, recommendations were made relative to regional planning, particularly in urban areas that are served by multiple governmental jurisdictions, but in essence are a single areawide community, particularly as far as the design of water and sewage works are concerned.

I would hate to see such a recommendation deleted from the final recommendations and I think that we should, as a group, work strongly toward this end of getting the systems combined together into a workable unit. This will eliminate multiple overflows and multiple discharges from small, poorly operated plants.

It will enable municipalities to operate these systems on a professional basis and to develop staff and to really carry out an effective sewer utility and sewage treatment plant program.

This question of phosphate removal has been kicked around and one thing that bothers me is that although we seem to have some information on it, we seem to be a long ways from critical, engineering design standards that the States can put into their requirements and actually build out phosphates from Lake Erie.

I think that probably this is a task that the Public Health Service should take on for the States involved and develop some type of standards. We would be all too willing to cooperate in this endeavor to come up with some kind of standards that we can really work with and which can be a practical application of the need for the removal of the phosphates.

The next thing is this question which I mentioned before of this idea of a master sewer program for these urban areas, which I consider essential, and I think should be included in the final recommendations.

I would also note this whole question of land drainage and subdivision control, because it has been our experience in this State that if you allow multiple subdivision development with private water supply and private sewage disposal, you are creating a problem that becomes a monster.

The installation of storm sewer systems without sanitary systems means that the storm sewer becomes a sanitary sewer, and I have seen few instances where this hasn't happened.

So, coupled with this whole urban area problem of effective sewage collection and treatment must go some kind of drainage planning, must go some type of adequate subdivision control at the State level, and as part of this picture, is the whole question of water supply planning.

Since sewage is used water, we extend water into an

area, but we don't make little provision for removing it.

Of course, one of the major issues which we made before and which has been emphasized by Governor Rockefeller and also by Commissioner Ingraham is this whole question of financial assistance to municipalities to build needed treatment works. And, as I said before, our experience in the State of New York has been that the need for Federal assistance has been paramount, and we can almost document our so-called progress in pollution abatement with the availability of funds for construction of needed works.

We have two cities in the State which are particularly recalcitrant. Last year they built sewage treatment works. Now, we could go out and brag that this was a great accomplishment of the State water pollution control program, but it would be kind of a phony. They absolutely refused to do anything until 50 percent Accelerated Public Works funds became available and then they built the works.

The other point is this whole question of secondary treatment. It seems to me that we have some kind of a conflict within the recommendations, since the original document said that the municipal sewer outlets should have secondary treatment, it was very specific on biological treatment.

CHAIRMAN STEIN: Didn't that say secondary biological treatment?

MR. HENNIGAN: That's right, and then the Michigan

conference, and I think this is important because actually I don't think that this is any secret, one of the major sources of pollutants, inputs into the Lake, is the Detroit River, and this says that all municipalities and industries be required to provide a degree of treatment sufficient to protect all legitimate uses where the effluent contains significant bacterial loadings deleteriously effecting legitimate water uses, disinfection of the effluent shall be required.

This is a much more general recommendation than is contained in the Cleveland recommendation which stated in effect that municipal wastes be given secondary treatment or treatment of such a nature as to effectuate the maximum reduction of BOD and phosphates as well as other deleterious substances.

I don't know whether they actually mean the same thing. Then one of the other items in terms of disinfection, very specific standards are contained in the Cleveland recommendations as against the very general standards in the Michigan one.

I think that these are problems that have to be worked out, because I think it is important for this effort to be successful, that all of the States involved work from the same point of reference, from the same foundation in pursuing the same purposes and same objectives.

I would also point out that in the coliform standards, we have a problem immediately, since the State Legislature passed

a bill setting coliform standards at the last session and we have a difference in standards since the standard adopted here is 1,000 organisms per ml, 100 organisms per ml for bathing waters, and the new State law that has just passed is 2400 organisms per 100 ml. That's all the comments I have.

CHAIRMAN STEIN: Thank you, Mr. Hennigan. We appreciate your statement. I think it is a pretty complete statement about the procedures under which New York is operating and what you are going to have to do in the future. But, as always, I seem to have this problem of following a procedural statement. I always tell my people when they talk about procedures, "It's only of interest to another technician; I would like to find out what we're doing about pollution." And in order to help us keep our eye on that bouncing ball and also see that the pea doesn't disappear under the walnut too fast, I wonder if we may get a rundown as to how you classified the rivers here. For example, I noted that in parts of your report you talked about Niagara River being classified as "A" - special - and indicated that the only known pollutant was phenol. Now I would like to know these classifications.

I heard a group the other day mention the "white stuff" coming out of two sewers there, discoloring the water. Our technical people indicated the material coming over the Falls was pulp and paper waste. Maid of the Mist operators were complaining

about that scum and foam on top that smells so bad, and said the tourists were also complaining. The beautiful green algal material coming over the Falls was looked upon with horror by the biologists. Now, do all these things really mean the Niagara River is "A" classification? Or, for example, I see another river that kind of peeked out - the Buffalo River is "E" classification. "E", as I understand it, deals with navigation.

Now I don't know, but maybe you can explain to us the reason these rivers are alphabetically classified according to a purpose. I guess that "A" deals with primary treatment. I don't know how that applies to municipalities. Or, perhaps, you can tell us why the Buffalo was classified "E" for navigation. Is that because it has so much oil in it that the boats can slip right through?

Then so we can correct the record we have these questions that you pointed out at first about the references of Governor Rockefeller in '61 and in '63, IJC references on pollution of Lake Erie. We didn't have any references to the Federal Government of the enforcement or other provisions of the Act for Federal assistance, but this went to IJC and then the reference was finally made in '63, and you say you believe the present Lake Erie study is being

carried out because of this reference.

MR. HENNIGAN: I didn't state that. I crossed it out.

CHAIRMAN STEIN: No, you read that.

MR. HENNIGAN: No, I didn't. You can look at my copy. It's penciled out.

CHAIRMAN STEIN: Didn't you say you believed the present Lake Erie....

MR. HENNIGAN: No, I didn't.

CHAIRMAN STEIN: Oh, all right, because I think everyone knows why we're in the present Lake Erie study. This is well documented in the halls of Congress. One of the most famous cases was H.R. 1, the Chicago diversion case, and one of the most famous bills was H.R. 1. It got to be so famous, it received the number one.

As a settlement of differences between States, we did enter into the study, but I think that is well known.

There are just a couple of more points I would like to clear up. I would like to comment, and this relates to something you referred to before. I am referring to that law we talked about and I want to make that abundantly clear for the record.

Chapter 727, Laws of 1964, this says property of any value, these are laws of New York, consisting of a sample culture, micro-organism, specimen, record, recording, document, drawing or any other article, materials, device or substance

which constitutes, represents, evidences, reflects or records a secret, scientific or technical process, invention or formula or any phase or part thereof, of process, invention or formula is secret, when it is not and is not intended to be available to anyone other than the owner thereof or selected persons having access thereto for limited purposes with his consent, and when it accords or may accord the owner an advantage over competitors or other persons who do not have knowledge of the benefit thereof.

And then it says that this act shall take effect July 1, 1964 and a violation is supposed to be grand larceny in the second degree.

You would say that that statute would not inhibit the State in any way from making material available in its files to Federal investigators and other interested parties on the volume and strength of wastes, discharge of industrial discharges through what falls into public waters. Is that correct?

MR. HENNIGAN: Yes.

MR. POSTON: Are you familiar with a meeting held in Albany at the Ten Eyck Hotel on August 14, 1964, a meeting of the Advisory Committee of Waste Water Problems for the New York State Department of Health. Attending from New York were Meredith Thompson, Mr. Dappert, who I understand was your successor, and others? Excuse me, your predecessor. He'll be happy with me for making him a youth again.

The meeting was chaired by Mr. Thomas, President of the

Associated Industries of New York. One of the questions on the agenda was a Public Health Service questionnaire on industrial wastes and whether this information should be made available to us. Are you aware of the meeting and the result of that?

MR. HENNIGAN: No.

CHAIRMAN STEIN: All right. Now, there is one other point I would like to clarify before we get back.

As I understand this, Governor Rockefeller, in a speech, spoke in terms of a $1.7 billion program. Is that right?

MR. HENNIGAN: Yes.

CHAIRMAN STEIN: And he also--and this presumably is for municipal works.

MR. HENNIGAN: That's correct.

CHAIRMAN STEIN: Now he also talked in terms of an industrial problem and talked about $67 million for industrial waste treatment. Generally speaking, we have, at least in the country as I've looked at this problem, and the reports I've gotten, have always been that the industrial and the municipal problems were about of equal magnitude.

Is this disparity the case in New York, that you really have a $1.7 billion municipal problem and only a $67 million industrial problem?

MR. HENNIGAN: I have never subscribed to nor seen any evidence that said that industrial or municipal problems were about equal. Somebody dreamt that up someplace or other.

CHAIRMAN STEIN: In other words, you subscribe to these figures?

MR. HENNIGAN: Let me talk.

CHAIRMAN STEIN: I'm trying to, and you demonstrated your ability to do so for a half hour.

MR. HENNIGAN: Now, the figures presented, the $1.7 billion, were developed as the result of a county by county survey. They represent the cost through 1970 of needed sewage treatment works and interceptor sewers.

In the State of New York, we have over 30,000 industries. Probably 80 percent of these industries are tributary to municipal systems. They will automatically be included in benefit. Now, in certain areas of the State, you have industrial concentrations where the industries are so large and there are so many of these industries that to expect them to go into a municipal sewer system would be preposterous. The Niagara Frontier is one of these areas.

In addition to that, we have certain industries in this State which are of such character and nature that they automatically would overwhelm any population which lives near them and I would include in this the canning industry, the paper industry and the dairy industry.

It is these types of industries to which these figures are applied. For instance, you can imagine the industrial complex that goes into the New York City sewers and goes

into other sewer systems in the State of New York.

The $67 million is purely an estimate and it's a question of professional judgment. Take it for what it's worth.

CHAIRMAN STEIN: Well, I think the conferees will. I think all these conferees have similar experiences in their State. As far as I know, I haven't heard of an estimate like this with this kind of disparity.

Perhaps the conferees may want to consider another issue which you raised that kind of confused me and that is that at one point in your paper you indicate that the program, and I have heard this many times in the Congress, that the program, in moving ahead in New York State in municipal waste treatment, was delayed because of the lack of ability of Federal grant funds.

The reports I've always gotten in New York is that your program has been delayed up here because you spent the last fifteen years classifying your streams and not cleaning up wastes.

Now maybe the conferees want to consider whether the lack of grant funds or the approach on classifying for fifteen years and not cleaning up has been the cause of delays here. I have no feeling on that now.

MR. HENNIGAN: Mr. Stein, it would be as unreasonable for me to say that New York State had tackled and completed its pollution abatement program as it would be to give the

impression that they have done nothing.

People here in the Niagara Frontier know that some work has been done, millions of dollars have been spent. There is a tremendous backlog left and in fact, the remaining work to be done is substantially larger than what has been done, so what are you talking about?

CHAIRMAN STEIN: Well, I'm talking about the conditions of your waters. I saw one of your rivers. I visited Niagara Falls. You asked me what I am talking about and you included it in your report and mentioned it in your report and opened this up.

I can say that when I saw that stuff spewing out from the American side, I wasn't proud as an American, if you want to know what I was talking about.

MR. HENNIGAN: Who is?

CHAIRMAN STEIN: I think in most cases I am. I have never had that feeling when I went to some other places.

MR. HENNIGAN: We're not proud of pollution, no and we haven't disputed the fact, the substantial fact, in your reports. We're not contending that fact.

CHAIRMAN STEIN: Considering the rivers that we have had in this area of the report, can you let us have the classification of what New York has classified as "A," "B," "C," "D," "E," or "F". Was that available?

MR. HENNIGAN: It is shown in the maps out in the

foyer by the color code.

CHAIRMAN STEIN: But you didn't put that in your report?

MR. HENNIGAN: No.

CHAIRMAN STEIN: All right, because I think that would be very helpful. As a matter of fact, one of the trends that I would like to see is whether you classified all the rivers, the way especially the Buffalo River has been, the "E" classification. However, we attempted to go a little higher in some cases.

MR. HENNIGAN: Lake Erie has been classified for most of its New York section "A," and in the New York system, the downstream classification controls it, and Lake Erie is downstream from all the streams going into the Lake from this area.

CHAIRMAN STEIN: Are there any other comments or questions?

MR. POSTON: I'd like to ask if New York will abide by the findings of the conferees at the end of this session?

MR. HENNIGAN: Certainly.

MR. POSTON: It will?

MR. HENNIGAN: Yes.

CHAIRMAN STEIN: Are there any other comments or questions?

MR. OEMING: I would like to ask Mr. Hennigan, did I understand that your classification of Lake Erie would apply to any tributary?

MR. HENNIGAN: Yes.

CHAIRMAN STEIN: Before we go, I'd like to raise these questions with the conferees. You indicated that the conference recommendations and previous conferences in Detroit and possibly in Cleveland were minimal programs, and you were looking for higher sights, and how the joint Federal-State program should have some higher sights.

Then again, you raised this question of developing standards--for Federal-State Joint Commission group--to develop standards for phosphate removal. I know this question of Federal standards is a touchy one. I'm glad to hear New York associates itself with this proposal, but maybe the conferees want to think about that.

Then you made another point, that we eliminated an operation dealing with multi-municipal organizations. I thought this was the one point where we agreed. I thought we pointed out to you, Mr. Hennigan, that I personally thought this was an excellent notion. However, Ohio and we, and I strongly suspect Indiana and Michigan also, are prohibited by law from requiring this under regulatory authority.

We will encourage this, as I pointed out. As a matter of fact, the legislation which is going through the Congress now would provide a bonus of an extra 10 percent in the amount of a grant to a maximum of 33 percent of project costs, if their plans

are included in a regional planning operation. We are all for that.

The question here is the function of where a group like this stands and whether it is proper for a regulatory group to require that.

It is one thing to offer a bonus and offer an inducement, it's something else to require it. Except for New York, which has a different law on State planning and organization, I think the other States involved, and the Federal Government, are very doubtful about their powers in that as a regulatory measure.

Are there any further questions or comments? If not, I think we should stand recessed for lunch until a quarter to two.

(CONFERENCE RECESSED UNTIL 1:45 P.M.)

CHAIRMAN STEIN: May we reconvene at this time?

MR. HENNIGAN: We are going to call on various people who would like to make presentations relative to the work of the conference, and the first will be Mr. Jerome Wilkenfeld, representative of Associated Industries.

MR. WILKENFELD: I am Jerome Wilkenfeld and while I am Technical Superintendent of Hooker Chemical Corporation at Niagara Falls, I am, at this conference representing Associated Industries of New York State, according to the invitation extended to Associated Industries on July 30 by Dr. Hollis S. Ingraham, New York State Commissioner of Health.

For your information, Associated Industries is a membership corporation which in effect is the manufacturers' association of New York State. Our members, large and small, are located in every part of the State and the manufacturing members of our association employ the majority of New York State's work force.

It happens also that I am a member of the Water Resources Committee of Associated Industries, and a member of the New York State Health Department Advisory Committee on Water and Waste-Water Problems.

It may be of interest to this conference to know that the President of Associated Industries, Mr. Joseph R. Shaw, is a past chairman and present member of the Ohio River Valley Water Sanitation Commission, being one of New York State's

representatives on that Commission.

CHAIRMAN STEIN: Would you tell Mr. Shaw that I was looking forward to seeing him up here and I regretted that he couldn't come?

MR. WILKENFELD: Well, Joe was awfully sorry he couldn't be here in person and my next sentence tells you why. Joe has a Board of Directors meeting of the Association today in Cooperstown.

The Associated Industries Board of Directors on March 3, 1965, adopted a policy statement strongly favoring the massive attack on water pollution, since adopted by the New York State Legislature upon the recommendation of Governor Nelson A. Rockefeller. This generally has bipartisan support as reflected in the practically unanimous passage by the legislature.

We are strongly advocating approval by the electorate of the billion dollar bond program, which is the essential part of this historic approach by New York State in the handling of a problem which, unless approached in this way, can take five generations or more to be accomplished.

I do not propose to make a lengthy statement and will be gald to answer questions from the conferees. The points which I wish to make are these:

1. New York State industry is determined to help achieve the goal of pure water which the community demands. I quote from the policy statement of March 3rd to which I

referred a moment ago:

"Associated Industries endorses whole-heartedly Governor Nelson A. Rockefeller's historic and meaningful plan for a massive attack on the water pollution problem as a program to bring to fruition many of the basic goals promoted by Associated Industries and its members affecting clean water.

"The Governor's program in our judgment is a bold and imaginative extension of the activity which we supported in the years immediately following World War II when Associated Industries worked closely with the Joint Legislative Committee on Interstate Cooperation in the formulation of the Water Pollution Control Law of 1949. This law was unanimously adopted by the Legislature with public support from Associated Industries. In 1949 we gave our full backing to regulatory legislation in the water pollution control field, an unusual step for industry."

This closes the quote and remember, this sort of backing by industry in '49 was very rare in the United States.

2. In New York State the record is clear that there is a real desire from the viewpoint of industry to achieve a solution in the public interest and to achieve it as rapidly as possible. This solution must be consistent with the overwhelming public stake in the economy of New York and the job-providing strength of our industry which is in stiffest competition not only with industry in other States but also with industry abroad. We think that the approach in New York State

has been a thorough and fair approach and has resulted in a strong foundation upon which we can build any enforcement action required.

We have repeatedly informed our members that from our point of view, the time is here when we can expect strong intensification of enforcement. In other words, our make-ready period is ended and industries which have not brought their own pollution problems to the stage where correction is attainable should expect prompt and vigorous State legal enforcement action.

3. However, do not belittle the results of voluntary or negotiated compliance which has been the hallmark of New York State's approach to this historic and massive problem. We are proud of the results of the program to date as evidenced by the many millions of dollars industry has spent for water pollution control since 1949. Those of us who have worked so closely, in partnership with the State Government, recognize the problems and have come up with solutions.

4. I hope the conferees will note that we are in no sense minimizing the pollution problem that exists with respect to Lake Erie and with respect to all the water resources of our State. But a point that we can make in all honesty is that unlike some other States we have made considerable progress, as all fair-minded observers will agree.

We are proud of our New York State program which we believe is one of the most forward looking programs in the

country. We point out again that we are now in the active control program phase, having essentially completed the herculean job of survey and classification.

Our control program includes abatement plans for over 70 percent of the State's area, and as Mr. Hennigan said earlier, and as other State officials will tell you, they expect this to be completed by the end of the year.

More than has been generally understood, progress has been made in New York State in connection with direct abatement of pollution.

I invite your particular attention to the text of the statement presented by the Honorable Charles R. Ross, member of the International Joint Commission of the United States and Canada, given to the Subcommittee on Air and Water Pollution of the United States Senate Committee on Public Works in Buffalo on June 17.

Speaking of progress toward the accomplishment of water quality objectives, he said, and I quote, "The Provincial and State Pollution Control enforcement agencies with the support of the Commission, have accomplished much towards the attaining of these objectives. A comprehensive study of the Detroit River, carried out by the Public Health Service in 1963, showed that the quantity of phenol, cyanide, oil and suspended solids from industrial sources has been reduced more than 50 percent since 1949.

"Data collected in the Niagara Frontier area indicate that an equivalent reduction has been accomplished here.

"All municipalities provide treatment of their wastes being discharged into the International waters. This treatment generally consists of primary sedimentation and disinfection which is the minimum that has been considered necessary up to the present time."

To continue the quotation, "An even more important indicator of accomplishments is the improved suitability of the water for certain uses. Not too long ago, taste and odor from phenol occurred with some degree of frequency in a number of Niagara Frontier municipal water supplies. In recent years, there have been no instances of taste and odor in these supplies which have been definitely traced to the presence of phenol. The Niagara River generally provides an excellent quality of water for municipal supplies. It is also very satisfactory for most industrial users."

To continue the quote, "Experience in recent years indicates that there has been no discharges of acutely lethal quantities of cyanide or other toxic chemical substances which have caused fish mortality in the area. The death of large quantities of fish which seems to occur regularly here are generally conceded to be a natural phenomenon by those biologists who have investigated the kills."

Mr. Ross continues, "The facts indicate that there

has been some forward progress in pollution control in this area by both municipalities and industries. However, we are aware that problems in the International waters have not been completely solved.

"There is evidence that oil and grease continue to be present in these waters to the extent that there are harmful effects on certain uses. Boat owners complain that at times their boats are coated with oil. A number of people are convinced that these oils are killing ducks.

"This is occurring in spite of the fact that there has been a marked reduction of industrial waste oil discharges to the streams of this locality. Available information indicates that the major industries discharging waste oil have reduced the quantity of their oil losses to the degree that was estimated to be necessary in 1949 to essentially eliminate the harmful effects in the river."

This ends the quotation from Mr. Ross' statement which covers the Niagara River, but is germane since it describes the water leaving Lake Erie.

5. We remind the conferees that the biggest need is for cash if we are to get action on water pollution abatement in this generation and not let it go for the next generation or even the one after that.

A program of immediate action is essential and realistic. This is what Governor Rockefeller has recommended with a

$1.7 billion program based on Federal-State-local sharing of the costs for the municipal sewage program alone. The voters in November will be asked to approve the State's money share and this will pre-finance the Federal share, if necessary.

6. We point out that Governor Rockefeller has gone out of his way on several occasions to put industry's share of pollution into its proper perspective. We do not deny that there is pollution from industries on Lake Erie as elsewhere. We recommend tax incentives by the Federal Government, at least along the lines of the tax incentive adopted by the State of New York, in connection with the corporate franchise tax fast write-off. Incentives have also been provided in this State in connection with real estate taxation.

It may be of interest to the conferees to know that during the last decade, five of the industrial concerns in the Buffalo area have spent, by a most conservative estimate, more than $10 million on water pollution control facilities, none of which are revenue producing.

It is generally accepted by industry that the rate of expenditure for such facilities will be much higher in the future. In addition, five plants on the Buffalo River have committed themselves to an expenditure of more than $8 million for the specific purpose of implementing the "Buffalo River Pollution Abatement Project - Water System."

This pollution abatement project was recommended and

approved by the City of Buffalo, the Water Pollution Control Board of the State of New York, the New York State Department of Health, the United States Public Health Service, the International Joint Commission, the County of Erie Health Department, and the Buffalo Sewer Authority. This project is not in lieu of any required treatment.

7. Eventually the New York State program will go beyond Federal projections that we have heard of in connection with water pollution abatement.

8. In regard to the question of effluent quality data, much has been made of industries' purported reticence to provide information. This is patently misstated.

Companies in the past have provided and will continue to provide data and samples to control agencies to help determine the quality of public waters, to develop new and improved technology, and to develop any needed control programs. This has included the U.S. Public Health Service which receives this data through appropriate State agencies.

Aside from the statement, discussing this with industrial people from the area, I know of several cases or several people have mentioned, that they have provided this sort of data in the past.

Getting back to the statement, it should be recognized, however, that all agencies using such data have a responsibility to the lay community, as well as to the supplier, to use it in a

meaningful way so that its significance remains in perspective. What industry objects to is the presentation of technical data in a form which can only be interpreted as being done in the interest of sensationalism. Our interest in pollution is not only in the pounds emitted but also the effect on the receiving body of water.

In summary, we believe that the Federal-State partnership can be effective as exemplified by current joint programs of research and technical assistance.

And, we further believe that the primary responsibility should continue to rest with State government and State enforcement agencies, as outlined in Public Law 660.

Finally, we believe there is room in this picture, as envisioned by the Governor's Federal-State-local program, for Federal support, particularly in the field of financial assistance, large enough to complete the program on schedule. Thank you. (APPLAUSE)

CHAIRMAN STEIN: Do you have any questions or comments on Mr. Welkenfeld's statement?

MR. POSTON: I have a question of Mr. Wilkenfeld. Mr. Wilkenfeld, you represent Hooker Chemical Company?

MR. WILKENFELD: Yes.

MR. POSTON: You also are a representative of Associated Industries of New York State, Inc., and I wonder if it is both the policy of Hooker Chemical Company and the

Associated Industries of New York to give information on industrial wastes, both as to quantity and quality, that are discharged to public waters.

MR. WILKENFELD: I'll answer your question first and then go back. I think the answer is yes. We have, in the past, and we will in the future.

As I stated at the beginning, I am here today representing Associated Industries, rather than the company which employs me.

CHAIRMAN STEIN: Do you mean the Association or the Company when you say, "we have in the past and we will in the future."

MR. WILKENFELD: I haven't discussed this recently with my Company, but I feel sure that they would.

CHAIRMAN STEIN: But are you speaking for your Association, all the members of your organization?

MR. WILKENFELD: No Association can speak for each of its individual members. The Association can only recommend to its membership what they should do. However, the Association is on record in this statement as favoring this and recommending it and stating that this should be done.

CHAIRMAN STEIN: "In the past and in the future," you said, because that's what I just heard.

MR. WILKENFELD: Yes.

CHAIRMAN STEIN: Again, I'm glad to hear this because

I talked to Mr. Hennigan before about that meeting held on October 14, 1964 at the Ten Eyck Hotel, of which we have a summary, at which Mr. Thomas, Director of Governmental Affairs for Associated Industries presided. Evidently we couldn't get this information.

I read from the report of the minutes of the meeting, "It was considered whether New York could provide data on industrial waste and, secondly, should this information be disseminated to the Public Health Service. It is recognized that the Public Health Service could not accept the information that was considered confidential. It was the intent," and this was the group, "to give them only information on a summary basis and only that which concerns the drainage area."

Mr. Anderson, who is our regional representative in New York, stated that he appreciated the chance to meet with the group and discuss their mutual interests. But in answer to the question, the PHS was forced to say "no, we just couldn't take these summaries in an area basin"--that a summary of information would not be satisfactory.

Mr. Kehr, and he is in charge of our Great Lakes Study, said"as far as the Great Lakes Study was concerned, the United States Public Health Service was obligated to develop a comprehensive program." This would require them to discover the sources of waste, develop beneficial uses and accomplishment of the water quality objectives.

They also said they must work in close touch with local and State agencies and the technical committee. Mr. Thomas, who was Director of Governmental Affairs for your organization, presided. In order to do this, they had to develop this information.

Now, the Advisory Committee, in its original work, has reservations in giving raw data to organizations which cannot treat it as confidential, and I would like to assure you, Mr. Wilkenfeld, that we cannot treat it as confidential. When we get this information, it's available to the public, and for this reason it was felt that the State should provide this information on an area basis.

And then I understand that Mr. Kinney--is Mr. Kinney the man who was on this? He has been a consultant for several of the steel companies. I guess he was there, too.

MR. WILKENFELD: I didn't attend this meeting. Do you mean Jack Kinney?

CHAIRMAN STEIN: He raised several interesting questions. It appeared that the information was not yet reviewed and Dr. Thompson, I assume that this refers to Dr. Thompson of New York State, indicated that he was against printing a list of waste discharges by name.

I assume from what I have heard from Mr. Hennigan and you, whatever the situation was in the past, this will not apply in the future.

MR. WILKENFELD: I think, though, a little clarification might be in order on that point. The entire situation, as I understand it and understood it at the time of the meeting, is subject to misinterpretation, in that the Industrial Advisory Group and the State Health Department there at that time were strongly favoring that any control program within the State be handled through the State people, in order to make use of their knowledge of the State and the information that they had available, their contacts, and to avoid duplications of contacts and duplications of supplying data.

And also, if we are to strengthen the State organization, and this I gather is the intent of the Federal legislation in Public Law 660, we should try to do as much of this with the State organization.

CHAIRMAN STEIN: I don't think there is really any significant difference between the Federal people and the State on this. As a matter of fact we have had a similar problem in getting industrial information from another State agency and the industry, that is the pulp and paper industry. They indicated that they enunciated the policy exactly as you did--that they wanted to deal with the State agency. But they gave the State agency this information with no restrictions and the understanding was that they would supply it to the Federal Government.

As a matter of fact, they were shocked and appalled by a notion that a State agency would not make this information available to us and they certainly had no objection. I think that if there is no misunderstanding on this, we should look forward and go forward on this instead of perhaps looking back to the past. I couldn't agree with you more that this should be done through the State and I am sure that the whole Federal staff agrees with that policy and concept.

MR. WILKENFELD: Very fine.

CHAIRMAN STEIN: Are there any other questions? Thank you very much, sir, and give my regards to Joe Shaw.

MR. WILKENFELD: I sure will, thank you.

MR. HENNIGAN: The next speaker will be Raymond Cochran who is Executive Secretary of the New York State Conference of Mayors and other municipal officials.

MR. COCHRAN: Mr. Chairman, conferees and ladies and gentlemen, my name is Raymond J. Cochran. I am Executive Director of the New York State Conference of Mayors which is the trade association for the villages and cities of New York State.

I am very pleased to have an opportunity to be here and talk with you about some of the problems as we see them and some of the recommendations that we have. I do not have a prepared written statement and I am not sure it is not a good thing I don't have, because during the day and a half here, I

have made no less than six changes in the form and content of what I wanted to say and I think if you had tried to follow me through all of those changes, it would have been pretty bad.

CHAIRMAN STEIN: By the way, Mr. Cochran, before you go on, is this an independent operation or are you connected with the United States Conference of Mayors, your organization?

MR. COCHRAN: We are an affiliate of the National League of Cities and the U.S. Conference of Mayors deals only with direct member cities.

CHAIRMAN STEIN: Thank you.

MR. COCHRAN: When we are talking about water supply, I am sure there is no need for me to emphasize that we believe we are dealing with the lifeblood of the communities of this State, but unfortunately, it is not very good blood at the present time.

There is no question about the magnitude of the problem of pollution in Lake Erie and in the other surface water systems of our State. There is no question that much, much more needs to be done than has been done in the past to remedy this situation.

At this point, on behalf of the cities and villages, I would like to acknowledge with grateful appreciation the assistance that so far has been received from the Federal Government in the construction of pollution abatement facilities.

We regret that the amount of assistance that it was

possible for the Federal Government to extend to us was far too small to meet our situation. And I may say that there is a further aspect at the present time which is that those problems that have not yet been solved are the ones that are by far the hardest physically, engineering-wise, and financially. Those problems which were easiest of solution are the ones that have been settled.

And now without indulging in the sometimes interesting but usually rather futile mental exercise of trying to go back and take credit or place blame for what lies in history, I would like to present a very simple outline, perhaps oversimplified, but still something that we can get our teeth in, of the situation as we see it on behalf of the local governments.

In addition to the question of the knowledge that we should have and can be developed only through research and which applies to all of the phases of this analysis as I see it, there are three factors.

One is standards. We need to have standards of quality and standards of enforcement. Those standards should be at least reasonably uniform because to have a very great variation from those standards from one State to the other tends to defeat the efforts of those States that have the higher standards.

The second thing that we need is motivation to meet those standards effectively. Now, motivation is of two kinds. One kind is taking the bullwhip down from the wall and cracking

it over the heads and the backs of the people who are concerned. The second kind of motivation is that which leads rather than drives and we have had a considerable example of that, I think, in the day and a half so far in all of the effort that has gone into publicizing and dramatizing the situation that we face. This has been done in the past and it has been producing results. That's why the people in the State of New York, and I am sure this is true in other States, have come to an awareness of the problem and a willingness to do some of the things that are necessary to remedy the situation.

But those two kinds of motivation are part of the picture and the psychologists tell me, and who am I to dispute a psychologist, that that motivation which leads and induces frequently produces a better result than that motivation which comes from the threat of applied force.

The third factor in the situation is practical assistance in meeting these standards. We have already had a partial effort in this direction and I think we are producing a much greater effort.

We have had for several years State assistance in the planning of the construction of sewage disposal works, including and indeed heavily emphasizing those which serve more than just one community. I am sure that we all agree that we cannot have effective sewage disposal unless the facilities are properly planned with respect to the problem they are intended to meet.

We have now a program of State assistance to the communities for the construction of sewage disposal facilities. We have a program of State assistance to the community for the maintenance and operation of sewage disposal facilities. We have a program of State assistance to industry primarily in the form of tax relief of two kinds to assist them in the efforts that they have to make in order to meet this problem.

Unless we continue as we have, and go ahead with this kind of practical assistance which indeed may be referred to as part of the motivation, we are not going to succeed.

But the communities of this State, just as the industries referred to by the previous speaker, have indicated that they are interested in doing something and they can when the goal is reasonably within their grasp.

There is an organization which was called the Temporary State Commission on Water Resources Planning, and in 1961 it issued a report which showed that as of 1957, the cities and villages having treatment plants for their sewage outnumbered by about three to one those that were dumping raw sewage. The same report shows that in 1957 there was a total of 151 villages and cities that needed either new or improved treatment plants. In 1960, the number was 124, while the number had been reduced by 27.

This doesn't sound too big perhaps, but I point out to you that if we could have continued at the same rate, this

year, 1965, five years later, we would have seen every one of those communities with the problem licked. Unfortunately, we were not able to continue at that rate of progress. This is a result that was brought forward in the report of the Commission.

The reason for it is exactly what I mentioned earlier. The easier problems have now been disposed of. The harder ones still remain and it takes more time, effort and money to dispose of that.

Are the communities willing to try and do something about this? Do you think that local public officials, and I was one at one time, really want to have themselves, their families, their neighbors and all of their constituents using polluted water if it's not necessary?

But what does the record show? In 1964 fiscal year for the Federal Government, there were more than twenty municipal projects which were submitted for Federal assistance for which there was no Federal money available. The money had been used up by previous projects during that year. So here were twenty or more municipalities that could receive aid that were ready and willing to move in this area. We were informed earlier in the 1965 fiscal year that at that time there were twenty-seven municipalities which had already filed applications and that the applications that they had filed would require $8.5 million in Federal funds.

This is not the total cost of the project. This is

the amount of the Federal contribution under the Federal law, leaving a shortage of $3.2 million in Federal contribution at that point.

How many more applications were submitted during that year? How many were turned back and not submitted or not accepted because Federal funds were not extensive enough, I do not know. But I do believe, from what I know of the people we deal with in local government and from the record that we have here, that the pressure upon them from all sources, from their constituents and from the State, is sufficient to push them into having the kind of disposal program and facilities that they require if it's reasonably possible for them to have it.

Just one other point that I might mention to you, two points in connection with this. New York City had an $18 million project and the Federal assistance that it was able to obtain under the law, which is now in the process of being amended, was $250,000, so that they were able to receive one-quarter of one-eighteenth of the cost of that project. This is not very effective aid. Fortunately, they were able to carry out the project in spite of that.

We have heard that there is $150 million being made available in Federal funds for sewage disposal and water pollution abatement during the coming year, and that more of this money than previously is going to be available to New York State, and that this is going to be of significant help to us.

Unfortunately, I am in the position of feeling that what they can do with the amount of that $150 million that can be allocated to New York State is not going to be very significant.

Let's assume that the rumors that we have heard are correct and that New York State might get $10 million of that. How far is that going to go? Let's make a further assumption. Let's assume that inasmuch as New York State has approximately 10 percent of the population of the country, it would receive approximately 10 percent of this money that is available. That would be $15 million, and how far will that go?

The estimate that the State made after rather a long and exhaustive survey was that the Federal share on a 30 percent basis would be about $500 million and that the State's share, on the same basis, would be the same. On that basis, ladies and gentlemen, if the entire $150 million a year that the Federal Government is talking about were applied to New York State and to no one else, in three years there would be $450 million that would be applied to these projects.

Now I'm not saying this in criticism of the Federal program or the Federal Government. I am saying it only because I feel that we need to recognize what the practical facts are that our local governments, and our industries, for that matter, face.

The greatest problem that we have to lick in this

situation as far as New York State is concerned is money, m, o, n, e, y, money. Now, what recommendations do we have?

First, we believe that the effort to develop standards should be continued and that research certainly should be continued, not only aimed towards the development of those standards, but also towards the means of meeting those standards effectively.

We believe that motivation should be worked on and that in addition to adequate enforcement measures, there should be appropriate measures taken through public relations campaigns or anything else that may be developed to encourage the officials and the people who ultimately control those officials, the constituents at the local level, to support this program and to see that these standards are met.

Further, we urge with every bit of vehemence that we have that you, and that your friends and neighbors and that my friends and neighbors and all of our relatives and all of the rest of the people in our community support the bond issue that is on the ticket this fall, this November, so that we can go ahead with this program and accomplish the things that need to be done.

In addition, we believe that the Federal Government can help in this if they find it within their grasp, by providing some of the additional money required for the municipal activity and by following up the recommendation that was made yesterday for the tax write-off.

Now if I understand correctly, the tax write-off has been proposed and has been introduced. The bill has not been passed and I do not know where it is. But I think I know enough about human nature, and the people who are in industry are human beings just the same as the people who are in local governments. I think I know enough about human nature to know that if a potential tax write-off were to come into being, it would have its effect when it is actually in being, rather than a gleam in the sponsor's eye.

This, again, is not intended to criticize anyone, but it is what I look upon as an analysis of what the situation is. This think can help and I think that everyone of us has a responsibility in communicating with our representatives in the Senate and in the Congress to urge that this action be taken. I expect that the members of the Commission during this hearing may also make a recommendation in that respect to the people to whom they are responsible in the Federal Government.

These, gentlemen and ladies, are the recommendations that we have, based upon the analysis we have made of this situation. Thank you. (APPLAUSE)

CHAIRMAN STEIN: Are there any comments or questions? Well, thank you very much for a very illuminating statement. I should point out that I have been informed that we must recess tonight at five promptly because there is a dinner to start here at 5:15. Thank

you. Mr. Hennigan?

MR. HENNIGAN: The next speaker will be the Honorable Chester Kowal, Mayor of the City of Buffalo.

MAYOR KOWAL: Thank you, Mr. Chairman, for the honor and courtesy extended to me on this occasion. Distinguished members of the Commission and ladies and gentlemen assembled here on this occasion. First, as Mayor of the City of Buffalo, I would like to extend on the behalf of the people of Buffalo a very warm welcome to the very distinguished group who have met here, now for the second day, the distinguished representatives of government, industry, and the experts and other persons to attack a very growing problem.

I couldn't help but be impressed with the many things that were stated by Mr. Cochran. The City of Buffalo happens to be a member of that same organization that he just represented, and in the interest of saving time, I have prepared a statement because otherwise, I think I would have gone on until this evening.

I am certainly no expert on the present day blight known as pollution, which is dangerously tainting the waters we drink and, I might add another problem we soon will be tackling, air pollution. I am, however, gravely aware of the threat pollution poses to our Nation today, tomorrow and in the tomorrows that follow. I fully agree that immediate remedial steps must be taken toward the eventual elimination of this menace.

From testimony given at last week's hearing in Cleveland, I gather that various States bordering on the Great Lakes, including New York State, appear to be quibbling over whether pollution drifts eastward or westward - or in both directions. In my opinion, such quibbling seems relatively unimportant and could result in lengthy and costly litigation which would solve little or nothing. I think it is generally agreed that pollution exists in our inland lakes and tributaries which flow into them. As I see it, the big question is not "Who caused it?" as it is too late for that, but rather "How do we correct it, and where does the money come from with which to accomplish this?"

On this score, I would like to point out that scientists of the United States Public Health Service have conducted extensive studies of Lake Erie for the past two years. These studies indicate that Lake Erie's currents intermittently flow westward as well as eastward.

So where does that leave us here in Buffalo? As guilty of pollution, probably, as communities to the west. But pointing our fingers at our westward neighbors and saying, "It's all your fault," certainly isn't going to solve anything.

Pollution, as I have said on many occasions, is like the racial problem. It should have had the attention of the various levels of our government long before this, and particularly those levels of our government which have the authority of enforcement.

Scientific study of Lake Erie, for instance, has disclosed some grim facts about the rapid deterioration of the Lake in the past fifteen years. Scientists have estimated that upwards of 35 million pounds of contaminants are pouring daily into a 240 mile long Lake Erie.

This tremendous disposal of waste occurs mainly in the industrial municipal areas of Detroit, Toledo, Cleveland, Erie, Lackawanna and Buffalo, just to mention a few.

This dumping of contaminants into our lake waters, scientists warn, has for many years steadily and treacherously polluted drinking, industrial and recreational waters. Today, after years of subtle and rapid growth, the menace of pollution poses a real threat to the very health and well-being of our citizens.

Again, I want to emphasize that I am no authority on pollution, but merely a taxpayer, as well as a city official, gravely concerned over a condition which has taken many years to spawn, and breed, and grow and mushroom, and explode into the menace it is today.

However, as a former comptroller of this City for ten years, and now its Mayor, I feel it qualifies me to talk with authority concerning public finance. And in my studied opinion, it is finances, money and only money, the same that has been re-emphasized by the previous speaker, that will solve the problem of pollution.

The big question is, "Where is that money coming from?" Certainly, the vast amount of money necessary to inaugurate a successful anti-pollution program cannot come from one pocketbook. The Federal Government obviously isn't keen on footing the entire bill. Communities cannot do it alone, nor can industry.

The proposal made by Governor Rockefeller, that New York State provide $1.7 billion to handle the pollution problem by itself, seems to me to be rather unjust to the taxpayers of this State.

The Governor proposes that this additional tax burden be levied on residents of New York State, despite the vast evidence of interstate cooperation in combating pollution.

New York State is a member of eight interstate agencies dealing with pollution problems. The seven other States want to take full advantage of Federal help, since water problems are interstate and thus invite Federal interest and funds. But the Governor of New York State feels the job of eliminating pollution can be done by this State alone without outside help at a cost of well over a billion dollars to the taxpayers.

Now I must state at this point that although I admire the forthright stand taken by Governor Rockefeller in asking $1.7 billion, I do question the wisdom of placing such a heavy financial burden upon the taxpayers of one state, especially when other states are involved as well as our neighbors to the

north, Canada. Obviously, this problem is not provincial, but instead, one of international dimensions.

May I point out that when I was serving this City during my first term as Comptroller, that was in the early fifties, I participated in the initial meeting with representatives of industry probing the problem of eliminating industrial waste which, for many decades had been emptying into the Buffalo River.

With the urging of the United States Public Health Service, the State Department of Health, the International Joint Commission, and the Water Pollution Control Board, a raw water cooling project was conceived to furnish a supply of fresh lake water to industries along the Buffalo River, which water, when used, would be discharged into the Buffalo River, thus creating a flow in the river and preventing concentration of industrial waste.

That was the beginning of the City of Buffalo's contribution to deal with pollution, and particularly from the industrial standpoint. This plan will result in the discharge of 120,000,000 gallons of fresh water into the Buffalo River daily - as much water as is used otherwise throughout the whole of the City of Buffalo.

Then, as now, the challenge was to find the necessary finances to build the project without imposing undue heavy financial burdens on the city or industry.

As the then Comptroller of the City of Buffalo, I

introduced the same procedure which had been applied so successfully to the construction of our off-street parking facilities, otherwise known as the "Kowal Plan." You will forgive me for mentioning it because that is the way it is identified. Under this plan, the city's credit and ability to obtain low cost financing was used to construct the project, an $8 million undertaking, the investment to be recovered by the guarantee of purchase by industry of water over the terms of the bonds, at a price sufficient to amortize our entire cost.

I just want to call your attention to what this same kind of financing is doing insofar as it concerns the operation of our off-street parking facility. The off-street parking facilities don't cost the taxpayers of the City of Buffalo one single cent. As a matter of fact, after we had set aside the necessary reserve for replacement, operation and maintenance and all other costs, over and above that, we get more money than we would have received from a tax source from properties that existed there before, more than we would have been receiving at the present rate of tax levy.

Now whether this project, sometimes known as the "Buffalo River Pollution Abatement Project," will prove adequate to meet the standards proposed here is problematical, but I believe it affords an example of cooperation between government and industry and the application of a financial principle which is worthy of further exploration in our attack

on the big problem of pollution control, abatement and elimination, and that is the only reason why I have mentioned it, gentlemen and ladies.

I feel that the threat of pollution can best be solved by a contribution of funds from all levels, namely, the Federal Government; the Canadian Government; all of the eight States involved; all of the communities and counties involved, and certainly by all of the industries involved.

This war against pollution is no one-man, no one-community, no one-county, state or industry job. It must be a job manned and financed from all levels in all of the States involved, and including the know-how and funds of the Federal and Canadian governments.

In closing, may I respectfully suggest that a committee be promptly organized to delve into these important matters:

1. To determine how much money will be needed to successfully eradicate pollution?

2. How should that money be pro-rated at the Federal level, the State level, the county level, the municipal level, the industrial and agricultural level?

3. How soon can that money be appropriated and when can an anti-pollution program commence on a much broader basis than they have proceeded up to the present time.

The answers to the above questions should be answered

in report form in the shortest time possible.

I also respectfully suggest that if an anti-pollution finance committee be formed, that it be composed of capable, qualified men and women, schooled in the cold, hard facts of finance, as well as being acutely aware of the threat that pollution poses to their respective communities and the Nation as a whole. Such a committee should be non-political, and, so as not to be unwieldy, confined to one member from each State, each county and each city. The committee should have Federal Government and industrial representation, and if at all possible, international representation which would represent, as I stated before, our neighbor to the north, Canada.

I believe we can lick pollution. All that is needed are the necessary funds, shared alike by those counties, cities and industries involved and substantially augmented by the States and the Federal Government.

This is a rather brief statement, but it is my hope that it has touched all the bases, because one could go on and dwell upon how little the Federal Government or how little the local government have given, but I doubt whether that would get us anywhere here at all unless we get down to doing it on an overall basis with everyone cooperating.

It is my hope that my proposal will help to contribute something toward working out a solution to the approach of fighting pollution. Thank you very much, gentlemen. If there

are any questions, I would be delighted to answer them.

CHAIRMAN STEIN: Thank you, Mayor Kowal. Are there any comments or questions? Mayor, I listened to your remarks about the quibbles. I don't think the New York representatives have taken this attitude and I don't think we have. I'm not too sure what the dictionary definition of "quibble" is.

MAYOR KOWAL: I wasn't talking about anyone. I am not here to point a finger at anyone. I am glad to hear that New York is not one of them. However, it seems to me that quibbling is going to settle little or nothing, and I felt that we have reached a position now where nothing else is going to help except to get down to doing the job at the least possible cost to all concerned.

CHAIRMAN STEIN: I certainly agree with you, Mayor. You know, it takes two to quibble and I don't think we have any quibbling here.

MAYOR KOWAL: Yes. Anything else, sir?

CHAIRMAN STEIN: Are there any further comments or questions? Thank you very much.

MAYOR KOWAL: Thank you very much for the courtesy extended me. (APPLAUSE)

MR. HENNIGAN: The next speaker will be Mr. Robert P. Schermerhorn representing the Empire State Chamber of Commerce.

MR. SCHERMERHORN: Mr. Chairman, gentlemen. My name

is Robert P. Schermerhorn. I am a member of the Board of Directors of the Empire State Chamber of Commerce, which organization I represent at this meeting. I reside at 21 Cleveland Avenue, Buffalo. The Empire State Chamber is a federation of 180 local chambers of commerce and statewide trade associations in New York State, with an underlying membership of about 80,000 business firms.

I want to make it clear at the outset, that the Empire State Chamber wholeheartedly supports the pure waters program that has been initiated by New York State and will recommend to its members that they vote "YES" on the referendum question at the next election with regard to authorization of a billion dollar bond issue by the State.

At the time Governor Rockefeller initiated this proposal, the Chamber made careful inquiry among member corporations which are large users of water for industrial purposes and who would be directly affected by the program. We received no letters in opposition. Consequently, the Chamber supported the bills to carry out this program when they were pending in the Legislature. The proposed billion dollar bond issue was carefully reviewed at the June meeting of our Board of Directors, and the Board unanimously voted to endorse this referendum proposal.

I emphasize our support of this program because of the charges frequently made that business and industry are not interested in programs for water purification. I can assure you

that no segment of our economy has a greater interest in a bountiful supply of pure water than does business in New York State. Our lakes and streams are essential for an adequate supply of pure water for industrial uses, for water supply for agriculture and for domestic purposes, and for recreation. New York business has a vital interest in all of these uses of our State's water resources.

Two bills passed by our Legislature last spring give special tax treatment to facilities constructed for disposal of industrial wastes. These should encourage industry to take steps to do its part in this program.

As we understand matters, there is general agreement on the need for an adequate program to eliminate pollution of our water resources. The basic question would appear to be the extent to which responsibility lies with the state and its local governments or with the Federal Government. As of now, New York has gone ahead with legislation to establish a broad program to ensure pure water. In setting up this program, it has recognized Federal interest and gone beyond the ordinary concept of a state-local program. It proposes a three-way program, with cost apportioned 40% to local governments, 30% to be borne by the State government and 30% from Federal funds. Since the Federal Government now has a ceiling of $600,000 on grants to any individual municipality, the present law will not permit Federal payment of 30% of the cost. New York, therefore, is taking a calculated risk. Of the billion dollar bond issue, $500 million would be

used to finance the State's share, and the other half to pre-finance a hoped-for Federal share on a 30% basis.

Frankly, we feel that the Federal Government is short-changing New York and other industrial States. The $600,000 ceiling on grants to municipalities means that the Federal Government contributes only a trifling sum toward the cost of sewage treatment facilities in populous areas where the need for such facilities is greatest. For example, in the Buffalo area alone adequate facilities for sewage treatment and disposal will cost $33 million. On an equitable basis, the Federal Government should contribute $9.9 million, but this year the entire State has been allotted only $5,270,000.

Since there seems to be general agreement that a water pollution problem exists, and since New York State already has completed the initial steps to cope with it on a statewide basis, the question remaining is the relationship of the Federal Government to this program. In our judgment, this should be a partnership arrangement with the State having the deciding voice. The Federal Government should certainly have its say, but inasmuch as it is our State Government which sets the pattern for both state and local policy, we believe that the State should have the determining voice. It should be kept in mind that legislation creating and controlling our local governments is a state responsibility.

While the Federal Government has, of course, a direct

interest in international and interstate waters, the area in which the sources of most of our streams are located is under the direct control of the State and its municipalities. Our State already has set adequate standards, but there is no reason why it should not cooperate with the Federal Government regarding international and interstate waters. However, since the area to be controlled is so largely intrastate, we believe the State still should have the dominant voice in determining the program. It is acquainted at first hand with local needs, is more flexible, and more directly responsive to the special problems of local areas. Thank you.

CHAIRMAN STEIN: Thank you very much. Are there any questions or comments on this? Mr. Schermerhorn, while you are up there, I fully sympathize with your New York approach. But I will say this: it seems to me that part of the approach that you are submitting is to ask the Federal Government to raise its sights and then to ask the Congress to appropriate more money for pollution control. Perhaps, you have your own way of doing business or your own approach here in New York, but I have appeared before the Congress many, many times. I will leave this to your judgment; I wonder if you think that this is the kind of proposal that will sway the Congress--that in our judgment this should be a partnership arrangement, that is, partnership between the State and Federal Government, with the State having the deciding voice, the State should have the determining voice.

If you're going before the Congress to ask for a lot of money and you want to talk about a partnership arrangement and in the next phrase you say, "with the State having the deciding voice," think about a Congressman from another State--the mid-west or the far west. How is he going to take it?

The next point is, consider what the Congress will think when you say, frankly, "We think that the Federal Government is shortchanging New York and other industrial States because they have not provided this money."

Now, you are going to have a program if your bond issue passed, and I hope it does this fall. You haven't had it up to now. The Federal Government has had a financial assistance program since 1956. I don't recall anyone in the Federal Government saying that because your State did not have a matching program as many other States have, that New York was shortchanging the people of this country.

Do you think that you can ask the Congress to meet you halfway if you plan to go ahead with this program? Is the approach, then, to go to the Congress and say that the Federal Government, in light of the record, is shortchanging the people of industrial States? And that we have to have a partnership arrangement with the States having the deciding voice? This may be the way to sway the Congress, I don't know.

MR. SCHERMERHORN: While I'm not an expert on

pollution, I do know something about partnerships and in the proposal, if the State provides 70% of the capital and the Federal 30%, it would seem only right to me that the 70% should have the dominant voice. (APPLAUSE)

CHAIRMAN STEIN: However, I look at your arithmetic and I don't read it that way. You say 30 percent State, 30 percent Federal and 40 percent local.

MR. SCHERMERHORN: I was talking about the State and 30 and 40 are 70, isn't that true?

CHAIRMAN STEIN: If you can speak for all the mayors and assume Mayor Wagner will endorse you and think there is a complete identity and correlation between the State and municipalities, you may very well be correct.

MR. SCHERMERHORN: May very well be correct provided the proposal which was the basis for the statement is carried.

CHAIRMAN STEIN: Yes. Are there any further comments or questions. Thank you very much. Mr. Hennigan?

MR. HENNIGAN: The next speaker will probably be one of the strongest advocates in the State of New York for clean water. Everyone around here surely must know him, Stan Spisiak, Chairman of the Water Resources Committee. (APPLAUSE)

MR. SPISIAK: Thank you, Mr. Chairman. First off, I am Stanley P. Spisiak, as many of you know, Chairman of the Water Resources Committee of the New York State Conservation Council, a group of private individuals in excess of 500,000 to a million people. We even include in that group some of our

fine ladies who are associated with some of the organizations and who are interested in conservation.

Before I get started, I would like to clarify one thing in the event that any of my Canadian friends aren't here. It is not the intention, I am sure, of this group or anyone else to annex several hundred square miles of Canada as this map would indicate. The map is also in error, and I would not feel correct in talking about what I'm going to talk about without noting the grave omission of the most polluted stretch of water that exists on the earth today which was not included because either the acid that exists in that river ate the paint off the map or the men were ashamed to list the Buffalo River, which flows just outside of Buffalo.

Now with that introductory remark, I would like to start on my statement.

By now, you have heard so much about the deterioration of our waters and the present and potential danger to our health, both physical and financial, that anything I might say would only be repetitious, as facts always seems to have that tendency.

I do, however, believe that if for no other reason, except for the seniority I have acquired in the past quarter of a century, you will grant me the opportunity to make a few observations based on my personal experiences as a pollution "Watch Dog" and "Crusader" for clean waters. I might add that seniority is something that you gain sometimes when you are no

longer physically able to do the things that you'd like to do. This is what seniority seems to be with me. I'm either too old or everything I want to do is illegal or indecent, including, perhaps, what I've got to say here.

Now, you have heard many people talk here today. Many of these people who have talked have had both the opportunity and the authority to have done something to halt the progress of pollution. The fact that whatever was done or was not done by them was ineffectual is very, very apparent. Someplace, these people have failed. If I seem critical, I intend to be that way. I offer no apologies, for I would serve no purpose if I would act as the conscience of the people and refrain from making comment on this score.

I do not intend, however, that I be misunderstood. For instance, the Chairman of the New York State section, who is sitting here today, is a valued and trusted friend who has proven himself time and time again, and I wouldn't want him to take any credit for what has happened previously by the Pollution Control Board and, subsequently, the group which has been transferred to what Mr. Hennigan heads now. I exempt Mr. Hennigan exclusively from any remarks I may make as to the effectiveness or the ineffectiveness of the program of the State of New York. I say that at the outset. I don't pull any other punches in regard to what I have to say.

Federal pollution laws enacted in 1948 were designed

to overcome many of the still existing problems. However, like most legislation of this type, it has been so watered down by amendments and weakened by lack of enforcement, that at best it has served only as a token of law.

One of its chief provisions was to encourage the States to establish pollution control programs and agencies of their own, with the threat that if the States did not, the Federal Government would institute its own controls.

Under the threat of this law, the State of New York brought into being the biggest fraud since P. T. Barnum brought out the Cardiff Giant--mainly, the so-called "Water Pollution Control Act" and the Board created by it.

During the fifteen years of its existence it had become a shield and a protection for the major polluters--the very groups it was supposed to eliminate.

At the time it was created, we were told--and this was told to us within a matter of 100 yards of this very building at the State Office Building, and well I remember the day--we were told that no new pollution would be permitted, and all existing pollution sources at that time would be given a reasonable length of time to correct their deficiencies.

I ask you what is a "reasonable length of time?" All of the people in this room don't have the same concept of what time is, but in this particular instance, you would assume that certainly ten years would be within reason. We have had fifteen years.

The law also provided for protection against violators, with the power of prosecution in the hands of the State Health Department and the Attorney General. Although hundreds of violations are occurring daily throughout the 62 counties of this State, there have been only 80 cases or 5 1/3 cases per year which have even been prosecuted in those 15 years.

I ask you to consider those figures and consider them seriously in the light of the fact that it has been proven time and time again that to spare the rod is to spoil the child and oh, how you can tell that, if you go up that slippery, oily river. As Mr. Stein indicated, those boats seem to slide. I didn't realize why we slid so well while we traveled that course, and that course is being taken by many people these days.

While it may be true that laws in and of themselves, even when vigorously enforced, do not correct as serious a problem as the one in which we find ourselves. It would, indeed, be an "inspiration for correction" if some of the violators who at this moment are violating our laws, such as the Federal Rivers and Harbors Act, for one, in accordance with the provisions of that Act, were placed behind prison bars.

If this sounds drastic, it is only necessary to look at the condition of this private sewer not listed on here but called the "Buffalo River," for it is and will continue to be loaded with oil and petroleum waste in addition to a multitude of complex chemicals.

For the moment, let us just consider the oil waste, for this is covered by the Rivers and Harbors Act which very clearly spells out that all the provisions of the law are adequate. There is no deficiency in that law, I found nothing wrong with the law.

If the Governor or Health Commissioner, who have already spoken, are serious about abating our pollution within this State, let them start the action--to put in jail (as the law provides) the general plant managers of say Socony Vacuum Oil Company, or the equal official of the Republic Steel Corporation, whichever is proven the more guilty or anyone found guilty. Because all of the thousands of gallons of oil waste that are in the Buffalo River, in direct violation of both State and Federal laws, can be traced to their doorsteps.

It's lying right there and if you want to be there, you can be there and catch it coming out. Now I had a discussion here earlier with Colonel Neff, and I found no argument with him on this score. He says the law is not clear enough. Even if I see it coming out of their plant, I have no authority to assume that it is coming from anywhere except from the sewer line. Now, it will only be necessary to determine where the guilt lies.

Unlike the Niagara River, there is no convenient flushing action provided by river currents. That evidence remains for all of you to see, and I urge you to take that trip if you can stomach it.

We must start somewhere to reverse this "express train of disaster," on which we are all riding. For too many years the Federal Government has permitted the States to handle their pollution problems in "good faith." The State of New York has proven to be a "State of no faith."

Ignored for too many years by our own governors, betrayed by our Health Department, which has the needed tools of enforcement, but because of an unholy alliance with industry, it has not made any serious attempt of enforcing these laws and by so doing, has encouraged a total disregard of abatement projects which might have been undertaken. Although I am fully aware of the moneys that are being spent by the industries in the Niagara Frontier, I shed no tears for this, for I don't think any expenditure of money is going to solve our problem, contrary to what many people will say.

We need money to implement the programs, but we need more than that--men, and I use that word "men" in its old-fashioned sense, men who will face up to their responsibilities and who will do what is needed, not because the law says so, but because their own conscience dictates the need and necessity of taking steps heretofore considered unnecessary. These are the things we're going to have to do.

I might add that I am not unaware of the claims of the Health Commissioner that the Buffalo River has been improved to the extent that there is a 60 percent reduction of pollutants.

I would like to know what he used as a yardstick--60 percent of what?

We have never known what the condition is. If he has some secret weapon or some secret way of knowing what there was so that he can say we removed 60 percent of what there was, I would like to know. Under the new provisions, as outlined by Mr. Hennigan, maybe I will be able to get some of the information that up to now has been denied me even by Executive Order within the State Health Department and the Conservation Department, copies of which I have with me available for anybody to see.

Since most of the waters of New York State eventually flow into adjoining States, such as Pennsylvania or even worse, into international waters, such as the Great Lakes, we cannot expect the Federal Government to remain disinterested in the problems we are creating.

Our good neighbors in Canada have a right to protest the daily violations of the International Treaty of 1909. I have presented a number of these protests in writing, from our good Canadian neighbors, to Senator Muskie's Committee, and it is my hope that they will not ignore these protests.

And those of you who have traveled the Maid of the Mist and have traveled it to the Canadian shore and seen the brown foam, the badge of indecency, the badge of betrayal and distrust which we, the American people, are giving daily to our

Canadian neighbors, an unwarranted award. I assure you, I know what I am talking about. If you haven't taken that trip, take that trip. Go up to the Seagram Tower and pay 10 cents to look through the giant telescope that they have and turn it on to a beautiful, beautiful sewer outlet discharging raw sewage through an outlet in excess of 8 to 10 feet in diameter, and watch the Maid of the Mist go by within a matter of a few feet of this raw sewage discharge and you'll know what was talked about here earlier.

In addition to these letters, it was also my privilege to turn over nearly 100 other letters and photos showing the pollution of our bathing beaches along the shores of Lake Erie.

There are people here today who took some of those pictures. I wouldn't even dare tell you the full explanation of what these pictures were and how dramatically they showed what our children have to walk through in order to reach the outer reaches of the water in order to be able to swim.

Many of these letters that I gave to the committee told of mothers carrying on their shoulders their children so that they could reach what was relatively clean water and carry them through this human waste which extended many feet out from shore, combined with industrial pollutants to the extent that it is impossible to find what the intermingled material fully is.

These are the things that perturb me, and if I sound a little bit perturbed, I assure you that I am more perturbed

than I am capable of showing.

The general theme of these letters was almost a prayerful plea for help. These people don't know where to turn. None of us do, for we have tried every avenue available to us, and this request, I wish to repeat to you, the gentlemen of this panel, at this time please--if it is within your power to start Federal action which may assist us in reclaiming at least a part of what we have already lost, I beg you, I beg you in the name of decency, to do something about this.

Perhaps we'll have to get down on our knees and bend our knees and adjust our elbows and beg God to help us, for certainly man has so far proven that he is not interested in helping us unless there is an awful lot of money involved.

While I must agree, and I do agree with some things that the State of New York is doing, with the Governor's proposed bond issue and these Federal funds that are needed to complete adequate domestic sewers, I believe that we even need more the benefits of Federal pollution control as proposed in the Pollution Control Law (S. 3), drafted by Senator Edmund Muskie and now waiting for passage by the House of Representatives, for only Federal control will solve our national and international problems.

I am very happy that the ladies who were so effective in getting letters written are here today and that they will undertake a program of urging, by all means available to us, that

the members of the United States House of Representatives pass the pollution bill as drafted by the Senate, particularly Senator Muskie's version, and not the watered-down, worthless bill that the House is considering of its own merit.

I urge you now to disregard the concern expressed by Governor Rockefeller that Federal enforcement would be a duplication of State enforcement. The Governor may not know it, but New York State doesn't have enforcement--you can't duplicate something that doesn't exist. Two of nothing is still nothing, so how can you duplicate something that doesn't exist.

And I am ready at any time to prove my charges, in any place and at any time, with or without the assistance of anyone, and as for the invasion of States Rights, which it is claimed might happen with Federal controls, I urge you to consider something more important, and that is People's Rights. We have some rights. We urge and ask you now to assist us in securing the type of legislation we need, but more importantly, to implement the actions required to enforce the laws that we have. We have adequate laws, but it appears to me, in most instances, the laws were drafted to serve a purpose, that the Water Pollution Control Act was drafted for one purpose only, to fool the public. It has achieved its goal. It has done so well that most of the people of the State of New York have sat in complacency with a total faith in a non-existent form of administration.

Now, if I have sounded a little bit too vehement in

this, I ask you and urge you to consider the fact that I have devoted a lot of time to this, and I have indicated earlier today to an associate of mine that I don't particularly concern myself with what comes from this group and what comes forth here today.

I have never heard a finer case presented in the field of pollution, where many speakers gave no consideration as to whether they were pleasing the audience and many of the panelists even questioned some of their own associates in a conscientious manner. This, I think, is what we have needed for a long time.

I have been here 25 years and finally I am graduating and I'd be very happy to surrender my job to somebody else if we can find one to do it. Thank you. (APPLAUSE)

CHAIRMAN STEIN: Thank you, Mr. Spisiak. Are there any questions or comments? You won't mind just a slight correction, then. S. 3 has been promoted. I think its S. 4.

MR. SPISIAK: I'd rather go uphill than down.

CHAIRMAN STEIN: And you know that bill has passed both the Senate and the House and it's now in conference.

I don't want to speak for the Corps or for any people from the Corps here, but I think you made a reference to that oil pollution and the Corps and I think the record should reflect....

MR. SPISIAK: Oh, I'm sure Colonel Neff is quite aware of that. At the time, I was quoted as the one stating he should be thrown in jail. I have since found reason to state that we

need him right where he is, because I think he'll do a job for us.

CHAIRMAN STEIN: He's very good, but let me explain....

MR. SPISIAK: This is from his quote, incidentally, but it's all right.

CHAIRMAN STEIN: Very good, but let me explain the state of the Federal law. The Corps of Engineers, as Colonel Neff has pointed out, does not have jurisdiction over liquid wastes coming out of sewers. Also, the Corps' authority under the Rivers and Harbors Act of 1899 has been exercised primarily with respect to pollutants which interfere with navigation. There is another law, sir, dealing with oil pollution, which is called the Oil Pollution Act of 1924. That is a fine Act except it has one restriction which limits the jurisdiction of the law to tidal waters or where the ebb and flow of the tide is. This exempts the Great Lakes and its tributaries, and therefore it is not within the purview of the Act.

The Corps of Engineers is also charged with enforcing that Act. So I think that other than interferences with navigation or the Federal Water Pollution Control Act, I don't know that there is any other Federal responsibility for abating this, and I think if you're looking for someone, Mr. Spisiak, whose responsibility it is to abate oil pollution, it is really we and not the Colonel. He's a very good fellow, but he can only do what he's authorized to do by law.

MR. SPISIAK: I'd like to give you just one instance: there was a remark made here by a representative of industry

that there have been no known cases of cyanide kills of fish or any other such related incidents. I would like to cite that on July 26, 1953 a cyanide pollution fish kill occurred upstream of three water intakes supplying one-half million people. The spill of cyanide was a deliberate spill by one of the industries. I have the documented photostatic copies of the entire case, including the instructions from the State Health Department to the State Conservation Department. Although I was instrumental in securing the information for them and forcing them to find it, in capital letters it states, "No information about this is to be given to Stanley Spisiak" in capital letters all the way through. I rate high with them.

Now, I am very happy to offer their own evidence, this is not my evidence, this is their own evidence which they did not realize I received on a death bed of the head of the Enforcement Division, locally stationed here in Buffalo, who has since died, and I had to keep this information. I don't want to see my friends die, but I have a lot of other information which I would be happy to make available. I have this case right here if you would care to have it.

CHAIRMAN STEIN: Thank you, Mr. Spisiak. You know, I have dealt with dissemination of information for a long time and if there is any way to assure that you don't get any information, I guess the best way to do it is to print in capital letters "Not to be seen by Stanley Spisiak."

MR. SPISIAK: Thank you.

CHAIRMAN STEIN: Thank you. Mr. Hennigan?

MR. HENNIGAN: The next speaker is Senator John Doerr, State Senator John Doerr.

SENATOR DOERR: Chairman Stein, gentlemen on the panel, my name is John Doerr, I am a member of the New York State Senate and I reside in Buffalo.

Last February when hearings were being held in Washington on House Resolution 4264--the water pollution control bill--I submitted a statement to the House Committee on Public Works in favor of the bill. I went beyond endorsement of the bill to pledge my efforts in behalf of state programs to implement the federal procedures.

Published statements of Governor Rockefeller at that time, however, caused great concern among many members of the New York State Legislature, that the Governor was not disposed to take part in a federal anti-water pollution program. Events of recent days have served to confirm our fears of last winter.

The abrupt departure of New York State's key representative from the conference in Cleveland last week; the Governor's insistence that New York State will "go-it-alone" on water pollution control measures; the Governor's insistence during the Legislative session on the adoption of staggering budget appropriations to finance an independent state anti-pollution program--all of these make it clear that the official posture of New York

State's administration is one of stubborn resistance to interstate cooperation under federal co-operation against one of the most imminent and critical domestic problems facing our nation today.

I might add parenthetically that in addition to these matters, we have the Governor's own statement of yesterday when he appeared before the panel. This statement that I have here was prepared prior to the Governor's remarks and I have not changed it.

In my submission to the Congressional hearing last February I commented:

"The problems of water pollution in the eastern end of Lake Erie are, in some measure, the result of the lack of--or ineffective--pollution control by certain communities and industries in Western New York. However, correction of these shortcomings would not really solve the total problem of pollution we face. The treasury of the State of New York could be drained to provide the most modern water treatment facilities and pollution control systems within the boundaries of the state. And yet, our beaches on Lake Erie would still be closed; our industries would still be starved for clean, cool water and fully 25 per cent of the waters of Lake Erie would still be incapable of sustaining marine life.

"The real problem results from the aggregate of community and industrial effluents spewed into the entire upper

Great Lakes system. But Buffalo and the Niagara Frontier do not suffer alone. Fully one-third of this nation is dependent in greater or lesser degree on the preservation of the Great Lakes as the world's greatest supply of fresh water and as the most economical route to the nation's heartland for bulk commerce.

"It is clear, therefore, that the fundamental problem of pollution in Lake Erie and Lake Ontario cannot be solved by a competition between Albany and Washington which would be costly and fruitless.

"I do not suggest, however, that the states do not have a proper responsibility in a comprehensive program of water pollution control. Clearly it is the duty of the individual states to complement the federal efforts. It is surely their responsibility to work in harmony with federal programs and to carry out the planning and intent of measures initiated by federal authorities on a broad, inter-state basis.

"This means then, that not only must the individual states be prepared to work hand-in-hand with federal authorities on measures within their respective borders, it also means that lines of communication among the states must be established so that the efforts of each state may be co-ordinated into the total program."

Gentlemen, as I see it, the conference in Cleveland had, among its purposes, the establishment of such lines of communication. By his departure--without notice--from the conference a full day before its completion, New York's Director of

the Bureau of Water Resource Services, Robert D. Hennigan, broke the communication lines.

We can only infer that since New York State has only a relatively short shoreline on the lower end of Lake Erie, Governor Rockefeller is taking the position that the major responsibility for the cleanliness of the lake lies with the states beyond our western border. Such an attitude is feudal in concept.

For one thing, it fails to recognize the direct responsibility of Western New York communities and industries for polluted waters washed back upon the shorelines of Pennsylvania, Ohio and Ontario following the natural phenomena known as the seiche. A seiche is the piling up of Lake Erie waters at the eastern end of the lake by strong northwest winds.

When the winds subside these high waters swirl back to the west, carrying with them for hundreds of miles the effluents generated all along the Lake Erie Shore from Buffalo to Dunkirk.

But perhaps more significant is the fundamentally selfish and shortsighted attitude implicit in Governor Rockefeller's point of view.

New York State is not an island or a walled city-state. We cannot insist that our neighboring states to the west comply with federal pollution control standards for our benefit without being willing, ourselves, to do the same.

We cannot expect our neighboring states to the west--and to the east--to respect the double standard of state-federal

relationship inherent in Governor Rockefeller's position. They surely will not bend their sovereignty to conform to federal programs when New York State recognizes no such obligation.

There might be some merit in the Governor's attitude if our own state's record of enforcement of existing state pollution control measures had been exemplary. The sad truth is that our skirts--and our waters--are not clean. The recent report of the U.S. Public Health Service specifically identifying chronic major sources of pollution in Western New York made public our shame. And, as recently as last Sunday, an article in the Buffalo Courier-Express reported:

"The Courier-Express study uncovered nobody, at any governmental level, who could recall any prosecution of any industry for water pollution. A state health official was asked if anyone ever had been prosecuted under the 1949 State Water Pollution Control Act. 'I think they have,' he said. 'But not around here'."

Gentlemen, I am as aware as anyone of the dangers of "big government." The record shows that in Albany I opposed this "big government" principle.

But I think it is a well-established principle that services must be performed by that level of government able to perform them most efficiently and at the least cost. With this principle uppermost in mind, it becomes a matter of simple logic that a program of pollution control in waters which flow past

the boundaries of one or many states must be initiated and regulated on the federal level. No lower level of government can meet the test of performing such a service either efficiently or at the lowest cost.

Further, it is my belief that an anti-pollution program on the federal level will not be subject to the pressures which can stifle effective control on the local or state level.

May I emphasize then, Gentlemen, that the position taken by Governor Rockefeller and his administration on this issue does not represent a consensus of the State of New York. As a member of the New York State Legislature, I join with Congressman McCarthy and Senator Kennedy in assuring you that the vast majority of informed and concerned residents of New York State do not share the Governor's interest in seceding from the United States in this campaign for clean and healthy water.

Thank you for this opportunity to present my views briefly to you, and I am very hopeful that much good will be accomplished by the efforts that you people are expending in this area.

CHAIRMAN STEIN: Thank you very much, Senator Doerr, for a very concise and thorough expression of your views.

Are there any comments or questions? If not, thank you very much sir, and we will be recessed for ten minutes.

(WHEREUPON A SHORT RECESS WAS TAKEN)

CHAIRMAN STEIN: May we reconvene.

MR. HENNIGAN: The next speaker will be Dr. William Mosher, Commissioner of the Erie County Department of Health.

DR. MOSHER: Mr. Chairman, members of the conference and ladies and gentlemen, I hope I won't have to follow Colonel Neff as Mr. Spisiak suggested.

The Erie County Department of Health appreciates this opportunity to express our views on water pollution as it relates to Lake Erie and the Niagara River. There is no denying the fact that a serious pollution problem exists in the western end of Lake Erie.

However, what is open to debate is how much pollution exists, what has been done and what is being done to prevent and reduce pollution, and who should have the authority and enforcement responsibility. I think that I am the first person that is going to take the part of saying that the local government should have more enforcement responsibility than it has at the present time.

In the recent public hearings of the water pollution problem in Erie County, much has been said about the nature and extent of the pollution of the Niagara River and the western end of Lake Erie. However, there has been little said about the efforts to control pollution except by the State Health Department and by industry.

In my presentation, I will not take the time to list industrial and pollution sources which have been presented by the

Public Health Service, the New York State Department of Health and others, nor will I cite the control activities of local industry in cooperation with the State Department of Health and the Erie County Department of Health.

I should like to discuss briefly some of the accomplishments of Erie County in water pollution control, particularly as it relates to domestic pollution, and also some of the special problems we face in Erie County. It is also my intention to define the role of the local health department in control activities as I see it.

This Department has always considered water pollution as having the highest priority in its environmental health program. In 1948, when the Department was organized, the population of Erie County was 700,000. Today, the County has a population of 1,100,000, so there was added 400,000 which is a major city in the short period of about 12 or 14 years.

This rapid expansion has had a tremendous impact on existing sewage disposal systems, including the many private systems which have been developed in rural and suburban areas since 1945. Meanwhile, industrial expansion and new technological advances have created more serious waste disposal problems.

Early efforts of municipalities to build new disposal plants were blocked by a limitation of funds and inability to secure public loans. However, during the past decade, vigorous steps were taken by the County and several municipalities to meet the sewerage demands of our expanding populations.

A County Sewer Agency was established to encourage development of new facilities. More recently, the availability of State and Federal financial assistance has encouraged communities to develop new plants and expand existing services.

Private sewage disposal systems have been rigidly controlled in Erie County and I would like to digress from my text at this point, because in 1959 our Department enacted a policy for the real estate development in this County. I have had five or six meetings since that period of time with town officials, builders, real estate developers complaining about the stringency of our regulations.

We can note that this is to a good extent responsible for the development of sewers and sewer plants in Erie County since this policy was adopted in 1959, and so I am very disturbed about the statements that I have heard here today and during the past few months that there has been little enforcement at the local level, because there has been some enforcement.

I would like to say that there are few Counties in the United States which have progressed as fast as Erie County in the development of needed sewage facilities.

For example, seven communities have constructed and placed into operation new, modern sewage treatment facilities. In addition, three of the larger towns in Erie County, consisting of about 20 percent of the County population, have completed or are in the process of completing extensive remodeling

of existing facilities to more adequately handle the increased population.

The Buffalo Sewer Authority, at our request and at great expense, improved their chlorination techniques as to adequately disinfect their sewage, and since they have done that, which was about six months ago, our counts in the river have improved.

It is increasingly disturbing to me that the people of Erie County have been given the impression that little has been done. I should like to invite the members of the conference and the members of the audience to come to our Department to show you the records of work and the amount of time our Department devotes to sewage and water pollution. I should also like to invite the Chairman and members of the conference to not only visit the waterfront of the City of Buffalo and Niagara River, but to visit some of our new facilities, and I will personally conduct a tour around the County to show what has been accomplished.

We estimate that within the last five years, with Federal and State support, more than $35 million has been committed or has been expended on such facilities, not only including plants and trunk lines, but sewers to homes, etc. Now this is a sizable amount of money which people of Erie County have largely paid to have this done, and I think if you are a taxpayer in the sewer district in the town of Amherst or the town of Cheektowaga or any number of other towns, you must be

aware that you are paying to prevent pollution in your particular town by the increased tax burden that you are now paying.

This emphasizes that financial assistance by the State and Federal Government is the basic need for our communities if we are to meet sanitary pollution problems and, therefore, we are in support of the $1.7 billion legislation for water pollution control.

Sewage treatment under normal weather conditions is not the major problem in most of Erie County because of the recent expansion of treatment facilities. However, Erie County has a serious problem of storm relief overflows in some municipalities, particularly the City of Buffalo. We agree with the Public Health Service that stormwater and sanitary sewer systems should be separated, as does the State Health Department, and this is being enforced in new construction in the State.

In order to correct the combined sewer system in the City of Buffalo, it would involve a multi-million dollar undertaking, perhaps a half billion dollars. The Public Health Service has pointed out that the correction of this problem in the Nation would amount to $20 to $30 billion, which is a considerable amount of money.

This is a problem we have inherited and a problem for which we hope to find a reasonable solution. Similarly, the problem of chlorinating and treating the storm relief sanitary overflows is a matter requiring further study before demanding

actual construction.

Most of the sewage in the developed areas of Erie County already passes through the sewage treatment plants except during rainy periods.

We will continue to have polluted streams even after a sewage treatment plant is built to serve every municipality unless these plants are properly designed, constructed, operated and supervised; unless most of the storm and ground water is removed from sanitary sewers; unless sewer construction and testing is properly supervised; unless we make conditions favorable to recruit and retain competent personnel to operate and supervise stream pollution abatement structures.

Efficiency of plants depends to a large measure on operation. Well designed but poorly operated plants pollute streams. We need both good design and excellent operation, and I think these new grants. We have already processed seven of these operation and maintenance grants in our Department, which will certainly help in this regard.

Another serious problem is the excessive infiltration and overloading of new sewage treatment plants by storm and ground water due to faulty installation of sewer lines. This can be prevented by closer supervision of sewer line installation by municipalities.

The illegal tying in of roof and footing drains to sewer lines also contributes to the overloading of plants and

should not be permitted by any municipality. More intensive surveillance by towns and cities is needed to stop this practice.

In my opinion, the local health department must continue to play the major role in the control of water pollution in this State, particularly in the metropolitan counties. At the present time, our Department has four sanitary engineers who devote most of their time to water pollution, a review of sewage plants, etc. and review of all problems connected with sewage.

In addition, we have thirteen environmental health technicians who devote all of their time to private sewage disposal systems. So you can see that much of the work that is being done in this County, at least, has to be done by the local Health Department, unless there is a change in the way things are going to be done in the future.

At present, our Department reviews plans for sewerage systems, supervises the operation of the treatment plants, investigates quality of water at beaches, conducts stream surveys, and provides training for operators of treatment plants.

In addition, the Department recommends approval or disapproval of the various State and Federal grants for planning, construction and operation of sewers and plants. In addition to these regular activities, our sanitary engineers assist the State Health Department and the Public Health Service in various study programs. And I would like to add to what Mr. Hennigan said this morning. He didn't mention the County Health

Department when he talked about the State surveillance network, but our Department collects the samples for this network once a month and we assign a man to it once a month.

We are also collecting samples for the Public Health Service at weekly intervals.

In the recent study of Lake Erie by the Public Health Service and the Lake Study Group we did cooperate in a small way. Local information and data is always available to both the State and Federal engineers to facilitate investigation and studies.

We think this should be a three way street and it should also come back to us as soon as possible.

It is important to have even closer teamwork between the Federal, State and local agencies, in order to develop a more effective control program. We look forward to closer cooperation between all the involved agencies, namely the United States Public Health Service, New York State Department of Health, the International Joint Commission, the Corps of Army Engineers, and the local Department of Health.

At my request, the State Health Department called two meetings with representatives of these agencies present, in order that we could have closer relationships and these two meetings were held in the last ten months.

The Erie County Department of Health has been handicapped in its water pollution control activities because of

vacancies in its engineering staff, which has limited its activities in detailed stream surveillance programs and in its program to control industrial wastes.

Local government is finding it increasingly difficult to compete for sanitary engineers with State and Federal Governments, which offer higher salaries and more benefits. Sanitary engineers are simply not available in today's market because of the rapid expansion of programs on all levels.

Since much of the day to day activities in pollution control is the responsibility of local health departments, local government should have a larger share of the available engineering talent. The opposite is occurring with greater recruitment by the State and Federal Government who devote much of their time to stream studies and research.

One possible solution is the assignment of engineers to local health departments by the State Health Department, and my other recommendation is that the Public Health Service and the State Health Department stimulate engineering schools to train their sanitary engineers, because we have the same shortage in this field as we have in medicine and other allied public health professions.

The local health department is also handicapped because the enforcement of Article 12 (Public Health Law) Water Pollution Control, is the legal responsibility of the State Health Department, which has been said repeatedly in this conference.

In the field of industrial pollution the local health agency, in order to be effective, must have the legal authority to enforce these regulations. Therefore the County Commissioner of Health should be the representative of the State Health Commissioner in this regard, and this legislation, again, I believe was introduced into the Senate and Assembly this year.

This will require legislation again next year if this responsibility is to be delegated to the County Commissioner of Health. I would like to say that responsibility without authority is not enough, and when there is trouble in Erie County, they call the County Health Commissioner first, then the press and other people who are concerned about the pollution problem.

We would agree with the Report of the United States Department of Health, Education, and Welfare in regard to recommendations that secondary treatment plants be so designed and operated as to minimize the removal of soluble phosphates. This will require a continuation of their outstanding research program, so that sound and reasonable procedures may be developed for such removal.

However, this Department is not convinced that secondary treatment of oxidizing type for the City of Buffalo is definitely indicated by the conditions of the Niagara River. This tremendous river provides a high dilution factor for waste and, thus, supposedly maintains adequate dissolved oxygen contents. Perhaps chemical precipitation would be indicated. Of course,

there is horizontal stratification. Therefore, further studies of dissolved oxygen and stratifications are needed before such a decision can be made.

In conclusion, it seems to me that all of us residing in the vicinity of the Great Lakes are deeply concerned about the condition of our water supply today and in the future.

There was never a greater public concern about our water resources, and we can expect public support and cooperation in water pollution control activities. The dollars are being made available to build new facilities for sewage treatment and to assist communities in maintenance and operation of sewage disposal plants.

Again, the recent $1,700,000,000 legislation for water pollution control in New York State, approved by the Legislature and now referred for referendum, is a tremendous step toward meeting our needs for new facilities in this State and we, of course, support the referendum.

Government at all levels has shown its deep concern. Here in Erie County, the County Executive and the Board of Supervisors have vigorously supported measures for correction and prevention of pollution of our natural water resources.

Progress is being made and much more is underway or planned for the future. However, progress will be hindered if confidence is not maintained in all of the agencies responsible for control. The problem is of such magnitude that no agency can

hope by itself to undertake effective enforcement programs without the active participation and cooperation of the other agencies.

Finally, industry has made tremendous contributions in Western New York to pollution control. In this area, much more remains to be done as in the area of sewage pollution.

Our farmers and agricultural agencies must also work with us in the reduction of fertilizer wastes which reach Lake Erie and also contribute to algae growth in this Lake.

The team has been alerted to the problem and now we must solve it together. Thank you.

CHAIRMAN STEIN: Thank you. Are there any comments or questions?

MR. POSTON: I would like to comment, on page seven where he says, "We would like to agree with the report of the United States Department of Health, Education, and Welfare in regard to recommendations that secondary treatment plants be so designed and operated as to minimize the removal of soluble phosphates." I think in our report we wanted to maximize the removal of soluble phosphate.

DR. MOSHER: Yes, I will correct that.

MR. POSTON: I noted down in your next paragraph you felt that this was not necessary in the case of Buffalo, because their effluent goes to the Niagara River, which did not have a dissolved oxygen problem. But I wondered if we couldn't expect a

similar eutrophication problem over in Lake Ontario if Buffalo were permitted to carry on here with a high phosphate concentration.

DR. MOSHER: May I call on Mr. Stankewich to answer that question. He's right here. Is there any other question you have for me?

MR. POSTON: I don't think so.

MR. STANKEWICH: On one of the pages in your report, you quote 22 percent reduction of Buffalo sewage, and that pertains to BOD reduction rather than suspended solids or some of the others. The Buffalo plant discharges its effluent into the Niagara River, and the Niagara River, of course, is a large river and, of course, there is stratification. But the total flow of the river is about 200,000 cubic feet and the amount of sewage that Buffalo discharges is only about 214. So, not considering any stratification, the dilution factor is about one to a thousand.

When we talk about BOD, we talk about activated sludge and secondary oxidation processes, but I don't think it's a question of BOD, I think it's a question of reducing more suspended solids, and we believe that suspended solids can be reduced more by chemical precipitation. There were some studies made by Syracuse University about the three best methods sponsored by New York State for removal....

MR. POSTON: You've answered my question I think. We

feel, though, that the removal of phosphates is a very important part of waste treatment in the Great Lakes to prevent this aging process, and that any discharge of phosphates adds to the total problem even though the body of water is large.

MR. STANKEWICH: In other words, you have to change the type of secondary treatment, and secondary treatment could consist of chemical coagulation.

CHAIRMAN STEIN: Now that we have this audience here, Dr. Mosher, there is one point I would like to make. You did touch upon a point of this assignment of qualified people, from the State to the County.

When you talk about building up local units of government, I don't really know if that's New York State's policy. But we in the Federal Government have these requests coming in constantly from the States asking us to assign people.

I don't think this view that I am expressing in just mine, sir. From ny personal knowledge, it's one that has been held by the past three Surgeon Generals. They don't look with favor on the Federal Government acting as a recruiting agency for the State. It may solve a temporary problem. But if we're thinking in terms of a partnership, building up State agencies and local agencies, you ought to provide a permanent structure for yourself. Get the salaries and the jobs and to the recruiting

I know it's hard because we have that, too. But I think with that problem being considered by a lot of hands, the determination has been made that we really don't solve anything by these temporary assignments.

DR. MOSHER: I only ask for it for a temporary period of time.

CHAIRMAN STEIN: I don't want to prolong this. I think we have this rather well documented. We have found that whenever we acceded to this and made these temporary assignments, it took the pressure off, but you didn't get your salaries up and you didn't get your vacancies filled. The way to accomplish that is to press for each organization to build up a maximum staff. This is one of those internal, inter-governmental problems which we may have. I suggest you talk that over with your State. I am almost certain we don't have a difference with this State on that philosophy.

MR. HENNIGAN: The next speaker will be a representative from the League of Women Voters, Mrs. North or Mrs. Higgins.

MRS. NORTH: Mr. Stein and members of the panel. I am Mrs. Robert North, Jr., Vice-President of the League of Women Voters of New York State. I live in Buffalo.

I welcome this opportunity to express the concern of the 88 Leagues throughout the State for New York's critical water problems. Mrs. S. D. Higgins will conclude our presentation with

the specific local conditions in Lake Erie which have been studied by members of the League's Erie County Council. These women are part of the Inter-League Lake Erie Basin Committee.

Their investigation of local pollution has been repeated by many Leagues in many sections of the States, in their Basins. So alarming were the conditions they found that the State League fully concurs with the urgent need for a program to clean up New York's waters. We applaud Governor Rockefeller and a unanimous Legislature for the State's Pure Water program. In the present period of drought, and with ever increasing domestic, industrial and recreational demands for water, New York, we believe, can no longer tolerate the pollution of its precious lakes, streams and rivers.

From now until the election, the League and many other citizen groups will vigorously work for the proposition for a $1 billion bond issue to provide funds to help municipalities construct the sewage treatment plants so desperately needed. We hope for an overwhelmingly favorable vote by the electorate. We recognize, however, the objections which may be raised to New York State's assuming so high a percentage of the cost with no guarantee that the federal government will make available its 30% share. We would wish the bond issue were not subject to this uncertainty, but to postpone the program would be uneconomical and, in the present emergency, unthinkable.

One thing the League of Women Voters learned early in

its nationwide study of water resources: water has no regard for municipal and state boundaries. The attack on pollution and the planning for optimum use and development of water resources must encompass an entire river, or lake basin. Little is accomplished if one community installs adequate treatment facilities but its neighbors continue to pour untreated sewage into the water.

The Pure Waters program also calls for vigorous enforcement. We believe that valuable financial assistance to communities and the tax relief offered to industry must go hand in glove with an unrelenting enforcement program in fact as well as law. They cannot be separated if we are to have permanent improvement in our water quality.

The November 2nd vote, we hope, will demonstrate the concern of citizens for the quantity and quality of New York's waters. Whatever that vote, communities under the pressure of federal and state enforcement policies must get about the urgent business of eliminating the pollution of waters essential to the very life of this State.

CHAIRMAN STEIN: Thank you very much, Mrs. North. Are there any comments or questions? I hope you will bear with me on this, I would like to make one comment on your statement.

You have a phrase here which I have heard used over and over again, and perhaps from your perspective in New York, you may think this is so, but I ask you to look at it and look at the facts, where you say "with no guarantee that the federal

Government will make available its 30 percent share." I don't think anyone, except the proponents of the bond issue believes that the Federal Government or the Congressmen from other States think that the Federal Government has a 30 percent share, at least at the present time, in the amounts you're talking about.

This may be a hope and this might be something that you might want the Congress to make available, but I don't think, and I know the League always likes to deal in facts, I think if we're talking in terms of a fact, this 30 percent is a pious and what very well may be a worthwhile hope, but it is not here yet.

As far as I can see, the best you can get in financial assistance at the present is coming out of this legislation. The bill is in conference and the only thing that can come out is the highest amount. That will provide a 30 percent grant, up to $1,200,000 for a project with limited allocations, perhaps at the most $150 million allocated through the country.

This will not mean this share. So I think, at least in the terms of the thinking here--and we all should think about this--while you may think from a moral point of view or an ethical point of view or from a resource point of view, that the Federal Government should contribute a 30 percent share to match the New York State financing plan, I don't think there is a general consensus throughout the country that this really is the Federal Government's share.

There are a lot of other plans for financing. Some people talk in terms of 50 percent. As a matter of fact, the

Mayor in Cleveland talked in terms of a highway grant fund of 90 percent Federal money, 5 percent State and 5 percent local, so I do not think that the whole country is made in the image of New York State although your governor's plan may be the one that will prevail.

But I think we have to look at this very cooly so that we know precisely what the situation is. Thank you.

MRS. NORTH: Can Mrs. Higgins speak now?

CHAIRMAN STEIN: Yes.

MRS. HIGGINS: Gentlemen, as a representative of the League of Women Voters, I am speaking today for seventy Leagues here in the five States in the Lake Erie Basin.

For the past two years, these Leagues, including six here in Erie County, New York, have been engaged in a study of the entire Basin's water resources as part of our national water program which dates back to 1956. Our statement today will touch briefly on conditions in the New York State area.

The preliminary report of our Lake Erie Basin Committee, issued in the fall of 1964, gives many alarming facts concerning the deterioration of this region's waters, largely due to pollution by inadequately treated municipal and industrial wastes.

Niagara County must cross over into the west channel of the Niagara River for its water supply intake, due to polluted conditions in the east channel.

In the Buffalo River and the Buffalo Harbor, channels

are clogged with silt and waste solids. This necessitates costly dredging and the disposal of dredged materials further contaminates the Lake's waters.

The decline in commercial lake fishing is at least partly due to pollution. Desirable fish for table use have almost completely disappeared and present catches are less valuable.

Family enterprises which formerly earned a comfortable living for several members and their dependents are reported now to bring in less than $2,000 per year. Water-based recreational activities are curtailed along much of Lake Erie's shoreline. Tourist-serving communities report economic losses through lessened business and declining property values.

Formerly desirable vacation cottages stand vacant at the height of the season because of polluted waters. At a time when other property values in the county are rising, some Chautauqua County realtors estimate a 30 percent-50 percent decline in shore properties used for recreational purposes.

In 1964, county health departments in western New York closed bathing beaches because of high coliform counts. So far in 1965, only the Hamburg Town Beach has been closed for brief periods. This was due to algal slime, which is not considered a health hazard, merely rendering water recreation an unpleasant experience. All area beaches are presently rated safe for swimming and it is to be hoped that this rating accurately reflects an actual improvement in water quality.

Public awareness of the pollution problem is growing. Pollution efforts are increasing. Here in Erie County, many previously unserviced communities now have disposal treatment. However, several inadvisable practices which compound enforcement problems continue. Some of these practices are the result of a compromise with financial realities; some are due to public pressure or indifference.

Evans Township has incorporated existing storm sewers into the new $4.15 million system. This permits raw sewage to flow into Lake Erie via Big Sister Creek in times of heavy run-off. Officials defend this unsatisfactory arrangement as the only kind hard-pressed taxpayers could afford.

In North Boston and several other communities, the public clamor for water has resulted in the extension of water lines to areas serviced only by septic tanks, some already malfunctioning. Lots are often too small in size to assure a safe, adequate water supply from wells and to accommodate a disposal system suitable for long-term use. Where building is concentrated, an abundance of water will interfere with proper operation of these septic tank systems, aggravate existing problems, and create new ones for everyone downhill and downstream.

There are some older sub-divisions in the area which refuse to connect with municipal disposal facilities, even though the discharge of offensive effluent from their septic tanks creates nuisance conditions in nearby ditches and creeks.

We must have better public understanding of the limitations of all methods of disposal treatment. Primary treatment, such as we have here in Buffalo, is better than nothing, but secondary treatment is far more efficient and can be adapted to remove an appreciable percentage of the phosphates which stimulate algal growth.

Secondary treatment should be the minimum standard for any area. Where waterways are sluggish and slow-moving, or where population and industry are concentrated, the efficiency of treatment is particularly important.

While civic officials have very properly directed public attention to industrial pollution, similar emphasis has not been placed upon the inadequacies of municipal disposal systems. The public remains complacently unaware of its own contribution to the problem.

In any study of the pollution of Lake Erie and industry's role therein, we should acknowledge three facts. First, industrial vitality is essential to the economic well-being of this entire area. Second, industrial pollution is recognized as a major cause of the deterioration of our waterways. Third, industrial waste problems frequently change with product and process changes, and often cannot be solved without extensive research.

It should be pointed out that certain industries, some of them cited as polluters, have made efforts to improve

conditions, expending considerable sums for waste treatment measures. This is a beginning--but only a beginning. Additional efforts on a far greater scale must be made if conditions are to be improved.

Where compliance with the pollution control law is lacking, where clean-up orders are disregarded, where there is stalling or foot-dragging by any polluter, whether industrial, municipal, or individual, strict enforcement measures must be taken.

Preferably this should be done by local or State officials. When action is not taken at either of these levels, the Federal Government must exert its authority. The Federal Government should not be regarded as the enemy of the States. We are convinced that if the localities, States, and interstate agencies get on with the job of cleaning up the waters, they need not worry about Federal interference.

Municipal and industrial pollution of Lake Erie and its tributaries is an undeniable fact. Present conditions would not exist if pollution control laws were enforced. An unbiased appraisal of all the reasons for lack of enforcement is needed.

Before any enforcement program by any level of government can be successful, there must be public realization of the urgent necessity for strict enforcement, for no laws are enforceable without widespread public acceptance. Such a climate is only now being created by citizens groups, the news media,

and by public conferences such as this.

We know what the problem is. We know the sources of pollution. We already know how to correct much of what is wrong. We have the intellectual and technical capability to solve the problems that are blocking progress. What we do need is a grim determination to tackle the job and see it through. It is time for co-operative, co-ordinated, intensified action by all levels of government, by industry, and by the citizens themselves.

(APPLAUSE)

CHAIRMAN STEIN: Thank you very much for an excellent, specific and detailed statement. Are there any questions? Mr. Morr?

MR. MORR: Mrs. Higgins or Mrs. North, individually or you might in representing the League of Women Voters, do you feel then as was read in both your presentations, that there is a need for cooperation and unity in financing as well as research?

We all feel we know the problem is upon us. Do I detect, though, that you both feel either individually or representing the League of Women Voters, that massive infusions of dollars are needed and that it would be your recommendation that the conferees consider these infusions to come in large part from the Federal agency that might best be involved?

MRS. NORTH: The National League testified of its concern for urban areas and the costs that were upon them, but we have not studied and we don't have a position on the raising of

this 30 percent ceiling. There hasn't been any study or any position taken on that nationally. It's a nation-wide problem, of course.

MR. MORR: Do you note a need for Federal participation financially to a larger degree or much larger than we find today?

MRS. NORTH: Yes, we think so.

MR. MORR: Thank you very much.

CHAIRMAN STEIN: If there are no further comments or questions, Mr. Hennigan.

MR. HENNIGAN: The next speaker will be Mr. John Pillion, former Congressman in this area.

MR. PILLION: Mr. Chairman and other distinguished members of this conference panel, my name is John Pillion, resident of Hamburg, New York, and I appear today as a citizen and interested taxpayer of the State of New York.

I must confess that I have a personal interest in the waters of Lake Erie. I was born on the shores of Lake Erie in Ohio too many years ago. I live on the shores of Lake Erie. I spent a great deal of my childhood swimming in the waters of Lake Erie and I have fond recollections of those days, so I am keenly interested in and have an unusual affection for Lake Erie.

Congressman John Dingell of Michigan made the following statement during the debate on the Water Pollution Control bill in the House of Representatives on April 22nd of this

year and I quote from page 8398 of the Congressional Record:

"I do, however, pay richly deserved tribute to some of the highly capable people in the Public Health Service--like Mr. Murray Stein--who certainly is deserving of enthusiastic acclaim for his splendid work in this field."

Mr. Chairman, I concur in this recognition of the dedicated public service performed by all of those men who took part in producing the excellent report before us, and I also recognize the public service of the gentlemen who are now sitting on this panel.

This report on the extent of the pollution in Lake Erie and the Niagara River is a comprehensive, scientific and technical base for the actions needed to reverse the accelerating putrefecation of Lake Erie.

An added merit of this report is that it is coupled with this conference which marks the initiation of legal proceedings to require compliance with our anti-pollution laws in accordance with Section 466 of Title 33 of our U. S. Code.

Lake Erie is in dire need of immediate relief from pollution. The longer we wait, the greater the economic damage becomes and the greater the cost of the restoration of high quality water in Lake Erie becomes.

Mr. Chairman, there appears to be some divergence of opinion as to the rights and responsibilities that relate to the problem of pollution control on Lake Erie and the Niagara River.

It might clarify the issues to summarize and delineate these rights and responsibilities.

Legal title and ownership of the underwater lands, the fish life in Lake Erie, and the waters of Lake Erie and the Niagara River, adjacent to the New York State land boundary are vested in the people of the State of New York.

The United States Congress has repeatedly affirmed its policy of recognizing the primary rights and responsibilities of the States over its adjacent waters including that of Lake Erie and the Niagara River.

However, the State of New York does not possess exclusive jurisdiction over the waters of Lake Erie and the Niagara River. These waters are both interstate waters and international boundary waters. Under the treaty of 1909, entered into by the United States and Great Britain, it was stipulated that neither the United States nor Canada shall pollute these waters to the damage of the other nation.

The exercise of a dual pollution regulation by the Federal Government does not displace, but supplements New York State's primary power and responsibility in this field, and this conference is a proper and legitimate exercise of Federal power and responsibility.

The current report of the Public Health Service indicates that more than 75 percent of the pollutants in Lake Erie come from sewage discharges. The report also indicates that the

States of Michigan and Ohio are the major contributors to the excessive pollution of Lake Erie.

The following figures indicate the ratio of pollution contributions of Michigan, Ohio and New York to Lake Erie, not Niagara River: Michigan, for example, puts in solids of 9,658,000 pounds, Ohio 2,952,000, New York only 100,000; in the case of phosphates, the inputs are Michigan 94,000 pounds, Ohio 64,000 pounds, New York 4800 pounds.

New York State thus contributes less than one percent of the suspended solids pollutants and less than three percent of the phosphate pollutants to Lake Erie. This record refutes the charges that New York State has been grossly lax in the control of pollution. However, New York State should, and I am sure it will, fully cooperate toward a comprehensive program to attain a high quality water content for Lake Erie.

This report gives the following reduction of Bio-chemical Oxygen Demand (BOD) pollutants in the Erie-Niagara Basin, which is what we are concerned with primarily here today.

Attica reduces BOD of its sewage by 90 percent, Arcade by 90 percent, Orchard Park by 87 percent, Tonawanda by 12 percent and Buffalo, according to this report, by 22 percent.

The report appears to be in error concerning the effectiveness of operation of the Buffalo Sewer Authorities Plant. Its 1963-1964 report indicates a 32 percent removal of BOD polluting solids instead of the reported 22 percent.

The Chairman, Honorable Anthony J. Naples and the Sewer Authority members have expressed their intent to re-survey their operations to determine the fiscal feasibility of a secondary treatment plant to increase the effectiveness of its operations.

Niagara Falls has an effective rate of less than 10 percent removal of BOD, for it is plagued by a very complex problem of excessive chemical loads, and Niagara Falls is in the process of completing plans for a new treatment plant and is awaiting moneys from either the State or Federal Government.

The City of Lackawanna is removing approximately 60 percent of its BOD with a primary treatment plant. Mayor Orzech and the Common Council are making a preliminary survey to upgrade this plant to a removal capacity of about 90 percent of BOD at a cost of approximately $900,000.

It is manifestly just and proper that all communities be required to make an equal contribution in the removal of sewage pollutants as expressed by BOD solids removals.

The Public Health Service has correctly analyzed the most effective, economic and immediate relief from excessive pollution in its first all-important recommendation--that all communities be required to upgrade sewage treatment from primary to a secondary biological treatment, just as the distinguished ladies here, representing the League of Women Voters, advocate.

Primary treatment gives an average BOD removal of about 33 percent. A good secondary treatment plant will remove

about 90 percent of BOD pollutants. In fact, it is an economic waste not to upgrade sewer systems from primary treatment with a pollutant removal of 32 percent to a secondary treatment with a pollutant removal of 90 percent.

Just let me give you an example. The replacement cost of the sewage disposal plant and the interceptor sewers and pumping stations of the City of Buffalo is about $35,000,000. The replacement cost of the collection sewer lines is about $75,000,000 in Buffalo. This total investment of $110,000,000 produces a BOD pollutant removal of only 32 percent. A secondary treatment plant for Buffalo would cost a maximum of $20,000,000, probably in the neighborhood of $15,000,000, and produce a 90 percent BOD removal or an additional 58 percent removal over the 32 percent and in addition to the 32 percent now being removed in the primary treatment.

The pollutant removal of a secondary treatment plant at Buffalo would, thus, be ten times as productive per dollar investment as the present primary sewage treatment plant, otherwise you would be getting a benefit cost ratio of more than ten to one over the present investment in your primary sewage plant.

Now, Mr. Chairman, no amount of research, recommendation, conferences, engineering plans or designs will construct the needed pollution control and remedial structures. Only money, raised by taxes, will build the necessary sewers and treatment plants.

Under present law, New York State contributes nothing to sewage construction. The Federal Government's contribution is so small that it amounts to next to nothing. As a consequence, the overburdened and overtaxed homeowner is required to carry the full burden of sewage construction costs.

Recognizing the inability of the taxpayer to assume the additional burden of these costs and the injustice of this local and excessive burden upon the homeowner, Governor Rockefeller prepared and initiated a most farsighted, constructive and practical program to solve the critical problem of sewage and pollution treatment.

Under the plan, New York State would bond itself to the extent of $1 billion to finance a 30 percent outright contribution of $500,000,000 by New York State to the local governments and another $500,000,000 contribution to pre-finance anticipated Federal contributions over the next five years.

The balance of $700,000,000 or 40 percent of the total cost of $1.7 billion for sewage construction up to the year 1970 would be met by the local governmental units, but this only applies to sewage plants, outflow sewage and intercepting sewers. We must remember the local homeowner still must pay for the plumbing and the lines to the street and the other connecting sewers, so the homeowner is still paying a large, large share of any needed sewage and pollution control measures.

Now, the Governor's plan was approved and enacted by

the Democratic controlled legislature, and I trust that it will be approved by the electors of this State in this fall's election.

Mayor Locher of Cleveland, in the hearings held in Ohio, recently approved Governor Rockefeller's program and recommended that the State of Ohio enact the same type of legislation.

Recently there have been certain public officials who have deliberately fostered the false public impression that the Federal Government has enacted legislation committing the Federal Government to a program of substantial Federal aid to the New York State citizens for sewage treatment and pollution prevention. Nothing could be farther from the truth.

Existing Federal law enacted in 1961 authorizes Federal aid of $100,000,000 for the present fiscal year 1966 and the same amount for the next fiscal year of 1967. That is the law. Under this law, New York's share is 5.4 percent or $5,400,000 per year, and New York pays 13.9 percent of all Federal taxes.

New York has 10 percent of the Nation's population. It receives back under this program and most Federal programs, in fact, on the average, it receives back under Federal aid programs $1 for every $2.50 it pays into the Federal Treasury.

I voted against this bill in 1961 because it is fundamentally unjust and it constitutes a political raid on the New York State taxpayers, produced by the power politics of our United States Congress.

Federal aid at 30 percent of the cost to meet New

York's pollution abatement needs amounts to $500,000,000 over the next five years. At the present rate of $5,400,000 of Federal aid per year, it would be about 100 years before the Federal Government would contribute its share of funds needed by New York communities on the basis of 30 percent that it would need between now and the year of 1970, five years from now.

This year, the House and Senate passed different versions of a bill to amend the Federal pollution aid program for fiscal years 1966 and 1967. Under the House bill, another $50,000,000 was authorized for 1966 and 1967 to be distributed on a population basis. But this additional authorization has been stuck in the conference between the House and the Senate, they being unable to agree upon this. And even if it were passed, it is too late for an appropriation to be placed in the 1966 budget, so that the probability is that there will be no money even if the bill is passed for 1966. And since it only applied for one more year, 1967, the additional $50 million will only cover 1967. It's only a one-year commitment for one year authorization.

In fact, the basic $100,000,000 per year anti-pollution authorization has been reduced to $91,000,000 by the Senate and that is stuck also in conference between the House and the Senate Appropriation Committees.

The best New York can hope for, if all the factors that are helpful would come through, the best that New York State

can hope for is $10,000,000 of Federal aid in the one year of 1967 under present legislation. Even with this increase, it would take 50 years to meet the 30 percent Federal share of New York State's fiscal pollution prevention requirements.

There is a joker in the present law limiting Federal aid to $600,000 for a single project. The pending bill, if it passes, would increase that limitation to $1,200,000 for a single project.

Thus, if Buffalo were to decide to build a secondary sewage plant to cost $20,000,000 or Niagara Falls decided to build a combined primary and secondary plant to cost $20,000,000, each of these cities would be limited to a mere $600,000 under Federal law and only $1,200,000 if the pending bill is passed.

This Federal policy discriminates cruelly against larger cities where the pollution is most prevalent and most critical.

The United States Public Health Service research has proven that pollution prevention can be controlled in large cities at a cost of one-half or one-third or one-fourth of that in smaller cities. The bottleneck in pollution control lies in the vacillations and power-politics that exists in the United States Congress. It has failed to realistically face up to and solve the financial and health problems inherent in pollution control.

Now, it takes anywhere from four to seven years to make economic feasibility studies, preliminary plans, surveys and

final construction plans for sewage projects. Local communities and the local office holders need long term definite financial aid commitments before they can commit the taxpayers of their towns, their villages to substantial preliminary expenses attendant in going into a large sewage treatment project and the United States Congress has failed to give these necessary long-term fiscal assurances and fiscal commitments.

The policies of Congress have been a deterrent to pollution abatement instead of a help.

Now, Mr. Chairman and distinguished members of this conference board, I would like to submit for the consideration of this conference the following facts, opinions, conclusions and recommendations:

1. That New York State fully cooperate with the U.S. Public Health Service and all other interested States in the abatement of pollution in Lake Erie, the Niagara River and all of the Great Lakes.

2. That the U.S. Public Health Service give effective assurances to New York and all other interested States that it will monitor and equally apply and equally enforce Federal laws applicable to pollution abatement.

3. That the U.S. Public Health Service give assurances of an equality of law enforcement against industrial waste pollution so that industry will not be tempted to move its operations from one State to another on that basis.

4. That New York State and the Federal Government give consideration to establishing priorities for requiring the construction of treatment plants to large cities and to those communities that build secondary treatment plants. This policy will give maximum pollution abatement with minimum costs to the taxpayers.

5. That the rights and the welfare of over 100,000 fishermen and conservationists in Erie County be taken into full account and all of New York waters be substantially upgraded so that fish life be restored in all possible waters.

6. That New York's pollution abatement program is based not upon a Congressional commitment, but merely upon an assumption that the Federal Government will contribute 30 percent of this State's sewage treatment costs. That New York State obtain long-range Federal commitments before it fully commits itself to the $1.7 billion anti-pollution program, and I think the Chairman here, Mr. Murray Stein, has in a timely and proper way brought to the attention of this group that there is no 30 percent commitment by the Federal Government for sewage treatment.

I think it's very important that we realize that, that it is only a pious hope, as he put it, and I agree with him. I don't think that there is a chance in hell that we will get that, as I know Congress and as I know its operations down there, and I don't want to have repeated the situation that we have in the interstate highway system where the people of the State of New

York were flim-flammed out of about $500,000,000 on the interstate highway program under assurances similar to the ones that are being given today about what Congress will do in giving financial aid in the large sewage treatment program that the Governor has proposed.

If we go into this, let's go into it with the full realization that the State of New York will probably pay the full 60 percent of this $1.7 billion, but that's all right, because it takes the burden off the homeowner who can't do it, and we don't want the type of Federal aid in which we pay $2.50 and receive back $1 and which, in effect, subsidizes the payment of treatment plants all over the country outside of the State of New York.

7. The next recommendation is that an authorizing bill passed by Congress is not a promise to the public but is only a limitation upon appropriations by Congress itself.

8. That New York State place more reliance and emphasis on the control and limitation of discharges from industrial plants and sewage plants rather than relying upon the classification of waters.

9. That the classification of waters permitting varying degrees of pollution gives a vested interest to polluters and makes it more difficult to equally enforce our laws against pollution.

10. That the management of most industrial plants recognize their social and public obligations in this field.

That treatment of many industrial wastes are extremely complicated and that the Federal, State and local governments give every possible cooperation to industries in developing and constructing waste processes.

I might give you an example of how complicated this situation is. The Bethlehem Steel Company in its plant in Indiana is separating its wastes, liquids, into four different treatment plants, sanitation, cooling systems, cyanides and phenols into another system, oils and pickling materials used in another system. It's a highly complicated matter and can't be done over night, and they require some help, they require some push also and I am glad to see and know that this group here will give them a little push as well as a little help and a little encouragement.

11. I also recommend that the construction of industrial waste treatment plants approved by the appropriate Federal, local and State health agencies be permitted to charge off their waste treatment costs as an operating expense instead of a depreciation as a capital investment, charged off whenever they billed it and thus relieve themselves totally from State and Federal taxes, allowing full deduction for them.

12. That the U.S. Engineers be required to discontinue its dumping the sludge, slime and sediment from the Buffalo River into Lake Erie.

13. That the U.S. Engineers expedite their report of

flood control of the Buffalo River, Cazenovia Creek and Cayuga Creek with emphasis on the construction of a multipurpose dam for the purpose of minimizing and catching the flow of silt that is coming into the Buffalo River and Lake Erie.

14. I recommend the United States Engineers initiate studies to determine the feasibility of the construction of dams on all the tributaries of Lake Erie to prevent the flow of sewage and silt and other discharges from uplands into Lake Erie.

That concludes my statement, Mr. Chairman, and I thank you for the opportunity to be here.

CHAIRMAN STEIN: Thank you, Congressman. Are there any comments or questions?

When Congressman Pillion was in Washington, as you probably can judge, he was really looking after your projects up here and you can see the detail with which he prepares his case and material that when a bureaucrat like myself is summoned up before him, I have to be pretty sure of my facts, too.

He was one of those who has kept us on the line and I can assure you he just didn't stop with the bureaucrats. He used to be after the Chairman of the Committee, too, because I have often had a call from Congressman Blatnik, who indicated to me if you're interested in a project and suggested that I get up and do something in a big hurry.

I see you're still maintaining your interest, Congressman, and I guess this is what keeps us honest.

MR. PILLION: We are all most grateful for everything you gentlemen are doing. Thank you. (APPLAUSE)

MR. HENNIGAN: The next speaker is Mr. Lee Adams.

MR. ADAMS: My name is Lee Adams and I represent a group of citizens who are trying to abate pollution existing in Silver and Walnut Creeks and in Lake Erie at the mouth of Silver and Walnut Creeks.

The pollution at Silver Creek, in the Silver Creek area is a microcosm of the whole of Lake Erie and if it were possible to use such a word to describe a nadir, you would describe the village of Silver Creek as the epitome of pollution.

It's a village of about 3300 people on Lake Erie about three miles west of Cattaraugus Creek, which I see by the map here has been upgraded into a river. Two small creeks, Silver and Walnut Creeks, flow through the village into Lake Erie.

For over 55 years, the village has collected in its sewers, the raw, untreated sewage from houses, businesses, schools, industries, garages and barns and has dumped this sewage through multiple outlets into the creeks which flow through the village into the Lake, or directly into the Lake.

In 1908, the State of New York granted permission to the village to discharge its sewage into these creeks, but it required that first of all the village screen the sewage.

That 1908 permission to dump screened sewage was granted but the village has never yet built a screening plant, and even

though a little bit of time has gone by, never has the village been punished by the State for violating its permit.

In 1953, the waters of Silver Creek and Walnut Creek in the Village of Silver Creek were classified by the State Water Resources Commission as Class C, in accordance with the classification procedure heretofore described by Mr. Hennigan. In the 12 years that followed, the village continued and still continues to dump raw, untreated sewage, filth and solids that are floatable, toilet paper that's visible, you can see it floating down the creeks, you can see it on the Lake, you can see it along the waterfront. If you stick your feet into it, your feet come out black. Now that's the part of your feet that is not covered with toilet paper.

This Citizen's Committee which I represent was formed in 1962. The members, all private citizens, desired to help the local officials abate the pollution by mobilizing public opinion for pollution control. The proferred assistance was spurned by the village. The Citizen's Committee, however, has continued and still does continue to campaign for a sewage treatment plant.

In January of 1963, the State of New York, through its Public Health Department, caused a hearing to be held on the Silver Creek situation. In the hearing, many things were determined and found, for instance, I have here the hearing examiner's report, "Discharges of sanitary sewage aforesaid deposited in floating sludge and noticeable amounts of suspended solids in

Silver Creek and a similar condition to a slightly less degree in Walnut Creek."

Four months after these findings, the Commissioner of Health issued an order directing the Village of Silver Creek within thirty days to retain an engineering firm. Within six months of the date of this order to the New York State Department of Health, the final plans for interceptor sewers will cause construction of such interceptor sewers and sewage treatment works to be commenced not later than one year after approval by the New York State Department of Public Health of the final plans.

The Village of Silver Creek has not met one single deadline set forth in this order nor has the Village of Silver Creek evidenced any desire to meet the deadline and that's the way the case sits now.

CHAIRMAN STEIN: Thank you, Mr. Adams. Are there any questions or comments? Do I understand you to say that many of the flush toilets in Silver Creek, and I assume they are flush toilets, when you flush the toilets, the waste goes right into the Creek through a pipe without any screening device, any septic tank, any treatment whatsoever?

MR. ADAMS: That is correct. Less than 10 percent of the houses in the Village of Silver Creek have septic tanks.

CHAIRMAN STEIN: How about new houses?

MR. ADAMS: Most of the new houses, I believe, have septic tanks but not all.

CHAIRMAN STEIN: You mean new houses are built this way?

MR. ADAMS: Well sir, I'm afraid that in some respects, it might be considered somewhat backward as a community.

CHAIRMAN STEIN: I thought we had some severe problems in Alaska, where these fellows were way out in the bush. Mr. Poole has been there with me, with their clogged septic tanks, but even there they don't let it go in raw, I don't think.

MR. ADAMS: You ought to go down sometime when the winds are blowing right and take a look at the Creek, especially in the summer months during drought when the majority of the water flowing down the creek beds is the sewage from these toilets, etc.

CHAIRMAN STEIN: Well, you know, there might be an explanation for it and possibly there is. If this were private law, they probably would have the prescription by now, since they were doing it uninterrupted since at least 1908, but this doesn't apply in public law, so I guess you can't do it.

MR. ADAMS: You should never require prescription to do something illegal, sir, and I'm positive that Mr. Hennigan's department immediately will be doing something about this, or at least I hope so. Thank you. (APPLAUSE)

CHAIRMAN STEIN: Thank you.

MR. HENNIGAN: Mr. Chairman, I have a statement here from the Buffalo area Chamber of Commerce which I would like to be put into the record.

CHAIRMAN STEIN: Without objection, this will be done.

MR. HENNIGAN: And a statement from Mr. William K. Sanford, representing the Association of Towns. I would like to have that put into the record.

CHAIRMAN STEIN: This will be done without objection.

MR. HENNIGAN: The following people were originally scheduled to appear. They have since left and I just want to make sure we don't overlook anybody: Mr. Sanford, as I have mentioned, the Mayor of Silver Creek, James J. De John, County Officers Association, Niagara Frontier Port Authority, Supervisor of the Town of Hamburg and the Councilman from the City of Buffalo. Mr. Chairman, that completes the New York presentation.

CHAIRMAN STEIN: Thank you. I think at this point, while we have a few minutes, I will entertain comments and suggestions, but I think it is the general consensus of the conferees that the conferees will meet in executive session.

This session will take place tomorrow morning and just so you know where we are and not in any beer garden somewhere, we probably will be upstairs in Room 1160, 1159 or 1160.

We will hope to have an announcement about 12 or 1 o'clock in this room. At least 12 o'clock. If we're not ready, we will send down word when we will have the announcement, but I suspect it will be somewhere around 12 or 1 o'clock when the conferees will come out and we will see what announcement we will be able to make.

A VOICE: Not before 12?

CHAIRMAN STEIN: No, not before 12:00. We will not come down before 12:00. We have had a considerable amount of experience with this. The worst thing we can do on something like this is rush, and we would rather be a few minutes longer. If we are going to have an announcement, we also try to have it typed and duplicated so we can distribute it at least to the key people who have stayed with us all the way through.

As you know, we have to use these fine, new duplicating devices. We couldn't do without them. But if you use one of those, you reproduce one page at a time and for a rush job it's relatively primitive.

But we do need the time and I think in the long run, this makes for a more expeditious and a more rapid determination of the problem, giving this enough time.

The Executive Committee will probably convene about 9:00 o'clock and between 9:00 and 12:00 may be a little short. I expect, though, that at the conclusion of this meeting, the conferees will begin having informal discussions through the evening and night, so that by the time we are ready to convene at the formal executive session tomorrow morning, we will hopefully be ready to go.

Are there any other comments? If not, we will stand recessed until about 12:00 o'clock or thereabouts tomorrow.

(WHEREUPON THE SESSION WAS ADJOURNED)

CHAIRMAN STEIN: Again, I am most happy to report that the conferees representing Michigan, Indiana, Ohio, New York and Pennsylvania have arrived at unanimous conclusions. These are the recommendations and conclusions of the conferees:

1. The waters of Lake Erie within the United States are interstate waters within the meaning of section 8 of the Federal Water Pollution Control Act. The waters of Lake Erie within the United States and its tributaries covered by sessions of this conference are navigable waters within the meaning of section 8 of the Federal Water Pollution Control Act.

2. Lake Erie and many of its tributaries are polluted. The main body of the Lake has deteriorated in quality at a rate many times greater than its normal aging processes, due to inputs of wastes resulting from the activities of man.

3. Identified pollutants contributing to damages to water uses in Lake Erie are sewage and industrial wastes, oils, silts, sediment, floating solids and nutrients (phosphates and nitrates). Enrichment of Lake Erie, caused by man-made contributions of nutrient materials, is proceeding at an alarming rate. Pollution in Lake Erie and many of its tributaries causes significant damage to recreation, commercial fishing, sport fishing, navigation, water supply, and esthetic values.

4. Eutrophication or over-fertilization of Lake Erie is of major concern. Problems are occurring along the Lake shoreline at some water intakes and throughout the Lake from

algal growths stimulated by nutrients. Reduction of one or more of such nutrients will be beneficial in controlling algal growths and eutrophication.

5. Many sources of waste discharge reaching Lake Erie have inadequate waste treatment facilities. The delays in controlling this pollution are caused by the lack of such adequate facilities and the complex municipal, industrial, financial and biological nature of the problem.

6. Interstate pollution of Lake Erie exists. Discharges into Lake Erie and its tributaries from various sources are endangering the health or welfare of persons in States other than those in which such discharges originate; in large measure this pollution is caused by nutrients which over-fertilize the Lake. This pollution is subject to abatement under the Federal Water Pollution Control Act.

7. Municipal wastes be given secondary treatment or treatment of such nature as to effectuate the maximum reduction of BOD, which is Biochemical Oxygen Demand, and phosphates as well as other deleterious substances.

8. Secondary treatment plants be so designed and operated as to maximize the removal of phosphates.

9. Disinfection of municipal waste effluents be practiced in a manner that will maintain coliform concentrations not to exceed 5,000 organisms per 100 ml at public water supply intakes, and not to exceed 1,000 organisms per 100 ml where and

when the receiving waters in proximity to the discharge point are used for recreational purposes involving bodily contact. It is recognized that bathing water quality standards are established by statute in New York State.

10. All new sewerage facilities be designed to prevent the necessity of bypassing untreated waters.

11. Combined storm and sanitary sewers be prohibited in all newly-developed urban areas, and eliminated in existing areas wherever feasible. Existing combined sewer systems be patrolled and flow-regulating structures adjusted to convey the maximum practicable amount of combined flows to and through sewage treatment plants.

12. Program be developed to prevent accidental spills of waste materials to Lake Erie and its tributaries. In-plant surveys with the purpose of preventing accidents are recommended.

13. Unusual increases in waste output and accidental spills be reported immediately to the appropriate State agency.

14. Disposal of garbage, trash, and other deleterious refuse in Lake Erie or its tributaries be prohibited and existing dumps along river banks and shores of the Lake be removed.

15. The conferees meet with representatives of Federal, State and local officials responsible for agricultural, highway and community development programs for the purpose of supporting satisfactory programs for the control of runoff which deleteriously affects water quality in Lake Erie.

16. Industrial plants improve practices for the segregation and treatment of waste tc effect the maximum reductions of the following:

a. Acids and alkalies

b. Oil and tarry substances

c. Phenolic compounds and organic chemicals that contribute to taste and odor problems

d. Ammonia and other nitrogenous compounds

e. Phosphorus compounds

f. Suspended material

g. Toxic and highly-colored wastes

h. Oxygen-demanding substances

i. Excessive heat

j. Foam-producing discharges

k. Other wastes which detract from recreational uses, esthetic enjoyment, or other beneficial uses of the waters.

17. The Michigan, Indiana, Ohio, Pennsylvania and New York water pollution control agencies undertake action to insure that industrial plants discharging wastes into waters of Lake Erie and its tributaries within their respective jurisdictions institute programs of sampling their effluents to provide necessary information about waste outputs.

Such sampling shall be conducted at such locations and with such frequency as to yield statistically reliable values of

all waste outputs and to show their variations.

Analyses to be so reported are to include where applicable: pH, oil, tarry residues, phenolics, ammonia, total nitrogen, cyanide, toxic materials, total biochemical oxygen demand, and all other substances listed in the preceding paragraph.

18. Waste results be reported in terms of both concentrations and load rates. Such information will be maintained in open files by the State agencies for all those having a legitimate interest in the information.

19. The Department of Health, Education, and Welfare establish water pollution control surveillance stations at appropriate locations on Lake Erie. Surveillance of the tributaries will be the primary responsibility of the States. The Department of Health, Education, and Welfare will assist the States at such times as requested.

20. The Department of Health, Education, and Welfare will be responsible for developing up-to-date information and experience concerning effective phosphate removal and control of combined sewer systems. This information will be reported to the conferees regularly.

21. Regional planning is often the most logical and economical approach toward meeting pollution problems. The water pollution control agencies of Indiana, Michigan, Pennsylvania, New York and Ohio and the Department of Health, Education, and Welfare will encourage such regional planning activities.

22. Within six months after the issuance of this summary, the State water pollution control agencies concerned will present a schedule of remedial action to the conferees for their consideration and evaluation.

23. The Federal conferee recommends the following for the consideration of the State agencies:

a. Recommended municipal treatment - completion of plans and specifications August 1966, completion of financing February 1967, construction started August 1967, construction completed January 1, 1969, chlorination of effluents May 15, 1966, provision of stand-by and emergency equipment to prevent interruptions in operation of municipal treatment plants August 1966, patrolling of combined sewer systems immediately.

b. Discontinuance of garbage and trash dumping into waters immediately.

c. Industrial waste treatment facilities to be completed and in operation by January 1, 1969.

24. Federal installations waste treatment facilities to be completed and in operation by August of 1966.

25. Representatives of the United States Corps of Engineers meet with the conferees, develop and put into action a satisfactory program for disposal of dredged material in Lake Erie and its tributaries which will satisfactorily protect water quality. Such a program is to be developed within six months

after the issuance of this summary and effectuated as soon as possible thereafter.

26. The conferees will establish a technical committee as soon as possible which will evaluate water quality problems in Lake Erie relating to nutrients and make recommendations to the conferees within six months after the issuance of the summary of the conference.

27. The Conference may be reconvened on the call of the Chairman.

At the conclusion of the Cleveland session of the conference, the following was included among the conclusions and recommendations of the conference:

"Pollution of navigable waters subject to abatement under the Federal Water Pollution Control Act is occurring in the Ohio waters of Lake Erie and its tributaries. The discharges causing and contributing to the pollution come from various municipal and industrial sources, from garbage, debris, and land runoff.

"Pollution of the Ohio waters of Lake Erie and its tributaries within the State of Ohio endangers health and welfare."

A question has been raised concerning the jurisdiction of this conference over intrastate Ohio waters. The conferees agreed to present this question to the Secretary of Health, Education, and Welfare and the Governor of Ohio for clarification and resolution.

That concludes the formal statement. Are there any comments or statements from the conferees? If not, I do think that this conference is indeed a milestone in developing a remedial program for the protection of the waters of Lake Erie.

I would like to thank all of the conferees at the table, Mr. Hennigan from New York, Mr. Oeming from Michigan, Mr. Poston for the Federal Government, Mr. Poole for the State of Indiana and Mr. Morr and Mr. Eagle for Ohio for bearing with a very, very delicate program of Federal, State and local relationships.

I believe without the cooperation of the State agencies, we would not have been able to achieve this result.

I also would like to thank those members of the audience who were here at the beginning and particularly those of you who stayed with us to the bitter end, because I do think in pollution control we have to stay to the bitter end. I do think we have a program here which will go a long way toward meeting the problem of pollution control in Lake Erie and alleviating adverse conditions and protecting our water quality.

I ask those in the audience as well as the State people and the Federal people to reckon well what we have said and outlined here today, and I hope you will hold us to the commitments we have made.

I want to thank you all for coming, and I believe if this program is put into effect, we can at last see a ray of hope

for the protection of Lake Erie and the preservation of this vital water resource as a fresh water resource for the entire country and the hemisphere.

Thank you very much for coming and if there is nothing more, we stand adjourned. (APPLAUSE)

(WHEREUPON THE CONFERENCE WAS ADJOURNED)

THE FOLLOWING STATEMENTS ARE MADE A PART OF THE RECORD:

STATEMENT OF COLONEL R. WILSON NEFF, DISTRICT ENGINEER, U.S. ARMY ENGINEER DISTRICT, BUFFALO (Portion which was not read at the conference)

Mr. Chairman and members of the conference, I welcome the opportunity to outline for you the responsibilities of the Corps of Engineers and the interest of the U.S. Army Engineer District, Buffalo, New York, in the very challenging problem of preventing pollution of Lake Erie and its tributaries.

The Great Lakes drainage basin is under the jurisdiction of the U.S. Army Engineer Division, North Central, with headquarters in Chicago. Within this area, the Buffalo District is responsible for the construction, maintenance, and operation of improvements authorized by Congress for navigation and flood control for the watershed area from Sandusky Harbor, Ohio, to the east.

The U.S. Army Engineer District, Detroit, is responsible for the area north and west of the Port Clinton-Marblehead Peninsula. It is important to note that the Corps of Engineers is involved in both regulatory and operational activities.

The laws administered by the Corps of Engineers provide for the protection of the navigable capacity of the waters of the United States and the prevention of pollution of such waters as may be necessary to protect the public rights of navigation.

The principal laws having a relationship to water

pollution are the River and Harbor Act of 3 March 1899 and to a lesser extent, the River and Harbor Act approved 3 March 1905. Section 10 of the 1899 Act provides for the regulation of construction, excavation and filling in navigable waters. Section 13 of this Act makes it unlawful to deposit "refuse matter of any kind or description..." into any navigable water. Section 4 of the 1905 Act authorizes and empowers the Secretary of the Army to prescribe regulations to govern the transportation and dumping into any navigable water, or waters adjacent thereto, of dredging, earth, garbage, and other refuse materials of every kind or description, whenever in his judgment such regulations are required in the interests of navigation.

Though the Oil Pollution Act of 1924 is not applicable to the waters of the Great Lakes, it has been held that oil discharged into navigable waters per se is a violation of Section 13 of the Act of 1899. (LaMerced, Circuit Court of Appeals, Washington, 84 Fed. 2nd 444). Specifically exempted from regulation under Section 13 of the 1899 Act are liquid wastes, other than oil as held above, passing into navigable waters from streets and sewers.

Liquid industrial wastes, although they may be pollutants, are not violations of the River and Harbor Act of 1899 if they reach the water through sewers. In addition, the complexity of many sewer systems renders the securing of necessary evidence to enforce existing regulations a most difficult task.

The Corps of Engineers, in the administration of the laws, attempts first of all to eliminate illegal deposits by encouraging industries to improve their treatment of wastes or use confined shore disposal. If this is unsuccessful or technologically infeasible, the industry is requested to remove, or pay for removal of its illegal deposit.

In the event of refusal to remove the deposits, prosecution is recommended when supporting evidence is obtainable. Since the primary purpose of these statutes is to protect navigation from obstruction and injury, enforcement has been concentrated on the prevention of illegal deposits, including oil, that will impede or injure navigation.

Legal recognition of the responsibility of industry with regard to the deposition of industrial solids by steel companies has been reviewed in other conferences on this subject.

In brief, this involved the successful enforcement of the Act of 1899 regarding the deposition of flue dust in the Calumet River, Illinois, by three major steel companies. Following appellate court decisions granting a new trial in favor of the Government, and after some nine years of litigation, the case was dismissed pursuant to a stipulation with the Government, wherein the steel companies agreed to pay annually for the removal of flue dust deposited in the Calumet River as a result of their operations. Additional investigations are not being undertaken in view of this precedent.

Other efforts toward pollution abatement by the Corps of Engineers are the periodic issuance of the regulations pertaining to pollution in the form of a public notice which also contains a reference to the applicable statutes and an invitation to the public to report all violations and a follow-up on all complaints.

STATEMENT OF GENE O. HEUSER, 6659 E. LAKE ROAD, ERIE, PA.:

Members of the board, since this is an interstate meeting, I feel that it is very urgent that I make this proposal for your recommendations.

For the record, I am a professional diver. I have been interested in the degrading of Lake Erie for fifteen years, at which time I started to notice the rapid changes in the Lake. I have studied the land runoff, the causes of runoff, the effect it was having in the Lake. I have studied the behavior of fish in bad water, I have watched them die in several massive fish kills in recent years. I've studied the pollution problem at every angle, so that I feel I have a complete understanding of this serious problem. Through these studies, I have developed a plan for the permanent future of Lake Erie and its water basin.

I feel that if we would have put this plan into effect ten years ago, we would by this time have started to slow down the aging of the Lake. This plan could be put to use in all of our major water basins, such as the Ohio River Valley or the Delaware River Basin.

Gentlemen, since all water does not stay within the boundaries of the individual States, I feel that it is no longer feasible for a State to try to solve its own problems alone. For everything that we do in one State affects in one way or another its adjoining States in the confines of that said water basin.

Because of our geographic location, Pennsylvania is involved in several water basins. In the interest of the U.S. Public Health surveys, I believe it is not necessary to give any facts or figures at this time. They are available in the reports given. My main interest at this time is to show the reasons why my proposals have such needed answers.

I believe that in the light of the facts, we, as individual States, can no longer live as neighbors but must work together as partners. There are several reasons for this:

1. By working together, we can solve the problems at hand sooner.

2. We can economically do it better.

3. We can stop the overlapping of the technical problems that we are not doing.

4. We can keep our surveillance on problem areas better.

5. We can eliminate the various State laws which I believe work hardships on communities and people of the area. As an example, each State has a set limit or size of fish that can be caught. Yet they all fish in the same body of water. I might

add that the fish do not know where the State lines are in the Lake. Because we are concerned with Lake Erie at this time, my remarks will be directed at this body of water. I believe my plan will be a useful one, which can be used in other water basins of the United States.

Financially, no State will be able to come up with the large sums of money that are needed in a crash program of our magnitude. It will not take just a few million dollars to solve our problem. It will take time and a continuous outlay of human effort and money to lick this problem. Also, our problem will continue to escalate every year as industry and population continue to grow.

I believe that the outlook at the turn of the century is that from Buffalo, New York to Chicago, Illinois, there will be a solid industrial belt. The tremendous amount of water required for this area will be so vast that Lake Erie could virtually be pumped dry or made so unusable that it would be completely useless for shipping or fresh water needs. In light of these future prospects, we must immediately begin to build up new water reservoirs in anticipation of future needs.

We need only to look as far as New York City and its water problems to see the dangerous effects of lack of proper planning for our future needs. With New York City, it is possible to solve its future needs from the ocean. But what of us in the inland? Where there is a limit to how much water we can have.

It is true that water is never used up. But it is also true that we cannot use water if it is not where we need it at the time it is needed. It is also true that if water is not kept in good condition, we can have all we need and not be able to use it, so this is where I feel that our problem can only be solved by the proposal that I have before you today.

I realize the States do not want the Federal Government to take control of our problems, but unless we can work out a practical and workable system of cooperation and useful planning immediately, there will be no other choice but to have the Federal Government run the fresh water system.

We cannot undertake this massive job without some financial help from the Federal Government. It will also take large financial outlays from the States involved and the industries and local communities.

We could have and should have had a program in effect twenty years ago, but through lack of experience in future problems and I believe the unwillingness of all concerned to see ahead, we have virtually backed ourselves up against a wall.

We cannot look back, but must start where we are now, to plan our way out of this very serious problem. It is with these known facts that I present at this time my plan for the future of Lake Erie and the Lake Erie Water Basin.

This is a report which will cover the causes and the solutions of our water pollution problems. It is a report of an

unending study of the Lake and its creeks and rivers over the last fifteen years. It is a report of facts and knowledge which were seen and reported as I, Gene A. Heuser, saw the facts as they are:

Pollution is an accumulative thing. It does not start in a day or a year. Our pollution in Lake Erie started when the first white man came into the area and took over the area around the Lake. The first pollution we know of was caused by erosion and in fact, is our biggest problem today.

When we cut down trees, plow up soil, start construction or open up land to the elements for any reason, we have erosion. This erosion is caused by wind, rain, or anything which would have a tendency to loosen soil and let it be moved. This movement of soil always tends to move toward a lower point and water. Once it gets into the streams, and rivers, it is carried very fast until it hits a large body of water.

In our case, Lake Erie is the large body of water. Once this movement of soil is slowed down in our Lake, it moves by wave action along the shores until the wave action slows down. It then settles to the bottom of the Lake. We have sediment on the bottom of our Lake from a thin film in some areas to many feet in other areas.

What effect does this sediment have on the Lake? First, it has the effect of lowering the water level and filling in the channels.

Second, this sediment has already covered just about all the feeding areas in the Lake. This will have the effect of completely destroying all the known species of fish left in the Lake. In ten years time, I have seen schools of fish dwindle to the point where I would see fewer than four or five fish in a two-hour dive in a known feeding area.

This sediment has already completed its damage, and anything man can do in the future, cannot remove this sediment from the bottom of the Lake.

What then can we do? We must stop more sediment from entering the Lake. There are people who say we cannot stop this soil movement. The only reason we cannot stop it is that these ignorant individuals do not want to stop it. With the knowledge that we have today on soil conservation, there is no excuse for any more contamination of valuable soil from our land going into the Lake as silt. To stop this, we must have a group with power to stand up and put a stop to this waste.

The way to stop this erosion is to:

1. Seed our open land with grass and trees to hold back a sudden rainfall.

2. Require all construction to seed their exposed evacuations. Contractors tend to go away from exposed land and leave it to the elements.

3. City and county governments must modernize their drainage systems so that they can grass all of their ditches and waterways.

4. To cover all other ways and means of runoff, we must, in short, slow down and, in some instances, stop sudden and damaging heavy rains from running directly into the Lake.

This program, in turn, will produce an abundance of fresh water for human and industrial use, which can be used and recleaned and then emptied into the Lake free of debris of any kind.

Now what effect will this have on the future of our economy and welfare of the lake? First, it will supply us with an unending supply of fresh water for our future need. Second, it will dump clean water into our lake basin which, in turn, will help eliminate the terrible damage already done to the Lake by dumping dirt and silt filled water as has been done in the past.

Beaches: We can eliminate the spending of millions of dollars on beach erosion by working with the elements instead of against them.

Lake Erie runs in a direction of southwest to northeast. We have a predominant west wind which means that most of our storms and winds blow against the south side of the Lake, pushing always toward Buffalo, New York. This, in effect, pushes our beaches and pollution down the Lake. This also causes the greatest concentration of pollution close to the shore and runs along our beaches all the way to the lower reaches of the Lake.

Using Lake Erie Peninsula as an example, we continuously spend millions of dollars to keep the beaches from eroding.

Yet, if we would use our knowledge that we already have, we could put a permanent system out in the Lake that would change the current. And, in doing so, we would have the tendency to build up sand on the beaches rather than erode them. This can and must be done soon so that we can save the beaches and money required to continuously repair these beaches.

Dredging: Over the last few years, we have been dredging our harbors and channels in the Erie Harbor area as have our other cities on the Lake Erie Basin.

What effect has this dredging had on the polluting of the Lake? The first effect is that this type of dredging that has been done in the past has helped to escalate the pollution problem tremendously. How? By dredging and stirring up the sediment on the bottom of bays and channels.

After a dredge has picked up a load of sediment, it carries the sludge and debris out into the lake in deep water and dumps it. So what we are doing, in effect, is taking a concentrated area of pollution and spreading it all over the Lake.

As an example, during the spring of 1964, the Army Engineers dredged the channel to twenty-nine feet into the Erie Harbor. I had been diving in the area for about two weeks before the Engineers started dredging. I had spot checked the bottom of the Lake from Shorewood to Erie, out to about three miles from shore which is sixty feet deep that far out. The bottom was quite bare of sediment where I checked. After the Army cleaned

the channel and had dumped the silt out in the grounds, I checked the bottom again and found the debris from the dumping had spread in a ten mile square area. Where there had been no debris at all before, was now covered with a film, of about a two inch layer all over a ten mile area. This was nothing but sludge from years of accumulation in and around the Erie Harbor. It was black in color and had the odor of untreated sewage.

We should never have allowed this debris to be dumped into the Lake. It should have been dumped as a land fill. Another thing this distribution of sewage has done is completely cover up all of the available feeding areas left from previous dredgings. We will see this year and in the next two or three years will just about eliminate all fish in the area that usually feed in these grounds.

Algae: In past years, we have been faced with an algae problem. It grew so fast that it was building up along the shores. With the hot sun and the air hitting it, it began to decay and cause a stink all along the Lake front. It also was a health problem.

I now believe that because the pollution is getting so bad, that it has a tendency to kill off the algae. Last summer I found that the algae was turning black and that several different kinds of fungus have started to grow in and around the algae beds, and in fact, it is growing all over the Lake. This only proves that the fish population is suffering more from contaminated water every year.

Bottom Movement: Lake Erie, unlike the oceans and other bodies of water, does not have a strong current, so that when sediment and debris or whatever there is settles on the bottom, it does not tend to be moved from place to place. The only change that occurs is a sudden change of weather whereby minute organisms or particles, such as we would know it on land, would be termed dust. This dust tends to raise up on a weather change. It completely eliminates visibility.

Out of a clear and calm sunny day, it is possible to tell that a storm or weather change is approaching because of this. These particles go straight up to the surface. This happens at any depth of the Lake.

This fact brings us to the conclusion that the Lake, being dirty, could be termed temporary, should we stop all further contamination and pollution from entering the Lake.

Another form of movement on the bottom of the Lake is the earth itself moving. Over a three year period, I have observed a large rock formation, pushed up out of the earth. The layers of sandstone and shale broke loose from a horizontal position and was forced into an upright or vertical position.

It took two years for this effect to complete. On the third year, the weight of the rock sticking up and the temperature change in the water, with further movement of the earth, broke up this mass of rock into a pile of rubble. I believe in two or three years time this rock will be further pulverized into

sand as we know it on our beaches.

In conclusion to bottom movement, I believe that in water over twenty-five feet deep, we will have very little movement from present sources already in the Lake. We must prevent any further contamination because this contamination, as it builds up, will destroy completely all forms of life as we know it today in the Lake.

Local government: I do not believe that local governments, if given the power to make up their own laws and regulations concerning pollution will work.

I do believe that it is up to the local governments to carry out and administer rulings handed down by a higher source. Providing we have the right type of systematized plan which would cover present and future needs.

I will explain my logic for this. If a local government was able to pass a law whereby they could tell an individual or concern to stop polluting, this in itself would not end a problem. If an individual was told to stop his drainage from going downhill and into a stream, he would in fact have to quit living.

In all probability, the soil is so saturated with sewage or other impurities that it is coming out of the ground. Nature would tend to wash it away.

Now, what would be the answer to this problem? First, on investigation of facts, we would find that to stop this wholesale pollution, we must construct a sewage plant to take care of

all community waste products.

Since a small community couldn't possibly construct such an expensive project, a water commission could then say we will build the required construction on a long-term loan. We will build it big enough for your needs for the next twenty years. This will then enable you to eliminate all pollution without excuses in this area.

After this project is accomplished, it is then up to the local government to take over and see to it that all pollution is eliminated and also to see that one occurs in the future.

A community might require a dam to be built for water conservation or flood control. The same principle could be applied to this problem also, so, I feel that local government on these problems should only carry out the well constructed plans of a much bigger and broader organization.

This organization which I call a water commission should cover a whole water basin in which all the runoff of the locality drains into this area. This area could cover several States, such as the Lake Erie drainage basin. I also do not believe that a water commission should cover more than one drainage area, because of the fact that as you expand to other areas, you run into different problems such as administration, time element to get things done and other problems not related to the use of the commission.

Money Problems: Because of the many problems of our

waters, we have in the past doled out money to individual interests to make studies of their own particular problem.

I believe, through this system, we have wasted countless dollars for the simple reason that these separate interests used the money only to help themselves. A lot of knowledge was by-passed or thrown away because it was not in the interest of the one using the information.

Another point is that one interest cannot under any condition solve their individual problems without the rest of the interests solving their problems.

An example is the commercial fishermen were granted $50,000 for a study to find out why the fish were disappearing and that their catches were down to almost nothing.

Now through knowledge already known, we found that pollution was causing the young fry not to develop, that disease was killing millions of fish and the fact that unethical fishing practices over the years was slowly at first and then suddenly depleting all commercial fishing in the lakes.

Now, why was there $50,000 granted for a study on this problem when the cause was known? This money could have been used to help eliminate the problem.

Now under a water commission, this money and all other appropriations would have gone into a general fund of the water commission, which, in turn, would have taken the problem into consideration with the intent to eliminate the cause of the

problem, which in this case would require the elimination of pollution by:

1. Requiring cities to improve their sewage systems and lending them money when necessary to see that they get the job done immediately, and also, to see that the job is supervised right.

2. As the water condition improves, we would then begin to activate our fish hatcheries, to replenish the Lake of our many species of game fish.

3. Our next step would be to change the fishing laws and make new laws so that the conditions as to size and catch would be universal over the whole basin area. This would eliminate discrepancies between the States and provinces as to how big the catch can be, the size of nets to be used, etc.

This is a typical example of the way the commission would handle the various problems facing the water basin, and I believe the only way that this great problem could be handled.

As stated before, all problems are integrated and cannot be handled as one problem but as a continuing work in phases to one great problem.

I refer to this commission as the Lake Erie Water Commission, but I believe and would like to see these commissions started on the rest of the Great Lakes and in fact, in the general water basins all over the United States such as the Delaware River basin or the Ohio River Valley.

This is the only answer to the complex water and pollution problems all over our great country. With our increasing pollution and water needs as they occur, we must start immediately to develop these commissions.

Shipping: With the advent of the St. Lawrence Seaway on the Great Lakes, we are running into problems of an increasing dimension as we have more ships coming into the Great Lakes every year.

Now, as in the ocean, a ship is allowed to dump waste and etc. overboard when the ship is so far out from shore. In the Great Lakes area and other inland waters there are dumping areas allowed.

To begin with, there should not be or should never have been dumping grounds set up. This does very great damage to keeping our fresh water areas pure. This practice must be stopped.

Now, to just pass a law to stop dumping in our inland waterways will not solve the problem. We must develop dumping stations at all inland ports, possibly connecting to city sewage lines or similar by-products facilities. This problem will increase as trade increases in our inland ports. I don't believe this problem is too hard to solve, but we must solve it soon.

One example of these so-called dumping grounds was in an area where there was known feeding grounds for one of our finest species of fish. This feeding area was completely covered

several years ago, and this once very abundant fish has completely disappeared from the Lake.

This could be used as an example of the fish commission not knowing what the Army Engineers were doing or two different organizations not working together to prevent such a catastrophe.

If all these different departments would have been under one roof, a compatible problem could have been solved by the ruling of what is right, not by who has the most power.

Beaches: Beaches on the south side of Lake Erie have tended to disappear over the years. There are several reasons for this:

1. The Lake bottom near shore is shale and shallow. Over a period of time, the wind and waves working against the shore tended to move what sand there was down the shore line and away from the beaches, the reason being that there was nothing to hold it to the shore.

Through several years of experimenting and observing man made obstacles to this beach erosion, it has been proven that we can hold and improve the beaches we have and in fact, create new ones where there isn't a sign of a beach now. This can and should be done because of the vast recreation facilities needed now and in the future.

2. Dredgers in the past have sucked millions of tons of sand from the beaches for commercial use. We can see the results over the years of this from one end of the Lake to the

other. We can only go from here and have better control over our sand resources.

Safety on the water: Today we have the biggest increase in boating interest ever known in history. This in itself is creating many safety problems.

There are too many people who buy a boat and go out into the Lake with no knowledge whatsoever as to operating a boat, lack of judgment as to safety equipment, gas enough for the cruising they are going to do.

Other things novices have little knowledge of are: weather conditions (being able to forsee a storm approaching), rules of the road, being able to distinguish others in distress and an unwillingness to help people in need. These problems are serious and are increasing as boating enthusiasts increase.

Other problems involved in boating include lack of enough boating facilities for the influx of boaters.

We need to develop a new series of man-made inlets along the Lake so that boaters caught out in a sudden storm, or any other reason, can duck in behind these walls to protect them from the possible dangers that exist where there is no protection. This will save many lives in the future that will be lost if something of this sort is not done in the future.

In the summer of 1964, I helped about fifteen different boats who were in trouble. These people would have been in real danger if there would have been no one around.

This leads me to believe that we need more safety patrol people to help out the undermanned Coast Guard Stations on the inland waters. As our population increases, safety will increase our concern for the problem.

Relation of Water and Sewage to a Community: Every community in the United States is having trouble from expanding use of water and sewage facilities.

As communities and cities grow, industry expands and many other water users demand more and more water. Our fresh water sheds are taxed to the fullest extent. Our fresh water needs will continue to expand for many years to come.

These same water users who are in need of these expanding facilities in the past have not been able to see far enough in the future for their future needs. Consequently, they did not plan for this great coming need. Land that could have been used for these new water sheds have been built up as residential areas, etc.

These people have failed to realize that we do not have an endless supply of water. Some do not realize it yet. Many are unwilling to face the facts that are in front of them. Any way we look at it, we have failed to look after the future generations. The time is late now but not hopeless.

We must start now to conserve water, learn how to reuse water and how to protect our water basins from being further damaged by man's wasteful use of his greatest asset. We have the

knowledge and the resources to do this. We need only the right organization to carry this great needed program out.

We must build larger and better watersheds and with what we already have, we can and must have the greatest fresh water supply ever known to man.

With this great increase in water need, we have failed completely to keep up with our great expanding sewage needs. This has hampered our pollution control problem. Our cities and towns have tended to forget sewage problems, when in reality, I believe sewage should have been first on the line.

We now have fallen so far behind our needs and with the increase in more sewage facilities needed for our expanding economy, it is going to take many years to catch up to our normal needs. Even if we get a crash program started immediately, this is what we must do if we are going to make any attempt to eliminate this great need for our society.

In summary, these are only a few of the many problems and examples of the needed cures that we must face up to. We cannot keep talking about the problem and letting it go on any longer. The time has come for a well co-ordinated plan of action to eliminate the wasteful use of our water, to clean up our pollution and improve our massive sewage problem.

This is a tremendously big job, but we can and must do it now. We have wasted many millions of dollars on our wars and other expenses. Now, we must invest in the future of our country and fellowmen.

STATEMENT OF THE BUFFALO AREA CHAMBER OF COMMERCE:

We recognize that a water pollution problem exists in the Great Lakes basin. We wish to point out for the record, however, that Buffalo area industry has complied with the existing laws of the State of New York under the "best-use" concept.

Users of such waters have been directed by properly constituted State authorities as to the steps to be taken to accomplish and maintain the assigned classification. Business and industrial members of the community have complied with the mandates of the authorities at considerable expenditure of time, effort and capital. The operating costs of abatement facilities are substantial and continuing.

A survey of companies located in the harbor-lake area on the Buffalo River and the Niagara River shows that a minimum of $10 million in capital expenditures have been made by these industries on such installations as settling basins, thickeners, intercepting sumps, skimmers and dephenolizing units.

In addition, incinerators, filter beds, neutralizers, scrubber-extractors and sludge control devices have been maintained as a part of the effort to keep area waters up to the "best-use" classification.

Most of the companies in these three areas maintain effluent control departments which cooperate with local, State and Federal agencies operating in health and pollution control fields.

Also, the $10 million capital expenditure mentioned above does not include the Buffalo River Pollution Abatement-Cooling Water Project which is under construction. Further, it does not include the major annual expenditures of payroll and operating expenses.

The cooperation of business and industry of this community is an established fact, clearly indicating acceptance of pollution abatement responsibility. We assure your committee that such cooperation will continue.

However, because the pollution of Great Lakes waters is not the concern of one State alone but of all States adjacent and of our Canadian neighbors, we recommend that the Federal Government act under the authority of the Federal Water Pollution Control Act to provide necessary in-State, out-of-State and out-of-country water pollution controls.

STATEMENT OF WILLIAM K. SANFORD, REPRESENTING THE ASSOCIATION OF TOWNS:

The task of cleaning up our lakes and waterways is one which must be attacked on a broad front. It must be a total program. It must include each source of pollution in every community To do it on a piecemeal, hit and miss basis will do no good. No municipality or polluter should be exempt or immune from compliance with the general mandate.

Some municipalities are today making a good, honest

effort. Others do nothing, the result being that when their neighbor upstream installs treatment facilities they will take action. Therefore, nothing is done because the neighbor can't afford even to build the collecting lines and trunk mains, let alone contract a plant and operate it.

Much of what is being done by some municipalities is being wasted.

Large sums are spent annually to treat sewage, only to dump the effluent into waterways which in themselves are nothing but open sewers, so great is their pollution caused by upstream municipalities which are doing nothing. My own town, with seven plants, is spending a quarter of a million dollars a year to treat sewage which is fed into the Mohawk and Hudson Rivers.

This must be the same discouraging situation that other fast-growing municipalities face. These are the ones who must provide sewage treatment in order to secure approval of new development. Without such approval development would not be allowed. But develop we must if we are to keep pace with our expanding economy.

Sewer facilities in town districts depend for their basic financing on the ability of the properties within the area of the district to pay bond financing and operating and maintenance costs.

If you don't have assessed value and prosperous, benefited properties in an area to support a sewer system and plant,

you cannot establish the district and construct these facilities. So, in the past, provision of sewer facilities has lagged until an area developed sufficiently to be able to afford them.

Even then, the need for other municipal services--schools, police, water, storm drainage--crowd sewage off the planning board. Years go by and sewer system costs soar to a point almost beyond the realm of feasibility.

I have in mind a relatively small residential development of some 70 homes which was approved for septic tanks and built some ten years ago. The septic tanks became less functional year by year. The point came when the residents demanded sewers "at any cost."

The costs developed to be so high that the engineers sharpened their pencils too sharply and thus their estimated maximum cost proved, after the opening of bids, to be too low.

In the meantime, the assessment roll developed a tax bill of almost $100 per house, per year. Proceedings are under way now to increase the maximum authorized cost. New bids will be sought. But can these people who must have sewers afford them?

The cost of this system is high because the receiving stream is so classified as to require a very high degree of treatment. This stream is a tributary of the Mohawk River. Therefore, this little development becomes part of the State Pure Waters Program and should be entitled to aid thereunder, as well as to

normal Federal sewer plant aid.

If we are to solve these problems and at the same time solve the lakes and waterways pollution problem, as we must, substantial aid absolutely must be supplied by the State and Federal Governments. The local governments can't do the whole job alone and it is wise that they are not being asked to do so.

Many areas would not have sewer plants today were it not for their construction during the depression of the early thirties with WPA funds. Others, too, would be without their facilities were it not for Federal sewer aids received and grants paid under the Federal Accelerated Public Works Program.

I am persuaded that even lacking the "Pure Waters" program presently sought by the State, it would be necessary to expand Federal sewer aid and put some real teeth into a State sewer aid program. This would be necessary merely to provide our people the sewer facilities they need just to live decently and safely. I stress this because it must not be assumed that the "Pure Waters" bond issue will be the answer to and provide the solution for all our sewer difficulties.

In connection with the cost of construction of sewer facilities, I am sure nothing is to be gained by postponing construction. Labor and material costs increase from year to year along with your grocery bill.

I have compared bid sheets on two sewer jobs, both opened by a town in the Albany area, one in October 1961, and the

other in April 1965. The low bid for 8-inch sewer pipe furnished and installed at 6-foot to 8-foot cuts in 1961 was $4.00 per foot. The 1965 low bid for the same item was $5.00--a 20 percent increase.

Towns in New York State today are in better shape to plan for and construct and finance sewers than they were a decade ago.

For instance, a town sewer district up to 1959 could only be established by a clumsy, cumbersome method which required the circulation of a petition in the area of the proposed district. It had to be executed in the manner of a deed of real property to be recorded. The execution of these petitions takes a very long time. Often by the time they are executed, construction costs have gone up to a point where the project cannot be built for the amount of money set forth in the petition, resulting in the long, painful recirculation of a revised, up-dated petition.

However, since 1959, a town board may establish a district on its own motion, without a petition, by a resolution which is subject to a permissive referendum.

This is a speedier and more convenient procedure, especially in large proposed districts. Without this change of procedure, I do not know how an area could be forced to comply with a pollution abatement State mandate. One certainly could not mandate property owners to sign a petition.

Even now, compliance with such a mandate could be difficult if a referendum is petitioned for on the question of the

town board's resolution to establish a sewer district and the proposal is voted down by the people. Fortunately, the situation is so bad that our people, as I have said before, generally want sewers at any price.

In 1962, an amendment to the Town Law authorized a town board to purchase lands for a future sewer district plant site by the use of general town funds. Such action, again, is subject to a permissive referendum. This amendment would permit a town to set aside a logical site for a sewer plant before it got built upon privately.

Only this year, the law was further amended to authorize the use of general town funds to pay for the construction of larger treatment facilities than a new district or extension presently needs. Such excess facilities would be held and conveyed subsequently for the use of a future district or extension.

Also, the Constitution of the State was amended, effective January 1, 1956, to provide broad latitude to towns, along with other units of government, to provide for the construction of common sewer facilities and to contract joint indebtedness therefore.

This amendment also provided that indebtedness incurred for certain revenue-producing improvements could be excluded from the municipality's debt limitation.

Effective in 1964, the Constitution was further amended to provide that indebtedness contracted between January 1, 1962

and January 1, 1973 for sewer facilities could be excluded from the debt limitation of counties, cities, towns and villages by legislative action. This the legislature has implemented.

I have every reason to believe that the several town boards of the State will be found responsive to programs to eliminate pollution so long as financial aid is made available.

Towns have good, legal tools to put these programs into action. But the full burden should not fall on the real property taxpayer. He alone will not enjoy the benefit. The benefit will be shared by all the residents of the State in the many obvious ways you all here know about so well.

Our lakes and waterways can become not only fine recreation facilities, but what is even more important, sources of municipal water supply.

I have heard municipal officials say that if the Pure Waters Bond Issue is defeated, they would by-pass their sewer plants and stop treating sewage and stop spending the high sums they are spending today for sewer treatment until another solution is found. As I said before, it is patently unfair to require costly treated sewage effluent to be dumped into rivers which are themselves nothing but open sewers.

But I am confident that this will not happen. These plants will continue to function. New ones will be built. All the municipalities of our great State will comply with mandated standards. The people will support the "Pure Waters" bond issue in November.

STATEMENT OF MAYOR DE JOHN, MAYOR OF SILVER CREEK, NEW YORK:

Mr. Chairman, conferees and participating citizens to this parley, as a past President and representative of the New York State Conference of Mayors and member of the National League of Cities Water Resources Committee, I thank you for the invitation and opportunity to be here today to join with forces aimed toward substantial inroads in solving this lake pollution problem.

And, as Mayor of a small municipality, upon which in 1963 an administrative order was served by the State Health Department to immediately cease discharging wastes into Lake Erie, and which village is financially unable to build and maintain a proper sewer system, I assure you I am very close to this problem....in fact....you could say I'm in the very middle of it. Silver Creek is only one of many communities and even large cities in this State who are faced with similar waste problems. Our property owners, who, as we all know, form the basis of our tax structure, cannot be burdened further to assume the additional financial responsibility of sewer costs.

You and I and every other wide-awake, alert citizen are aware of the need of protection to health and property from the evils of pollution. Now we must work collectively for ways and means to a solution. The ways, I believe, have already been established through the united efforts of the Public Health Service and in cooperation with representatives of government, industry, scientists and many public-minded citizens like yourselves.

By "means" of course, I refer to our favorite subject "money." To obtain "means" for the installation and maintenance of waste treatment facilities engineered to eliminate water pollution is another problem bigger than you and I, but which we will solve.

Governor Rockefeller's "Pure Water Program" is an important inroad to the solution. When his $1.7 billion anti-pollution bond issue comes before the New York State voters in November, I strongly urge and ask that you vote favorably for this allocation. It is a firm beginning.

Now, friends, we know that New York State is not the only guilty party to this nuisance of inter-state effect in Lake Erie. So it becomes also a Federal, and in fact, an international problem. The Federal Government recognizes this - and through the tireless efforts of you conferees and similar groups, this major cleanup project must be continually pushed before the Department of Health, Education, and Welfare and given top priority. We must not for a moment (now that the ball is rolling) cease our efforts till a combined local-State-Federal program is worked out to end this international problem which commands Federal assistance. I shall continue to push the issue at every opportunity, and feel sure each and every one of you will, too.

Thank you again for the opportunity of taking part in this conference, and, full speed ahead until all systems are "go."

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