536 F.Supp. 1225

17 ERC 1249,
12 Envtl. L. Rep. 20,519

ACTION FOR RATIONAL TRANSIT, et al., Plaintiffs,

v.

WEST SIDE HIGHWAY PROJECT, By its Executive Director, Lowell K. BRIDWELL, et

al., Defendants.

SIERRA CLUB, et al., Plaintiffs,

v.

UNITED STATES ARMY CORPS OF ENGINEERS, et al., Defendants.

Nos. 74 Civ. 5572, 81 Civ. 3000.

United States District Court, S. D. New York.

March 31, 1982.

Two actions were brought to attack construction of interstate highway and urban renewal project bordering Hudson River. The District Court, Griesa, J., held that landfill for construction of highway was enjoined until and unless compliance with law was shown since Corps of Engineers failed to make public disclosure of facts as required by National Environmental Policy Act regarding impact of landfill on fishery resources and failed to give adequate consideration to such impact in its own review of issue.

Order accordingly.

See also, D.C., 517 F.Supp. 1342.

William Hoppen, New York City, for plaintiffs in No. 74 Civ. 5572.

John S. Martin, Jr., U. S. Atty. by R. Nicholas Gimbel, Stuart M. Bernstein, New York City, for defendants Andrew L. Lewis, Jr., U. S. Secretary of Transp.; Walter C. Barber, Acting Administrator, and Richard Dewling, Acting Regional Administrator, of Environmental Protection Agency and U. S. Army Corps of Engineers.

Beveridge & Diamond by Gary H. Baise, Jonathan Z. Cannon, Charles A. Patrizia, Carl Eardley, Washington, D. C., for defendants West Side Highway Project; Lowell K. Bridwell, Executive Director of WSHP; Hugh L. Carey, Governor of New York State; and William C. Hennessy, New York State Commissioner of Transp.

Donovan, Leisure, Newton & Irvine by Sanford M. Litvack, Cathy Fleming, William A. Davis, II, New York City, for Robert F. Flacke, Commissioner of the New York State Dept. of Environmental Conservation.

Frederick A. O. Schwarz, Jr., Corp. Counsel by John C. Brennan, New York City, for Edward I. Koch and Francis X. McArdle.

Wikler, Gottlieb, Taylor & Howard by Harry A. Gottlieb, New York City, for J. William Burns, Chairman, and Frank T. Johnson, Executive Director, of the Tri-State Regional Planning Com’n.

Butzel & Kass by Albert K. Butzel, Mitchell S. Bernard, Michael B. Gerrard, Robert J. Sugarman, New York City, for plaintiffs in No. 81 Civ. 3000.

Lawrence R. Liebesman, Washington, D. C., for Environmental Defense Section, Land and Natural Resources Div., U. S. Dept. of Justice.

OPINION

GRIESA, District Judge.

These two actions have been brought to attack, on various legal grounds, the construction of an interstate highway and urban renewal project known as Westway. Plaintiffs in the Action for Rational Transit ("**ART** ") case complain that the construction of this project involves unwarranted devotion of federal funds to facilitating automobile and truck traffic on Manhattan Island, with attendant air pollution problems. The ART plaintiffs urge that preference should have been given to the improvement of mass transit in the form of subway, rail and bus transportation. These plaintiffs contend that the actions taken by various state and federal officials to implement the Westway project have violated certain provisions of federal law, namely the Clean Air Act, 42 U.S.C. ss 7401 et seq., the Federal Aid-Highways Act, 23 U.S.C. ss 101-136, and the National Environmental Policy Act (commonly known as "**NEPA**"), 42 U.S.C. ss 4321 et seq. Plaintiffs in the Sierra Club case attack the issuance of a landfill permit by the United States Army Corps of Engineers. The Sierra Club plaintiffs allege that the actions of the Corps of Engineers violate NEPA, and also violate Section 404 of the Clean Water Act, 33 U.S.C. s 1344, and Section 10 of the Rivers and Harbors Appropriations Act of 1899, 33 U.S.C. s 403.

Summary of Rulings

The motions of defendants in the ART case for summary judgment dismissing the action are granted with the following exception. The Court will hold a further hearing in that case to consider whether there should be an injunction against the Secretary of Transportation, preventing federal funding for Westway, on the ground of failure to comply with the requirements of NEPA in respect to the impact of the proposed landfill on fishery resources.

In the Sierra Club case, summary judgment is granted dismissing all claims except those relating to fishery resources. A trial has been held on the latter claims, and the findings of fact and conclusions of law on these claims are contained in this opinion.

[1] For the reasons there set forth, it is held in the Sierra Club case that the granting of a landfill permit for Westway by the Corps of Engineers violated the National Environmental Policy Act, the Clean Water Act and the Rivers and Harbors Appropriations Act. The permit granted by the Corps of Engineers is set aside, and the question of whether the Westway landfill should be permitted will be remanded to the Corps with appropriate directions to comply with the applicable statutes and regulations. The landfill for the construction of Westway will be enjoined until and unless compliance with the law is shown.

The basis for this ruling is the failure of the Corps of Engineers to make public

disclosure of the facts, as required by NEPA, regarding the impact of the landfill on fishery resources, and the failure of the Corps to give adequate consideration to this impact in its own review of the issue.

The Hudson River estuary plays an important role in the production of certain sports and commercial fish stocks. The most prominent of these is striped bass, which is a valuable and prized fish along the Atlantic seaboard. Although the proposed landfill area is located within this estuary, the Federal Highway Administration and the New York State Department of Transportation took the position in their Environmental Impact Statement, filed under NEPA, that the landfill area lacks most of the normal estuarine marine life and is a "**biological wasteland.**" However, during the Corps of Engineers proceedings, the Corps was presented with data which proved that the proposed landfill area is an important habitat for juvenile striped bass prior to their becoming a part of the Atlantic coast fishery. The Corps was further presented with responsible views of the National Marine Fisheries Service, the Fish and Wildlife Service, and the Environmental Protection Agency to the effect that the value of the area as a marine habitat is sufficiently great that its destruction would be seriously detrimental to the public interest. Indeed, the National Marine Fisheries Service took the position that the proposed landfill area is a critical nursery habitat for striped bass, and that the landfill would jeopardize the survival of the entire Hudson River striped bass population and its substantial contribution to the Atlantic fishery.

The Corps of Engineers was obligated under NEPA to make public disclosure not only of the facts about the landfill area as an estuarine habitat for fish, but also of the views of the federal agencies having expertise and jurisdiction on the subject of fish and wildlife resources.

The Corps failed to comply with these legal obligations, and filed no environmental impact statement. It acquiesced in the urgings of the Federal Highway Administration and the New York State Department of Transportation that the facts and issues about fishery resources be withheld. Also, there is no showing that even within the Corps the relevant questions were given consideration in the manner required by law.

The issues here do not involve a minor technicality. The debate over Westway in the political arena, and the controversies before various regulatory agencies, have been vigorous and, to the view of many, closely balanced. It is the judgment of Congress, as expressed in NEPA, that this type of process cannot function properly unless the various interested constituencies are fully and fairly informed of the environmental facts.

The striped bass fishery contributes to the economic well-being and enjoyment of literally millions of citizens. Moreover, because of the environmental problems of the present age, the health of this fishery is a matter of concern. Consequently, the failure to reveal the facts about the proposed landfill area as a striped bass habitat, and the failure to give adequate consideration to this issue, amounted to a critical deficiency in the administrative proceedings in this matter.

[2] A further hearing will be held to determine the exact terms of the injunctive relief. One point for consideration is whether the injunction should include the Federal Highway Administration. The latter agency is not a defendant in the Sierra Club case, although the Secretary of Transportation, in whose department the Highway Administration is located, is a defendant in the ART case. However,

because of the role of the Highway Administration in the events, and because its own Environmental Impact Statement has been shown to be deficient, the further proceedings should include the question of whether this agency should be covered by the injunctive relief.

Description of Westway

Westway is proposed to be constructed on the west side of Manhattan Island from the Battery to 42nd Street. One phase of the project involves replacement of the elevated West Side Highway, which is being demolished south of 42nd Street as a result of its badly deteriorated condition. The major portion of the proposed new highway will be tunneled in landfill to be placed in the Hudson River starting at Battery Park City and running to 34th Street. The Hudson River piers in this area, all of which have fallen into total disuse as piers, would be removed to make way for the landfill. The area proposed for the landfill is considerably larger than what is necessary for the highway. Consequently a major phase of the Westway project involves creation of areas for residential and commercial development, and also parkland along the Hudson River.

The landfill, the highway construction, and the creation of the parkland will all be carried out by the State of New York. It is apparently not yet determined how the real estate development will be financed and carried out, or by whom this will be done. It is estimated that construction of Westway will require about ten years. The construction cost was officially estimated in 1977 to be.$1.2 billion. The actual cost will undoubtedly be much greater-some believe, $2 billion or more.

Westway will be part of the interstate highway system. Consequently, it is contemplated that the federal Government will pay 90% of the cost of the project, including the cost of the landfill and parkland development. The State of New York will pay the other 10%.

The subject of replacing the West Side Highway has been under consideration for many years. In 1972 an agreement was entered into between the Governor of the State of New York and the Mayor of New York City establishing what is known as the "**West Side Highway Project**" as part of the New York State Department of Transportation. These entities will hereafter be referred to respectively as "**the Project**" or "**the Westway Project,**" and "**New York State DOT.**" An executive director and staff were appointed for the Project. There also was created a Steering Committee consisting of various officials of the State and City and the Port Authority of New York and New Jersey.

The Project set out to develop various alternative proposals for handling the problems it was presented with, including the deterioration of the West Side Highway and the decay of the lower West Side Hudson River waterfront.

By 1974 the Project had developed five alternatives which it proposed for discussion. One of these was the "**Outboard Alternative,**" which involved putting a major portion of the highway in landfill in the Hudson River. The other alternatives involved a partially sunken highway in a lesser amount of landfill, the use of the wide expanse of the existing West Street 12th Avenue (after the demolition of the West Side Highway) as an arterial north-south route, repair of the existing West Side Highway, and reconstruction of the West Side Highway with some changes in alignment.

A Draft Environmental Impact Statement ("**Draft EIS**") was issued in 1974, pursuant to the requirements of s 102(2)(C) of NEPA, 42 U.S.C. s 4332(2)(C). The Draft EIS was made public in the normal manner. Comments for and against the various alternatives were received.

Further study and planning resulted in the decision by the Project to propose the plan which is now known as Westway. It is a modification of the Outboard Alternative described in the Draft EIS, and is referred to as the Modified Outboard Alternative.

A Final Environmental Impact Statement was issued on January 4, 1977 ("**January 1977 EIS**"). This EIS was signed by the New York State DOT and the Federal Highway Administration ("**FHWA**"). The FHWA signed the statement in its capacity as the agency which would provide the federal funding for Westway.

On January 4, 1977 William T. Coleman, Jr., United States Secretary of Transportation, and Norbert T. Tieman, Federal Highway Administrator, approved federal funding for Westway. On February 3, 1977, the new Secretary of Transportation, Brock Adams, affirmed the action of his predecessor.

On April 7, 1977 the New York State DOT applied to the United States Army Corps of Engineers for the landfill permit for Westway. Since the proceedings before the Corps of Engineers are the subject of the Sierra Club case, and were explored in the trial of that action, the facts about these proceedings will be described in detail hereafter. The landfill permit was issued by the Corps on March 13, 1981.

In the meantime, various actions were taken by the State of New York. On April 10, 1979 the New York Department of

Environmental Conservation certified that the Westway project would not violate state water quality standards, and on October 30, 1980 this department granted the Indirect Source Permit, ruling that Westway would not violate state air quality standards. Prior to the Westway proceedings the proposed landfill area was designated as a "**wetlands**" by the State of New York. On October 24, 1979 the same department removed this designation.

On July 30, 1981 an agreement was signed by the Governor of New York State and the Mayor of New York City providing for the implementation of the Westway project.

History of Litigation

The ART case was commenced in 1974. One of the claims in this case was that the Draft EIS was inadequate in certain respects relating to the description of the amount of vehicular traffic which would be brought into Manhattan by the Westway project and the effect of the project on air quality. A series of court hearings was held in 1975, resulting in an agreement that certain parts of the material in the Draft EIS would be reanalyzed.

Following these hearings the ART action lay dormant while various administrative steps were being taken to obtain necessary approvals for Westway, and while the political debate about the merits of Westway was taking place.

In 1981, when it appeared that this process was about to be concluded with final approvals and governmental agreement to build Westway, the ART plaintiffs reactivated their lawsuit, by filing an amended complaint. Defendants in that case moved for summary judgment seeking dismissal of the amended complaint. While these motions were pending, the ART plaintiffs moved for a preliminary injunction to stay the condemnation and acquisition by the State of New York of the property which would be necessary for the Westway project and the landfill which would be involved. This motion was denied on July 17, 1981.

Regarding the companion action, the Sierra Club originally filed an action in 1979 against the Corps of Engineers attacking its landfill permit proceedings. The Corps moved to dismiss the action as premature, on the ground that the permit application had not yet been acted upon. The motion was granted and that action was dismissed by Judge Owen of this court. Sierra Club v. U. S. Army Corps of Engineers, 481 F.Supp. 397 (S.D.N.Y.1980).

The Corps of Engineers granted the landfill permit in March 1981, and the Sierra Club and other plaintiffs brought a new action attacking that permit. This is the Sierra Club action now under consideration. Shortly after the commencement of the action, both sides filed motions for summary judgment. The Sierra Club plaintiffs made no motion for preliminary injunction.

On November 11, 1981, the court announced rulings on the summary judgment motions in both cases. The court ruled that summary judgment should be granted dismissing the ART case in its entirety. In the Sierra Club case, plaintiffs' summary judgment motion was denied. The defense motion in the Sierra Club case was granted in part and denied in part. The court ruled that the Sierra Club plaintiffs' claim regarding the fisheries raised issues requiring trial.

In connection with the rulings made on November 11, 1981, the court did not undertake to announce the reasons in a decision at that time, but stated that there would be a decision on all points raised in both cases following the trial of the fisheries question in the Sierra Club case. The Sierra Club trial took place January 19 to February 1, 1982.

The present decision contains the findings of fact and conclusions of law on the issues tried in the Sierra Club case. This decision also contains the necessary explanation of the summary judgment rulings on the other points in the two cases.

The ART Rulings

There are 10 claims in the amended complaint. The following is a brief description of the nature of these claims. They are all dismissed, with the one exception noted.

Claims 1-5

These claims challenge the 1973 and 1979 State Implementation Plans ("**SIP's**"), promulgated under the Clean Air Act, 42 U.S.C. s 7401 et seq. These claims are identical to Claims 1-5 in Council of Commuter Organizations v. Metropolitan Transportation Authority, 524 F.Supp. 90 (S.D.N.Y.1981). These claims were dismissed by Judge Pollack on October 13, 1981. It has been agreed that Judge Pollack's disposition will govern in the ART case. Consequently, Claims 1-5 are dismissed.

Claim 6

[3] This claim alleges that the construction of Westway will violate emission standards or limitations of the SIP currently in effect, which is that of 1979.

The claim is without merit. No specific strategy or standard laid down in the SIP is shown to be violated by the proposed Westway Project. See League to Save Lake Tahoe v. Trounday, 598 F.2d 1164 (9th Cir.), cert. denied, 444 U.S. 943, 100 S.Ct. 299, 62 L.Ed.2d 810 (1979). Plaintiffs' arguments are based on general policies which they believe underlie the SIP rather than specific provisions of the SIP which are shown to be violated.

Claim 7

[4] This claim is that Westway is not consistent with the Regional Transportation Improvement Program of the Tri-State Planning Agency. There is no substance in the claim of inconsistency.

Claim 8

This claim alleges that the January 1977 EIS failed to comply with the requirements of NEPA in the following respects:

(1) Inadequate consideration of alternatives;

(2) Inadequate analysis of relative costs and adverse impacts versus benefits;

(3) Failure to disclose the possibility that the project will not be completed because of lack of funding;

(4) Failure to include an adequate discussion of an alleged additional leg of the interstate highway north of 42nd Street;

(5) Failure to disclose the taking of parkland on or near existing piers.

[5] In connection with Item (1), the principal contention is that there was a failure in the EIS to give adequate treatment to the so-called "**interstate transfer**" possibility. This refers to a procedure whereby federal interstate highway funds may, under certain circumstances, be traded for federal funds to be used for forms of mass transit such as subways, commuter trains, and busses. Section 103(e)(4) of the Federal Aid-Highways Act, 23 U.S.C. s 103(e) (4). However, the court finds that the subject was discussed in adequate detail in the EIS (pp. 269-73).

[6][7] The other two contentions regarding alternatives are that there was a failure to discuss the use of railroad transport instead of a highway, and a failure to discuss a so-called "**no action**" alternative. It is true that the EIS did not discuss either one of these alleged alternatives. However, NEPA does not require that an environmental impact statement discuss every conceivable alternative that could be imagined. Only reasonable alternatives are required to be set forth. Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, 435 U.S. 519, 98 S.Ct. 1197, 55 L.Ed.2d 460 (1978). It is not at all clear what the ART plaintiffs are suggesting in connection with the alleged rail service alternative. If their idea relates to the installation of a freight and passenger railroad on the lower west side of Manhattan, the proponents of the EIS were within their rights in not considering that this was a viable alternative to the various road and highway designs which are described in the EIS. To the extent that the ART plaintiffs are referring to existing rail transportation as serving part or all of the purposes of Westway, the EIS contains a description of existing railroads in the area.

As to the "**no action**" alternative, by the time the final EIS was prepared, a portion of the elevated West Side Highway had collapsed, and engineering studies had shown that this highway, in the area covered by the Westway project, would need to be demolished. Consequently there was no possibility of an alternative which involved no action whatever.

With regard to Item (2), it is sufficient to say that the EIS contains extensive descriptions of a variety of social and economic impacts of the proposed Westway project, and a detailed analysis of costs and benefits in dollar terms. None of the ART plaintiffs' arguments are sufficient to show material defects or omissions.

In this regard, the ART plaintiffs do not specifically raise the question of the impact of Westway on fishery resources as one of their claims. Their claims under NEPA do not expressly include a contention that the January 1977 EIS fails to disclose facts about fishery resources. This claim is part of the Sierra Club suit against the Corps of Engineers et al. The court has considered the potential effect of the findings in the Sierra Club case in respect to the ART case, and has decided, for reasons which will appear from those findings, to hold a further hearing in the ART case on the issue of whether there should be relief granted in that case because of the inadequacy of the January 1977 EIS in its description of the impact on fisheries. Otherwise, the claims in the ART case embraced in Item (2) are now dismissed.

[8] In connection with Item (3), the claim is that the Westway project is not assured of adequate funding to bring it to completion, at least with the various amenities described in the EIS. This issue was discussed in the course of court hearings. The result is that the Federal Highway Administrator, R. A. Barnhart, addressed a letter to the Court dated July 27, 1981, expressing the firm commitment of the federal Government to fund its 90% share of the Westway project to completion. In view of this circumstance, there is no ground for holding that the EIS is misleading in its description of the plans for funding Westway.

Item (4) is to the effect that the project, as described in the EIS, relates only to a highway and development plan south of 42nd Street, whereas it is alleged that the full scope of the contemplated interstate highway project includes a project reaching north of 42nd Street along the Hudson River. The answer to this claim is that the only project now in being is the one described in the EIS. There has been consideration on the part of some persons of a further project north of 42nd Street, which is described in the EIS. However, no actual plans have been developed.

[9] The claim in Item (5) is also without merit. The EIS contains a sufficient description of impact on parkland.

Claim 9

[10] This claim alleges that the Secretary of Transportation has failed to assure the consistency between Westway and the current SIP. The undisputed facts are clearly to the contrary.

Claim 10

Claim 10 is a vague grouping of contentions, largely under state law. They are all demonstrably invalid.

Sierra Club Rulings

There are 8 claims in the Sierra Club case. The following is a description of the claims and their disposition.

Claims 1 and 2

These claims allege the failure of the Corps of Engineers to issue an adequate environmental impact statement regarding the landfill permit application. Insofar as these claims deal with the questions of aquatic impact, the issues were tried. The findings of fact and conclusions of law will be set forth hereafter in this opinion.

[11] Aside from the aquatic impact issues, Claims 1 and 2 allege inadequate considerations of alternatives, of developmental aspects, of traffic and air quality impacts, of the possibility of funding shortfall, and of toxic chemicals and flooding. All these claims, dealing with the non-aquatic aspects, are dismissed. These subjects are adequately covered in the EIS.

Claim 3

[12] This claim alleges a particular procedural violation on the part of the

Corps-that the Corps should have had a publicly noticed proceeding on the specific question of whether a supplemental environmental impact statement was required. This claim is dismissed. There is no requirement for such a procedure.

Claim 4

[13] This claim alleges inadequate consideration of possible flooding by the Corps. The record shows that on this subject the Corps' consideration was reasonable and adequate.

Claims 5 and 6

These claims attack the Corps proceedings as violative of the Clean Water Act and the Rivers and Harbors Act. These claims were tried, and the findings of fact and conclusions of law appear hereafter in this opinion.

Claim 7

[14] This claim is that the landfill requires Congressional approval because it is a dike. See s 9 of the Rivers and Harbors Act, 33 U.S.C. s 401. This claim is invalid as a matter of law, and is dismissed.

Claim 8

This claim is that plaintiffs have been denied their constitutional rights. The claim is invalid and must be dismissed.

SIERRA CLUB CASE-FINDINGS OF FACT ON CLAIMS TRIED

CORPS OF ENGINEERS' LANDFILL PERMIT

Legal Framework

In order to perform the extensive landfill in the Hudson River required for Westway, permission needed to be obtained from the United States Army Corps of Engineers pursuant to Section 10 of the Rivers and Harbors Appropriations Act of 1899, 33 U.S.C. s 403, and Section 404 of the Clean Water Act, 33 U.S.C. s 1344.

The first of the above statutes provides that it shall be unlawful to fill or alter the course of any channel of any navigable water of the United States unless the work has been recommended by the Chief of Engineers and authorized by the Secretary of the Army. Section 404(a) of the Clean Water Act, 33 U.S.C. s 1344(a), provides that the Secretary of the Army may issue permits, after public hearings, for the discharge of dredged or fill material into the navigable waters. The Corps of Engineers has promulgated regulations regarding the handling of dredge and fill applications. These are contained in Title 33 of the Code of Federal Regulations. In addition, Section 404(b) of the Clean Water Act, 33 U.S.C. s 1344(b), provides that the action on any application for such a permit is to be made in conformance with guidelines developed by the Environmental Protection Agency ("**EPA**") in conjunction with the Secretary of the Army. These guidelines are contained in Title 40 of the Code of Federal Regulations. Under s 404(c) the EPA has a veto power over any dredge and fill application where the EPA determines that the proposed activity will have an unacceptable adverse effect on certain phases of the environment including fisheries.

The regulations of the Corps of Engineers provide for what is called a "**public interest review,**" involving a thorough consideration of the probable impact of the proposed activity and its intended use on the public interest. The regulations mandate consideration of a number of specific factors including "**fish and wildlife values.**" 33 C.F.R. s 320.4(a). It is specified that, in connection with dredge and fill applications, the Corps of Engineers officials will consult with the United States Fish and Wildlife Service ("**FWS**") of the Department of the Interior, and the National Marine Fishery Service ("**NMFS**") of the Department of Commerce. s 320.4(c). This section requires the Corps to give "**great weight**" to the views of these agencies on fish and wildlife considerations. The Corps is also required to obtain the views of the EPA in making its review under s 404(b) of the Clean Water Act. s 323.5.

The guidelines promulgated by the EPA under s 404(b) of the Clean Water Act have been recently amended to make certain clarifications. The following discussion relates to the 1975 guidelines which were in effect at the time of the Westway landfill permit proceedings.

40 C.F.R. s 230.3 provides that the EPA shall receive notice of all dredge and fill applications made to the Corps of Engineers, and shall review them and comment to the District Engineer. The District Engineer, in acting upon an application, may not only grant or deny the application, but may require "additional information where necessary to ensure a sound decision." Section 230.5 contains a lengthy list of objectives which are to be considered in acting on any dredge and fill application. One of these is to avoid significant disruption of the "biological integrity of the aquatic ecosystem, of which aquatic biota ... are integral components." s 230.5(a)(1). Another such objective is to avoid interrupting the movement of fauna, especially their movement into and out of feeding, spawning, breeding and nursery areas. s 230.5(a)(3). A subsection specifically dealing with fisheries provides that significant disruptions of fish spawning and nursery areas should be avoided. s 230.5(b)(3). The Corps is also to minimize any dredge or fill activity which will degrade recreational and economic values. s 230.5(a)(7). The District Engineer is to consult with the FWS and the NMFS in addition to the EPA. s 230.5(b)(10).

In connection with carrying out its responsibilities under the above statutes and regulations, the Corps of Engineers is required, in its consideration of landfill permit applications such as the one for Westway, to comply with the mandates of the National Environmental Policy Act, 42 U.S.C. ss 4321 et seq. Congress declared in NEPA that it is the national policy to promote efforts which will prevent or eliminate damage to the environment. 42 U.S.C. s 4321. In s 102 of the act, Congress directed that, to the fullest extent possible, the regulations and public laws of the United States shall be administered in accordance with the policies of NEPA, and further directed that all agencies of the Federal Government shall (42 U.S.C. s 4332(2)(C))-

"(C) include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on-

(i) the environmental impact of the proposed action,

(ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,

(iii) alternatives to the proposed action,

(iv) the relationship between local short-term uses of man's environment and

the maintenance and enhancement of long-term productivity, ..."

The detailed statement referred to in the statute is what has become known as the "**environmental impact statement.**" This section of NEPA also provides that, prior to the preparation of the environmental impact statement, the responsible federal official shall consult with and obtain the comments of any federal agency which has jurisdiction or special expertise with respect to any environmental impact involved. Copies of any such comments are to be made available to the President, the Council on Environmental Quality and to the public, and shall accompany the proposal through the agency review process.

The Council on Environmental Quality has issued certain regulations regarding environmental impact statements under NEPA. These regulations are contained in 40 C.F.R. Parts 1500-1508. Section 1500.1(b) provides:

"(b) NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA...."

Part 1502 contains detailed instructions regarding the contents of an environmental impact statement. Section 1502.1 provides:

"It shall provide full and fair discussion of significant environmental impacts and shall inform decision-makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.... Statements shall be concise, clear, and to the point, and shall be supported by evidence that the agency has made the necessary environmental analyses. An environmental impact statement is more than a disclosure document. It shall be used by Federal officials in conjunction with other relevant material to plan actions and make decisions."

One of the issues in the Sierra Club case relates to the extent of the Corps of Engineers' responsibility under s 102(2)(C) of NEPA for an environmental impact statement, in view of the fact that the New York State DOT and the FHWA had prepared such a statement prior to the filing of the landfill permit application with the Corps. The Corps of Engineers did not file its own statement, and relied entirely upon the previous filing by the State DOT and the FHWA. It is not entirely clear what the Corps relies upon as legal authority for proceeding in this fashion. The issue will be further dealt with later in this opinion. However, certain regulations of possible relevance will be here set forth.

40 C.F.R. s 1501.5 provides that a "**lead agency**" shall supervise the preparation of an environmental impact statement if more than one federal agency is involved in the same action or in a group of related actions. The agencies other than the lead agency are referred to as "**cooperating agencies.**" A cooperating agency is required to participate in the NEPA process at the earliest possible time, and to assume responsibility, on request of the lead agency, for portions of the environmental impact statement concerning which the cooperating agency has special expertise. s 1501.6. A cooperating agency may adopt the environmental impact statement of the lead agency when, "after an independent review of the statement, the cooperating agency concludes that its comments and suggestions have been satisfied." s 1506.3.

Even where there is not the relationship of lead agency and cooperating agency, one federal agency may adopt the environmental impact statement of another agency provided that the standards of NEPA are met with respect to the action of the second agency. s 1506.3(a).

Where an environmental impact statement is issued, and there are significant new circumstances or information relevant to the environmental concerns and bearing on the proposed action or its impacts, a supplemental statement must be filed. s 1502.9.

The Striped Bass Fishery

As already described, the issues in the Sierra Club case regarding aquatic impact relate mainly to striped bass.

The evidence in this case contains numerous affirmations of the importance and value of striped bass as a commercial and sports fish, and the substantial contribution of the Hudson River to the striped bass fishery.

The Westway Final EIS of January 1977 includes a document entitled Technical Report on Water Quality. It states in part:

"The striped bass supports an extensive commercial and recreational fishery along the coast from Maine to North Carolina, as shown by a commercial catch of more than 7 million pounds in 1965. Even more important is the vast sport fishery of the Atlantic coast. The 1965 survey conducted by the Bureau of Census indicates that altogether 55 million pounds of striped bass were taken by 613,000 sport fishermen from Maine to Cape Hatteras.

"In states neighboring the Hudson; Connecticut, New York and New Jersey, where the fishery is most dependent on the supply of striped bass from the Hudson River, the commercial catch amounted to 1,500,000 pounds in 1965. The sport catch of these three states alone is estimated to be about 19,000,000 pounds caught by over 200,000 anglers (Clark, 1969)."

Other documents introduced by both sides in the Sierra Club action contain further statistics about the volume of the striped bass fishery.

According to this information, in 1970, 7.3 million pounds of striped bass were landed by 783,000 sports fishermen on the Atlantic coast, spending approximately $100 million in this pursuit. In the same year, in the so- called "**New York Bight**" (the south shore of Long Island and the New Jersey coast), 2 million man days of recreational fishing were spent on striped bass, and in the larger area from lower New Jersey to Massachusetts the comparable figure was 3.5 million man days. 10.1 million pounds of striped bass, worth. $2.5 million at dockside, were landed by commercial fishermen.

Apparently the volume of striped bass caught on the Atlantic coast peaked in 1973, after which the volume has declined. However, the desirability of striped bass is so great that the activity of sports fishermen in pursuit of this fish has increased. A document introduced by defendants, which records data through 1979, notes that:

"The striped bass is one of America's most highly esteemed game and food fishes, especially throughout its range from Maine through North Carolina." **[FN1]**

FN1. "Interstate Fisheries Management Plan for the Striped Bass of the Atlantic Coast from Maine to North Carolina" (Def. Ex. G).

In 1979, 1.2 million striped bass were landed by sports fishermen on the Atlantic coast. The poundage figures are not contained in the record. However, the estimate in defendants' exhibit is that 5.9 million fishermen made 39.2 million trips in order to catch striped bass in 1979 along the Atlantic coast. In the same year more than 1 million people participated in marine recreational fishing in New York State, making over 7 million fishing trips. The exact proportion of this activity relating to striped bass is not statistically analyzed. The number of striped bass caught by New York fishermen in 1979 was 276,000.

The same defendants' exhibit acknowledges that sport fishing is a major contributor to the economy of New York State, and particularly Long Island. Striped bass are sought by practically all the Long Island surf anglers in the months of April, May, October and November when striped bass are at their peak on the Long Island shore.

In 1979 the commercial catch of striped bass on the Atlantic coast was 3.1 million pounds. Although this volume was substantially lower than in earlier years, the price of the fish in some areas, including New York State, has risen appreciably, so that the value of the catches was actually greater than in prior years of higher volume.

The striped bass, which are caught along the Atlantic coast are spawned in various estuaries. The largest contributor of striped bass to the Atlantic coast fishery is Chesapeake Bay. The second most important is the Hudson River. It is estimated that the Hudson River provides between 18% and 32% of the striped bass in the New York Bight and Long Island Sound. The Hudson contributes lesser percentages to the migratory striped bass populations in other sections of the coast. The relative importance of the Hudson River striped bass is increasing due to a decline in recent years of the productivity of Chesapeake Bay.

Striped Bass Life Cycle in Hudson River

In the spring of the year adult striped bass move from the ocean and adjacent waters into the Hudson River to spawn. The main spawning areas are between Bear Mountain Bridge and Poughkeepsie. After the spawning occurs, there is a brief period when the eggs are hatching and when the

newborn fish are in the form of larvae floating downstream. When the fish commence swimming they tend to seek shallow waters near the river bank. During this stage of their life, large numbers are concentrated in the Haverstraw Bay area of the Hudson River between the Tappan Zee Bridge and Peekskill.

Striped bass in their first year are referred to as "**young-of-the-year**" fish ("**YOY**"). In the summer of their first year the fish spread rather widely. A portion of the YOY population remains in the Haverstraw Bay area. A portion moves south. The ones that move south move through the lower Hudson River, the Harlem River, and the East River, into various areas including bays of Westchester County, Long Island and New Jersey.

During this early stage of life the fish are in a delicate state and experience a high mortality rate. By July of their first year the fish are only about one inch long.

An important stage of life comes with the first winter, when the YOY striped bass seek a suitable habitat for a decreased state of activity. This is referred to as "**overwintering.**" The fish tend to be about 4-5 inches long at this time.

There has been considerable uncertainty about the overwintering locations of YOY striped bass in the Hudson River. Some studies have shown that in the fall of their first year the fish which have previously gone into the bays of Westchester County, Long Island and New Jersey return to the New York harbor and lower Hudson River area. Some studies have also shown that most of the YOY fish which spent the summer in the Haverstraw Bay area move south past the George Washington Bridge.

Prior to 1979, although there was scientific evidence indicating these movements converging on the lower Hudson and New York harbor areas in the fall, there was little information as to where the fish actually went during their first winter.

As will be described in detail subsequently, a study carried out in 1979-80 in connection with the Westway project showed that in the winter months there was a concentration of YOY striped bass in the proposed Westway landfill area; that a substantial although less significant concentration was found along the New Jersey shore of the Hudson across from the Westway area; and that the concentrations of YOY striped bass in these Westway and New Jersey areas were immensely greater than in any of the other 25 locations sampled, running from the Lower Bay, south of Verrazano Bridge, as far north as Haverstraw Bay.

To continue the description of the life cycle, following the first winter, the fish appear to return to the locations previously mentioned regarding the first summer. In the second year of their life, the fish are referred to as "**yearlings.**" Again, prior to 1979 there was considerable uncertainty about the precise overwintering locations for yearling striped bass. However, the 1979-80 study indicated heavy concentrations of yearling striped bass (7-10 inches in length) overwintering in the Westway Project area and across the river along the New Jersey shore.

After the second winter, the juvenile striped bass join the adult population, including the migratory stock in the Atlantic Ocean.

The January 1977 EIS

As already noted, the Corps of Engineers did not prepare its own environmental impact statement in connection with the Westway landfill application, but relied on the January 1977 EIS, issued by the New York State DOT and the FHWA.

The January 1977 EIS is a document of 314 pages. It deals mainly with a description of the proposed Westway project, the alternatives considered, the existing highway and street system, the neighborhoods affected by the proposed project, and the impact of Westway in regard to traffic, air pollution, noise, and the upgrading of the lower Manhattan westside waterfront which would assertedly result from the construction of Westway. The January 1977 EIS also includes material on water quality and the aquatic environment, and the impact of Westway thereon. However, these subjects are a relatively minor feature of this EIS, involving only about 15 pages of the 314-page document.

In addition to the January 1977 EIS proper, the EIS is deemed to include two other documents-one known as "**Section 6**" consisting of comments and responses relating to the Draft EIS, and the second being the "**Technical Report on Water Quality**" ("**TRWQ**") referred to earlier. The TRWQ is 135 pages long and contains the backup for the 15 pages of material in the January 1977 EIS relating to water quality and the aquatic environment.

On the subject of fisheries, the January 1977 EIS alludes to the essential role which an estuary, such as the lower Hudson River, plays in the production of certain species of fish. An estuary is that portion of a river which is affected by ocean tides and is a mixture of salt and fresh water. The January 1977 EIS states (p. 116):

"Examples of the needs fulfilled by the Hudson for migratory fish are spawning areas for fish like shad, which do not spawn in the sea; winter protection for species like the striped bass, that cannot survive in the ocean during the coldest months (minimum ocean temperature is about 28o F, while the minimum temperature of the Hudson is about 30o to 32o F, depending on the salinity of the water); and nursery areas for the young of oceanic species, like bluefish, that must find sanctuary in the waters of estuaries to survive their first year of life."

The January 1977 EIS then goes on to argue that the area proposed for the landfill (often referred to in this case as the "**interpier area**") does not play a normal role in Hudson River estuary fish production, but is so polluted and so lacking in oxygen that virtually no fish life can be supported. The only "**macro-organisms**" (that is, organisms which need not be observed through a microscope) specifically mentioned as being present in the interpier area are barnacles, tunicates, oligochaetes, mud snails, mud crabs and blue crabs (p. 117). Although the EIS makes a brief theoretical reference to the fact that "**a relatively few species of fish**" can tolerate the type of conditions existing in the interpier area (p. 117), no species of fish are actually identified as living there. The January 1977 EIS states (p. 245):

"The interpier basins are presently almost devoid of macro-organisms, and therefore the landfilling of the basins will cause a minimal loss of estuarine productivity for species other than micro-organisms. Since the inshore area is biologically impoverished, the placement of the landfill will have little impact on the overall productivity of the Hudson estuary."

Thus the conclusion to be drawn from the January 1977 EIS is that the proposed Westway landfill will have no significant impact on fish resources, because there is no fish life in the proposed landfill area even worth mentioning.

The purported backup for this material in the January 1977 EIS is contained in a portion of the TRWQ. This portion is Part 2 of the TRWQ, consisting of a discussion prepared by Alpine Geophysical Associates, Inc. dated May 1974. This Part 2 deals with a number of subjects, including fish and benthic organisms (crabs, snails, etc.).

The information about fish is fragmentary and contradictory. It includes the results of a "**biological survey**" of the interpier area which was made in May and June of 1973, in which there was an attempt to take samples of various forms of marine life including fish. The Alpine discussion states that during the survey of May and June 1973, there were unexpected findings of snails, crabs, worms, etc. (p. 83) leading to the conclusion that a full cycle of biological food chain exists in the interpier area, starting with bacteria and fungi, proceeding to worms and then crabs, and finally fish. It is said that fish were observed and found in the surface and at the midwater levels of the interpier area (p. 83). There is the statement that fish appear to be more plentiful in the northern part of the proposed landfill area (p. 88). The Alpine material states that a relatively few species of fish can tolerate the conditions of the interpier area, and further indicates that fish migrating upstream or downstream in the Hudson River may use the interpier area "**to a limited extent**" and "**on occasion**" as a conduit (pp. 7 and 78).

These statements would seem at least to raise the question as to whether the interpier area is used by the important Hudson River fish, including striped bass. However, the Alpine material does not specifically identify any species of fish as being present in the interpier area, or give any information about numbers found in the sampling, except in the case of tomcod. The conclusion which the reader is obviously intended to draw is that other species of fish such as striped bass simply do not exist in the interpier area. At one point the Alpine discussion states that because of modern-day pollution the interpier area is a "**biological wasteland**" (p. 98). This is said despite the earlier report of finding a full cycle of biological food chain.

Proceedings Before the District Engineer

[15] On April 7, 1977 the New York State DOT filed the landfill application for Westway with the New York District Engineer of the United States Army Corps of Engineers. On April 22, 1977 public notice of the application was given.

In the processing of landfill applications by the Corps of Engineers, the level of the District Engineer is the first of four levels of potential review. The next is the Division-in this case the North Atlantic Division. After that is the Chief of Engineers. Finally, there is the Secretary of the Army.

The Westway landfill application was before the New York District Engineer for a period of nearly 21/2 years. The District Engineer was Colonel Clark H. Benn. There were certain units in the District Engineer's office which performed staff work on the Westway application and gave advice to Colonel Benn. These units included the Environmental Branch, the Regulatory Branch and the Office of Counsel.

In the course of the trial of the Sierra Club action, plaintiffs introduced evidence to the effect that the District Engineer received a number of objections, from

federal agencies and other parties, to the issuance of the Westway landfill permit. These objections included contentions that the Corps of Engineers lacked adequate information-particularly on the fisheries question-on which to base a decision. A number of the objections urged that the Final EIS of January 1977 did not sufficiently address the environmental impacts of the proposed landfill, and requested that a new or supplemental environmental impact statement should be prepared specifically addressing these issues. The District Engineer ruled that the objections were without merit, and recommended issuance of the permit without either obtaining additional information or preparing a further environmental impact statement.

As the ensuing discussion will show, plaintiffs' evidence raised issues of substance regarding the propriety of the action of the District Engineer. The normal response to such evidence on the part of defendants would have been to call as witnesses, at the trial, representatives of the district office of the Corps of Engineers who participated in the decisions that were taken. Surprisingly, no such witnesses were called. Colonel Benn did not testify. No authoritative advisor testified. The only witness from the district office was a junior employee in the Environmental Branch, a biologist named Linda Monte. Although Monte performed certain work relevant to the Westway landfill application, her testimony was no substitute for that of Colonel Benn or his senior advisors.

The following are the relevant facts, shown by the evidence at trial, about what occurred in the proceedings before the District Engineer.

Shortly after the filing of the Westway landfill application, and the giving of notice, public hearings were held by the Corps. These hearings occurred in late May 1977.

Also, representatives of the Corps and the Westway Project met with the EPA and the two federal agencies having special responsibility regarding fisheries- the NMFS and the FWS. Meetings were held May 13 and June 29, 1977. All three of these agencies expressed serious reservations about the proposed Westway landfill, and also urged that the January 1977 EIS was inadequate, particularly with respect to the impact of the landfill on fish resources.

On August 18, 1977 NMFS wrote the District Engineer that the position of that agency was that the Westway landfill permit should be denied. The letter stated that the existing interpier area provides a marine habitat for a broad spectrum of resources, which has the potential of improvement as a result of the construction of sewage treatment facilities reducing the pollution of the lower Hudson River.

The EPA also took an adverse position in a letter to the District Engineer dated December 14, 1977. The main point made by the EPA was that there was insufficient information about the fish and other marine life in the interpier area on which to base a decision on the landfill permit. The EPA letter complained of the "**superficial**" biological study contained in the TRWQ, which was the basis for the conclusion in the January 1977 EIS that the proposed landfill would have no impact on Hudson River fish productivity. The EPA recommended that a more thorough study be carried out.

On December 15, 1977 FWS wrote the District Engineer urging that the Westway landfill permit be denied, stating that the permanent destruction of the interpier section of the Hudson River estuary was a matter of grave concern to the FWS because of the loss of aquatic resources.

Even in the absence of objections from the three agencies, the Corps was under the legal obligation to make an independent evaluation of the available information on the fisheries question to determine whether there was sufficient information on which to base its decision, and to further determine whether the January 1977 EIS, filed by the New York State DOT and the FHWA, was adequate to fulfill the obligation of the Corps under NEPA respecting the landfill application. In this connection, it is conceded that the action of the Corps on the Westway landfill application was a federal action within the meaning of NEPA and that the District Engineer was a "**responsible official,**" having the duty to prepare an environmental impact statement, or at least to make sure that one was prepared.

It should be emphasized that the question of fishery resources was not some minor detail among the subjects to be considered by the Corps of Engineers on the Westway application. It is conceded that, when a landfill application is made to the Corps, the three foremost concerns to be dealt with, as far as impact on the body of water is concerned, are navigation, flooding and fisheries.

Aside from the obvious duty of the Corps to consider the relevant questions, even without urgings by other agencies and outside parties, there were the objections of NMFS, FWS and EPA and their considered views that the existing information was inadequate and that the January 1977 EIS was deficient in regard to the acquatic impact of the landfill.

The evidence is a virtual blank as to what consideration the District Engineer and his staff gave to the critical issues during the 21/2 years in which the Westway application was pending before them. There is a great deal of evidence about activity and analysis by other agencies and parties, and there is evidence about the Corps funneling the objections of these agencies and parties to the Westway Project and the FHWA for their response. But as to work carried out by the District Engineer's office in fulfillment of its duties under the statutes and regulations, there is precious little material in the record. As already stated, neither the District Engineer nor any senior member of his staff testified at the trial.[FN2]

FN2. Among the questions one would have expected to be considered in the District Engineer's office was whether, as a matter of law, the Corps was permitted to rely on the January 1977 EIS to satisfy the obligations of the Corps under NEPA. Could the FHWA be considered a "**lead agency**" and the Corps a "**cooperating**

agency"? See 40 C.F.R. s 1501.5 et seq. Since the Corps had no participation in the preparation of the January 1977 EIS, there was a serious question, to say the least, as to whether there could be such a relationship. If the lead agency concept did not apply, was there any other theory allowing the Corps to rest with the previously filed EIS? For instance, could the Corps adopt the EIS under 40 C.F.R. s 1506.3(a)? There is no evidence of any consideration of these questions by the District Engineer or his staff.

Returning to the objections which NMFS, FWS and EPA submitted to the Corps, the evidence shows that the Corps forwarded these objections to the Westway Project. The Project responded in May 1978, taking vigorous exception to the criticisms.

On June 26, June 27 and August 17, 1978 respectively, FWS, NMFS and EPA wrote the District Engineer reiterating their previous positions in opposition to the Westway landfill permit. EPA again emphasized the inadequacy of the present information about the fishery question.

During June, July and August 1978 the Corps received various letters from New York City officials and private parties and organizations urging that a new environmental impact statement be prepared in connection with the landfill proposal pending before the Corps. On August 4, 1978 the Corps forwarded certain of these letters to the FHWA, which responded on November 3, 1978, taking the position that the January 1977 EIS was in all respects adequate.

The Corps of Engineers showed no interest in EPA's recommendation for a more thorough biological study of the interpier area. However, EPA prevailed upon the Westway Project to make such a study. The Project retained the firm of Lawler Matusky & Skelly ("**LMS**") for this purpose. EPA was joined by NMFS and FWS in discussing the scope of the study with the Westway Project and LMS. However, the Corps of Engineers took no part in these discussions.

Work on the LMS study commenced in April 1979. The details of the study will be discussed hereafter.

The District Engineer decided to recommend issuance of the Westway landfill permit. This decision was made without waiting for the results of the LMS study.

Although the formal report of the District Engineer was not issued until September 1979, the decision was reached in May of that year. At that time the file on the Westway matter was transmitted to the North Atlantic Division of the Corps of Engineers. This process constituted what is known as "**elevation.**" The elevation of the Westway matter to the Division level occurred because of the unresolved objections of NMFS, FWS and EPA. Shortly after the May 1979 elevation, the matter was recalled by the District Engineer in order to allow solicitation of the views of the New Jersey government on whether there was concern about flooding. Apparently no difficulty on this subject was encountered, and the matter was re-elevated to the North Atlantic Division in September 1979.

The proceedings before the District Engineer concluded with two documents-an environmental assessment dated August 2, 1979 and a report of recommendations dated September 14, 1979. Both were signed by Colonel Benn, District Engineer. Both documents contain some discussion of the question of possible impact of the proposed landfill on the aquatic environment. This discussion was drafted by the biologist, Linda Monte. However, it is safe to infer that the conclusions Monte set forth in these documents reflected positions reached by her superiors. None of these superiors testified at the trial.

The August and September 1979 documents reiterate the description of the interpier area contained in the January 1977 EIS and the TRWQ to the effect that the interpier area is an impoverished biological environment without any substantial value as a habitat for fish, and that the loss of this area of the river due to the landfill will have no significant impact on fish and wildlife resources. The report of September 14, 1979 takes note of the new biological study being carried out at the request of EPA, but concludes that the information to be produced by this study is not necessary for decision on the Westway landfill permit. In addition to recommending the issuance of the permit, the September 14 report makes a specific finding that no new or supplemental environmental impact statement is required.

The evidence shows that, by the time of these documents, preliminary data from the new biological study were available, indicating the presence of significant marine life in the interpier area. This information was conveyed informally to the District Engineer's office-at least to the biologist Monte. Therefore, at the time of the District Engineer's environmental assessment and report of recommendations, it was known in the District Engineer's office that the statements in these documents on the question of fishery resources did not represent the facts as they existed.

Proceedings before the North Atlantic Division

The Westway landfill permit application was then considered by the North Atlantic Division. Major General Bennett Lewis was the Division Engineer. He formed a committee of three members of his staff to assist him on the Westway matter. The members of this committee were Jerry Savage, a civil engineer from the Operations Branch; Charles Stone, Chief of the Environmental Resources Branch of the Planning Division; and Edward Wasilewski, from the Office of Counsel. The Westway matter was before the North Atlantic Division from September 1979 until November 1980.

Neither General Lewis, nor any member of his Westway committee testified at the trial. The Government called John J.

Smutz, Chief of the Operations Branch of the Construction Operations Division. However, his testimony consisted mainly of a skeletal outline of the events which occurred at the Division level, and threw little light upon the substance of the considerations by the Division. The Government also called the biologist, Linda Monte, who was promoted from the New York District to the North Atlantic Division in the fall of 1980, and a more senior biologist employed by the Division, Robert Pierce. Both Monte and Pierce were mainly involved in certain limited technical functions, and did not play any decision-making role. However, the testimony of Pierce and his analysis of the fisheries question is of considerable importance.

In June 1979, when the Westway matter was first elevated to the Division, a preliminary analysis of the file from the District office was prepared by Savage, Smutz and Pierce. This analysis stated that the January 1977 EIS contained little useful information about the fisheries question, and that the TRWQ was deficient because of a lack of data and "many conflicting statements relative to the viability of the aquatic community." The authors of this document took the view that the new fisheries study undertaken at the instance of the EPA was requisite to any proper evaluation of the Westway landfill application.

The Division Engineer did in fact decide to wait for the results of the LMS study before making his decision on the Westway matter.

As will be described hereafter, during the winter of 1979-80 the sampling done in the course of the LMS study revealed an astonishing amount of fish life in the interpier area. Although preliminary data from the LMS study had been furnished informally to the Corps during the early stages of the study, apparently this was not done regarding what was found in the winter. In early 1980 the Division office made a request to the Westway Project for the fisheries data collected to date from the LMS study. The Project declined to furnish the data to the Corps at that time, but promised a report in June 1980. The reason given by the Project was that data in the hands of the Corps would be subject to disclosure under the Freedom of Information Act.

The Westway Project was obviously concerned about the information which was being developed in the LMS study. It is evident from what has just been described, and from the future course of events, that the Westway Project wished to prevent the results of the LMS study from becoming public. As far as presentation to the Corps of Engineers and the other federal agencies was concerned, this was done in a manner which masked the full significance of the information.

The Division office continued the same passive role on the fisheries question which had been played by the District office. There was no recognition of the duty of the Corps to make an independent evaluation of the fisheries question. Any vigorous performance of such a duty would surely have led the Corps at the time of the events of early 1980 to demand immediate production of the LMS data and to have this data analyzed in the most thorough and competent manner possible. This would have meant submitting it not only to the Corps' own most experienced biologists, but to the other federal agencies with expertise-NMFS, FWS and EPA. These steps were not taken. Instead, the Corps allowed the Westway Project to submit the LMS data at the time and in the form it chose. And even then, as will be later described, the Corps avoided obtaining appropriate analysis from its own staff and the other three agencies.

The LMS Study

This study involved a 13-month biological sampling program conducted from April 1979 through April 1980. During each of the 13 months sampling was conducted at 8 stations. The samplings occurred once a month, except that in a few months there were two samplings. The stations were divided into 3 "**transects.**" The first transect was at the south end of the landfill location, off Canal Street. The second transect was at the north end of the landfill location, off 34th Street. Each of these transects had 3 stations-one was actually in the interpier area, and the other two were farther offshore. The second station was at the pierhead line, and the third station was in the main channel. The two interpier sites were designated as WHA-1 and WHB-4. The third transect consisted of two stations in the channel off 122nd Street.

By the end of 1979, the sampling had revealed unexpected quantities and varieties of fish and other marine life in the interpier area. Consequently it was determined to expand the study so as to compare the abundance of fish in the interpier area with that found in other locations. Therefore during the months of January through April 1980, 9 additional "**Exploratory Stations**" were sampled. One of these was located close to the New Jersey side of the river opposite the interpier area, and the other 8 were located in the Upper and Lower Bays, south of the mouth of the Hudson River. A significant finding from the LMS sampling was the presence of large numbers of striped bass in the interpier area. As a result, in February LMS established 11 additional sampling stations denominated "**Exploratory Striped Bass Stations.**" These special striped bass stations ranged from just north of the George Washington Bridge to Haverstraw Bay. There was only one sampling of these stations-in February 1980.

In order to obtain fish in its sampling efforts, LMS used trawls made with large nets towed by a boat. Each trawl was of a prescribed distance and time. The maximum trawl was about 1700 to 1800 feet and lasted about 10 minutes. The trawls in the interpier area and at various other stations were shorter. This meant that, for comparison purposes, a figure known as "**catch-per-unit-effort**" was extrapolated from the numbers of fish caught in each trawl. The unit effort was a 10-minute trawl.

The Westway Project had promised that a report on the LMS study would be furnished in June 1980. What appeared in June was what is known as a "**Progress Report.**" It was furnished to the Corps and to the other federal agencies. It is dated May 1980. It contains data only through November 1979. The final LMS report was completed in the fall of 1980-Volume I in early September, and Volume II in November.

Volume I of the final LMS report contains the data and analysis which is relevant for present purposes. All future references to the LMS report will be to this Volume I. The following is a summary of the pertinent material in the report.

The report has two quite distinct aspects. Since an abundance of fish was found in the interpier area during the study, the report makes a disclosure of this situation. However, all the data collected by LMS was not presented in the report. Moreover, some of the presentations in the report manipulated the data in a misleading fashion. The obvious purpose was to attempt to detract from the startling revelations about the presence of fish in the proposed landfill area.

The first item of interest is that the LMS report discounted entirely the Alpine survey of May and June 1973, upon which the material on aquatic resources contained in the TRWQ and the January 1977 EIS was based. The LMS report noted that the device used in the Alpine sampling was minnow traps, which LMS said were inappropriate to determine relative abundance or species composition of the fish community in the interpier area.

The LMS report states that, as a result of the 1979-80 trawl sampling, 22 species of fish were found in the interpier area. The most abundant were (in order of rank):

Atlantic tomcod

Hogchoker

Winter flounder

Striped bass

White perch

Bay anchovy

Weakfish.

The periods of greatest abundance of striped bass were April 1979 and October 1979 through April 1980, indicating highest usage of the area in the cooler months. The LMS report contains the striped bass figures for the two interpier sampling sites (called WHA-1 and WHB-4) (p. 3.0-47). The figures are for the months October 1979 through April 1980. They are in terms of catch-per-10- minute-effort.

	WHA-1	WHB-4
Oct. 18	22.50	66.67
Nov. 1	10.00	105.00
Nov. 20	120.00	210.00
Dec. 19	130.00	280.00
Jan. 24	610.00	45.00
Feb. 20	147.50	55.00

Mar. 18 87.50 10.00

Apr. 21 120.00 180.00

The figure for WHA-1 for March 18 is apparently a mistake; it should be 100.

LMS compared the abundance of striped bass and other species in the interpier area versus the channel of the river. The finding was that certain of the species, including striped bass, winter flounder, white perch and bay anchovy preferred the interpier area. The report contains a bar graph showing this comparison in the case of striped bass. During the months of October 1979 through March 1980, the striped bass in the interpier area out-numbered the striped bass in the river sites by ratios ranging from 15:1 to as high as 105:1. During April 1980 the bar graph shows no striped bass in the river sites as against an average of 150 in the interpier area (p. 3.0-34).

The text of the LMS report makes the following statement about the quantity of white perch and striped bass in the interpier area (p. 4.0-10):

"White perch were abundant in the interpier zone only through December, but striped bass concentrations were high from October 1979 through April 1980, when the study ended. During these periods of abundance, both species demonstrated a statistically significant preference for the interpier zone vs the pierhead and channel zones."

LMS analyzed the fish by size in order to determine the breakdown of the samples between juveniles and adults. According to the LMS report, the striped bass found in the interpier area were predominantly those in the first two winters of their lives (p. 4.0-10). Indeed, testimony at the trial about the detailed data in the report (Appendix G) shows that over 90% of

the interpier area striped bass were young-of-the-year or yearlings.[FN3] The report speaks of the LMS sampling as finding "**large concentrations**" of young striped bass "**overwintering in the lower estuary**" (p. 3.0-45). The place where the "**large concentrations were found**" was the interpier area.

FN3. At the trial, the testimony generally referred to YOY striped bass as those in their first year, running from an April spawning. Thus the fish in their first winter were designated at trial as YOY's. The fish in their second year, beginning in April, were referred to as "**yearlings,**" and the testimony spoke of the fish in their second winter as being in this category. The LMS report places the cutoff date between YOY's and yearlings, and between yearlings and the next stage, as December 31 of the year. This is not a distinction of substance. Detailed statistics show that more than 90% of the striped bass in the interpier area were in their first and second winters of life.

As already stated, the finding of significant quantities of fish in the interpier area caused LMS to investigate the relative importance of that area to other possible sites in the Hudson River estuary and nearby waters. LMS expanded the study beyond the original 8 sampling sites, and added the 9 other Exploratory Stations commencing in January 1980. In February, sampling was carried out, not only at all of these sites, but at the additional 11 Exploratory Striped Bass Stations. Presumably these various sites were selected by LMS as offering the most illustrative locations in the Hudson River estuary and nearby waters, in order to determine the relative importance of the interpier area as an overwintering habitat for juvenile striped bass.

The following table shows catch-per-10-minute-effort figures for the samplings made from October 1979 through April 1980. The figures are given for the two interpier area sites (WHA-1 and WHB-4), the nine exploratory sites added beginning in January, and the 11 special sites for striped bass sampled in February. In each month there was one sampling. Where the initials "**S**" and "**D**" are used, these refer to "**shallow**" and "**deep.**" "**Red Hook F**" refers to Red Hook Flat. "**WHA-NJ**" refers to the site near the New Jersey shore of the river across from the interpier area.

TABLE OF CATCH-PER-10-MINUTE-EFFORT FIGURES FOR

INTERPIER AREA SITES A ND EXPLORATORY SITES

Oct.	Nov. 1	Nov. 20	Dec.	Jan.	Feb.	Mar.	Apr.

WHA-1	23	10	120	130	610	148	1	00	120	
WHB-4	67	105	210	280	45	55	1	0	180	
WHA-NJ			168	45	155	1	43			
Ellis Is. S.				24	0	5	70			
Ellis Is. D.				0	29*	30	5			
Red Hook F.				10	1	70*	9			
Red Hook D.				3	1	0	2			
Gravesend Bay				0	0	0	0			
Hoffman Is.				2	0	0	0			
East Bank S.				1	1	0	0			
East Bank D.				0	0	0	0			
Tubby Hook				3						
Yonkers West				36						
Hastings South				2						
Piermont D.				25						
Piermont S.				17						
Tappan Zee				5						
Rockland Lake				7						
Potato Rock S.				0						
Potato Rock D.				3						
Bowline S.				0						
Bowline D.				0						

The striped bass reflected in these figures were predominantly YOY's and yearlings. The two exceptions to this were the 29 for Ellis Is. D., caught in February, and the 70 for Red Hook F., caught in March. These samples, marked (*), were predominantly adult striped bass.

According to the testimony at trial, the New Jersey site is one which is comparable to the interpier area. The samplings showed substantial catches of juvenile striped bass at this site. Except for the New Jersey location, there were no findings in any of the other sites which even approached the consistent magnitude of the findings of juvenile striped bass in the interpier area during the winter months of 1979-80. There were some sporadic findings of juvenile bass near Ellis Island. There were also findings worth noting in February at Yonkers and at Piermont. The latter location is 31/2 miles south of Tappan Zee Bridge. The findings at the other locations were either nonexistent or negligible.

Certain basic and incontestible facts emerge from the data gathered by LMS. The interpier area is a productive habitat for a variety of fish. It serves as an overwintering refuge for juvenile striped bass. The LMS report attributes this to **"the environmental characteristics of the project area, such as structural shelter, relatively low currents, temperature, and salinity"** (p. 4.0-17). The interpier area is not **"biologically impoverished,"** as stated in the January 1977 EIS. It is not a **"biological wasteland"** as stated in the TRWQ. At the very least, the interpier area plays the normal role of a river estuary area in fulfilling certain essential needs of fish production. Beyond this, the LMS data indicates that the interpier area is of unusual importance, at least with respect to striped bass. Except for the New Jersey site across the river, the abundance of juvenile striped bass found in the interpier area was enormously greater than that found in any other location sampled. As the senior biologist of the Corps of Engineers, Dr. John Hall, later wrote in an internal memorandum:

"The fact that such large numbers of the species (striped bass) are found in the interpier area, coupled with the size of the area lends weight to the significance of the area as habitat. Additionally in this stretch of the Hudson there are few similar areas with similar physiographic relief which have proven distributions of striped bass."

The LMS report made these facts abundantly clear to the Corps of Engineers. The reaction of the Corps to the report will be described hereafter.

However, it should be noted that some phases of the LMS report are misleading and represent rather obvious attempts to avoid the full impact of the facts revealed by the study. These facts were obviously unpalatable to LMS's employer, the Westway Project. The LMS report avoids making any direct statement of the magnitude of the striped bass found in the interpier area in comparison with that of other areas. Indeed, the report does not contain a list of the catch-per-effort figures for the exploratory trawls. A bar graph purporting to deal with this data (Figure 4.0-3 at p. 4.0-14) is misleading, since it averages the data in such a way as to show the numbers of striped bass in the interpier area as only about one-third of what they actually were. Only by an analysis of this graph with other materials in the report [FN4] can the facts about the relative magnitude of striped bass found at the different sites be pieced together.

FN4. For instance, with the graph on p. 3.0-34 and the table on p. 3.0-47.

Following along with this sleight of hand is the conclusory discussion in the LMS report, purporting to provide "perspective into the importance of the three-mile-long Westway interpier zone as a marine habitat" (p. 4.0-11). The report mentions some literature of earlier years and "**unpub. data**" of LMS indicating the presence of striped bass off Long Island and in Haverstraw Bay during certain winters (p. 4.0-16). The report refers to a 1968 study by an author named Clark, who voiced the theory that striped bass cannot live in water temperatures below about -.5o C to -.8o C, and would tend to avoid the lower Hudson estuary, where temperatures in the "**more saline waters**" reach - 1.5o C or lower. The LMS report states that the winter of 1979-80 was relatively mild and that the water temperatures in the study area did not drop below 1.5o C. The report concludes (p. 4.0-17):

"As is illustrated in Figure 4.0-3, in 1980, striped bass were found throughout the 50-mile exploratory sampling area, but were concentrated in lower, more saline portions of the River from Milepoint -0.7 (Ellis Island Stations) to Milepoint 24.4 (Piermont South Stations). During such mild winters as 1980, because the physiological restrictions imposed by the

environment are much less rigorous, it is likely that Hudson River striped bass are widely spread throughout Long Island Sound and the many embayments comprising the local coastal system.

"... For the striped bass population, the project area appears to represent one of many available habitats that various portions of the population occupy during the winter months in years when temperatures are mild and conditions are favorable."

A careful reader of the LMS conclusory discussion, referred to in the previous paragraph, would note that it avoids any statement about specific numbers of striped bass in other locations which could in any way be compared with the data about the interpier area gathered in the 1979-80 study. Of course, the purpose of the exploratory trawls in the latter study was to provide comparative data, since none existed at that time. The testimony at trial shows that the so-called "**unpub. data**" of LMS was not reviewed by the author of the LMS report; and that, to the extent such data existed in the LMS files, it generally showed non-comparable or very low figures for overwintering striped bass in the other locations such as Haverstraw Bay.

As to the "**mild winter**" theory, the expert testimony at the trial was strongly against it; and, more important, even the two Corps biologists, Pierce and Monte, testified that they put no stock in it. For one thing, the detailed water temperature information in the LMS report itself (not prepared by the author of the text of the report) shows that the minimum temperatures recorded during 1962 to 1979 for the winter months in the project area were well above 1.5o C (referred to in the LMS report as the mark of a "**mild winter**") on most dates and never reached the alleged freezing temperature of striped bass.

With regard to the statement about "**many available habitats,**" presumably this is an attempt to give the impression of many habitats more-or-less equal in importance and productivity. Of course, the report does not say this directly, nor could it, since the data gathered in the LMS study is to the contrary.

LMS Report and Division Engineer's Office

As stated earlier, the Division Engineer's office received the LMS Progress Report in June 1980 and Volume I of the final LMS report in early September 1980. This Volume I contained the crucial data.

The actions of the Division office following receipt of the LMS material can only be explained as resulting from an almost fixed predetermination to grant the Westway landfill permit.

The LMS report demonstrated that the information previously furnished by the Westway Project on the crucial question of fisheries was the complete opposite of the true facts. The analysis and presentation in the January 1977 EIS and the TRWQ, insofar as they dealt with fishery resources, had been discredited. The District Engineer's recommendation to grant the landfill permit was based on the incorrect information.

Surely these circumstances should have awakened the Corps of Engineers to make a thorough and independent review of the entire matter. There should have been a fair disclosure of the facts to the public, as required by NEPA. The Corps should have recognized the need, at long last, to make a

competent and professional assessment of the degree to which the proposed landfill would affect production of fish in the Hudson River estuary. As the evidence at the trial demonstrated, this was not a question which could be easily answered. It was surely not a matter of simply accepting the facile conclusion of the LMS report (unsupported by the data) that the interpier area was merely one of many juvenile striped bass habitats. A proper resolution of this question would have involved a complete and independent analysis of all of the LMS data, a systematic canvass of other existing information about the movements and habitats of striped bass, and expert judgment on the relative importance of the interpier area regarding fish production, and the risks involved in its elimination. As to the three agencies with special expertise on the subject- NMFS, FWS and EPA-the Corps was not only legally obligated to obtain their technical assistance (33 C.F.R. s 320.4(C)), but should have been desirous of doing so in view of the fact that the contentions of these agencies had thus far been completely vindicated.

None of this was done. There is no evidence of any appropriate consideration of the conflicts between the LMS data and the January 1977 EIS and TRWQ. Instead of close consultation with the other three agencies, the Division office carefully avoided requesting their aid. There was no demand made upon LMS for the full data and no biologist within the Corps was assigned to make any meaningful analysis and recommendation based on the new fisheries information.

The question of whether to file a new or supplemental EIS was raised with the Corps in late August 1980. EPA took the position that even the limited information in the LMS Progress Report contradicted the January 1977 EIS. At about the same time Butzel & Kass, attorneys for the Sierra Club, requested that a new or supplemental EIS be issued by the Corps. Butzel & Kass had obtained a copy of the Progress Report.[FN5]

FN5. Neither the Sierra Club nor Butzel & Kass was furnished with, or obtained, a copy of the LMS final report until the commencement of this litigation.

The Corps' response was to seek the view of the FHWA, which referred the matter to the Westway Project. The Project and the FHWA urged the Corps that a new or supplemental EIS was not necessary. They took this view even after the LMS final report. In a letter dated November 26, 1980, the Division office of the Corps acquiesced and agreed not to insist on a further EIS. However, this letter noted that the LMS report "does provide additional documentation on the aquatic impacts of this project," and recommended that the report be filed with EPA as "**supplemental information**" to the January 1977 EIS.

The reference to "**supplemental information**" is to a regulation of the Corps of Engineers, 33 C.F.R. s 230(11)(d), which provides that, where there is new information which does not appear to require the full NEPA procedures of a new or supplemental EIS, there can be a filing of supplemental information with EPA, accompanied by certain public disclosure. The distinctions between a new or supplemental EIS and supplemental information need not be explored fully here. The important point for present purposes is that the suggestion of the Division office in its letter of November 26, 1980 about the filing of the LMS report as supplemental information was not carried out. There is no explanation for this.

The senior biologist at the Division, Dr. Pierce, was given certain limited assignments following the receipt of the LMS report. He reviewed the report, and the position which he expressed to his superiors was that there was cause for concern that the elimination of the interpier area as marine habitat would have an effect on the "**carrying capacity**" of the estuary for one or more of the estuarine species. The carrying capacity concept refers to the need of a sufficient amount of habitat to sustain various species of fish and wildlife in an area.

There is no evidence as to what consideration the Division Engineer and his advisors gave to this professional view of their senior biologist. They did not assign Pierce to make any in-depth analysis of the available data on striped bass or other species. Indeed, Pierce's testimony is that the issue about striped bass was not focused on at all by the Division.

Pierce's trial testimony indicates what could have resulted if Pierce had been assigned to do a thorough study of the fisheries question. At some point after the landfill permit had been issued, on his own initiative, Pierce made an analysis of the LMS data regarding striped bass. Among other things, he made precise calculations of the number of YOY and yearlings found at the various sites. His analysis was to the effect that the numbers of YOY and yearling striped bass caught in the interpier area and at the New Jersey site across the river were approximately 15 times as great as the average of those caught at all the exploratory sites. He also reviewed historical data, and noted a study, which appeared weighty to him, indicating a massive migration of striped bass from the Haverstraw Bay area south past the George Washington Bridge during certain years. Pierce concluded that the destruction of the interpier area as a habitat presented the risk of a severe impact upon the striped bass population, in the absence of definite knowledge of other important habitats.

The junior biologist at the Division, Linda Monte, was assigned to prepare the material regarding fish and wildlife in the staff report at the Division office. The staff report, dated November 1980, carefully avoids making any mention of the issue of overwintering juvenile striped bass. It contains no reference to the magnitude of the findings of striped bass in the interpier area. The issues raised by the LMS report are not given any competent evaluation. The staff report states that the interpier area is

not a "**critical**" habitat for any of the "three life stages sampled in the (LMS) program (eggs, larvae, adult) for the species found in the study." Monte testified at the trial that the library at the New York District office contained some data about striped bass found at various locations during certain winters. This data showed very small numbers, and was not on a comparable basis with the LMS information. In any event, Monte was neither assigned to research this data, nor did she even look at it, prior to writing the material in the staff report.

With regard to the three agencies-NMFS, FWS and EPA, the Division Engineer proceeded in a fashion virtually designed to avoid obtaining their expert views. The LMS final report (Volume I) was given to representatives of NMFS, FWS and EPA at a meeting held by the Corps on September 8, 1980. The representatives of the Corps requested the views of these agencies only on the subject of "**mitigation.**" This refers to a proposal to have a certain configuration of rock and other material at the edge of the landfill in an attempt to provide a limited habitat for marine life. NMFS and FWS advised the Corps that the proposed mitigation measures would be insufficient.

The Division office of the Corps held another meeting with the three agencies on November 26, 1980. A brief slide show was followed by the announcement by Major General Lewis, the Division Engineer, of his intention to recommend the granting of the Westway landfill permit.

FWS, EPA and NMFS took steps to elevate the matter to the Chief of Engineers. Each of these agencies wrote the Division Engineer and Chief of Engineers reiterating opposition to the Westway landfill and requesting the elevation. The letters are dated December 22, 1980, December 29, 1980, and January 8, 1981 respectively. The NMFS letter is of particular significance, because of its detailed analysis of the fisheries question in light of the LMS report, and states in part:

"During the fall, natural behavioral patterns account for a downstream movement of young striped bass into the lower estuary where they are found predominately in the interpier area to be filled. Because that interpier area provides shelter, food and appropriate habitat for these midwater fish, we consider this area to be habitat essential for their survival. As will be discussed later, such habitat is also considered critical since suitable alternative habitats have been eliminated by development and pollution. That use of this area by juvenile striped bass occurs only during the winter months, is related to the species' life history, and does not diminish its critical importance. Should juvenile striped bass (including the hatchery produced fish described earlier) be denied access to this critical nursery area, it is NMFS' opinion that the survival of the entire Hudson River population and its substantial contribution to the Atlantic coast fisheries would be jeopardized."

Michael Ludwig, of NMFS testified at the trial that the LMS study was a major step in resolving the uncertainties about the overwintering habitat of juvenile striped bass.

The Division Engineer's report to the Chief of Engineers is dated January 16, 1981. It recommends issuance of the Westway landfill permit. Its description of fish and wildlife issues is merely a repeat of what is contained in the staff report. Thus it avoids mention of the significant data and issues regarding striped bass.

The Division Engineer's report further concludes that there is no need for any new or supplemental EIS. The report

states that the Westway project has provided the LMS data "to all concerned Federal, State and local agencies as well as to the interested public." The report goes on to note the suggestion to the FHWA that the LMS report should be filed with EPA as supplemental information to the January 1977 EIS.

As previously stated, the LMS report was not in fact filed as supplemental information. Moreover, it was not made public in anything approaching the sense that NEPA requires. One attorney for certain environmental groups obtained the LMS report under a New York State freedom of information procedure in mid-September 1981. This was not the equivalent of public disclosure.

Chief of Engineers

The Westway matter was elevated to the Chief of Engineers in mid-January, 1981. The Chief was Lieutenant General Joseph K. Bratton. He was assisted by Major General E. R. Heiburg III. Neither of these officers testified at the trial.

It is clear that they sought to expedite the matter, and saw no reason to "**second guess**" the decision of the Division Engineer. The only technical work on the fisheries question in the Chief's office was that of the biologist, Dr. Hall, whose memorandum was quoted earlier. Hall testified at the trial. He believed that serious questions were raised regarding the impact of the proposed landfill on the Hudson River striped bass production. There was a question as to whether the loss of the interpier area as a habitat would result in a decline of the Hudson River striped bass population. He wrote the memorandum to one of the Chief's advisors, commenting upon the significance of the interpier area as a striped bass habitat. Neither General Bratton nor General Heiburg consulted directly with Hall.

The Chief of Engineers decided that the Westway landfill permit should be granted. There is no formal decision. The conclusions of the Chief are contained in letters written to NMFS, FWS and EPA dated February 18, 1981. The letter to NMFS states in part:

"We fully agree that the interpier area is a productive and valuable fisheries habitat for striped bass and other species: apparently, at least as productive as other areas of the estuary that have been studied.... However, we have found no literature sources that provide evidence that this project interpier zone is sustaining population levels of the striped bass produced in the entire Hudson River nursery. Furthermore, to the best of our knowledge, there are no data available which indicate that the health and well-being of the striped bass fishery may be directly related to the availability of this interpier area."

NMFS, FWS and EPA prepared documents for the purpose of elevating the matter to the Secretary of the Army. However, the plans to elevate were not carried out.

On March 12, 1981 the Office of the Chief of Engineers sent a directive to the New York District Engineer to issue the Westway landfill permit. On March 13, 1981 the permit was issued.

Expert Testimony at Trial

The expert witnesses on both sides were unanimous in the view that the interpier area is a productive overwintering habitat for juvenile striped bass. The difference of opinion lay in the question of whether this habitat is "**critical**" to the Hudson River striped bass production-*i.e.*, whether the destruction of the habitat would cause a major decline in the Hudson River striped bass population.

The following witnesses testified for plaintiffs. Michael Ludwig of NMFS gave the opinion that the interpier area is critical. Frank DeLuise of FWS testified that the LMS report raised a "**red flag**" about the impact of the proposed landfill on the striped bass population. In his view, further information was necessary to assess the impact more definitely. However, he testified that even if there was an area as significant as the interpier area, the elimination of the interpier habitat would be like "amputating your right hand because you have another on the left side." Ian Fletcher, of the University of Washington, testified that the interpier area is of great importance to the Hudson River striped bass production. There might be other similar areas, but none had been shown. Thus the interpier area could well be critical.

Aside from the witnesses from the Corps, defendants called two expert witnesses from LMS. One was Carter Braxton Dew, who conducted the study and was the author of the text of the report. His opinion was that there are many available striped bass habitats for overwintering purposes, and that the loss of the interpier area would have little effect upon the Hudson River bass population. However, he stated that his conclusion was tentative and that he would prefer to have a longer and more thorough study, with different kinds of equipment, in order to reach a firmer conclusion. The other witness from LMS, Ronald Alevras, took the view that striped bass can easily adapt to other habitats if one is lost.

SIERRA CLUB CASE-CONCLUSIONS OF LAW

NEPA

[16] Decisions of the Supreme Court and of this and other circuits have fully

discussed the purposes underlying NEPA. These are to provide the public with full and accurate information about significant environmental impacts, and to ensure that the decision-maker gives due consideration to these impacts. Vermont Yankee Power Corp. v. Natural Resources Defense Council, 435 U.S. 519, 98 S.Ct. 1197, 55 L.Ed.2d 460 (1978); Grazing Fields Farm v. Goldschmidt, 626 F.2d 1068 (1st Cir. 1980); I-291 Why? Association v. Burns, 517 F.2d 1077 (2d Cir. 1975); Chelsea Neighborhood Associations v. U. S. Postal Service, 516 F.2d 378 (2d Cir. 1975); Monroe County Conservation Council, Inc. v. Volpe, 472 F.2d 693 (2d Cir. 1972).

The most significant environmental impact requiring consideration by the Corps of Engineers was the impact of the proposed landfill on fishery resources. The Corps was under a duty to make reasonable effort to ascertain the facts, and then to set forth those facts in an environmental impact statement. Under the mandate of NEPA, the Corps was required to make a full disclosure of the information about fishery resources, and to give an opportunity for comment by interested parties. As part of this process, the Corps was required to make public the views of the federal agencies with jurisdiction and expertise on the subject of fisheries.

The total failure of the Corps to comply with these obligations has been demonstrated beyond any question. At no point did the Corps make any effort of its own to ascertain the facts about marine life in the interpier area. It was content to rely upon the January 1977 EIS, despite warnings from EPA, NMFS and FWS that the information in this statement about aquatic impacts was probably unreliable. After the LMS report was obtained, at the instance of the other agencies, the invalidity of the conclusions in the January 1977 EIS regarding aquatic impact was proved. The interpier area was shown to be a highly significant and productive habitat for fish, including striped bass. The proposed landfill would have the impact of destroying this habitat. The Corps was obligated under NEPA to publicly disclose this information and this impact in an environmental impact statement. It did not do so. Instead, it acquiesced in the urgings of the New York State DOT and the FHWA to withhold the information.

[17] The Corps contends that it was within its discretion to determine that the information was not of sufficient significance to require an environmental impact statement. The Corps appears to argue that disclosure of the nature of the interpier area as a marine habitat was not required because no conclusive proof exists that it is "**critical**" to any species of fish, including striped bass.

These arguments are without merit. The need for disclosure did not depend on whether the interpier habitat is critical. The fact that the proposed landfill would destroy a productive estuarine habitat for fish, including striped bass, is sufficient to require disclosure under NEPA. The need for disclosure was particularly pressing, in view of the falsity of the January 1977 EIS.

Under the circumstances, there was clearly no legal basis for the Corps of Engineers to "**adopt**" the January 1977 EIS and to treat it as a fulfillment of the Corps' legal obligation under NEPA.

On the question of the critical nature of the habitat, the Corps was aware, or should have been aware with any competent analysis, of a most serious issue in this regard. The Corps' own senior biologist, Dr. Hall, believed there were serious questions about the destruction of this

possibly unique habitat. Moreover, NMFS asserted categorically that existing scientific information showed the interpier area to be a critical habitat for striped bass.

The Corps had no right to swallow up these issues in the privacy of its bosom. It was required to make fair and open disclosure not only of the available facts, but of the responsible scientific views as to the risks involved in the loss of this habitat. Committee for Nuclear Responsibility, Inc. v. Seaborg, 463 F.2d 783 (D.C.Cir.1971).

Aside from public disclosure, the Corps had the obligation to develop a full and adequate environmental impact statement in order to ensure that its own deliberations took into account the relevant facts and the environmental impacts. The record in this case demonstrates the salutory nature of this legal requirement, and the total non-compliance by the Corps. The District Engineer's recommendation was made without having any reliable fishery information whatever. The Division Engineer acted following receipt of the LMS report, but obtained no appropriate technical assistance from the Corps' own biologists or from the other federal agencies with expertise. The Chief of Engineers quickly affirmed what was done at the lower levels. This wholly inadequate procedure would have been avoided if the District Engineer had promptly instituted steps to prepare and promulgate an environmental impact statement as required by NEPA.

[18] Because of the failure of the Corps to comply with NEPA, its issuance of the Westway landfill permit was invalid and must be set aside. Proceedings by the Corps, to determine whether a landfill permit should be issued, must be commenced anew and must be carried out under the legal requirements, with safeguards provided by the Court. These will be dealt with in the injunction to be issued.

Clean Water Act and Rivers and Harbors Act

[19] The conclusions set forth in the previous section demonstrate that the issuance of the landfill permit by the Corps of Engineers was made without a legally sufficient basis under the Clean Water Act and the Rivers and Harbors Act.

Conclusion

All claims in the ART case are dismissed, except that there will be a further hearing to determine whether there should be an injunction against the Secretary of Transportation, preventing federal funding for Westway, on the ground of failure to comply with the requirements of the National Environmental Policy Act in respect to the impact of Westway on fishery resources.

All claims in the Sierra Club case are dismissed, except the claims relating to the impact of the proposed landfill on fishery resources. On the latter claims, plaintiffs are entitled to injunctive relief setting aside the Corps of Engineers' permit for the landfill, and remanding the matter to the Corps for proceeding, in compliance with the law, to determine whether or not a landfill permit should issue. The landfill for the construction of Westway will be enjoined pending the outcome of these proceedings.

A further hearing will be held to determine the exact terms of the injunction.

So ordered.