

ML - Chester Twp

Caputo v. Chester Twp

~~10/18~~

12/6/17

Witnesses:

Transcript of Trial - Lloyd, Kasler

~~10/18~~ + Exhibits

Vol IV

p 132

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A-813-A 50 SEP 1979

no by

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - MORRIS COUNTY
DOCKET NO. L-42857-74 P.W.

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JOSEPH CAPUTO and
ALDO CAPUTO,

FILED
JAN 14 1980

STENOGRAPHIC TRANSCRIPT
OF
TRIAL

vs.

Stephen W. Townsend VOLUME IV
CLERK

TOWNSHIP OF CHESTER
and PLANNING BOARD
of TOWNSHIP OF CHESTER,

PLACE: MORRIS COUNTY COURTHOUSE,
MORRISTOWN, NEW JERSEY

Defendants.

DATE: December 6, 1977

BEFORE: HON. ROBERT MUIR, JR., AJSC

TRANSCRIPT ORDERED BY: PHILIP LINDEMAN, II, ESQ.

A P P E A R A N C E S:

MESSRS. AMBROSE & MONICA
BY: PHILIP LINDEMAN, II, ESQ.,
COUNSEL FOR PLAINTIFFS

MESSRS. McCARTER & ENGLISH
BY: ALFRED FERGUSON, ESQ., &
NICHOLAS C. ENGLISH, ESQ.
COUNSEL FOR DEFENDANTS.

REC'D.
APPELLATE DIVISION

APR 5 1979

Elizabeth W. Laughlin

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APPELLATE DIVISION

APR 5 1979

Elizabeth W. Laughlin
EM
GWH

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I N D E X

<u>Witness</u>	<u>Direct</u>	<u>Cross</u>	<u>Redirect</u>
THOMAS LLOYD	2	52	82
MALCOLM KASLER	84	92	131

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MR. ENGLISH: Mr. Lloyd, take the stand,
please.

THE COURT: He's still under oath.

T H O M A S L L O Y D, recalled.

CONTINUED DIRECT EXAMINATION BY MR. ENGLISH:

Q Mr. Lloyd, I have on the easel here the maps we were talking about when you were on the stand the other day, which are, for the record, D-24-h for Identification, which deals with the erodibility of soils; D-24-i for Identification, which covers soil limitations for light buildings with cellars; D-24-j for Identification, which is soil limitations for septic tanks; and D-24-k for Identification, which is combined soil limitations. Could you tell us, please, first, the process by which those maps and, perhaps, or presumably the other maps which are a part of the Upper Raritan Watershed natural resource inventory, the process by which those maps were prepared? First of all, what did you start with as a base map? A I began by assembling the soil survey maps, the individual soil survey maps for each of the three counties that are included in the watershed, Morris, Hunterdon and Somerset Counties.

Q And, where did you obtain these maps from?

A These were obtained from the individual Soil Conservation Service office for each county. Having assembled the maps, we integrated as best we could, integrated the

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Lloyd-direct

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serial photographic survey sheets on a single mylar so as to make a complete base map. This was done by overlaying clear plastic mylar on the individual soil sheets and tracing off the boundaries of each soil type within the three counties. At the same time, of course, a numerical code for each soil type was placed on the map. Having done this, prints were made of the mylar, and then individual suitability maps were developed on these prints and this was done by simply referring to the individual soils survey manuals, or what I had gotten from the individual soils survey office. In terms of the suitability for septic tanks, light buildings with cellars, and agricultural suitability, a lot of other soil maps, other soil maps that were prepared was simply a matter of referring to these manuals, identifying what limitation the Soil Conservation Service recommended for a particular soil type, and then simply coloring the map in one of three colors according to that classification.

Q Well, referring to these maps which are part of the natural resource inventory, for example, D-24-h for Identification, is the piece of paper which is the basis of this map one of the prints from the mylar which you just described?

A Not exactly. It's, what it represents is an overlay--

Q I'm not talking about the color.

A I know, but the soil maps were first prepared on these

1 prints that I just mentioned, and then these particular, this
2 particular piece of paper, this base map was overlaid on
3 top of the colored intermediate map and developed.

4 Q All right. So, you had, you had a base map
5 printed from the mylar you described? A Right.

6 In other words, I had two base maps really. I had a soil
7 base map, and then the, that particular base map that is shown
8 there, which is based on the U. S. G. S. topographic maps.

9 Q So, the, do I understand the boundaries of the
10 various colored sections, or portions of this map came from
11 the first base map you described, but the information result-
12 ing in the kind of color you put on came from the second
13 base map? A From the soil base map, yes.

14 Q And, did you personally participate in the
15 process of transferring the data from the soils sheets and
16 other materials you obtained from the Soil Conservation
17 Service onto these maps? A I did.

18 Q Now, did you discuss with Mr. Carl Eby of the
19 Soils Conservation Service your work in the preparation of
20 these maps, which are part of the natural resource inventory?

21 A Yes, I did.

22 Q And, tell us what kinds of matters you discussed
23 with Mr. Eby in that connection? A We discussed

24 general characteristics of individual soils, and different
25 ways of grouping them, classifying them, that would be most

1 useful for planning purposes.

2 Q Do the maps in the natural resource inventory,
3 and specifically without limitation, the maps marked Exhibit
4 D-24-h, i, j, and k for Identification, correctly set forth
5 the methodology and factors which you discussed with Mr. Eby?

6 A Yes, they do.

7 MR. ENGLISH: If the Court please, I
8 now offer into Evidence Exhibits, maps which
9 are Exhibits D-24-h, i, j, and k for Identifi-
10 cation, respectfully.

11 MR. LINDEMAN: If your Honor please, my
12 objection now is limited to this: At page 24
13 of Mr. Lloyd's report, and as he has testified
14 thus far, he indicates that he has studied the
15 geology, soils and hydrology of the upper
16 watershed area, and at page 58 of the trans-
17 cript of his depositions on April 15, 1976,
18 we have that testimony of his about his know-
19 ledge of the soils and the geology. We've
20 gone over this before, but the Court will re-
21 call that they're talking about the natural
22 inventory report, and any comment of the witness
23 as to the advisability of the pond, Mr. Lloyd
24 testified at the bottom of page 58, "I have al-
25 ways testified in terms of the geology and

1 soils. I would not be capable of expressing
2 an opinion," and here again in particular
3 you want to point out the advisability of very
4 detailed specific studies," et cetera. So,
5 I think it's reasonably clear from his testi-
6 mony that he said that he is not capable of
7 expressing an opinion on geology, soils, and
8 that was general, and says as to the particular,
9 that is geology and soils around the lake, he
10 says that additional very detailed specific
11 studies would be required. Now, I think that
12 it's fair to say that the plaintiffs are at
13 a disadvantage and that it is unfair, and im-
14 proper, that the witness testify on anything
15 having to do with the quality, condition or any
16 expertise relating to soils and geology in the
17 light of his statements. We were not able to
18 pursue Mr. Lloyd on that subject. These de-
19 positions were taken on April 15, 1976, which
20 was substantially after any of these reports
21 were prepared, and that was at a time when he
22 had apparently very considerable conversations
23 with Mr. Eby and others about the condition of
24 the soil, and I think that it is, therefore,
25 improper. The other objections that I have

1 are clearly resolved as of now, but that one,
2 I think, is not.

3 THE COURT: I think we have been through
4 some of this before. The framework here--

5 (DISCUSSION OFF THE RECORD WITH CLERK.)

6 THE COURT: We have been through this
7 business before with respect to what was being
8 discussed here. You have, keep having reference
9 to the soil on the site, and even yesterday
10 Mr. Eby said that the report of the S.C.S.
11 would not be reliable for the specific site in
12 question, and you know his answer is, you're
13 saying it's a generalized answer. Also testi-
14 fied in terms of geology and soils. I would
15 not be capable of expressing an opinion...".
16 He's relying on the S.C.S. report, to the extent
17 he relies on the S.C.S. report, I think he has
18 a right to do that. That's what this whole
19 problem boils down to now, and relates back to
20 that opinion that I referred to the other day
21 when we had the preliminary colloquy in the
22 Schmoon Industries case vs. the Department of
23 Health, N. J. 93, N. J. Super., where Judge
24 Conford talks about reliance on hearsay. I
25 think he has the right to rely on it.

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MR. LINDEMAN: Your Honor, in Schemoon at page 283, the judge says, "The guide," that is, the guide that Mr. Worthweight, the witness used to talk about a whole series of tests to determine pollution from a smoke stack, he says, the Court says, "The guide was not relied upon or cited testimonially as proof of the truth of its contents, but merely as evidence of what Worthweight considered in arriving at his expert conclusions of violation of the code by complaint."

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Now, I think that distinction is a very nice one, and I'm not sure that it's so real, but I defer to the Court on it. However, what the Court seems to be saying is that there's nothing in the guide that the witness is talking about to prove the truth of it, but he's just saying I relied on that as part of the authority to determine what is good, coming out of a smoke stack, and what's not good.

Mr. Lloyd, on the other hand, or counsel through Mr. Lloyd, is offering these documents and his testimony to prove the truth of what he's saying, that the soil is erodible to a certain extent in various areas of Essex County.

1 I think there's a difference in Schacon
2 but I understand the Court's concern about
3 just what the effect of these maps may be,
4 and the extent of Mr. Lloyd's testimony based
5 upon them, but I go a little bit farther than
6 that. I think I'm going beyond this immediate
7 question. We're about to talk about soils. He
8 has said what he did on page 58, said it at a
9 prior place in his discovery, that he was acting
10 as a technician, not as, didn't make verifi-
11 cation of various things. I'm speaking parti-
12 cularly of page 19 of the transcript, when he
13 talks about the preparation of a document
14 called P-11 for Identification, says, "I acted
15 as a technician, I suppose." Now, that coupled
16 with his saying that, "I'm not an expert on
17 geology and soils," and now coming forward with
18 this, I think, shows that there are two differ-
19 ent ways that he testified. No fault of his
20 at that time, but I think that we are at a dis-
21 advantage.

22 Now, these documents do talk about the
23 character and condition of the soil, and while
24 they may be properly identified for the purpose
25 of introduction, I don't know that this witness

1 should be permitted to testify from them, or
2 there should be any testimony even from his
3 report on the character and quality of the soils,
4 and that's the basis of my objection.

5 THE COURT: I'm going to allow it. Allow
6 it to be marked in Evidence. I think what
7 Judge Conford says in the Schamoon case is
8 something that I can utilize as a base for
9 allowing it to occur. You may be correct in
10 that there is a more semantic difference than
11 anything else in what Judge Conford is saying.
12 However, it seems to me that expertise can
13 be based upon other reports of a hearsay quality
14 to reach a conclusion as long as the total
15 truth of the documents relied upon are not pre-
16 dominantly relied upon, because if I look at
17 the Rules of Evidence, when you talk about
18 experts' opinions, I believe it's 53. It's
19 56, where if the witness is testifying as an
20 expert, testimony of the witness in the form
21 of opinions or inferences is limited to such
22 opinions as the judge finds are based primarily
23 on facts. The word, "primarily," I think, is
24 certainly a key word. The explanation for it
25 later on under, in the Rules, and also as the

1 explanation was developed in the report under
2 New Jersey Supreme Court Committee on Evidence,
3 March, 1963, would seem to indicate that there
4 is a reason for allowing hearsay. There's a
5 reference at page 108 in that report to Pro-
6 fessor McCormack, and the quote is, "Professor
7 McCormack has also urged that hearsay be per-
8 mitted as a basis for expert testimony. He
9 argues that the expert is a competent judge of
10 the merits of the hearsay involved. 'If the
11 statements are attested by the experts as the
12 basis for judgment upon which he would act
13 in the practice of his profession, it seems
14 that they should ordinarily be a sufficient
15 basis, even standing alone, for his direct
16 expression, professional opinion on the stand,
17 and this argument is reinforced when the opinion
18 is founded not only upon such reports, but also
19 in part upon the expert's first-hand observation,
20 observation will usually enable the expert to
21 evaluate the reliability of the statement.'"
22 Then, it goes on and says, "Rule 56-2 adopts
23 a middle position, somewhere between that which
24 precludes you from relying on it at all, and
25 Professor McCormack's by adopting the word

1 'primarily.'" It says, "The intentment is to
2 permit an expert to be corroborated, confirmed,
3 or bolstered by hearsay, but not to rest ex-
4 clusively or primarily on it." From that I
5 would conclude that the Supreme Court report
6 and the Rules adopt, it was to permit an expert
7 to rely on hearsay. I know we can get into
8 a very fine semantic discussion as to whether
9 or not everything that Professor McCormack says
10 is applicable here; everything the report says
11 is applicable here; or whether precisely what
12 Judge Conford says is applicable here. As I
13 read Judge Conford, as I read the report on,
14 of the Supreme Court Committee on Evidence,
15 and it's dated March, 1963, I didn't say that
16 before, and as I read the rule, I think it's
17 permissible, and I'm going to allow it.

18 MR. LINDEMAN: Your Honor, I do not
19 argue now with the Court about this, and I do
20 acknowledge, I think counsel did their job in
21 giving the back up for these maps, but now I'm
22 concerned about what Mr. Lloyd said in his testi-
23 mony before, not on his testimony in this case,
24 but in depositions, and I don't want to be in
25 the position of waiving our objection on that

1 point--

2 THE COURT: That may viciate the weight
3 to some extent, but I don't think under the
4 circumstances, the totality of the circumstances
5 and the proofs that I have so far, that it
6 precludes admissibility. I think it may slide
7 to the other part of the scale. So, I'll allow
8 them to be marked. I think, perhaps, they should
9 be marked at this time. D-24-h, i, j, k and
10 l marked in Evidence.

11 MR. ENGLISH: If the Court please, there's
12 a handy remainder to urge on the record, may
13 I observe with respect to your Honor's ruling
14 admitting these Exhibits that we have a little
15 different situation than I think was presented
16 in the Schamoon case, in that here we had
17 Mr. Eby, who's the individual responsible for
18 the data and according to both Mr. Eby and Mr.
19 Lloyd, these maps correctly transfer Mr. Eby's
20 data to these maps.

21 THE COURT: Yes. That's what I said.
22 The circumstances, didn't enumerate on it, but--

23 MR. LINDEMAN: I concede that, your
24 Honor.

25 THE COURT: Okay.

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MR. ENGLISH: While we're dealing with maps, if the Court please, I will renew the offer of exhibit D-24-a for Identification, which is the 1961 land use map.

THE COURT: I don't recall, Mr. Lindeman. I don't think you objected at all to it.

MR. LINDEMAN: I don't know about that, your Honor.

THE COURT: All right. Let's mark that in Evidence also.

(D-24-a, h, i, j, k and l, maps, were received and marked into Evidence.)

MR. ENGLISH: If the Court please, I would like to get back to the general subject of Mr. Lloyd's report, which was marked D-34 for Identification.

BY MR. ENGLISH:

Q Mr. Lloyd, I am being a little repetitious, but there's a foundation for what we're talking about today. I think you testified last week that in the course of preparing your report, which is D-34 for Identification, you relied on the data contained in the number of reports which are the report of Jason M. Cortell & Associates, which is Exhibit D-21 in Evidence? A I did.

Q A water quality survey of the Upper Raritan

Lloyd-direct 15
watershed for August and November, 1967, which is D-22 in

Evidence? A Yes.

Q Report on water quality studies of the Upper
Raritan watershed, May, 1968, to October, 1969, prepared by
the Academy of Natural Sciences which is D-23 in Evidence?

A Yes.

Q Water Quality Survey, 1972, of the Upper Rari-
tan Watershed, prepared by the Academy of Natural Sciences,
which is D-25 in Evidence? A Yes.

Q The Natural Resource Inventory, which is D-24
in Evidence, and includes not only the text, but the maps which
is marked? A Yes.

Q The series of reports by the Upper Raritan
Watershed Association, which are D-26 in Evidence, D-27 in
Evidence, D-28 in Evidence, D-29 in Evidence, and D-30 in
Evidence? A Yes.

Q Now, in addition to those materials, we have
just referred to, did you make some field studies of your own
in the course of preparing your report? A I did.

Q Will you tell us, please, when those studies
were made, and what they consisted of? A In

July and September, 1977, I visited the Upper Raritan water-
shed, and in particular the Peapack watershed.

Q Peapack Brook watershed? A Peapack
Brook watershed, and performed aquatic biological studies at

1 six locations. These locations were in what I termed in my
2 report as the north branch of Peapack Brook. This is in
3 the headwater region at Cooper Lane. I performed a study on
4 Tiger Brook at Cooper Lane, and in Peapack Brook just upstream
5 from the Caputo tract on Fox Chase Road, and in the Town of
6 Peapack, excuse me, yes, in the town of Peapack upstream from
7 the sewerage treatment plant, and below the sewerage treat-
8 ment plant at a point where the stream is very close to Route
9 206, was one other station, was located just upstream from
10 the confluence of Gladstone Brook.

11 Q What was the general nature of the studies which
12 you made at those locations? A I had re-
13 viewed chemical and biological data that had been developed
14 over the years, and I wanted to--

15 Q Excuse me. Was that data what is contained in
16 these reports we just identified? A Yes. I
17 wanted to, as best I could, verify some of the results, and in
18 some cases see what changes may have occurred at different
19 stations over the years.

20 Q What, generally, were the results of those
21 studies which you performed?

22 MR. LINDEMAN: I object, your Honor.
23 The trial of this case was scheduled by the
24 Court, July, August, to commence September 12,
25 '77, that was subsequently adjourned because of

1 Court calendar problems. The witness now
2 testified he has examined, verified these vari-
3 ous areas around September 6, and closely,
4 other times close to September 6, 1977. Our
5 depositions were very substantially a year
6 before that, but it's possible, of course,
7 that expert witnesses might under certain cir-
8 cumstances have to verify their conclusions
9 or whatever data may exist for the purpose of
10 arriving at conclusions, but still this kind of
11 a verification at this hour, I submit is im-
12 proper, and any testimony that the witness may
13 offer as to verifications of the situation as
14 of September, 1977, and conclusions should
15 not be allowed.

16 THE COURT: Mr. Lindeman, let me say
17 this to you: The Rules very carefully, and the
18 cases, very carefully point out to me that if
19 I think that a party is going to be prejudiced
20 by something that he, is new in a report by an
21 expert, that I have at my disposal the right
22 to say, okay, I'll give you the time to explore
23 the matter by further discovery. If this is so,
24 I don't know whether it is, but if, you're going
25 to have to explain to me why. If it is so

1 prejudicial to you as to be something that you
2 need time for further discovery, I'll give it
3 to you. The way this case has been going, I
4 see no reason why we can't do that. I won't
5 exclude, however, and I'll tell you the same
6 thing, if the same thing happens to you and Mr.
7 Ferguson says the same thing, alternatively
8 I'll give you the opportunity for exploration
9 on it in the form of discovery, because I think
10 that that's the way the cases read, and that's
11 the way it should be done. But what is so
12 prejudicial about,--all right, he did it in
13 July of 1977, and he did it in September of '77,
14 as I understand--

15 MR. LINDEMAN: Yes.

16 THE COURT: Now, what is so prejudicial
17 about these studies that--

18 MR. LINDEMAN: Judge Muir, I don't know,
19 I really don't. I don't know.

20 THE COURT: Okay.

21 MR. LINDEMAN: I would rather think it
22 isn't prejudicial or might not be prejudicial.
23 I don't think there's much in the whole report
24 that's prejudicial, but that, you know, anything
25 could be. Sometimes you're surprised when you

1 get a determination from a Court on evidence
2 that is interpreted in a way that you never
3 really suspected, so, therefore, I'm objecting.
4 I think I have the right to object. Of course
5 I do. No question about that.

6 THE COURT: I'm giving you the right
7 that the Rules give you. Do you want to exer-
8 cise that right?

9 MR. LINDEMAN: I don't think I want to
10 exercise that right, Judge Muir. I don't think
11 this is a case where that consideration to an
12 opposing party is called for. I think this is
13 one of those cases where the testimony should
14 be excluded because of the exigencies of time,
15 because of the enormous costs of this kind of
16 a suit, also because of the action which we
17 believe is now being undertaken by the muni-
18 cipality to change its ordinance, and I'm ex-
19 pecting any day something is going to come
20 through that's going to have to call for a lot
21 more different testimony before this case is
22 over. I fear that. I hope that it won't hap-
23 pen, but I fear that, and in this kind of thing,
24 just continues this long, arduous case even
25 longer, and it was unnecessary. I think that

1 it simply should not be allowed. While our
2 position will be equalized by permitting dis-
3 covery, and the making of tests ourselves,
4 that that isn't necessarily fair in the case
5 at this time.

6 THE COURT: It just seems to me that you
7 have the alternatives. I don't think it's a
8 situation for saying all right, because we have
9 come this far, and because there are some
10 pressures, some pressures to move the case
11 with some promptness after an extensive period
12 of delay that we, you know, it's justification
13 for saying, well, all right, just close this
14 type of testimony out. I don't know whether
15 the analogy is appropriate, but I remember for
16 ten years they were building a bridge across
17 the Monongahela River in Pittsburgh, and for
18 ten years you could go part way across and
19 then you had to stop. They got within 20 feet
20 of the shoreline, and somebody said there was
21 something wrong with the engineering test, and
22 they didn't want to go any further. Somebody
23 else said the heck with it, 20 years, let's go
24 on. Fortunately, they made the test and they
25 found out that the tests were in error, and

1 the remaining part would have sunk into the
2 mud if they had not made the tests. Okay. I
3 don't know whether it's an appropriate analogy.
4 Having come this far, having done all this, I
5 think it's appropriate to allow this type of
6 testimony, but if you feel that you need the
7 time to explore it before Mr. Lloyd is allowed
8 to testify, I will give it to you, so I, there-
9 fore, say to you I will not close the door on
10 the testimony, but I will leave you other op-
11 tions. Do you wish to exercise it?

12 I take it by a shaking of your head--

13 MR. LINDEMAN: I don't want to appear--

14 THE COURT: I realize I'm putting you in
15 a box. I think it's, I think I have to do it.
16 I'm not trying to be unkind to you, Mr. Linde-
17 man. I think I have to decide these things as
18 I see the appropriate application of the cases,
19 and the rules, and I recognize that I'm putting
20 you in a box. If you say you want it--

21 MR. LINDEMAN: At the moment, I don't
22 know. Maybe we better see what the witness
23 has to say. I don't know, your Honor. Maybe
24 I don't understand fully. Is it that we will
25 wait even now--

1 THE COURT: What I'm saying is, now, do
2 you want to stop and take discovery of the
3 gentleman? Do whatever you have to do.

4 MR. LINDEMAN: What I would prefer to do,
5 if it would be all right with the Court, is to
6 let the witness testify so that we can hear it,
7 and then if we feel that we need some time to
8 prepare rebuttal testimony--

9 THE COURT: Fine. I'll allow that also.
10 Okay. Proceed.

11 MR. LINDEMAN: I'm not waiving my ob-
12 jection, am I, your Honor?

13 THE COURT: No.

14 MR. LINDEMAN: Okay.

15 THE COURT: I would say to you that very
16 infrequently am I in the position of having,
17 being able to do that, and normally a trial
18 judge does not want to do that because it means
19 stopping the case, and not getting it concluded.
20 But, I just think that in this case it's some-
21 thing that's appropriate. It would be unfair to
22 you to make you live with it, but I think the
23 course of action is, should be palatable to the
24 defendants and is palatable to me, that you can
25 hear it, and then make a determination as to

1 whether you want time to prepare a rebuttal
2 to it. Okay. Go ahead, Mr. English.

3 BY MR. ENGLISH:

4 Q Mr. Lloyd, can you tell us what were the re-
5 sults of these aquatic biological studies that you performed
6 in July and September of 1977? A I found that

7 the north branch of Peapack Brook at Cooper Lane appeared to
8 be in a healthy biological condition, although it did show
9 signs of organic enrichment. This appeared to be a result
10 of seepage from the area drained by the stream drains in
11 Chester, the east branch of Peapack Brook is a small tribu-
12 tary that drains predominantly wooded land between Cooper
13 Lane and Cliffwood Road. These two locations are portrayed
14 or depicted on map number 2, land use, that is on page 28.

15 Q Page 28 of your report, which is D-34 for
16 Identification? A That's correct. I did not

17 examine this particular stream. I relied on data that were
18 provided by Jason M. Cortell & Associates, and from their data
19 indicated that the nutrient load in the stream as measured
20 by nitrogen and phosphorus values was low. Tiger Brook was
21 investigated by myself at Cooper Lane. This stream drains
22 the Chester Springs Shopping area, and a portion of Chester,
23 and it contained accumulations of sediment. It was what I
24 considered a, still in a healthy biological condition, but
25 the aquatic animal diversity and abundance or bio-mass--

1 bio-mass is a measure of the, in weight, of animal life present
2 in a stream--was lower than the north branch, which was a
3 stream similar in size to Tiger Brook. Downstream at Fox
4 Chase Road, there was evidence of rather heavy siltation in
5 the stream. There was a small in-stream impoundment which
6 had a very heavy load of silt in it, accumulation of perhaps
7 a foot, depended on exactly where you were in the impoundment.
8 The stream was healthy in terms of the aquatic plants and
9 animals that were present although their relative abundance
10 indicated that that particular station showed rather heavy
11 organic enrichment as a result of nutrients in the stream.
12 Further down at the Gill St. Bernard School, which is located
13 just above the confluence of Gladstone Brook, there was evi-
14 dence of, again, of fairly heavy organic enrichment, comparison
15 of the aquatic plants and animals at this station that were
16 present in 1967, as described by the Academy of Natural
17 Sciences, indicated there were certain groups such as the
18 blue-green algae, midge , larvae, and black flies . These
19 are aquatic insects, were more abundant in 1977, than they were
20 in 1967, and these particular groups are recognized as indi-
21 cators of organic enrichment, and typically when you find lar-
22 ger numbers of them, you can expect that the stream is more
23 heavily enriched by nutrients, or it has a higher organic
24 load in it.

25 Q If I can interrupt you at that point. Is there

1 any relationship between what you described as "enrichment"
2 or "higher enrichment," and water quality? A Very
3 much so, because water quality can be measured in many dif-
4 ferent ways. Enrichment refers to nutrients such as phos-
5 phorus and nitrogen, that make up the chemical quality of the
6 water. Typically, when one refers to enriched conditions, he
7 is referring to levels of nitrogen and phosphorus in the stream.
8 However, it can also, enrichment can also be described strictly
9 in biological terms and when one does this, one is talking
10 about the, basically about the different kinds of plants and
11 animals that are present and their relative abundance.

12 Q Well, does what you have said have any re-
13 lationship to the potability of water, suitability for human
14 consumption? A Very often if a stream is enriched,
15 or has a high nutrient load in it, coliform bacteria and
16 other classic measurements of the potability of water will
17 be high. It, in itself, does not tell you whether or not there
18 is any specific toxic chemicals in it that might be harmful
19 to man.

20 THE COURT: If it has high coliform
21 bacteria count, it would be less potable than--

22 THE WITNESS: It would require additional
23 treatment.

24 Q I'm afraid I interrupted you, Mr. Lloyd. You
25 were telling us about the result of your studies and we got

1 downstream as far as Gill St. Bernard School at the confluence
2 at Gladstone Brook. If you would finish your discussion of that
3 station, will you keep on moving downstream, please?

4 A Well, the lower two stations that I looked at were
5 just upstream from the Peapack-Gladstone sewerage treatment
6 plant. This is, first station number 14, that appears on page
7 8 of my report.--

8 THE COURT: What page did you say?

9 THE WITNESS: 14.

10 MR. LINDEMAN: Page 14?

11 THE WITNESS: Yes.

12 A It's Peapack Brook at Holland Road in Peapack. At
13 this station I found a healthy stream, but, again, rather
14 heavy organic enrichment, and it appeared to be more heavily
15 enriched based on the biological, my biological observations
16 than what had been indicated in previous years by the Academy
17 of Natural Sciences. The lowermost station that I specifically
18 looked at was immediately downstream of the Peapack-Gladstone
19 sewerage treatment plant, where the stream flows adjacent to
20 Route 206, and there--

21 Q Is that station number 15 as shown on the map
22 on page 8 of your report? A Yes.

23 Q Please continue. A At that sta-
24 tion I found that the stream was in what would be termed
25 either a semi-healthy or polluted condition as indicated by

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1 the aquatic plants and animals that were present there. This
2 condition was considerably worse than had been previously
3 described by the Academy of Natural Sciences, in 1967 I believe,
4 and I think it was also investigated in 1968. The stream was
5 judged to be healthy. In other words, the water quality was
6 much better in 1967, 1968, than in 1977. --

7 THE COURT: The A.N.S. made a study in

8 '67?

9 THE WITNESS: Yes.

10 A For example, they found trout surviving in the stream
11 right down below the waste water treatment plant. I found
12 no trout whatsoever. They found something like 15 different
13 groups of aquatic insects, and I believe I only found three,
14 so there was very significant reduction in species diversity
15 which indicates that a quality of water had declined quite
16 considerably.

17 Q Do you have any information as to whether or not
18 the, there were any changes in the Peapack-Gladstone sewerage
19 treatment plant during the interval of time between the studies
20 made by the Academy and your own studies? A I in-
21 quired of the Upper Raritan Watershed Association, and evi-
22 dentially has--

23 MR. LINDEMAN: Hold it, Mr. Lloyd. Ex-
24 cuse me. I object. I object to any testimony
25 of the witness in--

1 THE COURT: Sustained.

2 Q Are the detailed results of your aquatic
3 biological studies set forth in Appendix B in your report,
4 which is D-34 for Identification? A Yes, they
5 are.

6 Q Can you tell the Court how or why the aquatic
7 biology is an indication of water quality in a stream?

8 A Aquatic plants and animals can be used or have been
9 very often used as a means of measuring water quality. Water
10 chemistry has also been used. The aquatic plants and animals
11 are very useful for, useful as parameters to measure water
12 quality simply because they're in the stream at all times,
13 whereas the chemical results reflect conditions only at that
14 exact instant of time that you took, excuse me. They only
15 reflect conditions when you actually took the sample. Aquatic
16 plants and animals have a natural monitoring system.

17 THE COURT: Do you know what time of year
18 the Academy of Natural Sciences did their '67
19 report when they found the trout there?

20 THE WITNESS: Summer.

21 THE COURT: Is it possible that if that
22 stream is stocked by the State of New Jersey
23 that those trout would have been found there
24 as a result of the stocking, but not found
25 there as a result of being there at the time

1 you made it, because they either, one, no
2 longer stocked, or, well, they no longer stock?

3 THE WITNESS: They stock, but I suspect
4 it was more a result of water quality mainly;
5 because , the chemical data I did look at
6 indicated that ammonia concentrations, for
7 example, were in excess of what typically
8 trout find unsatisfactory.

9 THE COURT: I'm a fisherman. I don't
10 know that I have any expertise, but I do know
11 they stock in that area, a good number for the
12 size of the stream.

13 Q Mr. Lloyd, do I understand that in preparing
14 your report and in reaching your conclusions you considered
15 the data contained in these reports by Cortell, the Watershed
16 Association, and the Academy of Natural Sciences, your own
17 aquatic biological surveys in July and September of 1977, and
18 the natural resource inventory which you prepared?

19 A I did.

20 Q As a result of all that, did you reach certain
21 conclusions as to the water quality in Peapack Brook?

22 MR. LINDEMAN: As of when?

23 MR. ENGLISH: As of 1977.

24 A In summary, I did. I--

25 MR. ENGLISH: That answers my question.

1 Q Will you tell us your conclusions as to the
2 conditions which you found in Peapack Brook when you com-
3 pleted your studies this fall? A I found that
4 the stream, although still healthy in the upper reaches of it,
5 still in reasonably good condition, it was very heavily enriched
6 and it was semi-healthy or polluted at the lower end below the
7 waste water treatment plant.

8 Q Were you able to reach any conclusions as to the
9 water quality or health of Peapack Brook in 1977, as compared
10 with what the studies, eight or ten years previously had dis-
11 closed? A In a number of, those locations,
12 in fact, all three of the locations that were surveyed in '67
13 and '68, were in better condition, better biological condition
14 at that time than they are today.

15 Q Just, again, which are the three locations
16 that you refer to? A Tiger Brook, and the
17 Peapack Brook at Gill St. Bernard School, and downstream from
18 the waste water treatment plant. I might add there is a
19 fourth, and that one was the station on Holland Road in Peapack.
20 But, essentially, all four of them showed less enrichment
21 in '67 and '68 than they did in '77.

22 Q Do you have an opinion as to what are the
23 causes or probable causes in the changes in water quality in
24 Peapack Brook which appear to have taken place during the
25 last eight or ten years? A The causes for the

1 changes?

2 Q Yes. A Yes, I do. I feel that
3 sediment and nutrients from on-site septic systems have been
4 responsible for most of the degradation, sediment, particularly
5 in Tiger Brook and immediately downstream from Peapack Brook
6 from the confluence of Tiger Brook.

7 Q Where does the sediment come from?

8 A I can tell you where some comes from. I couldn't
9 tell you where all of it comes from. I noticed that at--

10 MR. LINDEMAN: Excuse me. I object.

11 Before this question is answered, this is un-
12 orthodox I concede, but I wonder if we might
13 determine whether or not this evidence is going
14 to come from Mrs. Ashmun's statement about her
15 reporting orally to the witness--

16 THE COURT: Her trip up Tiger Brook?

17 MR. LINDEMAN: Right. Because if it is,
18 I would object--

19 THE COURT: Mr. English?

20 MR. ENGLISH: Well, at the moment the
21 objection was made, the witness, I thought, was
22 about to state his own observations.

23 THE COURT: Why don't I let him answer
24 it, and we'll deal with it.

25 MR. ENGLISH: It may be a combination,

1 I don't know.

2 A What I was referring to was on page 19 of the report.
3 It's a picture of sediment, or, excuse me, it's a picture
4 of the eroded condition of the head wall at the outfall of the
5 pipe which contains sewerage and storm water run-off from the
6 Chester Springs Shopping Center, and also on page 20, figure
7 5, there's a picture of silt immediately downstream. That
8 picture was taken approximately 30 feet downstream from the out-
9 fall, and then--

10 Q Let me interrupt you. Who took the pictures
11 which are incorporated in your report, Mr. Lloyd?

12 A I did.

13 Q And, were they taken in the summer of 1977?

14 A September of 1977.

15 Q Directing your attention to figure 5 on page 20,
16 I think you said was a picture taken 30 feet or so below the
17 outfall from Chester Springs. Can you describe what that
18 picture shows in terms of the sediment? A On the
19 right bank facing downstream, it shows an accumulation of
20 silt, as I recall was approximately a foot deep, right along
21 the right bank there.

22 Q Is that what looks to my untutored eye like a
23 sand bar on the end of the board? A That's
24 correct. And, as I mentioned, the picture doesn't show
25 particularly well the extent of erosion that has occurred around

1 the head wall. It is considerable, and the land above the out-
2 fall, or rather the land between the outfall and the parking
3 lot surrounding that red brick building that's apparent in
4 figures three and four had been seeded with barley cover crop
5 to try to protect the soil, but there was evidence of erosion
6 all through there. Little gulleys and rivalets.

7 Q Well, I think you were addressing yourself to
8 my general question as to what, in your opinion, were the
9 causes of the changes in Peapack Brook over the eight or ten-
10 year period prior to your last studies, and you mentioned
11 sediment, and I think, have you anything more to say about
12 sediment?

13 A Well, just that it's very diffi-
14 cult to define exactly where it comes from. I attempted to
15 estimate roughly how many new people that had come into the
16 watershed, and I did this by comparing the number of houses
17 that are portrayed on the 1954 U. S. Geological Survey topo-
18 graphic map with the number of new houses that appeared on
19 the 1970 photo revision topographic map of the same area, and
20 multiplied that number by 3.2, which is a standard planning
21 number for the number of people in a single-family home, and
22 estimated that roughly 500 people had moved into that portion
23 of the watershed, and were primarily responsible for the
24 increased enrichment in sedimentation. In driving through
25 the watershed on almost all the roads, it did not appear that
there had been any significant changes in agriculture. In

1 fact, what agriculture there was in terms of cultivated fields
2 was generally confined to Gladstone Brook watershed.

3 MR. LINDEMAN: Your Honor, having heard
4 that testimony, now, really, the only way to
5 raise the objection was to hear it. The witness
6 has testified as to the impact of development
7 upon the quality of streams. Without regard to
8 whatever other infirmities the evidence may have,
9 he did testify previously that he was not going
10 to testify, that he did not have any expertise,
11 was not retained for the purpose of the impact
12 of--

13 THE COURT: What page?

14 MR. LINDEMAN: This is page 6.

15 THE COURT: Of the deposition?

16 MR. LINDEMAN: Of the deposition of Mr.
17 Lloyd, "impact of any development on natural
18 resource inventory." Then it, then on page 28,
19 29, again questions are framed about a develop-
20 ment, particular reference is made to the Caputo
21 development, but the witness says at line 20,
22 page 28, "I think both the water quality data
23 and natural, data included in the natural re-
24 source inventory would be useful guidance."
25 Then he says at page 29, line 6, "In terms of

1 the natural resource inventory, on-site studies
2 would have to be made, studies related to the
3 soils, geology, and so forth. In terms of the
4 water quality, the existing conditions of Pea-
5 pack Brook should certainly be established."

6 Now, that's the thing, of course, about
7 which I'm so very much concerned, and particular-
8 ly with regard to the thing I referred to in
9 my objection before, and this testimony now.
10 He says that he counted the houses, estimated
11 the number of additional people, and then uses
12 that as one of the bases upon which he con-
13 cludes that the effect on the streams was
14 caused by those additional people. I think
15 that that is directly contrary or certainly
16 contrary in spirit, more than spirit, it's
17 directly contrary to what he said in his de-
18 positions. He was not going to testify about
19 the impact of development upon the quality of
20 the streams or the natural resource inventory,
21 not only not knowing about the soils and geo-
22 logy, but that was not what he was doing. He
23 just reported on the inventory itself, and now
24 he's done it, and it's not his fault but I think
25 it's improper, your Honor, very, very seriously

1 prejudicial to us.

2 THE COURT: Mr. Ferguson?

3 MR. FERGUSON: The statement made on the
4 bottom of page 6 was that he refers to "Mr.
5 Lloyd may be retained for that purpose if and
6 when we get data sufficient to enable such an
7 evaluation to be made." At that time, Mr. Lloyd
8 had not, in fact, been retained for the purpose
9 Mr. Lindeman states, for the purpose of prepar-
10 ing this report, and about which Mr. Lloyd is
11 testifying now. What happened in the interim,
12 and we must keep in mind that this deposition
13 was taken in April of 1976, was that we've had
14 a year and a half of additional data in the
15 form of these documents which have been marked
16 D-25 to D-30. For instance, D-30 is the summer
17 of 1976, prepared by the Upper Raritan Watershed
18 Association; fall and winter of '75, '76, D-29;
19 D-28 is the summer of '75; and D-27 was the
20 spring of '75. D-26 is 1974, north branch of
21 the Raritan. These documents referred to the
22 testing that was done during that time, but
23 they weren't physically available until later
24 on in 1976. They had to be collated, printed,
25 and bound. They didn't become available until

1 after this deposition. As soon as they were
2 available, we shipped them to Mr. Ambrose, and
3 I would have to check the letter which is not
4 here to see whether we just gave him notice of
5 the reports, or sent him a copy. These data
6 were shipped and at that time I indicated to
7 Mr. Ambrose we would be using these during the
8 trial. Now, when the case was postponed from
9 May in 1977, this data was all complete. We
10 sent them to Mr. Lloyd, and asked him at that
11 time to do this report. We told Mr. Ambrose
12 that he was going to do this report, and that he
13 would be using this newly available data. That,
14 frankly, is the reason why this particular
15 report could not have been done prior to the
16 deposition.

17 MR. LINDEMAN: Your Honor, if my memory
18 serves me, and I did examine each letter in
19 Mr. Ambrose's file in some detail, there were
20 reports that were sent to Mr. Ambrose, and we
21 do know that we have those, but that doesn't
22 change the objection that I have as to what the
23 direction of the witness' testimony was going
24 to be. We did receive the documents, certain
25 of those documents, if not all of them, which

1 talked about the natural resource inventory,
2 condition of the streams, but I submit that's
3 different from testifying about the cause and
4 impact of development upon whatever that bio-
5 mass may have been.

6 THE COURT: Well, I know if there are
7 two areas here, then I think, that are signi-
8 ficant, one is the logical conclusion that if
9 none of us were here, the water quality of all
10 of our streams would not even be a problem.
11 It's our moving in that causes the water quality
12 in all streams--. I think it's a logical in-
13 ference. You're talking about a plan here of
14 ten years. I think it's reasonable just upon
15 the figures that I have from the, that were sti-
16 pulated on growth in the area, that there had
17 been changes. These changes have got to have
18 occurred from man-made sources. All right.
19 That's one point.

20 The second point is if, if it is an area
21 of problem, I'll give you an opportunity to
22 explore it. Given all those reports, accepting
23 Mr. Ferguson's representation, and I know you're
24 in a difficult posture there because you were
25 not the man who was doing, dealing with it be-

1 fore, but the reports were given, the reports
2 were made available, collated, et cetera,
3 and then Mr. Lloyd could utilize them. If that
4 causes a problem, again, I'll give you time to
5 resolve it, but I really don't think that it's
6 a basis for valid, I won't say valid, an objec-
7 tion is sustainable at this time.

8 MR. FERGUSON: I appreciate Mr. Lindeman's
9 problem.

10 THE COURT: I do, too. I don't want to
11 say that I don't understand or appreciate the
12 difficulty, but Mr. Ferguson is representing
13 that he forwarded these to your predecessor
14 in this case, which is what he felt obligated
15 to do as a result of what's on page 6 of Mr.
16 Lloyd's deposition.

17 MR. LINDEMAN: There are two problems
18 here. One is the fact that I happened to be
19 a different lawyer, and the fact what Mr. Lloyd
20 may have said in his depositions. I don't think
21 that, I don't want there to be any suggestion
22 in this case that the defendant is at a dis-
23 advantage because I happen to be a replacing
24 lawyer.

25 THE COURT: I'm not suggesting that he

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is.

MR. LINDEMAN: No, but these documents were received. I know they were received. I can't pinpoint them exactly, but I considered the correspondence with which they were sent, and it's true. Mr. Ferguson did do that. We have all of those documents, but that isn't really the only--

THE COURT: I understand your objection extends further to, there's nothing from Mr. Lloyd to say that he was going to testify in this area.

MR. LINDEMAN: That's it.

THE COURT: That, again, I'll allow you time to deal with that problem if you feel it's appropriate.

MR. FERGUSON: Just to have it fully stated, had we gone to trial in May, we would have done the same thing through another witness whose deposition was also taken, and who did testify in general, from general principles, you know, to the same general conclusion, and that is on the record. We did shift, as it were, to include this additional data with Mr. Lloyd because of all kinds of problems about

1 availability, things you run into when you
2 experts--

3 THE COURT: Anything further? Mr.
4 English.

5 BY MR. ENGLISH:

6 Q I think, Mr. Lloyd, at the time the objection
7 was made, you were trying to tell us some of the reasons which
8 leads you to the opinion or the conclusion that, to explain,
9 to whatever opinion you have as to the reasons for the
10 changes in water quality which have occurred in Peapack Brook
11 over the last eight or ten years. I don't know whether you
12 finished your answer, but if you haven't--

13 A In performing the study, I, as I said, I reviewed the
14 data, the existing chemical and biological data. I then went
15 out in the field and looked at these six locations, and I
16 noticed the sediment in the field, enrichment, and I was
17 curious as to whether or not, perhaps one could correlate the
18 existence of sediment and nutrients, so forth, in general
19 with natural and man-made features in the watershed. So, I
20 then looked at, prepared a slope map that is portrayed on
21 page 32 of my report, and I also prepared two maps, one suit-
22 ability for on-site sewerage disposal systems, which is map
23 number 4 on page 34, and the other is on page 35, and it's
24 entitled, "Erodibility of Soils," and I prepared these maps,
25 using the same general methods that were used to prepare the

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1 original natural resource inventory, and then compared the
2 results of my water quality investigation with what was apparant
3 on these maps in terms of slopes and the locations of houses
4 in relation to their suitability, in relation to the soils
5 on which they were located for suitability for septic tanks.

6 Q In reaching your conclusions, what, if any,
7 consideration did you give to the size of Peapack Brook, size
8 of the stream? A I found that Peapack Brook
9 is a very small high gradient stream. The stream, which
10 varies from approximately eight feet in the stream headwaters
11 at a few inches deep, to 30 or 40 feet at the lower end of the
12 stream. The deepest point is, in September, was two and a
13 half feet. The point is that it's a very small stream, and
14 there is a small amount of water in it for dilution of various
15 pollutants, whatever other purpose the water might be used
16 for.

17 Q Now, as a result of your studies, do you have
18 an opinion as to the appropriate intensity of land use in the
19 Peapack Brook watershed?

20 MR. LINDEMAN: I object, your Honor.

21 I think the witness is not qualified for that
22 in addition to my other objections that I made
23 before.

24 THE COURT: I think it's rather broad
25 for his expertise.

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MR. ENGLISH: If the Court please, my recollection is that when Mr. Lloyd was on the stand last week, he indicated that an area of his special expertise was on related quality water-land use.

THE COURT: Well, without going back-- it's been several days. Did you testify to that?

THE WITNESS: I did, as I recall, yes.

THE COURT: I'll allow it.

MR. LINDEMAN: Same objection, your Honor.

THE COURT: All right.

MR. ENGLISH: You want the question read back?

THE WITNESS: Yes, could you do that please?

THE COURT: As a result of your studies, do you have an opinion as to the land use in the watershed?

A In general, I, because the slopes are moderately to fairly steep because of the erodibility of soils, and the small size of the stream, it does not appear that this stream is suitable for widespread intensive development, and what I mean by "intensive" is, intensive is typical medium density, 30 per cent-per-acre-type density, or higher.

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THE COURT: How much?

THE WITNESS: Thirty per cent per--
thirty dwelling units per acre.

MR. LINDEMAN: Sorry.

Q Thirty persons or thirty dwelling units?

A Thirty persons per acre, something like that. In other
words--

THE COURT: 3.2 persons per household?

THE WITNESS: What I'm getting at is it's
not suitable for garden apartments and so forth.
If it's suitable for any development, it's
suitable for single-family residential type
low-density development.

MR. LINDEMAN: Your Honor, may we have
that read back. That 30 persons per acre, I
would like to, may we have that again, please?

(REPORTER COMPLIES.)

Q Mr. Lloyd, in the, in your last answer, do you
mean that no development of, at all, of the density you indi-
cated, perhaps eight or ten dwelling units per acre is appro-
priate, or did you mean that the entire watershed should not
be paved with that kind of developments?

A Well, I simply mean that there would be severe environ-
mental degradation with an intensity of eight, ten dwelling
units per acre, and even more so if the entire watershed was

1 covered at that density or even higher.

2 Q Do you, when you say it's not suitable for
3 that, for development of that density, do you have any, are
4 you indicating the scale of such development? Are you saying
5 there shouldn't be any at all, or there could be to a limited
6 amount, or what? A I suppose there could be
7 to a limited amount, but exactly to what level, I'm not pre-
8 pared to say at this point.

9 Q Now, as a result of your studies, do you--

10 MR. LINDEMAN: Excuse me, Mr. English.
11 Hold on half a second, please.
12 Thanks.

13 Q Mr. Lloyd, as a result of your studies, do you
14 have an opinion as to whether or not Peapack Brook is capable
15 of assimilating much additional pollution?

16 A I do not believe it does.

17 Q Do you have an opinion as to whether additional
18 development in the Peapack Brook watershed would be reasonably
19 likely to result in additional pollution of the stream?

20 A Based on the limited amount of development that appears
21 to have occurred in the past, I would say yes, the future
22 developaent would have an impact.

23 MR. ENGLISH: I now offer in Evidence
24 Mr. Lloyd's report which is exhibit D-34 for
25 Identification.

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1 MR. LINDEMAN: Your Honor, the objection,
2 I think, to this report applies, that I made
3 to that for Mr., for General Whipple applies
4 even more to this one. The Court, I think, can
5 see even in thumbing through it they are vast,
6 vast. There are very extensive parts.

7 THE COURT: Extensive what?

8 MR. LINDEMAN: Parts of it to which the
9 witness did not testify, and which would
10 probably be excludable, and I cite as an ex-
11 ample page 44, this is just an example, and
12 I think it would not be unfair to us if the
13 Court even were to look at the last full para-
14 graph where the witness refers to pollution
15 and the Caputo tract, and 2,000-acre drainage,
16 and a number of other factors, things to which
17 he did not testify.

18 THE COURT: I think it would be appro-
19 priate to exclude from the report any reference
20 to construction on the Caputo tract since you
21 did not get into it in your case.

22 MR. ENGLISH: I agree.

23 MR. LINDEMAN: That, of course, doesn't
24 constitute the entirety of my objection. I
25 mean, the reasons for it. It's that kind of

1 thing, but there are, I think, very substan-
2 tial other things as well that the witness
3 didn't testify to. I do concede, however,
4 I think that his having testified to certain
5 maps and drawings would make it reasonable
6 that they be offered, perhaps admitted into
7 Evidence, because they would clarify his testi-
8 mony. I'm thinking particularly of the showing
9 of the stations along the various water courses
10 on page 8, and certain of the photographs to
11 which he referred. The conclusions in his
12 Appendix B, which relate to the studies in
13 1977, I think, he has testified to fairly
14 extensively, and there isn't any need for them.
15 He testified to it. He didn't testify as ex-
16 tensively as appears here, I should say, but he
17 did testify to the condition in all of these
18 water courses, but the rest of it, there's so
19 much of it that he didn't testify to, and
20 would not even be appropriate. Another example
21 is page 36, where he talks about the Parker and
22 Edneyville soils, and then he refers them to
23 the Caputo tract, the Court has excluded any
24 reference to the Caputo tract, but this whole
25 page talks about the soils from their classi-

1 fication, Edneyville, Parker, Califon, and
2 clearly he is, he's really quoting from--

3 THE COURT: D-1. In Evidence.

4 MR. LINDEMAN: Yes.

5 THE COURT: So what harm does it do?

6 MR. LINDEMAN: Well, the harm that it
7 does is that unless it's an exact quote, he
8 can't be--

9 THE COURT: I'm going to look at the
10 S. C. S. on the soil, in reading over that
11 page, you were talking about it. My recollection
12 is that at least as to the Edneyville soil,
13 which we talked about so extensively yester-
14 day, and I caused a rereading about it during
15 the course of the day, that statement that he
16 makes about the Edneyville series consists of,
17 is pretty close to being accurate. I don't
18 profess to say it's word for word, but is pretty
19 close to being accurate because in rereading
20 it yesterday, as well as the Califon series, I
21 did that after Court. because I had a curiosity
22 relating to an area that I'm familiar with,
23 from that standpoint it's clear to me that
24 something that he's done there is relying upon
25 what is, he reflects in his bibliography, and

1 which he refers to even in the text, U.S.D.A.
2 I agree that some of the things he has not
3 covered. I have no intention of attempting to
4 interpolate, or figure out, or make part of my
5 findings those schedules that are attached
6 where the readings are taken at the stations.
7 I won't try to read them, the conclusions. I
8 think in all other respects I'll allow it to
9 be marked into Evidence.

10 MR. LINDEMAN: May I just raise this
11 question, your Honor, on conclusions that your
12 Honor just referred to, page 43, last sentence
13 of the first full paragraph.

14 THE COURT: First full paragraph?

15 MR. LINDEMAN: Middle.

16 THE COURT: The one that starts with
17 "Diminished water qualities...."

18 MR. LINDEMAN: Last sentence, which is,
19 "Seepage from poorly functioning systems, very
20 likely to be responsible for much of the
21 nutrient load in the watershed north of Pea-
22 pack." We had, we had some reference to that
23 before when he tried to testify about the
24 sewerage treatment plant. That kind of sentence
25 that crops up from time to time is objection-

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able, we submit, and--

THE COURT: Mr. Eby told us that yesterday when he compared residential areas, or was it--

MR. ENGLISH: General Whipple.

THE COURT: When he compared the agricultural areas and the residential areas, talking about the effect of nutrients on the stream. His expertise covered that.

MR. LINDEMAN: Yes. That may very well be, but here this witness is drawing a conclusion. He's not just citing data that comes from some other source. He's saying, maybe it's just corroboration. I don't know it's exactly the same thing that General Whipple said but--

THE COURT: It's not exactly what he said. It's a little bit at variance. Given the areas of expertise of the two men, that's a weight evaluation for me. I understand what you're saying, Mr. Lindeman, but I see nothing so objectionable to you, to exclude the report, to say that the report should be excluded. The weight I give it is something else again. I think I'll allow it to be marked. All right.

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In Evidence.

(D-34, report, was received and marked into Evidence.)

THE COURT: Anything further?

MR. ENGLISH: You may cross-examine.

THE COURT: Why don't we take until five after.

(RECESS OBSERVED.)

MR. ENGLISH: If the Court please, may I ask the witness one question I overlooked on his direct examination?

THE COURT: All right.

CONTINUED DIRECT EXAMINATION BY MR. ENGLISH:

Q Mr. Lloyd, as a land use planner, what function or value would you give to a natural resource inventory?

A Well, the natural resource inventory can be used to determine where houses, for example, can be constructed at the least economic cost in terms of just the construction cost. They can also indicate where the least cost might be in terms of environmental impact; environmental inventories can be used for, by those interested in other specific objectives such as defining or trying to conserve prime agricultural land, for example. You must identify the land, and inventories typically do include a study of agricultural suitability as well as other areas that might be used for recreational purposes,

1 water supply, great number of different uses.

2 Q Would it also have in addition to houses and
3 things you mentioned, would it also have a bearing upon com-
4 mercial or industrial development? A Yes.

5 For example, industries typically like to locate on flat land
6 just because they have such, many of them are built with great
7 surface area, and the cost of constructions on steep slopes is
8 much greater than flat land.

9 MR. ENGLISH: You may cross-examine,

10 Mr. Lindeman.

11 CROSS-EXAMINATION BY MR. LINDEMAN:

12 Q Mr. Lloyd, you testified that your determination
13 of the, one of the causes of pollution, or of change in the,
14 in the character of the Pespach Brook was the addition of
15 houses, and from the time of 1967 or '68, or '69, until 1970,
16 is that correct? A That's correct.

17 Q And, you ascertained that by counting them on
18 a photographic map; is that correct? A I
19 counted them on the U. S. Geological Survey topographic map
20 that was dated 1954, and 1970. In other words, there was,
21 it's the same map that has been photo revised.

22 Q And, what did you use then for 1977 to--

23 A I didn't use, I just used those two sources, and in-
24 creased the factor by about 30 per cent, just to present a
25 rather conservative estimate.

1 Q But you had no record of what the natural re-
2 source inventory was as of about 1954, did you?

3 A The earliest was '61, which I did have records for, or
4 '60, excuse me. It was the aerial photographs that were
5 used in the 1961 land use map.

6 Q No. I mean, were there any, do you have any
7 data as to what the condition of these water courses was from
8 the point of view of the aquatic and plant biology as of 1954?

9 A No.

10 Q So, the latest time you had was 1960?

11 A The earliest time.

12 Q Sorry. The earliest was 1960?

13 A The earliest time was 1967, for water quality we're
14 talking about now.

15 Q Right. Therefore, there is nothing in this
16 watershed area that you have which you could use as a base to
17 determine the effect of construction on the quality of the
18 water, of these streams; isn't that so? A Which
19 watershed?

20 Q I'm speaking of the Peapack Brook, Tiger Brook--

21 A Peapack Brook.

22 Q Right. A The only information
23 I had was 1960 land use, and the water quality data that were
24 done in 1967.

25 Q Am I not correct that you testified that you

1 attribute the change in whatever respect there was a change
2 of the condition of the water courses we're talking about in
3 1977 to the increase in the houses because, increase in the
4 houses? A That's correct.

5 Q And, there were 3.2 more people, 3.2 people
6 per house? A I used that as a factor, as I

7 said increased the, very specifically I counted the new houses
8 between '54 and '70 that were apparent on the topographic
9 maps, and the number came out to something like 87. I multi-
10 plied this by 3.2 and that comes out to less than 300, in order
11 to present a very conservative estimate. I just added an addi-
12 tional 200. In addition to that, in the brief I read that--

13 Q In the brief that you read, did you say?

14 A I don't know what you call it specifically, but, yeah,
15 I think it's the preliminary brief. I can't identify the
16 exact, it was a brief that was presented by McCarter & English.

17 Anyway, in the beginning of that, there was reference to the
18 census from 1950 to 1960, and throughout the 18-plus square
19 mile area of the township there was a population of, increase
20 of approximately 2,000 people during that period. The Peapack
21 Brook watershed represents 6.5 square miles, or less than a
22 third of that area, so that I was saying that the population
23 increase was 500 or 25 per cent of the total area for geographic
24 area of less than one-third, which seems fairly reasonable.

25 MR. LINDEMAN: I move that the testimony

1 of Mr. Lloyd on the question of the effect of
2 the increase in population from 1970 to 1977
3 in the water courses that we're talking about
4 be stricken for the reason that the witness now
5 shows that he really had no evidence at all as
6 to the actual houses or anything even close to
7 it, except rough estimates of percentages of
8 increase of people, generally, but he did not
9 know how many houses there were in this water-
10 shed area, and that's what he testified to.
11 It appears now that his testimony is that he
12 had a record of the increase in the number of
13 houses, and counted the number of houses from
14 1954 to 1970, and from that he just made pro-
15 jections, but I think that, that did not appear
16 very clearly in his direct examination. I,
17 therefore, move it be stricken.

18 THE COURT: Stricken, no. Evaluated by
19 the Court as the trier of the facts, yes.
20 That's the purpose of cross-examination. Go
21 ahead, Mr. Lindeman.

22 Q Now, you state there was a change of varying
23 proportions, and in varying respects, in the stream, Peapack
24 Brook, particularly from 1970, '69 until 1977. It is possible,
25 is it not, that whatever change occurred was all the result

1 of the construction of the Chester Springs Shopping Center;
2 is that not so? A No. It's not so.

3 Q Will you tell us-- A For example,
4 the water quality below, in the lowermost station below the
5 sewerage treatment plant was degraded to a much greater
6 extent between '67 and '77, than the water above in Peapack
7 Brook. In other words, there is at least one additional fac-
8 tor in the watershed that has caused degradation of water
9 quality other than the shopping center.

10 Q That sewerage treatment plant existed in 1968,
11 didn't it? A I think it was, I think so.

12 Q Either not-- A Might have
13 been under construction or brand new, whatever. I don't
14 know exactly when it was constructed.

15 Q I didn't ask you when it was constructed. I'm
16 talking about the fact that it existed. For example, page
17 16 of your report, Mr. Lloyd, you say, last paragraph,
18 "Biological studies performed by the A.N.S.P.....," that's
19 the Philadelphia Academy, is it not?

20 A Yes.

21 Q "...in 1968, show that water quality downstream
22 from the sewerage treatment plant was adequate to support
23 most forms of aquatic life," et cetera. Now, I raise that,
24 I refer to that sentence, not for the facts contained in it,
25 but only for reference to the sewerage treatment plant. That

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indicates, does it not, that it existed as of that time?

A Yes.

Q And, it's fair to say that you don't know how long before 1968 it did exist, whether it was--

A I do not know.

Q Nor under what specifications or controls it may have been constructed? A No, I don't know.

Q Nor what kind, what area it served?

A No, not specifically; the specific service area I do not know.

THE COURT: Excuse me a minute.

All right, Mr. Lindeman. I'm sorry.

Q You have some familiarity with the, with sewerage treatment plants in respect of what they do, what their function is, do you not? A Some, yes.

Q You have familiarity with their existence in the course of your work, do you not? A I do.

Q And, you are aware, aren't you, that there's been a significant improvement in, advance in the technology of the construction of sewerage treatment plants between 1968, at least, and now? A I'm quite certain that the same general technology was available in '68 as present now. I think the main difference is phosphate removal; for example, so-called tertiary treatment, where they simply dump in, introduce aluminum into the sewerage effluent and

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1 precipitate out, suspended matter that contains the phos-
2 phorus. That technology was present long before 1968.

3 Q Are you saying, therefore, there's no difference
4 in the technology in the construction of sewerage treatment
5 plants between--

6 THE WITNESS: In general?

7 MR. LINDEMAN: Yes.

8 A I'm sure there's been some. There's new techniques
9 and so forth that have been developed.

10 Q Have you ever had occasion to make a test of aqua-
11 tic life, quality and condition of streams, natural resource
12 inventory on the streams above and below a sewerage treatment
13 plant other than the one in question? A Many
14 times.

15 Q Have you not observed in a number of those
16 occasions differences in the quality of the streams above
17 and below the plant? A Certainly.

18 Q Now, have there also not been differences de-
19 pending upon what the sewerage treatment plant does, and
20 how many installations they may serve? A In my
21 experience, I think one of the biggest factors is just pure
22 dilution. If a sewerage treatment plant is, that handles
23 normal domestic waste, doesn't contain toxic substances, is
24 discharged into a small stream, the impact of that is con-
25 siderably greater than the same sort of effluent discharged

1 into a stream where the dilution might be one to ten or one
2 to fifty, or one to one hundred. In other words, a big
3 stream as opposed to a small stream.

4 Q And, the quality and condition of the technology
5 and construction of the sewerage treatment plant has no bear-
6 ing upon what effect it may have-- A It can help,

7 but, and depending on what degree of preventive measures are
8 taken, that will determine the impact. What I'm getting at
9 is, for example, chlorine. There is, chlorine is a very
10 toxic substance that's used to kill pathogins in the sewerage.

11 It is technically possible to add de-chlorinating facilities
12 at the end of the sewerage treatment process. This is,
13 I don't believe, this is not done too often. Typically, the
14 sewerage effluent is chlorinated and discharged directly
15 into the stream.

16 Q What experience, if any, do you have on the
17 operation of a spray irrigation system? A None.

18 Q What measurements, if any, did you take of the
19 width and depth of the stream, Peapack Brook in particular,
20 that you referred to in your direct examination? You spoke
21 about it as being several inches in some places, many feet
22 in lower regions. A I merely estimated it

23 looking at the stream and, occasionally, walking. My stride
24 is approximately a little bit over a yard, and occasionally
25 in some instances I physically walked the distance to see

1 how many strides it took.

2 Q Is this the entire length of the Peapack
3 Brook in the area that you spoke about--sorry.

4 A Width.

5 Q Did you walk the entire length of the stream,
6 the watershed area that you're talking about?

7 A No, no. I looked at the stream at those six specific
8 sites.

9 Q And, it was at those places from which you
10 made your, you gave your testimony as to the depth of the
11 stream; is that right?

12 A Depth, yes. I did
13 not have a yardstick or anything that I physically stuck in
14 the water. I just estimated whether, you know, it was a couple
15 of inches or a foot or whatever.

16 Q What is the difference, if any, this is a
17 broad question, I don't know how else to ask it, in the aquatic
18 life that would exist in a stream such as the Peapack Brook
19 in the places that you testified in 1977, between the winter
20 and the summer, apart from the--excuse me, apart from the
21 problem of ice?

22 A Yes. If I understand your
23 question correctly, which is what biological differences would
24 you expect to see on a--

25 Q Yes. Is there any difference in the quantity
of the animal life because of the different season?

A To a certain extent. I think, I know that a biologist,

1 when he looks at a stream, he has to take the season of the
2 year into consideration. In general, the diversity of
3 species and diversity of general groups remains quite con-
4 stant during the course of a year. There are specific times,
5 June, for example, when a lot of the May flies and a lot of
6 other insects go from the larval-nymphal forms to the adult
7 form, and this is what you have to take into consideration.

8 Q But, insofar as counting and identifying
9 aquatic life, winter time, dead of winter, can a comparison
10 be made of whatever may be found, for example in December
11 and January of any year, with that which may have been found
12 in July and September?

13 THE WITNESS: For what purpose?

14 MR. LINDEMAN: For the purpose that you
15 testified to.

16 THE WITNESS: For the purpose of evalu-
17 ating the water quality?

18 MR. LINDEMAN: For the purpose of count-
19 ing and identifying the life that may be in
20 the stream.

21 A I looked at the stream to evaluate water qualities,
22 and I would say, yes, you can examine a stream in the winter,
23 taking into consideration that you may have reduced growth in
24 certain groups, such as the algae, and determine whether or
25 not the stream is healthy, or semi-healthy, or polluted.

1 MR. LINDEMAN: Go ahead. Sorry.

2 A The other tool biologists use is to look at different
3 streams within an area so you get as broad a range as possi-
4 ble of different biological conditions.

5 Q Well, you didn't do that in this case, did
6 you, just studied the Peapack Brook? A I looked
7 at Tiger Brook in the north branch, and I looked at Peapack
8 Brook over, at different locations, which did represent
9 different chemical conditions.

10 Q Assuming that one were to look at those same
11 places today, can a proper comparison be made of the con-
12 dition today as opposed to September, and verify the,
13 whatever observations may have been made in September and
14 July? A You can go into the stream today and

15 determine the degree of enrichment of it.

16 Q Those are the nutrients in the stream?

17 A Based on nutrients, and also, you could go in and
18 simply look at the sediment, for example, condition of the
19 bottom, stream bottom.

20 Q You could see the sediment and the nutrients.

21 What about the animal life, apart from fish? A It's
22 there.

23 Q It's still there, not in larvae or--

24 A That's what I look at. That's exactly what aquatic
25 biologists concern themselves with, the aquatic nymphs and

1 larvae as well as the aquatic plants in the stream. They,
2 aquatic biologists are very often ignorant of the specific
3 characteristics of the adults, for example, because in their
4 little world, the adults are of lesser value in terms of try-
5 ing to judge the condition of a particular stream.

6 Q Now, you testified on direct examination that
7 the Peapack Brook was healthy above the treatment plant,
8 didn't you? A I did.

9 Q And, it was polluted below. A To
10 be specific, in my report, I believe I say that it's healthy,
11 heavily enriched above, and semi-healthy or polluted below.

12 Q Was it not heavily enriched as of about 1967,
13 '69? A Where?

14 Q Above. A Above? I think, if
15 I recall correctly, and I have to refer to the report, I
16 believe the report said healthy, enriched above.

17 Q As opposed to heavily enriched?

18 A As opposed to heavily, yes.

19 Q Now, you, can you tell us if in this watershed
20 area, under 30 people living per acre in the area would be
21 satisfactory in your opinion? A No, I don't
22 think it would. I think the whole point is that given the
23 natural characteristics of this watershed, its slopes and
24 its soils, and so forth, a vast amount of damage could be
25 done if houses were improperly constructed or located at a

1 density of five houses, I mean one house per acre, at very
2 low density.

3 Q Now, Mr. Lloyd, you show in your report at page
4 1, that you were retained by Chester Township to investigate
5 water quality in Peapack Brook. When were you so retained?
6 Was it prior to the taking of your depositions on April 15,
7 '76?

8 A Yes. Excuse me. Prior to my deposition
9 in '56--'76, I was just asked to simply report on the natural
10 resources inventory. It was not until 1977 that I was asked
11 to specifically look at Peapack Brook.

12 Q When in 1977 was that? A It was
13 the summer.

14 Q On, when you say that you were retained to in-
15 vestigate water quality in Peapack Brook, is that the same
16 thing as saying to furnish a natural resource inventory?

17 MR. ENGLISH: If the Court please, I
18 object to the question because I think it is
19 incomplete. I assume counsel is referring to
20 page 1 of Exhibit D-34 in Evidence, which
21 reads, quote, "Chester Township has retained
22 the services of Mr. Thomas Lloyd to investi-
23 gate water quality in Peapack Brook in relation
24 to the natural and man-made features of the
25 watershed."

MR. LINDEMAN: Right.

1 Q Was that the same as furnishing a natural re-
2 source inventory? A No, no.

3 Q It's different? A It's a part.
4 It could be used as a part of the natural resource inventory.

5 Q You mean the resource inventory is a part of the
6 investigation; is that what you're saying? A My
7 study, resource inventory is obviously a very general term.
8 I mean, classic resource, natural resource inventory includes
9 an investigation of geology, topography, climate, soils,
10 vegetation, hydrology. Many of these things, in fact, were
11 investigated in this study.

12 Q Including the soils and the hydrology?

13 A They were re-mapped and the hydrology there were,
14 hydrology, again, is a very broad study, and there were
15 certain things that I did do.

16 Q Going to page 2 of D-34 in Evidence, second
17 paragraph, you state that land use was then investigated
18 with particular reference to the nature and location of
19 development that has occurred since 1967. Geology, topography,
20 soils and hydrology were studied because of their importance
21 and the amount of pollution that flows or seeps into streams.
22 That was all done since July of 1967; is that correct?

23 A Yes.

24 Q The maps that you refer to in the sentence im-
25 mediately succeeding that, of course, previously had been

1 prepared, hadn't they? A Maps of land use,
2 topography, so forth, that sentence?

3 Q Right. A The land use map
4 was provided by the Upper Raritan Watershed Association, and
5 then I subsequently checked that in the field.

6 Q Is that D-24-a that you were referring to a
7 little earlier? A No. It's been introduced
8 as Evidence. I don't know what the exhibit is. It's the map
9 that Mrs. Ashmun might have provided the Court.

10 Q The other maps, all the other 24, D-24 maps
11 had previously been prepared, were they not, before--

12 A These maps in my report are new maps. They're not just
13 copies of those maps. They were, they were not made by simply
14 overlaying--

15 Q Okay. The maps that are D-24 were made before;
16 the maps, however, that appear in D-34 are new since July of
17 1977? A That's correct.

18 Q Did you prepare these maps personally?

19 A I prepared the draft and the criteria. I did not
20 personally color in the maps.

21 Q The photographs that appear on page 18, 19,
22 20, 21, and so on, obviously look very different in the winter
23 time, wouldn't they, that goes without saying?

24 A Yes.

25 Q Do you know whether any part of that water

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freezes up in weather such as we have today?

A Today, I would doubt it. As a matter of fact, I noticed on the way in that none of the streams were frozen.

Q Do you know whether any of the streams such as this does freeze after a continued spell of cold weather?

A What happens in streams like this is you do find ice in pools under extremely cold conditions, you can have almost all of the whole stream frozen. This is a very high-graded stream, takes very cold water, weather to--

Q Can you tell us, Mr. Lloyd, what you mean by "intensive residential development" as you use it in the last paragraph on page 2 of D-34?

A What I was referring to was development greater than single-family residential development.

Q Had you discussed the content of your report before it was put in final form with counsel or any of your colleagues?

A I had provided them with a preliminary one page, preliminary report that was one page long.

Q You didn't have any particular discussion about "intensive residential development" though, did you?

A In defining it?

Q Yes. A No.

Q At page 16 of your report, you state in the last paragraph, "Biological studies performed by the Philadelphia Academy in 1968 show that water quality downstream

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1 from the sewerage treatment plant was adequate to support
2 most forms of aquatic life, including trout," et cetera.

3 Can you tell us what the source of that is, of that state-
4 ment? Or, is that just a conclusion of yours?

5 A It was a conclusion simply based on the results of
6 that study. I don't think I have it right in front of me.

7 Q You don't know whether the study said that as
8 such or whether that--

9 A The study, as I
10 recall, said that the stream was healthy, enriched, and
11 went on to cite the 12, specifically the 12 different groups
12 of aquatic insects and other invertebrates that were found
13 at that station, and these represented all of the major
14 groups of aquatic organisms that you would expect to find in
15 a stream like that.

16 Q Page 24 of D-34, you state, "to help determine
17 where the substances come from." You're referring to the
18 types of pollution affecting Peapack Brook?

19 A Right.

20 Q "The geology, topography, soils and hydrology
21 of the upper watershed area were investigated and compared
22 with water quality data." Now, investigating the geology, you
23 studied the report that was referred to by Mr. Eby yester-
24 day, that is to say, the Soils Conservation--you were not
25 here? A Geology?

Q Yes. Did you do that?

A I didn't

1 refer to the Soil Conservation Service data.

2 Q What did you do in studying the geology?

3 A I looked at the original natural resource inventory.
4 I also examined reports by Joseph Ward, report entitled,
5 "Report of Environmental Geology Overview, Proposed Property
6 Development, Chester Township, New Jersey," and in addition
7 to that, well, in the field, I looked at rock outcrops just
8 in general to determine whether or not my map seemed to be
9 accurate, and, in fact, it was at that time that I dis-
10 covered that my geology map, inventory was probably not
11 accurate.

12 Q Is that the extent of your investigation of the
13 geology or is there anything more? A Yeah.

14 It was not a detailed geological survey by any means.

15 Q Now, the topography. What did you do to study
16 that? A The topography, these were slopes, were

17 defined on the, using the U. S. Geological Survey topographic
18 maps.

19 Q You didn't do any measurements yourself, of
20 course, did you? A Well, you simply determine
21 the slope from the maps. I mean I didn't go out in the
22 field and measure the slopes.

23 Q How about the soils, what did you do to investi-
24 gate the soils? A The soils information was

25 developed from the Morris County Soil Survey. A soils map

1 that portrayed all the different soil types in the watershed
2 was obtained from the Upper Raritan Watershed Association,
3 and then the copies of the maps were made and the soils were
4 classified according to the Soil Conservation Service criteria
5 for septic tank suitability. The map that, map number 5,
6 which was entitled, "Erodibility," was developed directly
7 from the Soil Conservation Service, soil types. This included
8 a consideration of slope and K-Factor.

9 Q Is that it? A Yes.

10 Q Did you do this all by yourself, or did you
11 have others helping you? A I had others help-
12 ing me.

13 Q Who? Can you tell us? A A man
14 named Mr. Merriam helped me with the soils work.

15 Q Is he an expert or a technician?

16 A He is, he works on a part-time basis for Betz En-
17 vironmental Engineers, and he is a soils specialist with
18 them. The graphics themselves were done by a landscape
19 architecture firm entitled, called Andrew Hogan & Asso-
20 ciates.

21 Q Any others? A I had some help,
22 merely just mechanically going through the, all the different
23 reports in preparing Appendix A, which is the tables of
24 water quality data.

25 Q Anything else? A No.

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Q Now, about hydrology. What is hydrology?

A Hydrology is the study of water and the way it's used here is to investigate water flow, some of the physical characteristics of Peapack Brook.

Q Do you use any literature to assist you in the study of the hydrology? A I used, yes, some. It's referenced in the report.

Q Part of some of those texts, part of your bibliography? A Yes.

Q Did you have any study to do of texts, of those texts that are in the bibliography? A I don't understand.

Q Did you study the texts? Did you have to read them, or was it just looking at charts, or what?

A I read them in the past, and they were techniques and so forth that had been described. I read them before, and I referred to tables and so forth.

Q How long after your taking of the tests in September of 1977, was it that you commenced the writing of this report? Approximately. A I think I started in October. It was a long process.

Q Well, between September, then, and the commencement of the writing, were you collating the material, studying it, putting it together? A Yes.

Q And, this was with the assistance of other

1 people, individuals?

A They pretty much

2 finished by then. I mean, I wrote the thing myself. That's
3 one reason why it took so long.

4 Q But at least between, what was it, September 7th
5 or thereabouts, that you made your second test, and October,
6 you were putting the material together? A Yes.

7 And, I had, it's hard to remember exactly what was done, when.

8 But, certainly the, I was working on the water qualities in
9 that period, and I think that, I guess the rough drafts of
10 the maps had been completed by then, and it was a matter of
11 just having the final graphics done and pictures, and so
12 forth, taken. That was, I guess, done in October.

13 Q Do you have any computation of the number of
14 hours that you personally spent in all of your work from
15 July through the production of this document?

16 A I have it written down. I don't know offhand. It
17 was 200. I don't know.

18 Q Something like 200? A I'd have
19 to check. I kept a record of it.

20 Q Would you also find out, please, the number of
21 hours that were spent by your associates?

22 A I could give you, can give you a pretty good estimate.
23 Merriam spent, I believe, a total of--

24 Q Why don't you think about it, Mr. Lloyd, unless
25 you know it exactly now. A Eighteen hours, I

1 think.

2 Q Merriam spent 18 hours? A Helping
3 me with the soils. Andrew Hogan spent 16 hours, and approxi-
4 mately 12 hours were spent by, in collating, helping collate
5 the data.

6 Q Now, in studying any of the geology or the
7 soils, did you ever have occasion to examine any borings,
8 boring logs? A No.

9 Q Do you know-- A I looked at
10 Joseph Ward's report, and that's the extent of it.

11 Q Did you use any of the data from the boring
12 logs in any of your reports? A No.

13 Q Can you tell us why? A It was
14 not, it did not appear to be, well, it just was not, I
15 couldn't find anything particular that was useful for my
16 report.

17 Q At page 29 of D-34, you state that, "Woodlands
18 represent nearly 50 per cent of the total acreage." This
19 is in the watershed area, is it not? A Yes.
20 That's, there's an inaccuracy there. It's closer to 40 per
21 cent. It was a typographical error.

22 Q Where does that figure come from, 40 or 50
23 per cent? A This came from Planimeter, Inc.,
24 P-l-a-n-i-m-e-t-e-r, I-n-c. The map that's portrayed as
25 map 2 of this report.

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Q Land use? A Yes.

Q Is that a photograph or a--

A That's a photograph of the original map that was prepared.

Q And, so, therefore, the calculation Planimeter depends on, whether or not the first map is accurate, first map from which this was, this land use picture was taken, was drawn by you and your associates, wasn't it?

A Yes, yes.

Q In other words, you didn't use Planimeter on the graph? A No.

Q Now, in the next paragraph on page 29, under the heading, "Physiography and Geology," you state that the Peapack watershed is situated in two physiographic provinces, Appalachian highlands, and the Piedmont, and then you say, "A fault which traverses the watershed north of Gladstone separates the two provinces."

MR. LINDEMAN: We do understand, do we not, your Honor, the next sentence referring to the Caputo tract will be ignored?

THE COURT: Yes.

Q As to the fact of the fault, where does that data appear? A Where did I--

Q Yes, where did you, what is the source of that information? A The source is the Joseph Ward

1 report. It's referenced 1976.

2 Q Okay. Now, the rest of that paragraph, though,
3 which goes to the top of page 31 comes from a report of an
4 A. W. Martin Associates, doesn't it? A Yes.

5 Q That's testimony of a witness who may or may
6 not be produced in this trial; is that correct?

7 MR. ENGLISH: I don't know if the wit-
8 ness knows who's going to be produced.

9 MR. LINDEMAN: I suppose that's correct.

10 Q What is the "A. W. Martin Associates, 1976,"
11 that you refer to on page 31 of your report? A It's
12 consistent with the natural resource inventory, that state-
13 ment, but anyway, there was a report entitled, "Feasibility
14 of Proposed Spray Irrigation on the Caputo Tract, Chester
15 Township, Morris County." Fifth reference on page 46 of my
16 report.

17 Q That's the report of a prospective witness. Do
18 you know that or not know that? A I guess, I
19 don't know.

20 Q Going to page 36, that page contains definitions
21 of various kinds of soils. Is all of that taken from the
22 Soils Conservation Service report? A Yes.

23 Q Is it copied word for word, do you know?

24 A Just with minor modifications. I didn't, if it was
25 exactly word for word, it would have been quotes. It's very

1 close.

2
3 MR. LINDEMAN: There's a statement in
4 the first paragraph about the Caputo tract.
5 I assume, your Honor, that will be ignored?
6 This does appear all through the whole report.
7 The witness has a sentence that says, "The
8 soils make up about 75 per cent of the Caputo
9 tract." That's, of course, one of the things
10 we objected to.

11 Q What is fragipan? A Fragipan
12 can be a real problem with on-site sewerage disposal systems
13 because what it is is a layer of sand and clay material at a
14 sub-surface level that can become very hard and impermeable
15 to the extent that it's like concrete.

16 Q Now, on page 37, you refer to Califon soil,
17 saying it has a "fragipan", that it causes a perched water
18 table, lateral seepage, and under these conditions on-site
19 sewerage disposal systems will not function properly." Where
20 did you, where does that appear? A That came
21 directly from the Soil Conservation Service.

22 Q Is it stated that way exactly?

23 A I can refer you to--says--

24 Q What are you reading from? A Page 19.

25 Q Of what? A Of the Soils Survey
of Morris County, New Jersey.

1 MR. LINDEMAN: Page 19?

2 MR. ENGLISH: Can we identify the docu-
3 ment the witness is referring to as being the
4 same as Exhibit D-1? D-38 it is in Evidence.

5 Referred to yesterday as D-1.

6 MR. LINDEMAN: Yes.

7 Q Where is this, page 19? A Yes,

8 the right column next to the last, end of the next to the last
9 paragraph before the small print.

10 THE COURT: It is D-1.

11 MR. LINDEMAN: It is D-1?

12 THE COURT: Yes.

13 THE WITNESS: "Seasonally a high perched
14 water table and lateral seepage..."

15 MR. LINDEMAN: Hold it just one second,
16 please. Just trying to find this. Yes. Right.
17 Go ahead.

18 A Simply says, "Seasonally a high perched water table
19 and lateral seepage of water are the main limitations for
20 community development," referring to the Califon series of
21 soils.

22 Q It does not say under these conditions on-site
23 sewerage disposal systems will not function properly; doesn't
24 say that, does it? In other words, that is editorializing
25 a little bit, isn't it, Mr. Lloyd? A To the extent

1 that if you have lateral seepage in a high perched water
2 table septic tanks will not function properly.

3 Q How do you know that? A Because
4 I have seen enough septic tank, or situations where the soils
5 have been saturated, wet, and have caused problems. It's
6 also the, straight out of, sorry, page 92 of the Soil Survey
7 manual.

8 Q What does it say? A Under the
9 limitations for septic tank absorption fields for Califon
10 soils, it says, "Severe seasonal high water table perched
11 to depths of one-half foot to four feet lateral seepage above
12 fragipan ." That's for three different soils described as--
13 well, three different types of Califon soils.

14 MR. LINDEMAN: Your Honor, for whatever
15 effect it may have in this case, I move again
16 that statement be stricken from this report
17 because it constitutes an opinion. It does
18 not appear as such in the report that the wit-
19 ness has referred to, and I think that this is
20 one that doesn't really go to weight. This one
21 is one where, this kind of thing is an opinion
22 on the functioning of soils which is not taken
23 in the right way from its source. Should have
24 been word for word.

25 THE COURT: Let me ask you this:

1 fragipan , as it seems to be in the S. C. S.
2 Soils Survey, is an impermeable layer of soil. Is
3 it not a logical inference that water goes side-
4 ways, and if water goes sideways, rather than
5 down, any septic system that's functioning above
6 a fragipan is going to run into that water?

7 MR. LINDEMAN: I don't know that's an
8 assumption that either of us can make.

9 THE COURT: I'm not so concerned with it
10 that I'm going to strike it.

11 MR. LINDEMAN: I understand the Court's
12 ruling then. It isn't a case, I don't object
13 because it's a matter of great concern, but
14 it's typical of conclusions that are drawn
15 that are not precise, and in this area where
16 the witness is not an expert, taking something
17 from an expert's document, this method of
18 editorializing, I submit, is improper.

19 MR. ENGLISH: If the Court please, for
20 the record all I heard the witness say in his
21 answer he observed these situations where
22 problems were caused--

23 MR. LINDEMAN: He may have observed them,
24 but he's not an expert. This is not his field.
25 He's not a soils expert, or geologist.

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THE COURT: Do you have to be an expert to testify as to what you have seen?

MR. LINDEMAN: I think so. I think you have to build these things, you have to have, you have to have experience with the, with what you're dealing with from the--

THE COURT: I think if you look at the Rules of Evidence, under Rule 56-1(a), "may be rationally based upon the perception of a witness if a witness is not testifying as an expert." I can testify a man is drunk by what I see. The same thing, I think, if you see it, you see it. You can tell what you saw. You have the right to draw conclusions from what you have seen. I think not, Mr. Lindeman. All right. Go ahead.

Q Going to the bottom of page 43, top of page 44, is your statement that, "In Gladstone a five foot impoundment has been filled by sand, gravel and rubble; and off-channel impoundment near Fox Chase Road was filled with silt during the construction phase of the Chester Springs Shopping Center." That all comes, all of that comes from Mrs. Ashmun?

A No. Perhaps the sentence is unclear. Perhaps it should be, there should be instead of a semi-colon, should be a period separating the five-foot impoundment from the

1 off-channel impoundment. The five-foot impoundment was one
2 that I physically observed in Gladstone, and the, the dredging
3 out of the other impoundment was from what I heard from Mrs.
4 Candice, I mean Mrs. Ashmun.

5 MR. LINDEMAN: Yes.

6 A The five-foot impoundment in Gladstone--

7 Q That you saw and the fact of the silt building
8 up near Fox Chase Road during the construction phase of
9 Chester Springs Shopping Center comes from Mrs. Ashmun; is
10 that right? A Yes, but I didn't mean to imply
11 in the report that the impoundment in Gladstone filled up
12 specifically as a result of the shopping center in Chester
13 Springs. What I was trying to point out is that because
14 of the steepness of slope and so forth, gradients, steep
15 gradient of the stream sediment transported, deposition
16 is a real problem in this stream.

17 MR. LINDEMAN: Your Honor, I believe
18 that that concludes my cross-examination, ex-
19 cept for information about the number of hours
20 that it took to perform this work from July
21 until the report was completed.

22 THE COURT: The only thing, Mr. Lloyd--

23 MR. FERGUSON: He can write us a letter,
24 and we can give Mr. Lindeman a copy.

25 MR. LINDEMAN: Either way.

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THE COURT: Anything further?

MR. ENGLISH: Just a couple of questions,
if your Honor please.

REDIRECT EXAMINATION BY MR. ENGLISH:

Q Mr. Lloyd, early in the cross-examination you indicated that the water quality below, just below the Peapack-Gladstone sewerage treatment plant seemed to be worse in 1977 than it had been eight or ten years earlier?

A Yes.

Q Now, in the light of that observation, what, if anything, is indicated as to the necessity of maintaining water quality standards upstream from that sewerage treatment plant?

A I think it's very important because right now the stream is enriched, and it has fairly high nutrient concentrations.

Q You mean below the sewerage plant?

A Above. But still, it's in much, much better condition than below the sewerage treatment plant, and right now it is certainly helping to dilute the effluent from the sewerage treatment plant, and this is a very positive factor. It's terribly evident^{if}/you look at the chemical data because you can see that within a relatively short distance the phosphate concentrations begin to go down, and if the water quality was poor immediately upstream from the sewerage treatment plant, the quality of water flowing into the north branch of

1 the Raritan would be worse in terms of higher nutrients
2 because of what would happen is that the beneficial aquatic
3 plants and animals in the stream would not be able to assimilate
4 or begin to break down and assimilate the sewerage that
5 was being introduced at Gladstone.

6 Q May I direct your attention to page 16 of your
7 report, which is D-34 in Evidence, and I believe Mr. Linde-
8 man directed your attention to the last full paragraph be-
9 ginning a little below the middle of that page, where it speaks
10 of the biological studies performed by the Academy of Natural
11 Sciences in 1968. Just for the record, are the results--

12 MR. LINDEMAN: What page is this?

13 MR. ENGLISH: Sixteen.

14 Q Just for the record are the results of those
15 studies by the Academy contained in the report the Academy
16 prepared, which has been marked as Exhibit D-23 in Evidence?

17 A Yes.

18 MR. ENGLISH: I have no further questions.

19 MR. LINDEMAN: No questions.

20 THE COURT: You may step down. Thank
21 you.

22 MR. LINDEMAN: Your Honor, may I have a
23 little time, a few days, perhaps more, to decide
24 this question as to what we're going to do?

25 THE COURT: You don't want to interrupt

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the trial for it?

MR. LINDEMAN: I don't think so.

THE COURT: All right. Let's break for lunch.

MR. FERGUSON: We have Mr. Kasler coming at 1:30. We can continue with him. I don't anticipate being terribly long. We're almost through.

MR. LINDEMAN: I had some questions-- not very many.

THE COURT: All right.

(LUNCHEON RECESS OBSERVED.)

MR. FERGUSON: Your Honor, this afternoon Mr. Kasler has returned. He's been previously sworn, and I anticipate asking a few questions, finishing up his testimony. Mr. Kasler.

M A L C O L M K A S L E R, recalled, resworn.

CONTINUED DIRECT EXAMINATION BY MR. FERGUSON:

Q Mr. Kasler, my recollection is that at the conclusion of your testimony the last time you were here, I was, I asked you whether you had at my request examined the zoning ordinance 76-12 to see what items or areas in that ordinance should be looked at, or reviewed, or examined, whatever, in light of the Municipal Land Use Law, and the decision of the

1 Supreme Court to, in the Madison Township case, to zone for
2 least-cost housing. I believe your answer was, you correct
3 me if I'm wrong, yes, I had made such a request, and you
4 looked at the ordinance; is that an accurate statement?

5 A Yes, sir, it is.

6 Q I would change that question just slightly,
7 and ask you to tell us those areas or items in the ordinance
8 which you would recommend be looked at or re-evaluated in
9 light of the Madison Township mandate to zone for least-
10 cost housing, and not to tell us about those items in the
11 ordinance which should be re-examined to, or changed to comply
12 with the Municipal Land Use Law, and would you, as I've re-
13 directed that, the thrust of my question, would you tell us
14 what you found in that ordinance and why?

15 A There were several sections that I, issues I think I
16 had raised in concert with our discussions dealing effectively
17 with Sections 8.206 and 8.301. 8.206 placed a restriction of
18 300 dwelling units in total in the RM zone, and placed a
19 limitation of 150 dwelling units for any one particular
20 site. Not that I found the 300 units objectionable per se,
21 but I did believe that there might be certain inequities
22 created as a result of that, and that certainly lands within
23 the RM zone were, although permitted multiple-family dwellings,
24 might not be allowed to develop if, in fact, other entities
25 have developed first, and the same comment would hold to that

1 section dealing with a 150 dwelling units for any one site
2 as a limitation.

3 Q I take it, then, the thrust of your comment,
4 then, about the 300-unit limitation is that with the limi-
5 tation on it, it might prevent anything, one area from
6 developing if another area developed first. Do I understand
7 that correctly?

8 A That's correct. I sub-
9 sequently determined prior to that, to this discussion, in
10 my opinion the 300-dwelling units was a reasonable amount
11 of housing under the Fair Share study that I had undertaken.
12 This did not speak necessarily to the, to the aspect of the
13 Madison case which indicated that there should be, in fact,
14 a greater amount of area zoned than actually might be built
15 to allow for a reasonable amount of fair-share housing.

16 THE COURT: Let me ask you this: Do you
17 know whether the township made any investigation
18 as to the ownership of these parcels before
19 they zoned them? In other words, if they, if
20 they, let's just take for a theoretical ex-
21 ample, if I'm a very wealthy person, and ob-
22 viously I want to have as much land around me
23 as possible, and they zone my land for multiple-
24 family use, the likelihood of my willingness to
25 devote it to that use is limited. All right.
Did they take any investigation of this nature

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to determine who the land owners were, and the potential for that land falling onto the market for sale for the use proposed?

THE WITNESS: I can't speak specifically to the zoning ordinance, but when we were undertaking the master plan aspect, which identified those same general areas, there were, as I had indicated in earlier testimony, a number of criteria that we utilized in determining what locations would be almost unique, if you will. We ultimately came down to about three or four general locations. We did not, as consultants to the Board, identify who owned the property, because that was immaterial, although the size of the property was important in terms of its potential for being developed. As far as I know, in the master plan process there was no determination as to ownership. But, as to the zoning ordinance itself, which I did not participate in, I can't answer that question.

A So, that represented one area that we had suggested might be re-considered by the Board, or should have been considered by the Board.

The second dealt with the density of five units per

1 acre. We did not object professionally to the density
2 per acre. Five units to the acre is a reasonable density
3 for townhouses and garden apartments as a general mix,
4 but the way the ordinance is structured, it would allow
5 five units to the acre for garden apartments. It was our
6 opinion that the townhouse density might be a little bit
7 on the high side; garden apartment density, it might be
8 on the low side. In any event, it should have been con-
9 sidered in the light of separate development as well as
10 combined developments. Certainly, that should have been re-
11 considered.

12 Thirdly, there was a limitation in Section 8.301
13 which limited the number of bedrooms per acre; that is,
14 technically, you could have ten one-bedroom apartments,
15 or five two-bedroom apartments, or any combination
16 thereof, as long as the number of bedrooms did not exceed
17 that particular number. I thought this was really a
18 legal question, but it is one that I found objection-
19 able in terms of it being an overly limiting method of
20 density calculation. It is one that has grown in popu-
21 larity over the past few years, but in my opinion seems
22 to run contrary to the number of cases, particularly
23 the Glassboro case, which indicated that you could not
24 restrict the number of bedrooms, and that this might
25 place an undue limitation on the type of housing that was

1 being constructed.

2 Q Wholly apart from what the Glassboro case
3 may have said, do you feel the ten bedroom limitation should
4 be re-examined in light of the Madison Township, and zon-
5 ing for least-cost housing?

6 A Yes, it has the same practical effect. It places
7 certain limitations on not only the amount of housing
8 that is to be built, but the actual spatial distribution
9 of that housing, which, in effect, if you have ten one-
10 bedroom apartments, that has a certain economic value;
11 if you have two-bedroom apartments, that has a dif-
12 ferent economic value. What is not really being regulated
13 is the broad concept of housing units per acre, or people
14 per acre, which is really part of what Madison speaks to.

15 Lastly, this wasn't within the framework of any
16 specific section of the ordinance per se, but it really
17 deals with the aspect of Madison which deals with small-
18 lot zoning. Madison doesn't only say that you must have
19 multiple-family housing, but it also indicates that there's,
20 there should be a variety of housing made available in
21 the community. Madison and Mount Laurel both speak to
22 small-lot, one-family homes, as one of the alternative
23 types of housing; for the most part, the Chester ordinance
24 is predominantly large-lot zoning with the multiple-
25 family zone included. While I was not in a position to

1 judge whether, in fact, there should have been small single-
2 family lots, other forms of housing, I thought it certain-
3 ly should be something the community should consider in view
4 of the other things that were also being considered.

5 Q Now, did you form any opinion as to what should
6 happen when these four items are evaluated or re-addressed
7 by the community? If so, will you tell us what that
8 opinion is?

9 THE WITNESS: Sorry. I didn't under-
10 stand the question.

11 Q These four items which you just described, do
12 you have an opinion substantively as to what should happen
13 with respect to those items or limitations which you think
14 should be re-examined? A I think they should
15 be re-evaluated by the Planning Board, and the governing
16 body of the community.

17 Q Do you now have independent judgment as to what
18 should be the result of that process? A I don't
19 think that I could specifically speak to a solution to it, no.

20 Q Mr. Kasler, I will state, and I'm sure Mr.
21 Lindeman will correct me if I'm wrong, but I believe Lee
22 Hobough, an expert planner who testified on behalf of the
23 plaintiffs, testified as a result of his review of the master
24 plan and zoning ordinance, the various standards applicable,
25 including, I suppose, Madison Township and the Land Use Law

1 that, in his opinion, large-lot zoning in Chester Township is
2 inconsistent with general welfare. I'd ask you to comment
3 upon that statement, and tell us whether you agree or dis-
4 agree, and if so, why.

5 MR. LINDEMAN: If your Honor please,

6 I'm not sure I agree that he said that, but I
7 don't object to the question. I don't know
8 whether Mr. Hobough said it, if he did say it--

9 THE COURT: Okay.

10 A I don't agree with that statement. I think everything
11 in this world has got to be tempered and balanced, and a
12 community such as Chester, were the community so deemed to be
13 a developing community, and that's all they had was large-
14 lot zoning, then yes, the public welfare and general good
15 probably would be hurt, but this is a community that is still
16 a rural community, has attempted to provide multiple-family
17 housing, perhaps other forms of housing in certain portions of
18 the community. It's a community that does not have public
19 water, public sewers, and in those, in that general context
20 large-lot zoning is consistent with the public welfare which
21 Mr. Hobough spoke to. It is also a form of directing develop-
22 ment in the community to those areas where more intensive de-
23 velopment should take place so that is, if you do have a five-
24 acre zone, environmentally sensitive area, an area that should
25 not be built at this time, there should be another place where

1 that he was doing? A Attempted to, yes.

2 Q He consulted with you in what you were doing?

3 A Yes.

4 Q Was it just the two of you who were working on
5 this master plan for Chester Township, or were there others
6 at Candueb & Fleissig? A There were ob-

7 viously other support facilities, such as drafting, typing and
8 such, but as I recall as far as the planners, more supervisory
9 personnel, I believe it was basically the two of us.

10 Q Did you have any, do you recall having examined
11 the Soil Conservation Service maps and data in the preparation
12 of the master plan? A I personally did not re-

13 view that material. It was, I was aware of it. In fact, I
14 physically saw the maps. I know Mr. Hultgren was working
15 with it, but I did not particularly use it myself.

16 Q That was not something that you were working
17 on? A That's correct.

18 Q In your report--. Is that marked? I can't
19 remember.

20 MR. FERGUSON: Yes.

21 MR. LINDEMAN: D-19 in Evidence.

22 Q Do you have a copy of it? A Yes,
23 sir. I do.

24 Q In calculating the needs of multi-family dwell-
25 ings, and the various regions, you first used the figure that

1 is designated, "1970 low and moderate income housing need,"
2 and that I think you stated came from governmental sources such
3 as the Bureau of Census, did you not, and Port Authority?

4 A No, sir.

5 Q What were those? A The low and
6 moderate income housing--

7 Q Community Affairs? A --was based
8 upon the Department of Community Affairs' study.

9 Q Yes. D. C. A. study, and do you recall if,
10 in that study, there was any definition of low and moderate
11 income in terms of the dollar amounts? A Yes,
12 sir. I believe there was.

13 Q Do you recall what they were? A I can
14 only give you a ball park estimate because I don't remember the
15 specific number, but I believe it was approximately \$5,600
16 or something of that magnitude for a family of four in 1970.

17 Q Now, 1980 projected multi-family housing need
18 is taken from the same survey, was it? A No, it
19 is not.

20 Q Where was that from? A Estimated
21 need was undertaken, was obtained from a study prepared by
22 Rutgers University, the authors of which were Franklin James
23 and James Hughes, study was entitled, "Modeling State Growth,
24 New Jersey, 1980," prepared by the Center for Urban Policy
25 Research, Rutgers, which in part was documented by the Depart-

1 ment of Community Affairs.

2 Q The total isn't documented? Well, third column
3 on page 5 in the report, of course, is the total of those
4 two, as to the 1980 projected need, what indication is there
5 that that's low-cost, low and moderate income need?

6 A The method that was utilized basically is indicated,
7 it did not speak to income per sq. It spoke to multiple-
8 family housing.

9 Q So, it could be-- A In this par-
10 ticular instance, it speaks to a broader range than just
11 low and moderate income housing, but what we attempted to do,
12 because the Madison case now doesn't speak to just low and
13 moderate income housing, but least-cost housing, is that we have
14 translated multiple-family housing to be one form of housing
15 which would be synonymous with least-cost housing.

16 Q Are you sure that Madison Township only calls
17 for least cost, doesn't speak of moderate at all?

18 A It does speak, it speaks in a generic sense, but it
19 recognizes the fact that the market place is not building
20 housing for that income strata, and I think the resulting
21 opinion was that they're really talking about the least amount,
22 well, it's interpretive as to what least-cost housing is. But,
23 I have interpreted least cost to mean cost of the least amount
24 of money within the framework of the community itself. It is
25 not to build a 100-story high-rise building in Chester, but

1 something that would be compatible with the community.

2 Q As to --. I really interrupted your answer.

3 Have you finished as to the determination of the character
4 of the 1980 need? You say that was general, and it concluded
5 least, moderate, and any other kind of multiple dwelling--

6 A Speaks to multiple dwellings, that's correct. It does
7 not speak to an income category.

8 Q The multiple - family dwellings that were con-
9 structed between 1970 and 1975, which you deducted from the
10 1980 housing need was taken from building permits, correct?

11 A That's correct.

12 Q Isn't it fair to say that of all the multiple-
13 family housing built under those permits, that none of it could
14 fairly be characterized as least-cost housing, or to satisfy
15 the least-cost housing need? A I couldn't
16 agree with that.

17 Q What study, if any, did you make to determine
18 what that construction was? A There's no, no known
19 information per se as to the actual rental values or ownership
20 values of that housing that's been built. It is generally
21 accepted that multiple-family housing is a fairly high density
22 form of housing as opposed to other forms of housing, as
23 opposed to one-family houses on five acres or on three acres.

24 Q It is a fact today, though, that new multiple-
25 family dwelling construction results in what is normally

1 characterized as high rentals for the prospective tenants,
2 doesn't it, just as a general population, especially in the
3 Morris County area? A That is not limited to
4 Morris County, but your question is correct in that just about
5 everywhere in the State right now housing costs are extremely
6 high. What we're attempting to measure is that area which is
7 being constructed, unassisted, that is, without governmental
8 assistance, which will meet the lowest income strata, whatever
9 that income may very well be.

10 Q I realize that it isn't just Morris County.
11 Only one of your categories is Morris County alone.
12 But, you have a five-county region, Morris County, and Class 4
13 and Class 3. I'm speaking about those four regions of the
14 construction that was done there. It is fair to say that,
15 well, it is correct that you did not make any study of the
16 nature of the multi-family dwelling that was done, that was
17 constructed; is that so? A That's correct.

18 Q And, you don't know, therefore, if any of it was
19 low or moderate-income housing? A My own
20 general knowledge would be that probably, probably 95 per cent
21 or more of it would not qualify under low, moderate income
22 housing.

23 Q Now, going to Table 2, where you have percen-
24 tages of employment of the residents of Chester Township
25 compared to the others employed in the region--

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THE COURT: What page is this?

MR. LINDENMAN: Page 6 of D-19.

Q The first percentage figure is 2.80. Am I not correct that that is the percentage of the employed persons in Chester Township as compared with the rest of the five-county region? A To clarify the record, the percentage is .28 per cent, and it's the number of people working in Chester as compared to the number of people working in the region.

Q So that it isn't just all of those who are employed, who happen to live in Chester Township?

A This is not Chester residents' total employment in Chester Township.

Q Right. Now, that figure, therefore, based upon those employed in Chester is controlled, naturally, by the extent that Chester previously or at least up to this time will have zoned any of its property for business, commercial, or farming purposes, which would give rise to employment; that follows doesn't it? A No.

Q Tell us why that is not correct.

A Well, that would assume that all of the lands, whatever was zoned in the township, in fact, had been developed industrially or commercially, which is not necessarily the case. The town had area-zoned, which hadn't been built. Therefore, the employment isn't a reflection just of the zoning. It is

1 in fact, what the market place is dictating in part, what
2 the zoning is permitted in part.

3 Q Well, are you saying if the market would have
4 dictated there be a lot more employment available, a lot more
5 industry and commerce would have wanted to locate in this
6 place, that Chester would, by some automatic process, have re-
7 zoned itself so that there would be more space allocated for
8 commercial and industrial purposes? A I'm
9 saying that there's room right now today, and there had been
10 room even years ago, because there were areas zoned for non-
11 residential purposes, never been built upon.

12 Q What do you mean? What non-residential purposes
13 is there room for? A Industrial, areas in the
14 town zoned industrial, and areas that had been zoned business.

15 Q Do you know where the industrial areas were in
16 Chester Township? A I don't--

17 Q Whether they were practical--. Let me ask the
18 first question first. A I don't have a copy
19 of the old zoning map so I can't give specific reference, but
20 I recall it was basically in the vicinity of the borough, and
21 there has been, or had been some development in that area, but
22 not, nowhere near the area that had been zoned.

23 Q Well, how much? You say "nowhere near."

24 A I couldn't tell you because I don't remember what the
25 numbers are.

1 Q Fifty per cent, ten per cent, ninety per cent,

2 or-- A I don't recall.

3 Q Now, what about commercial development?

4 A I believe the same would hold true. I think there
5 are areas in the community that had been zoned commercially
6 that had not been built upon.

7 Q Isn't it a fact that the extent that a muni-
8 cipality will zone its residents in such a way as to encourage
9 a lower-income labor force to come in has an impact upon the
10 extent that there will be commercial and industrial develop-
11 ment?

12 A I have never heard that question
13 posed that way.

14 Q You have never heard the concept that industry
15 or this view that industry and commerce has that it will
16 not move into an area where it can't readily find a labor force
17 to work; industry will not come in, steel mill, for example,
18 which, of course, would be absurd, but a steel mill is not likely
19 to come into Chester Township, even assuming there were enough
20 land for it, if the labor force would not be readily available;
21 isn't that--

22 A As a general proposition, that is
23 correct. It becomes extremely difficult to say that a labor
24 force doesn't exist in this region, because the region is so
25 large, and very mobile, so that if you took a hypothetical
steel mill in Chester, it's still possible there might be a
labor force coming 30, 40 miles away to it.

1 Q Do you know whether that is happening in the
2 corporate headquarters of I. T. & T., whether or not they're,
3 in fact, having difficulty in finding people to work?

4 A I have no specific knowledge of any of the specific
5 corporations in this general area.

6 Q Is it not also a fact that a commercial area,
7 though, is not likely to develop with respect to the con-
8 struction and the occupation of stores and shops, if there
9 aren't people, fair number of people around who will use them?

10 A Of course.

11 Q If a township such as Chester does not have a
12 substantial number of small lots, whether it be lots of
13 people living, a fair number of people living, that whatever
14 commercial area there might be would not be developed because
15 the people are not there to buy on a local level?

16 A That's not necessarily true.

17 Q What is the fact about the development?

18 I'm speaking now not of the shopping center such as Chester
19 Springs, but--

A As a practical matter, you
20 have a comparable situation in Morristown.- Morris Township,
21 in that Morristown is a commercial hub and surrounding it you
22 have a township which in the last 20, 25 years has developed
23 substantially. Morris Township now has a population over
24 20,000 people, yet does not, for practical purposes, have too
25 much by way of commercial development, although the needs for

1 the township would be supplied in Morristown, and the same
2 would hold true in Chester Borough and Chester Township.
3 So, the fact that the area, the township has some areas zoned
4 commercial does not necessarily mean that they in and of them-
5 selves must have a substantial population to support it,
6 because that support could come from elsewhere, or conversely,
7 the fact that it has property zoned commercially doesn't mean
8 it will be built there because there are competing facilities
9 in the borough, and the total market support for commercial
10 facilities might be before the borough, township, and other
11 communities as well. There's no direct correlation between
12 one and the other.

13 Q You spoke first, I think, of Morris Township
14 and its development with regard to its proximity to Morristown.
15 Isn't there a difference when a township such as Morris
16 Township would be as close as it is to Morristown and the
17 shopping in Morristown so that there would not be the need,
18 perhaps, for the construction of commercial places for Morris
19 Township, and isn't that a reason why such development would
20 not take place? A I don't know that I under-
21 stand the question.

22 Q Morris Township adjoins Morristown. Chester
23 Township does not; is that not correct? A No, in
24 fact it does adjoin Chester Borough. I was speaking of the
25 relationship of Morris Township to Morristown, as Chester

1 Township is to Chester Borough. They're both communities,
2 center of which is surrounded by the townships, and there's
3 a historical relationship between those two entities in that
4 they will both, in fact one municipality, Morristown-Morris
5 Township were one municipality, as were the two Chesters, and
6 historically they split off, the center of which became a
7 more urbanized place.

8 Q I didn't think that's what you were talking
9 about before. You were saying there hasn't been much com-
10 mercial development in Morris Township even though there were
11 20,000 people there; correct? A Right. The
12 demands for those 20,000 people were being supplied in the
13 town itself in the middle, in Morristown, and I'm suggesting
14 the same might hold true in Chester Borough and Chester
15 Township.

16 Q However, there's a very great difference in the
17 development of Morristown now and the Borough of Chester now,
18 or, and even when Morris Township was growing 20 years ago;
19 isn't that a fact? Morristown was the hub commercially,
20 industrially, professionally, which is different, very dif-
21 ferent from Chester Borough? A No. I
22 recognize that Morristown is really an urban center relative
23 to the entire county, and because of the courthouse and hos-
24 pitals, and the other functions it serves, a much more regional
25 function, than does Chester Borough, but there is a relation-

1 ship, particularly towards convenience needs, that is, the daily
2 shopping needs of residents, that Chester Borough could, in
3 fact, supply to Chester Township in the same fashion Morris-
4 town supplied to Morris Township. I'm not implying Chester
5 Borough would become another Morristown.

6 Q I have difficulty in understanding just what
7 your point is. Maybe you don't understand my question either,
8 but is it a fact that Chester Borough has much more commercial
9 area in it than Chester Township has? A Yes,
10 I believe that is true.

11 Q Now, if that is the fact, somehow the stores,
12 places of employment have not developed, except for the two
13 shopping centers; is that correct? A Speak-
14 ing about the borough now?

15 Q Yes. A Well, that becomes part
16 of the work force in the borough, but not the only amount of
17 employment that the borough has generated.

18 Q My question now is the commercial area has not
19 developed very extensively in Chester Borough?

20 A I suspect it has developed relative to the overall
21 needs of the general region that it serves.

22 Q Precisely. Just what I'm driving at, that it
23 is developed in accordance with the needs of the area, and the
24 needs of the area depend somewhat upon the kinds of people
25 who live there, the numbers of people, and the income level

1 of the people; isn't that so? A It depends
2 on many factors, of which they are part of the input. I
3 wouldn't say they're the only reasons.

4 Q I agree. I'm not being absolute about this. I'm
5 just saying that that is a factor, however.

6 A Yes.

7 Q And, therefore, what I'm saying is that the
8 percentage which appears on the first column of Table 2 of
9 those who are employed in the region is certainly affected,
10 if not controlled, it's affected by the fact of the develop-
11 ment to the extent that there has been residential develop-
12 ment in the area; isn't that fair to say? In other words, if
13 there were lots more people living on single-acre lots, or
14 multiple dwellings who would use a commercial area, there
15 would be more people working in the area, and, therefore, that
16 percentage would be bigger? A No, sir.

17 That number is the people working in the township, and what
18 I'm suggesting to you is if the population in the township
19 quadruples, increases tenfold, it doesn't necessarily corres-
20 pond that you're going to have an increase in employment in
21 the township because it may be taking place some place else.

22 Q I agree. Wouldn't necessarily happen, but it
23 is one of the things that could affect the development of a
24 commercial area, perhaps an industrial area, the fact of
25 people living in an area? A The attraction for

1 industrial use is not that closely correlated with the
2 amount of people living in a community. PER SA.

3 Q Then, we will de-emphasize the industry and get
4 back to the commercial area. A Yes, there's
5 a more direct correlation on commercial.

6 Q Now, you stated, I think on direct examination,
7 that as of the time of the adoption of the master plan in
8 1974, that it was appropriate just to plan for the next six
9 years; did you say that? A No, sir.

10 Q Tell me what you said. A If I
11 did, I hope I didn't.

12 Q Tell me what you said. A The
13 original concept when one developed the master plan was to
14 really do a long-range program, projected ahead ten, fifteen,
15 twenty years. What I did state was that the Municipal Land
16 Use Law, which is now in effect, requires a periodic re-
17 assessment every six years. That is, the municipality is
18 required to at least review that plan every six years as being
19 kind of an interim period which will have an affect on plan-
20 ning and zoning in the municipality, not just Chester.

21 Q Let me just step ahead a moment, Mr. Kasler.
22 The Municipal Land Use Act was, of course, adopted after the
23 master plan was adopted, wasn't it? A That's
24 correct.

25 Q All right. Go on. A The only

1 thing that triggered that was the reference to six years. The
2 whole concept legislatively was then to tie, if a community
3 was undertaking capital improvements, to tie in that kind of
4 a program with an overall land use plan. It would then tie
5 into various types of zoning so that you didn't have an
6 ordinance which became outmoded, outdated, so that hopefully
7 the municipality will be reviewing and updating all of their
8 implementating ordinances, and other types of controls on
9 a short-term basis.

10 Q You say the Municipal Land Use Act calls for
11 review of the master plan every six years. You have read
12 that section of the Act, I assume, have you not, the one that
13 refers to the six years? A I helped write the
14 law.

15 Q That's not responsive, Mr. Kasler. Did you
16 read it? A Yes, sir.

17 Q Now, do you recall what sanctions there are if
18 a municipality does not follow the injunctions of the statute?
19 A What specific section are you referring to?

20 Q This is 40:55(d)8.9. It provides that, "The
21 governing body shall at least every six years provide for a
22 general re-examination of its master plan and development
23 regulations by the planning board." Now, you say you have
24 read the document and, indeed, you wrote it, helped write
25 part of it. Do you know what it says about what happens if

1 the, if the townships or any town doesn't follow the re-
2 quirement of the statute? A I don't recall any
3 sanctions.

4 Q So that even though there is, conceivably this
5 would call for a study of the Act, I guess, but even if the
6 Act does call for re-examination, it doesn't necessarily have
7 to happen, does it?

8 MR. FERGUSON: I object. It calls for a
9 legal conclusion which this witness may or may
10 not be qualified to answer.

11 MR. LINDEMAN: I didn't offer the gratui-
12 tous statement that he wrote the act. He did.

13 MR. FERGUSON: That's why I said he may
14 or may not be qualified.

15 MR. LINDEMAN: I'm only asking factually,
16 of course. I take it you don't know, Mr. Kasler.

17 THE COURT: I don't think it makes any
18 difference whether he knows or not for this
19 case. I'll sustain the objection.

20 Q The zoning ordinance was adopted in, at least
21 two years after that, of course, wasn't it? I think it was,
22 became effective in August of 1976? A Yes, sir.
23 That's correct.

24 Q And, your testimony was that it really was ef-
25 fective until about 1932 because there was an economic turn-

1 down in the period, and, therefore, what was contained in the
2 '76 ordinance would really go that long; is that correct?

3 Is that what you said, or was it something different than
4 that? A I don't recall making that statement.

5 Q Is it fair, then, to say that the zoning ordin-
6 ance of, that was adopted in '76 was intended to just, to
7 speak for the next four years because the projections as of
8 1974, or needs for multiple-family dwellings spoke for six
9 years, and that time would be up in 1980?

10 A The time framework is a little bit different, but what
11 I think is engendered in this entire concept is that within
12 a six-year period the town would be required to review this
13 document and determine whether, in fact, it was current and
14 up to date. If it were not, then it could make various types
15 of adjustments based on its findings. There will be communi-
16 ties in this State in which six years will not see a great
17 deal of change in the community. In fact, the ordinance will
18 still be as valid as it might have been six years previous,
19 and there will be other communities in which a great deal of
20 activity will have taken place in that perhaps certain adjust-
21 ments should, in fact, be made, but you will only know that
22 at the time you make your evaluation. So, what I believe I may
23 have stated was that somewhere relative to the housing study
24 which we undertook to be a six-year projection, Land Use Law
25 being a six-year projection, sometime in the early 1980's or

1 sooner it would be reasonable to assume that this ordinance
2 would be valid, as would the master plan, as to the total
3 needs of the community, and, in fact, had two or three hundred
4 multiple-family housing units been built at that point in
5 time, and there was adjudged to be an additional need to go in
6 the later years, perhaps additional areas would be re-zoned.

7 Q Is it your opinion that good planning, a zoning
8 ordinance should speak only for the succeeding six years?

9 A Yes, sir. It speaks to six years, and thereafter.

10 Q That's what I mean. It's just limited to six
11 years, and then in six years when that period is up, to re-
12 examine, to see if there shouldn't be more multi-family
13 dwellings or--

14 A Yes, sir. I believe that
15 it is good planning.

16 Q Isn't it always difficult, difficult if not
17 explosive, when residential single-family residences have
18 been built, to re-zone immediately adjoining neighboring
19 areas to multiple dwellings because that would have a chilling
20 effect on the value of the single-family dwelling right next
21 door to it? Isn't that a reason, therefore, that more than
22 just the immediate need should be planned for?

23 A The first part of the question, I don't totally under-
24 stand. It's taken in a very general context. The second
25 part of the question is that the planning for long-term
conditions is being taken up by the master plan. It's only

1 the six years that will require some form of implementation,
2 so if the master plan looks forward to 20 years, and the first
3 six years is implemented, that, in my judgment, is a valid
4 and reasonable way to plan for our municipality.

5 Q I'm speaking of the zoning ordinance, and if the
6 zoning ordinance as the 76-12, in fact, provides, takes care
7 or allows for three tracts to be available for multiple-
8 family dwellings, and it should have developed, should turn
9 out that in 1980 much more multiple-family dwelling would
10 be needed, and if single-family dwellings are built in
11 places of Chester Township which are next door to other
12 tracts that the township now says should be multi-family
13 dwellings, the people who built those single-family dwellings
14 will be very upset, won't they, and it becomes difficult to
15 zone the adjoining property for multi-family dwellings?

16 A If I may, I think you've got about three hypotheses
17 in there. One that, three tracts of land that are zoned
18 multiple-family, shouldn't say hypotheses because that, in
19 fact, is a fact, to assume parts of it are developed for hous-
20 ing, and then the third part is that the residual lands, if not
21 zoned, or if you cannot build them for multiple-family hous-
22 ing, would be developed for one-family housing. Is that--

23 Q No. I'm saying that you're used up on the
24 multi-family dwelling. 1980, you don't have any more land
25 because all the land zoned for it is built apart from the

1 what's in the present zoning ordinance, and you have to
 2 zone more, if you zone more land at that time it becomes more
 3 difficult because you might have to zone lands which are
 4 next to places where there are single-family dwellings;
 5 isn't that, do you not understand me? A No.

6 Q All right. I'll drop it.

7 THE COURT: Why does it become more
 8 difficult?

9 THE WITNESS: I think I know the direction
 10 that he's going.

11 MR. LINDEMAN: It's difficult because
 12 multi-family dwellings next to premises that
 13 are--

14 THE COURT: Difficult for whom?

15 MR. LINDEMAN: Obviously difficult for
 16 the people who live there, and it's not fair.

17 THE COURT: They want to sue--

18 MR. LINDEMAN: It's--

19 THE COURT: Isn't that the way? Isn't
 20 that what the Land Use Law contemplates? Go
 21 back every six years and looks at it. I don't
 22 understand why all that questioning. Where was
 23 it going to? Mr. Ferguson sat here without
 24 objection, while I squirmed.

25 MR. LINDEMAN: I think it's a very real

1 point, and I think the witness is really fenc-
2 ing with me. I'm saying that here the municipi-
3 pality plans only for six years, and has limited
4 areas for multi-family dwelling, and after six
5 years it might have to allow for a lot more.
6 At that time, it might be it's much more diffi-
7 cult unless, rather than if the municipality had
8 planned originally, perhaps, over-zoned as
9 Madison at Oakwood Township calls for.
10

11 MR. FERGUSON: If the local residents
12 screamed loud enough, they won't re-zone any
13 more land. I think that's what he's getting at,
14 and I think this is my own view that this is
15 a problem the Land Use Law has solved by
16 erecting the various boards and bodies, and
17 boards of review, and ultimate appeal to the
18 Court. It's a problem you'll have now, later,
19 no matter what the statute says. So, I don't
20 think it's a particularly relative inquiry,
21 but that's the way I perceive the question
22 is going.

23 MR. LINDEMAN: It isn't just screaming.
24 I'm talking about a zoning ordinance that pro-
25 vides for 300 units, and a master plan that
calls for 650 units. There's no provision in

1 the zoning ordinance for anything like that 650
2 units, obviously, and the witness says that he
3 thinks that was good planning. Now, it might
4 be that my questions are just, can't be under-
5 stood. I didn't think that was the case, but
6 apparently so. But, I think the point has been
7 made, your Honor. I'm sure it isn't worth
8 beating any further.

9 Q Mr. Kasler, my notes show that when you testi-
10 fied before, you said that the township had environmental
11 problems, and there were geographic and geologic factors
12 which militated in favor of the areas chosen for the RM zones,
13 but you don't know what they are; is that correct?

14 A There will be another planner who will be testifying
15 to those aspects.

16 Q That's Mr. Hultgren, is it?

17 A Yes, sir.

18 Q Now, the three areas were chosen with a number
19 of factors having been borne in mind. One was accessibility
20 to highways. Is it your view that the three parcels are more
21 accessible than, let's say, the Caputo tract to major high-
22 ways? A Yes, sir.

23 Q Is it not a fact that so far as shopping is--
24 Well, let me put it this way: Are any of the RM-zoned pro-
25 perties immediately adjoining any shopping center, or across

1 the street from the shopping center that you can recall?

2 A I don't recall if they're immediately adjacent to or--
3 I can't recall per se.

4 Q So, you don't know whether, even where they're
5 located, it would nevertheless be necessary that residents
6 in any one of those three zones would have to drive to the
7 shopping center, no matter how far or how close they would
8 be?

9 A I believe we would assume that over-
10 whelmingly people will drive to do their shopping. It was
11 not being located where it was for the purpose of walking,
12 or it was not anticipated.

13 THE COURT: There's a drive regardless
14 of the location?

15 THE WITNESS: That's correct. The in-
16 tent was to minimize the travel distance of that
17 drive.

18 Q Do you know whether there are any traffic stud-
19 ies that were made of the highways on which the three RM zones
20 were located?

21 A I believe there were some
22 data available as to traffic volumes on the major thorough-
23 fares.

24 Q Was that something that you concerned yourself
25 with, or was that Mr. Hultgren? A Again, that
was Mr. Hultgren.

Q A factor to be considered is the availability of

1 water and sewer utilities, and the three parcels that were
2 selected are closer, perhaps, than others to the borough,
3 and it was assumed that it was more likely that there would
4 be a sewer system in the borough first; is that correct?

5 A It was assumed several things. One that the, as you
6 have indicated, that there might be the availability of sewers
7 in the borough, perhaps extending out to certain parts of the
8 township, or in the alternative, that the sites, if developed,
9 could have on-site utilities provided by the developer which
10 would, which could be absorbed by the ground, or whatever
11 the system was. In that context, we met with the director
12 of the Upper Raritan River Watershed to discuss those
13 particular matters as to our conclusions, as to the poten-
14 tiality of that at the sites, and to cross-discuss with him
15 as to his opinions.

16 Q As to the first factor, that is sewers, is
17 Chester Borough doing anything or has it been doing anything
18 with regard to creating any kind of a sewer system?

19 A My recollection was that in the mid-1970's, '73,
20 that when the master plan was being studied, that there was
21 some consideration being given to it by the borough, or that
22 there might, in fact, be a merger between the borough and the
23 township which was under discussion at that point in time
24 as well.

25 Q The merger with a view to creation of the sewer

1 system? A To create one municipality from
2 the two.

3 Q I'm speaking now only of the sewer system.

4 A I understand that, but that's part of the overall--

5 Q In connection with a potential merger, there
6 was also consideration given to-- A Possibility
7 of central sewers, yes.

8 Q Is the population density in the borough greater
9 substantially than that in the township to your knowledge?

10 A I really don't know.

11 Q Do you know what spot zoning is, Mr. Kasler,
12 what we generally mean when we refer to something as spot
13 zoning? A I think I have an understanding

14 of it, but I really believe it's a legal conclusion.

15 Q Until there's an objection, can you tell us,
16 please, what spot zoning is? A Spot zoning
17 is providing a certain benefit to a property owner or group
18 of property owners which on a very limited basis is not being
19 provided to anyone else, and is, therefore, to the benefit of
20 those particular property owners, almost exclusively.

21 Q You mean where it would be necessarily the intent
22 of the governing body just to favor one party, and has
23 nothing to do necessarily with the result, merely the fact
24 that only one one-owner tract is zoned in a particular way.
25 You think it just has to be the intent of the--

1 A I think it's a result. Beyond that, I believe you
2 could have zoning to benefit a singular property owner, and
3 still might not constitute spot zoning.

4 Q The three parcels that were selected for multi-
5 family dwellings, each are owned by one owner, are they not?

6 A I don't know that.

7 Q Is it fair to say you don't know if Mr. Hultgren
8 knows that? A I don't know whether he knows it
9 or not.

10 Q Do you know how far the three parcels are from,
11 or any one of the three, any one or all of the three parcels
12 are from a railroad station? A No.

13 Q Are there bus stations nearby? By "nearby,"
14 I mean, well, is there bus service? Let me put it that way.
15 Is there bus service that services the roads in front of the
16 RM parcels? A I have no specific knowledge of
17 any.

18 Q That was not one of the studies that you made,
19 then, has to do with the traffic pattern, does it?

20 A Yeah. I would presume that it would. I don't have
21 any knowledge as to any bus service in that general area.

22 Q Are you familiar with the Governor's Executive
23 Order #35, which calls for 1,000 to 1,100 additional dwellings
24 in this township by 1980?

25 MR. FERGUSON: I don't know that that's

1 a document in Evidence. If we're going to--
2 Or, marked for Identification.

3 MR. LINDEMAN: No, it isn't.

4 MR. FERGUSON: I would object, then, as
5 to the characterization of "calls for," unless
6 the witness can see the document, read it, and
7 see if those words are used, or what the docu-
8 ment does in fact say.

9 MR. LINDEMAN: Well, excuse me. If the
10 Court will bear with me, I think this was asked
11 in his examination, the question was asked,
12 page 49 of his pretrial discovery on Febru-
13 ary 16, 1977. "You are aware of the fact that
14 there has recently, there has been recently
15 published a state housing goal pursuant to the
16 Executive Order #35 of the Governor, issued
17 last April? ANS.: Yes, I'm aware of that."
18 So, he's already conceded that he is aware of
19 it. Then the question is "The figure mentioned
20 for Chester in that housing goal, as I recall,
21 is slightly in excess of 1,000 units? ANS.:
22 Something of that magnitude. I don't remember
23 if it was 1,000 or 1,100, but you are correct,
24 it is somewhere in that vicinity." So, I
25 didn't think it--

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THE COURT: What's the relevancy of it?

MR. FERGUSON: We had a colloquy on this earlier. It's my understanding that something was done to that Executive Order so it's no longer with full force and effect of an Executive Order. I think that it came out too long before the election, and then they did something else. I would object to it going in as substantive evidence. I don't think there's such question that document had--

THE COURT: I'm asking what's the relevancy of the question, Mr. Lindeman? Where's it going to go?

MR. LINDEMAN: The relevancy is this: I would ask the witness what his view about its correctness would be and then whether or not it would--

THE COURT: Correctness of what the Governor has ordered, or the correctness of what the Governor--

MR. LINDEMAN: Estimate.

THE COURT: Whether that estimate is as reflected in the report is correct, or whether there is, in fact, a need for that much housing by 1990.

1 MR. LINDEMAN: It would really be both.
2 The witness wouldn't say he agreed, unless he
3 didn't think there was a need. It would be
4 both.

5 THE COURT: I might not necessarily
6 agree with what he said was correct. That's
7 what I'm asking you. That's all I'm asking you.
8 That's what I want to know. Do you want to know
9 from him whether the Governor said that--

10 MR. LINDEMAN: Whether he agrees with
11 it. Whether he believes it is correct.

12 THE COURT: All right. I'll allow it.
13 Let's first get through you are aware--

14 Q You're aware of the Executive Order #35 that
15 called for additional housing units, a thousand, by 1990?

16 A I would correct the question to the effect that
17 Executive Order has been rescinded, is no longer an Executive
18 Order.

19 MR. LINDEMAN: Please answer the ques-
20 tion, Mr. Kasler, until you're instructed
21 otherwise.

22 THE WITNESS: I can't answer--

23 Q Were you aware of the existence of that Execu-
24 tive Order #35, whether it has been rescinded, or not?

25 A I was aware of it at the time that it was an Executive

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Order, yes.

Q Now, without regard to it having been ~~res-~~
cinded, whether it was even, it has the force of law, do
you have an opinion as to whether or not the figure of 1,000
to 1,100 units by 1990 is correct and a fair one?

A Yes, sir. I have an opinion.

Q What is that? A It is my
opinion that it is not fair, or a correct one.

Q In connection with the present master plan
and zoning ordinance, which presumably are being formulated
for the defendant, have you had occasion to confer with Mr.
Cappola who is working on it? A No, sir.

MR. FERGUSON: Excuse me, could I have
that question read back?

(REPORTER COMPLIES.)

MR. FERGUSON: There are two assumptions
in the beginning which may or may not relate
to the question. I won't object.

Q You have read, you made reference in your
direct examination, Mr. Kasler, to Madison at Oakwood,
Madison at Oakwood Township, have you not?

A Yes, sir.

Q It is correct, then, that where Judge Conford
for the Supreme Court says that Madison has provided for no
home ownership at all on, quote, "very small lots," close

1 quote, as mandated in Mount Laurel, this is, by the way, page
2 41 of the slip-in, clearly no effort was made to permit,
3 quote, "least-cost," close quote, single-family homes, and
4 certainly not in reasonable numbers, that the same thing
5 does apply to the present zoning ordinance, correct? That
6 is to say, there has been no provision for home ownership on
7 very small lots? A It's my general opinion that
8 a townhouse type of a unit, which would be sold, would have
9 the same comparable impact and force as a single-family
10 house on a small lot. In fact, it might even be less costly
11 than a one-family house on a small lot in and of itself--

12 MR. FERGUSON: The witness is not
13 through.

14 A --but, I raised the issue with counsel as to the
15 question as to small-lot zoning which is certainly one of the
16 areas that I felt the Chester Planning Board and governing
17 body should look to in evaluating the master plan and the
18 zoning ordinance.

19 Q Now, when the municipality provides for 300
20 multi-family dwellings, is that necessarily a reasonable way
21 to provide for least-cost multi-family dwellings, or is it
22 not necessary that in order to create a climate for the con-
23 struction of 300 units of least-cost housing that you must
24 provide for construction of substantially more than that?

25 A I don't understand that question.

1 Q You don't understand the question. If you
2 allow for only 300 multi-family dwelling units, is it likely
3 they will all be for least-cost housing, and I'm speaking
4 now of the situation as it pertains in Chester Township, the
5 lands available for it in Chester Township, bearing in mind
6 the costs or value of the lands, and all the other economic
7 considerations that are applied, when you allow for 300 units
8 are you likely to get 300 units of least-cost housing?

9 A I don't know that that question could be answered. It's
10 purely speculative. It may be, may not be. The only way of
11 knowing is to actually have the development take place.
12 There are so many factors beyond the municipal, municipality's
13 position as to know whether or not those units are going to
14 be \$10,000 or \$140,000.

15 Q So, therefore, you would disagree, then, with
16 Judge Conford at page 46 of the slip-in where he says, "And
17 developers of least-cost housing may not select all of the
18 zoned land available therefor, or at least not with any an-
19 ticipated period of need; thus over-zoning for the category
20 desired tends to solve the problem."

21 THE COURT: Mr. Lindeman, let me say
22 this: The word "least," the words, "least cost,"
23 imply whatever the least cost might be in a com-
24 munity. That might be a range, tremendous
25 range as you go from community to community.

1 On his direct examination he pointed out the
2 variable character of that word, "least." I
3 think you're being unfair to him. That's what
4 I implied. His answer was as it related to the
5 last question. He can't answer what the least-
6 cost housing is because he doesn't know what
7 "least-cost" means for Chester Township, am I
8 correct?

9 THE WITNESS: Correct.

10 MR. LINDEMAN: I disagree with that,
11 your Honor. I think the witness is not being
12 candid, and I think that is really not the case,
13 that when we know what least--

14 THE COURT: All right. You tell me what
15 is the definition of "least-cost housing."
16 I'm the trial judge, and I'll give you an
17 opportunity to define for me "least-cost hous-
18 ing."

19 MR. LINDEMAN: Well, I think it has been
20 defined, and I think it has been defined even
21 by this witness. It would be the housing that
22 would be available for those people in the
23 lowest, that low-income category that he referred
24 to. He guessed--he said, I'll make a guessti-
25 mate as to what it is, something like--

1 THE COURT: It's the least cost of
2 housing in the community, the cost at which
3 housing can be produced at a least cost. It's
4 not correlated as far as I read Madison, and
5 you can point it out to me if I'm wrong, it's
6 not correlated in the Madison case to low and
7 moderate-income housing. You show me where
8 it is.

9 MR. LINDEMAN: I don't have it here. I
10 think it does, your Honor.

11 THE COURT: I would like you, tomorrow
12 or the next time we appear, you show me where
13 it correlates the words, "least-cost," speci-
14 fically and directly into moderate and low. I
15 don't think he does. I've read it two times,
16 three times, four times now, and I have diffi-
17 culty with either of you pushing a witness to
18 try to define a term used by a judge in an
19 opinion, when it is a term that I have to deal
20 with, and it really deals with what my respon-
21 sibility is, not what his responsibility.

22 MR. LINDEMAN: I think what "least cost"
23 means is cost of housing available to low-
24 income people. Doesn't mean poor construction--

25 THE COURT: I'll give you a break. I'll

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take till five after. You show me where in
Oakwood at Madison it says that.

MR. LINDEMAN: I may have to read the whole
case on it, your Honor, because I think it's a
general thing that interweaves through it,
but I'll try.

THE COURT: Let's take a break.

(RECESS IS OBSERVED.)

MR. LINDEMAN: Judge, I agree with the
Court's frustration about the opinion. We all
have problems with long opinions.

THE COURT: I'm not--don't misunderstand
me. I'm not necessarily frustrated by it. The
way I read it is that least cost arises as a con-
cept because without public subsidizing, a
builder may not be able to provide housing for
low cost, low-income people, so you get this
filtering-down process. But, I don't see any-
where where it says "least-cost housing" to
be provided for low-income people, and that's
my point.

MR. LINDEMAN: I think it's a fairly
lengthy thing, but I don't think it will take
too much time, your Honor. At page 37 of the
slip-in, I don't know that it follows the same

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pagination in the advance sheets.

MR. FERGUSON: Footnote 21.

MR. LINDEMAN: The Court says, "Nothing less than zoning for least-cost housing will... indicated circumstances, "satisfy the mandate of Mount Laurel, and past the paragraph of the footnote, it says, "We envisage zoning provisions which will permit construction of housing in reasonable amounts at the least cost, consistent with such standard observation. Many areas of the State confirm that low-cost housing can be maintained without becoming a slum." So, there's a sentence in which, low cost and least cost are sort of--

THE COURT: Well, I don't read it to suggest that it's--

MR. LINDEMAN: That's not the whole story.

THE COURT: Let me get something straight. I sat here while Mr. Ferguson has asked questions in the legal area. I have sat here now while you've done it, quietly, without objection on my own part. A point is reached, however, when in my opinion there's a little bit of an affront to the trial judge to have an expert

1 sit on the stand and interpret a zoning case.
2 Let him stick to his field, ask questions in his
3 field, but don't press him for answers as to
4 how to interpret Mount Laurel or Oakwood.
5 You let me do that. Let's get away from his
6 legal opinions. Let's stick to his planning
7 opinions. All right? I have not said anything
8 before, but we're getting overly burdened with
9 it, and, Mr. Lindeman, the reason I allowed you
10 to go on is because Mr. Ferguson asked the
11 questions. He started it. If you objected in
12 the beginning, I would have closed him off. You
13 didn't so, I think, therefore, you have the right
14 to do the same thing, but a point has to be
15 reached. When I say affronty, I'm not really
16 affronted by it. It's just that I think we're
17 wasting time. I don't think that's the type
18 of questions that should be asked of this man.
19 Okay? So, let's stick with his field of ex-
20 pertise.

21 MR. LINDEMAN: I guess I didn't object
22 in the first instance since I did fully intend
23 to go into it myself. That was the reason.

24 THE COURT: I was well aware of why you
25 didn't object.

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MR. LINDEMAN: Just one final thing, Judge Muir, on page 40, I won't read this, the slip-in which is after Roman numeral VI, first two, three paragraphs, the Court there talks about the level of income of poor people, and very next few paragraphs talks about least-cost housing, so it was from that that I would say the Court is talking about low income and very precise categories in terms of least-cost housing, and thereby correlates the two. It's a little bit attenuated, but I think he does it that way.

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THE COURT: I think the whole concept of least-cost housing comes about based upon the filtering-down process. We will provide least-cost housing, and, therefore, people in moderate income will be able to buy that. Then the people in the next income level down will have a lower standard of housing available to them that they can buy, but better than what's being provided for them now, so everybody will have a better standard of housing. I really think the concept well recognizes the problems of providing unsubsidized, publicly unsubsidized housing at a cost that low income and even

1 moderate-income family ranges can afford.

2 Maybe moderate in this area, I don't know.

3 MR. LINDEMAN: Your Honor, based upon
4 that last ruling, I really have nothing further
5 to ask the witness. I'm finished.

6 REDIRECT EXAMINATION BY MR. FERGUSON:

7 Q Mr. Kasler, do you know if there was any bus
8 service in Chester Township when you and Mr. Miltgren were
9 helping prepare the master plan? A I don't re-
10 call.

11 Q Would you care to comment upon the question of
12 which comes first, the chicken or the egg, as it is related
13 to employment and residents, which comes first, industry and
14 jobs, commercial activity, or, and then the residents, or is
15 it then people, first people and then commercial and indus-
16 trial activity? I think that's what Mr. Lindeman was trying
17 to get, and I'm not sure we ever satisfactorily explained
18 or understood what the questions were, and more importantly,
19 what your responses were. A In a very simplis-

20 tic area, you would first have the employment, which would
21 then lead to people being there; because we're in such a com-
22 plex metropolitan area, it almost doesn't matter which one
23 comes first, because if the industry is located in Chester,
24 the residents or the employees could be 20, 30 miles away,
25 containing a very substantial area, or in the alternative,

1 housing may be built in Chester for jobs which may be 15,
2 20, 30 miles away. The commercial contrast to industry is
3 directly related to the resident population; that is, if you
4 have a substantial residential population, you could almost
5 predict there will be "X" amount of square footage for super-
6 markets, drug stores, general convenience types of shopping.
7 Other types of commercial uses are not directly related to it,
8 but are somewhat more indirect, but there are still fairly
9 direct correlations.

10 Q Was it your recollection at the time the master
11 plan was done, and you worked on it, that Chester Township
12 had land zoned for industrial and commercial, which had not
13 been, in fact, developed? A Yes, sir.

14 Q Mr. Kasler, you gave us your opinion that you
15 did not think that document which has a title on it, labeled
16 Executive Order #35, and a housing goal for Chester Township
17 of around 1,000, your opinion was it was not a fair number.
18 Will you tell us why? A For one, the method
19 of selecting or allocating the number of units was based on
20 a number of factors, some of which I thought were really
21 irrelevant, including income.

22 Q Can you tell us what factors were used in that
23 document? A The document I'm looking at is
24 entitled, "Statewide Housing Allocation Plan for New Jersey,
25 Preliminary Draft for Public Discussion, dated November, 1976,

1 prepared by the Division of State and Regional Planning."

2 And, in the back of that particular report, under the title
3 of "Housing Allocation Criteria," there are such things in-
4 dicated as population, housing units, present housing needs,
5 which refers to the earlier study that the Department of
6 Community Affairs did, vacant developable land, which we
7 included in our study, and then employment growth, that is the
8 change of employment over a period of time, which is not
9 necessarily relevant, and non-residential, non-residential
10 ratable growth, and personal income. Neither one of which is
11 directly related to the need for housing in a particular
12 community. A community could be a very wealthy community,
13 and not have a housing need, depending upon a whole number
14 of factors. This says the higher the income, the greater
15 the need, and there's absolutely no correlation in my mind
16 as to that aspect. As to the non-residential ratable growth,
17 if a community, in fact, has a great number of jobs, but has
18 not grown over the period of time that this was evaluated,
19 its needs would be lessened even though there may be thousands
20 of jobs in the community, and so on. The other aspect of it
21 was that the division had a series of regions allocated in the
22 State. Many of which were the counties themselves, but when
23 you get into the North Jersey area, lumped about eight or
24 nine counties into one specific region.

25 Q What is the region used in that report which

1 would include Morris County or Chester Township, or both?

2 A It was designated Region 11, and included Bergen County,
3 Passaic County, Morris County, Essex, Hudson, Union, Somers-
4 set and Middlesex. Now, while that, those one, two, three,
5 four, five, six, seven, eight counties were considered one
6 region, the adjoining county, Sussex County, was a separate
7 region; Warren County was a separate region; Hudson, a separate
8 region, so on.

9 Q Do you, as a professional planner, agree or
10 disagree to the selection of that region as an appropriate
11 one for that kind of study?

12 A I think it's
13 inequitable. I think, for example, places Morris County in
14 an eight-county region, but the adjoining county is a region
15 onto itself, which I think is a little bit unrealistic, if you
16 use counties as a measure, county should be used uniformly.
17 If you'll use so-called "journey to work," then there should
18 be a formula for determining how you would allocate that, but
19 the result of which, I believe, that it created disproportion-
20 ate numbers depending upon a lot of the non--, what I consider
21 non-direct variables, and, therefore, creates inequitable--

22 Q Non-direct variables? A Variables
23 as to allocation that have no relationship to the needs for
24 the housing or the jobs which are in effect creating those
25 needs.

25 Q Did that study give a basis of the D.C.A.'s

1 allocation, how they weighed it? A There ap-
2 parently was some formula utilized, but I could not determine
3 from this study exactly how that was done.

4 Q Is the grouping of the eight-county region,
5 or eight counties together in one region, Region 11, would
6 that, in your opinion, give an undue weight to the factor
7 of vacant developable land?

8 MR. LINDEMAN: I now object, your Honor.
9 We really are proving the validity, correctness
10 of the Executive Order--

11 THE COURT: You're going too deep into
12 it. Got a mention in cross-examination. Now,
13 I don't think there's any necessity, I don't
14 see the relevancy of it. It's been rescinded
15 according to his testimony.

16 MR. FERGUSON: That's all I have.

17 MR. LINDEMAN: Nothing further.

18 THE COURT: Okay. Thank you. Step
19 down.

20 MR. FERGUSON: That's it for today.

21 (WHEREUPON PROCEEDING WAS ADJOURNED.)
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