The National Environmental Policy Act After Five Years

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The National Environmental Policy Act[1] (NEPA) was signed into law on January 1, 1970, and was announced as ushering in the decade of the environment.[2] As we are now halfway through that decade, it is an appropriate time to evaluate the operation of the Act.

NEPA is of major significance both in its new and broad expression of national policy on environmental matters and in its innovative administrative procedures designed to implement that policy. Prior to NEPA's passage the federal government had taken only a limited part in environmental protection. The responsibilities which had been assumed were not comprehensive, and the agencies implementing them frequently lacked significant policies and mandates for enforcement.[3] The Report of the Senate Committee on Interior and Insular Affairs, the committee responsible for drafting NEPA, aptly described the problem which existed in the pre-NEPA period:

> As a result of this failure to formulate a comprehensive national policy, environmental decisionmaking largely continues to proceed as it has in the past. Policy is established by default and inaction. Environmental problems are only dealt with when they reach crisis proportions.[4]

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1. 42 U.S.C. §§ 4321-47 (1970).

2. Remarks of President Richard M. Nixon at the Bill Signing Ceremony, 6 WEEKLY COMPILATION OF PRESIDENTIAL DOCUMENTS 11-12 (Jan. 5, 1970).

3. For a synopsis of federal environmental law prior to the passage of NEPA see Moorman, *Outline of Federal Law for the Practicing Lawyer*, in LAW AND THE ENVIRONMENT 182-234 (M. Baldwin & J. Page, Jr. ed. 1970). The poor record of enforcement by the Federal Water Quality Administration is discussed at length in D. ZWICK & M. BENSTOCK, WATER WASTELAND 199-228 (1971).

4. S. REP. No. 296, 91st Cong., 1st Sess. 5 (1969).

NEPA was designed to remedy this pattern of inadequate federal action. Its opening sections set out sweeping policy requirements calling for the harmonious co-existence of man and his environment.[5] In order to implement these policies, the Act includes the "action-forcing" requirement that for each proposed major federal action affecting the environment the responsible official must prepare an analytic impact statement.[6] Unlike the statutes which

5. The declaration of purpose states:

> The purposes of this chapter are: To declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation. . . .

42 U.S.C. § 4321 (1970). The broad policy of the act is further defined in the statement on its implementation by the federal government:

> [I]t is the continuing responsibility of the Federal Government to use all practicable means, consistent with other essential considerations of national policy, to improve and coordinate Federal plans, functions, programs, and resources to the end that the Nation may—
>
> (1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
>
> (2) assure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings;
>
> (3) attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
>
> (4) preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice;
>
> (5) achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and
>
> (6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

42 U.S.C. § 4331(b) (1970).

6. The Act requires that all agencies of the government shall

> 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—
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> (i) the environmental impact of the proposed action,
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> (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, and
>
> (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

42 U.S.C. § 4332(2)(C) (1970).

followed in the environmental field, such as the Clean Air Act Amendments of 1970[7] and the Federal Water Pollution Control Act Amendments of 1972 (FWPCA Amendments),[8] NEPA does not contain specific standards for pollution control, nor does it present a detailed program for controlling particular types of pollutants.[9] NEPA's approach is to apply the policies of the Act to any discrete federal action through the particular analytic approach of the impact statement.

The success of this approach is dependent upon the recognition by federal agencies and officials of their responsibility to promote the policies of the Act and comply with its mandate through comprehensive impact statement preparation. Wise discretion must be exercised by the agencies in determining the need for preparation of an impact statement and the scope and context of the "major Federal action" which forms the framework for the statement. In addition, the sources of information relied upon in the analysis must be thorough and competent, and the quality of the analytic work must be unbiased and reflective of the state of the art.

To assure that the broad, national scope of the Act's policies would be carried out and to guard against the parochialism of narrowly focused agencies, three significant features were included in the Act which make it unusual in the statutory landscape. First, the Act contains a universal federal mandate. *Every* major federal action significantly affecting the human environment is subject to the Act's policies,[10] and for each major federal action the responsible federal official must prepare an environmental impact statement.[11] Second, recognizing that most federal agencies do not have environmental expertise or concern, the Act contains a consultative referral mechanism which draws other federal and state agencies

7. 42 U.S.C. §§ 1857-58a (1970).
8. 33 U.S.C. §§ 1251-1376 (Supp. IV, 1974).
9. As Judge Skelly Wright has noted:

> Congress did not establish environmental protection as an exclusive goal; rather, it desired a reordering of priorities, so that environmental costs and benefits will assume their proper place with other considerations . . . .
>
> Thus the general substantive policy of the Act is a flexible one. It leaves room for a responsible exercise of discretion and may not require particular substantive results in particular problematic instances.

Calvert Cliffs' Coordinating Comm. v. AEC, 449 F.2d 1109, 1112 (D.C. Cir. 1971).
10. 42 U.S.C. § 4332(2)(C) (1970).
11. 42 U.S.C. § 4332(2)(C) (1970).

into the operation of the federal entity complying with the Act. NEPA specifically seeks to have those with relevant jurisdiction and expertise involved in the making of decisions which affect the environment by having those agencies comment on the analytic impact statement.[12] Third, NEPA has consistently been interpreted as providing for substantial public participation in agency actions which affect the environment.[13] In part the Act was designed to function as an environmental full disclosure law.[14] The emphasis on public participation also flows from the Act's expansion of agency mandates beyond the immediate area of the agency's expertise. It is further based on the democratic philosophy of participation in enforcement which is evident in much of the other environmental legislation of recent years.[15]

This brief review of NEPA's first five years will examine its operation largely in terms of agency compliance and enforcement, considering first these three innovative features of the Act and then the quality of environmental analysis and review which the Act has fostered. The policies and structure of NEPA held out great promise in 1970. The Act provided a comprehensive and thorough method of integrating environmental issues and concern

12. The statute provides in part that:

> Prior to making any detailed statement, the responsible Federal official shall consult with and obtain the comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved.

42 U.S.C. § 4332(2)(C) (1970).

13. The Act directly requires that environmental impact statements be widely available:

> [the environmental impact] statement and the comments and views of the appropriate Federal, State, and local agencies, which are authorized to develop and enforce environmental standards, shall be made available to the President, the Council on Environmental Quality and to the public as provided by section 552 of Title 5. . . .

42 U.S.C. § 4332(2)(C) (1970).

14. The courts have repeatedly emphasized both public participation and environmental full disclosure. *E.g.*, Natural Resources Defense Council v. Morton, 458 F.2d 827 (D.C. Cir. 1972); Committee for Nuclear Responsibility v. Seaborg, 463 F.2d 783 (D.C. Cir. 1971); Duck River Reservation Ass'n v. TVA, 6 ERC 1789 (E.D. Tenn. 1974); Natural Resources Defense Council v. SEC, 389 F. Supp. 689 (D.D.C. 1974).

15. *E.g.*, Clean Air Act Amendments of 1970, 42 U.S.C. § 1857h-2 (1970) (citizen suit provisions); Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. § 1365 (Supp. IV, 1974); congressional declaration of policy on the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. § 1251(e) (Supp. IV, 1974).

into the operation of the federal government and made the use of this method mandatory to each federal agency. A broad, national policy on the environment, universally applicable to federal agencies, was to be exercised openly with the participation of the widest range of interests. After five years, the Act has undoubtedly done much to heighten the environmental consciousness of all branches of the federal government and the general public. Given the Act's indefinite goals, it is always difficult to detail the extent of its effectiveness; but the extent of the controversy over its enforcement, as well as the fact that similar measures have been enacted in more than twenty states,[16] is patent testimony to its impact. At the same time, the continuing opposition to the Act has won significant victories which have weakened its full force and effect. For that reason, this Article concludes with suggestions for bolstering the effectiveness of the Act and preserving its essential mandate for protection of the environment.

I. The Universal Mandate

It was a central tenet of NEPA that the analysis which it required and the policies which it set forth should be applicable to every major federal action which significantly affected the quality of the human environment.[17] Moreover, every federal agency was *itself* to be required to apply the policies of the Act through the prism of the impact statement.[18] By its terms NEPA was applicable to both agencies endowed with an environmental charter and those without. Its broad commands were sufficient to encompass those agencies which could consider themselves to be already following specific congressional instructions on environmental issues, such as

16. More than 20 states have adopted environmental impact statement requirements similar to those in NEPA. These are summarized as of December 1974 in Council on Environmental Quality, Environmental Quality: The Fifth Annual Report of the Council on Environmental Quality 401 (1974). Since that time, New York has passed a "little NEPA" statute, N.Y.E.C.L. § 8-0101 to -0115 (McKinney Supp. 1975).

17. 42 U.S.C. § 4332(2)(C) (1970).

18. 42 U.S.C. § 4332(2)(C) (1970). As the Report of the Senate Committee on Interior and Insular Affairs explains, "S. 1075 [NEPA] would provide all agencies and all Federal officials with a legislative mandate and a responsibility to consider the consequences of their actions on the environment." S. Rep. No. 296, 91st Cong., 1st Sess. 14 (1969).

the Forest Service[19] or the Federal Power Commission (FPC),[20] as well as those, like the Atomic Energy Commission (AEC), which had explicitly ruled most environmental concerns beyond their jurisdiction.[21]

The universal mandate and the requirement of federal responsibility resulted in a long spate of litigation in which agencies contended that the mandate of the Act did not apply to them or that they were empowered to delegate their responsibilities under the Act to others. Agency after agency took one or the other of these routes. The AEC contended that it was not compelled to apply the Act for more than fourteen months after its passage and that it could exclude from consideration in its impact statements issues such as water quality by deferring to existing standards of other state and federal agencies.[22] The FPC[23] and the Federal Highway Administration (FHWA)[24] argued that they could delegate most if not all of their responsibilities to others, primarily their applicants for licenses or funds. The Environmental Protection Agency (EPA) contended that the Act simply did not apply to it because it was in the business of environmental protection[25] and because its own

19. The Multiple Use-Sustained Yield Act of 1960 sets out a mandate which could be claimed as a specific environmental charter. The Act requires that the national forests be managed for outdoor recreation, range, timber, watershed and wild life and fish purposes and requires the maintenance of sustained yield. 16 U.S.C. § 528 (1970). The resources are to be used so as to best meet the needs of the American people. 16 U.S.C. § 531 (1970).

20. Under the Federal Power Act, the FPC is required to license those hydroelectric power projects which

> will be best adapted to a comprehensive plan for improving or developing a waterway . . . . for the use or benefit of interstate or foreign commerce, for the improvement and utilization of water-power development, and for other beneficial public uses, including recreational purposes.

16 U.S.C. § 803(a) (1970). The courts have held that statutory mandate to require an analysis and judgment closely akin to that required by NEPA. Scenic Hudson Preservation Conference v. FPC, 354 F.2d 608 (2d Cir. 1965), *cert. denied,* 384 U.S. 941 (1966); Scenic Hudson Preservation Conference v. FPC, 453 F.2d 463 (2d Cir. 1971), *cert. denied,* 407 U.S. 926 (1972).

21. New Hampshire v. AEC, 406 F.2d 170 (1st Cir.), *cert. denied,* 395 U.S. 962 (1969).

22. Calvert Cliffs' Coordinating Comm. v. AEC, 449 F.2d 1109 (D.C. Cir. 1971).

23. Greene County Planning Bd. v. FPC, 455 F.2d 412 (2d Cir.), *cert. denied,* 409 U.S. 849 (1972).

24. *E.g.,* Citizens Environmental Council v. Volpe, 484 F.2d 870 (10th Cir. 1973), *cert. denied,* 416 U.S. 936 (1974); Iowa Citizens for Environmental Quality, Inc. v. Volpe, 487 F.2d 849 (8th Cir. 1973).

25. *See* text accompanying notes 40-41 *infra.*

statutory requirements were the functional equivalent of NEPA.[26] The Army Corps of Engineers, which had its water pollution discharge program under the 1899 Refuse Act[27] resuscitated by executive order in 1970,[28] and which was faced with the difficult task of developing permits for approximately 20,000 discharges into American rivers and streams, simply failed to take any significant steps to enforce the Act.

In the face of this widespread hostility and indifference to NEPA on the part of the agencies given the task of enforcing it, the reaction of the courts has generally been to enforce both the universal nature of the mandate and the federal responsibility for performance under the Act. In *Calvert Cliffs' Coordinating Committee v. AEC*,[29] the Court of Appeals for the District of Columbia Circuit roundly rejected the AEC's interpretation of the Act, finding the time lag in its application "shocking,"[30] and the exclusion of environmental areas to which existing standards applied "in fundamental conflict with the basic purpose of the Act."[31] In *Kalur v. Resor*[32] the District Court for the District of Columbia required the Corps of Engineers to comply with NEPA with respect to discharges affecting water quality, rejecting its contention that the then-existing water pollution laws, whose enforcement proceedings were cumbersome, ineffective and largely in the hands of the states,[33] sufficiently addressed the question of water quality control. In *Greene County Planning Board v. FPC*[34] the Second Circuit denied the FPC the right to delegate to applicants for licenses

26. *See* text accompanying notes 42-44 *infra*.
27. 33 U.S.C. § 407 (1970).
28. Exec. Order No. 11,574, 3 C.F.R. 292 (1974).
29. 449 F.2d 1109 (D.C. Cir. 1971).
30. *Id.* at 1119.
31. *Id.* at 1123.
32. 335 F. Supp. 1, 13 (D.D.C. 1971).
33. Water Pollution Control Act of 1948, ch. 758, 62 Stat. 1155; Water Pollution Control Act Amendments of 1956, ch. 518, 70 Stat. 498; Federal Water Pollution Control Act Amendments of 1961, Pub. L. No. 87-88, 75 Stat. 204; Water Quality Act of 1965, Pub. L. No. 89-234, 79 Stat. 903; Clean Water Restoration Act of 1966, Pub. L. No. 89-753, 80 Stat. 1246; Water Quality Improvement Act of 1970, Pub. L. No. 91-224, 84 Stat. 91. Moorman has noted that "[the Federal Water Pollution Control Act] seems deliberately designed to make it difficult for the person injured by pollution much less a mere citizen group to participate in its enforcement proceedings." Moorman, *supra* note 3, at 202. Only one suit was brought under the Act between 1960 and 1970. *Id.* at 204.
34. 455 F.2d 412 (2d Cir.), *cert. denied*, 409 U.S. 849 (1972).

the preparation of the draft impact statement required for review at its licensing hearings, declaring that an applicant's statement was likely to be based on self-serving assumptions and that the Commission owed the public active and affirmative protection.[35] With respect to the claims of the FHWA, early decisions were more receptive than *Greene County* to attempts at delegation, provided the federal presence was maintained by way of review or consultation.[36] By the summer of 1975, however, the Highway Administration had begun to suffer decisive defeats on the delegation issue as various courts, such as the Second Circuit in *Conservation Society of Southern Vermont v. Secretary of Transportation*[37] and the Seventh Circuit in *Swain v. Brinegar*,[38] held that only genuine federal participation in the preparation of the statement would meet the standards of the Act.

The EPA is one of the few agencies that has been successful in the courts in evading NEPA, at least on the basis of the argument that the Agency's statutory requirements were the functional equivalent of those in the Act.[39] Its first major contention, that it should be exempted from NEPA compliance because it is in the business of environmental protection, was based on an exchange that took place on the Senate floor prior to NEPA's passage be-

35. *Id.* at 419-20.

36. There were various formulations of the FHWA's proper role in the preparation of impact statements. For example, in Citizens Environmental Council v. Volpe, 484 F.2d 870, 873 (10th Cir. 1973), *cert. denied*, 416 U.S. 936 (1974), delegation was acceptable where "[t]he S[tate] H[ighway] C[ommission] prepared the impact statement in consultation with state, federal and private agencies" and "[t]he Secretary of Transportation did not simply 'rubber stamp' the State's work." *Accord*, Finish Allatoona's Interstate Right, Inc. v. Volpe, 355 F. Supp. 933 (N.D. Ga.), *aff'd*, 484 F.2d 638 (5th Cir. 1973). In Iowa Citizens for Environmental Quality, Inc. v. Volpe, 487 F.2d 849 (8th Cir. 1973), limited delegation was approved where ". . . FHWA recommended changes in the initial statement and provided additional information to be added to the final statement. Review, modification and adoption by FHWA of the statement as its own occurred in this case." *Id.* at 854.

37. 508 F.2d 927 (2d Cir. 1974), *vacated and remanded for further consideration*, 96 S. Ct. 19 (1975).

38. 517 F.2d 766 (7th Cir. 1975). *Accord*, Appalachian Mountain Club v. Brinegar, 394 F. Supp. 105 (D.N.H. 1975).

39. The courts have created a few other limited exceptions to NEPA. People of Saipan v. Dep't of Interior, 502 F.2d 90 (9th Cir. 1974), *cert. denied*, 420 U.S. 1003 (1975) (Pacific Island Trust Territory Gov't.); Ely v. Velde, 497 F.2d 252 (4th Cir. 1974) (LEAA grant); Carolina Action v. Simon, 389 F. Supp. 1244 (M.D.N.C.), *aff'd*, 522 F.2d 295 (4th Cir. 1975) (federal revenue sharing program); Cohen v. Price Comm'n, 337 F. Supp. 1236 (S.D.N.Y. 1972) (Price Commission).

tween Senator Muskie, speaking for the Public Works Committee (the Senate committee having jurisdiction over the EPA's predecessor agencies) and Senator Jackson, the chief author and floor manager of NEPA. Speaking with respect to the effect of section 102 of the Act on existing agencies having important environmental control responsibilities, such as the National Park Service and the Federal Water Pollution Control Administration, Senator Muskie succinctly expressed the consensus that was reached in their colloquy:

> [T]he agencies having authority in the environmental improvement field will continue to operate under their legislative mandates as previously established, and . . . those legislative mandates are not changed in any way by section 102-5.[40]

The courts have implicitly recognized that if this informal method of amending legislation by stating understandings in the Congressional Record were allowed to prevail, the voting powers of the entire Congress would become illusory and every act would become littered with exceptions and addenda. Thus they have given weight to this argument but have not found it to be controlling.[41]

The EPA has been much more successful in avoiding the Act by contending that performance of its responsibilities under its own statutes is the functional equivalent of compliance with the requirements of NEPA. Generally, the argument is made that the

40. 115 CONG. REC. 40423 (1969). By the fall of 1972, when the FWPCA Amendments of 1972 were under consideration, Senator Jackson had abandoned this view, at least insofar as it would exempt the EPA from NEPA compliance in all respects. 118 CONG. REC. 33711 (1972). It was endorsed with even greater fervor, however, by Senator Muskie, Representative Jones and others. 118 CONG. REC. 33700 (1972) (remarks of Senator Muskie); 118 CONG. REC. 33750-51 (1972) (remarks of Representative Jones).

41. *E.g.*, Portland Cement Ass'n v. Ruckelshaus, 486 F.2d 375 (D.C. Cir. 1973), *cert. denied*, 417 U.S. 921 (1974). Senator Jackson, having changed his position with respect to the issue of the EPA's exemption from NEPA, also became caustic with respect to this practice. In condemning another attempt by Senator Muskie in 1972 to rewrite the meaning of a statute (in this case § 511(c) of the FWPCA Amendments) without rewriting its language, he declared:

> A back-door attempt at legislation through last minute speeches on the floor of the Senate is not the proper conduct of the Nation's business. Fortunately, as *Calvert Cliffs'* and other court decisions have indicated, the courts will not abide the diminution of the authority of environmental laws through the vehicle of floor speeches reinterpreting clear legislative language.

118 CONG. REC. 33711 (1972).

statutes enforced by the Agency seek the same policy goals as NEPA (*i.e.*, the protection of the environment), that the method for enforcement outlined for the Agency by its statutes assures the same kind of careful attention to environmental concerns as do the requirements of section 102 of NEPA, and that to require the EPA to comply with NEPA might frustrate the Agency's efforts to assure that the policy goals shared by NEPA and the EPA are implemented promptly.[42] On this basis the Agency's actions under the Clean Air Act Amendments of 1970 were effectively excluded from the Act by the courts,[43] and at least one court has similarly exempted the Agency's control of economic poisons under the Federal Insecticide, Fungicide and Rodenticide Act.[44]

Despite the generally strong response of the courts in enforcing NEPA's universal mandate, experience has demonstrated that the preservation of that mandate is not guaranteed by judicial action. An agency which fails in the courts can turn to Congress and ask that the Act, or the agency's responsibilities under it, be amended or curtailed. Moreover, exemptions from compliance with NEPA which may remain open to question after litigation can be confirmed by explicit statutory directions.

These paths have been trod time and again with considerable success. The Army Corps of Engineers, which did not respond to *Kalur* by speedy compliance with NEPA, was relieved of its responsibilities for discharge permits by the passage of the FWPCA Amendments,[45] which transferred the water pollution discharge control program to the EPA. Moreover, under the FWPCA Amendments, the EPA's responsibilities concerning discharge permits were exempted from NEPA compliance in most respects.[46] The stated

42. *E.g.*, Amoco Oil Co. v. EPA, 501 F.2d 722 (D.C. Cir. 1974); Portland Cement Ass'n v. Ruckelshaus, 486 F.2d 375 (D.C. Cir. 1973), *cert. denied*, 417 U.S. 921 (1974); Environmental Defense Fund v. EPA, 489 F.2d 1247 (D.C. Cir. 1973). *See* 118 CONG. REC. 33700-701 (1972) (remarks of Senator Muskie) for a thorough statement of the arguments.

43. *E.g.*, Appalachian Power Co. v. EPA, 477 F.2d 495 (4th Cir. 1973); Buckeye Power, Inc. v. EPA, 481 F.2d 162 (6th Cir. 1973); Duquesne Light Co. v. EPA, 481 F.2d 1 (3d Cir. 1973); Anaconda Co. v. Ruckelshaus, 482 F.2d 1301 (10th Cir. 1973); Portland Cement Ass'n v. Ruckelshaus, 486 F.2d 375 (D.C. Cir. 1973), *cert. denied*, 417 U.S. 921 (1974); Getty Oil Co. v. Ruckelshaus, 467 F.2d 349 (3d Cir. 1972), *cert. denied*, 409 U.S. 1125 (1973).

44. Environmental Defense Fund v. EPA, 489 F.2d 1247 (D.C. Cir. 1973).

45. 33 U.S.C. § 1371(a), (b) (Supp. IV, 1974).

46. 33 U.S.C. § 1371(c) (Supp. IV, 1974).

rationale for the exemption was that the FWPCA Amendments provided a comprehensive mandate to the Agency to regulate the discharge of pollutants and that if the actions of the Administrator under the FWPCA Amendments were subject to the requirements of NEPA, administration of the water pollution control program would be greatly impeded.[47] On a similar basis Congress approved the exemption of the EPA's actions under the Clean Air Act which the courts had granted under the functional equivalency test.[48]

In addition, in reaction to *Calvert Cliffs'*, the FWPCA Amendments gave the EPA *sole* authority over water-polluting discharges and barred other agencies from reviewing the EPA's discharge standards and permits in NEPA impact statements.[49] Thus most water pollution issues have been effectively removed from NEPA review. This change not only affects the work of one agency, the EPA, but also hampers the entire NEPA process.

In 1975, following the Second Circuit's decision in *Conservation Society*,[50] Congress amended NEPA itself to allow limited delegation of impact statement preparation to state agencies receiving grants from the federal government.[51] It should be noted that the degree of delegation permitted by the amendment is by no means clear. The statute, even as amended, requires the responsible federal official to furnish guidance and to participate in the preparation of the statement, to evaluate the statement independently prior to its approval and adoption, and to maintain his responsibility for the scope, objectivity and content of the entire statement.[52] Moreover, when there is disagreement as to the interstate impact of a project between the state preparing the statement and another state or federal land management entity, the federal official must prepare a written assessment of those impacts.[53] The practical effect of this cumbersome amendment remains to be seen.

Virtually without discussion in the congressional reports accom-

47. S. REP. No. 1236, 92d Cong., 2d Sess. 149 (1972).
48. Energy Supply and Environmental Coordination Act of 1974 § 7(c)(1), 15 U.S.C. § 793(c)(i) (Supp. IV, 1974).
49. 33 U.S.C. § 1371(c) (Supp. IV, 1974).
50. 508 F.2d 927.
51. Act of Aug. 9, 1975, Pub. L. No. 94-83, 89 Stat. 424, *amending* 42 U.S.C. § 4332 (1970) (codified at 42 U.S.C.A. § 4332(D) (Supp. 1975)).
52. 42 U.S.C.A. § 4332(D)(ii)-(iii) (Supp. 1975).
53. 42 U.S.C.A. § 4332(D)(iv) (Supp. 1975).

panying them, numerous other exceptions to NEPA of various degrees of importance have been passed by Congress. Under the 1974 Housing and Community Development Act, the Department of Housing and Urban Development has been authorized to delegate its impact statement preparation to local authorities, thus removing the primary federal presence in the urban environment from the control of NEPA.[54] The impact statement on the Trans-Alaska Pipeline System was congressionally approved and court review barred.[55] Most forms of federal action taken for the relief of disaster victims, including the replacement of public facilities damaged or destroyed, are exempt from NEPA.[56] Some of the conversions of power plants to coal-fire use are exempt, and the importation of hydroelectric power from Canada in the vicinity of Fort Covington, New York, may be approved without an impact statement.[57]

The political forces at work in these amendments are not always publicly visible, and the opaque and inoffensive language of congressional reports does little to make clear all that is happening. The amendment to NEPA proposed in 1975 in the wake of the decisions in *Conservation Society*[58] and *Swain*,[59] and the provisions included in the FWPCA Amendments responding to *Calvert Cliffs'*[60] and *Kalur*,[61] are probably the best indications of the efforts to alter the Act since they were contested most openly and bitterly. In both instances the amendments came as direct responses to judicial decisions interpreting the Act. In both the most forceful pressures for amendment came from the "clients" of the agency which had sustained the judicial reversal. The agency which had flaunted the congressional mandate did less to argue directly for change, but by its action could have a powerful effect on the de-

54. 42 U.S.C. § 5304(h) (Supp. IV, 1974).

55. Trans-Alaska Pipeline Authorization Act of 1973 § 203(d), 43 U.S.C. § 1652 (d) (Supp. IV, 1974).

56. Disaster Relief Act of 1974 § 405, 42 U.S.C. §§ 5172, 5175 (Supp. IV, 1974). *See* Homeowners Emergency Life Protection Comm. v. Lynn, 388 F. Supp. 971 (C.D. Cal. 1974).

57. Energy Supply and Environmental Coordination Act of 1974 § 7(d), 15 U.S.C. § 793(d) (Supp. IV, 1974).

58. 508 F.2d 927.

59. 517 F.2d 766.

60. 449 F.2d 1109.

61. 335 F. Supp. 1.

bate in Congress. The FHWA acted most blatantly in this manner by cutting off almost all funds for highway projects in New York, Connecticut and Vermont in a time of recession.[62] The result was inevitably to build pressure for legislative change.

In each case the pressure created by the judicial decision on the agency's program was used to shift the terms of the argument in Congress away from the issue of proper principles of environmental regulation to the particular problem of the production of power or the provision of highway construction jobs. Given Congress' more parochial view towards a particular crisis, persuasive arguments could be found for deviation from the systematic method of the Act. In the case of *Calvert Cliffs'* the appeal was to the special expertise of the EPA in water matters,[63] and with *Conservation Society* the appeal was to local knowledge and control.[64]

A constant counterpoint in the debate is the administrative burden imposed by NEPA. This argument is closely allied to the charge that compliance with the Act will delay or disrupt the program to which it is applied. Characterizing compliance with the law as delay is misleading, but it is an attractive argument when the fruits of ignoring the law are concrete and tangible. Against this attack the defenders of the Act have the difficult task of arguing for a method and a general principle and against the supposedly concrete benefits offered by the opponents of the Act. Arguing in comparative ignorance before a NEPA analysis has been completed, the defenders are unable to say precisely what harms the Act's operation will prevent, especially since it does not set particular standards. Moreover, the argument that the agency has brought the delay upon itself by failing to comply with the Act

62. *See* S. REP. No. 152, 94th Cong., 1st Sess. 2 (1975).

63. The remarks of Senator Muskie, chief Senate floor manager of the FWPCA Amendments, in an exchange on the floor with Senator Buckley make this clear. Senator Buckley questioned the exclusion of EPA's water quality program from review by other agencies, particularly the AEC, since under the authority of NEPA the AEC staff had just proposed stringent remedial action for the protection of aquatic biota at the Consolidated Edison Co. of New York's Indian Point 2 plant on the Hudson River. Senator Muskie replied:

> The whole concept of EPA is that environmental considerations are to be determined in one place by an agency whose sole mission is protection of the environment. It did not occur to us that AEC might be more conscientious in this than EPA, so we have given EPA the total authority. . . .

118 CONG. REC. 33708 (1972).

64. *See* S. REP. No. 111, 94th Cong., 1st Sess. 2 (1975).

lacks the appeal it would have were the federal officials, rather than construction workers or consumers of power, to be those suffering the adverse effects occasioned by compliance with the Act in an untimely fashion.

Faced with the hostility of the EPA and the tepid enthusiasm of the Council on Environmental Quality (CEQ),[65] the Act does not have a strong advocate in the executive side of government. Nor is there an organized "clientele" economically dependent on the operation of the Act. Moreover, in Congress the amendments, not surprisingly, usually emanate from committees whose first considerations are constituencies with interests more specialized than that of the general environment.[66] Thus the amendments to the Act have largely been the achievement of organized bureaucracies and their clienteles, pursuing specialized interests to the detriment of the general public's interest in the environment.

Whatever may be thought of the merits of individual exceptions, the principle of a universal mandate is now a shattered hulk. Only one amendment has directly altered the Act which itself maintains a deceptively broad scope as it appears in the United States Code. Nevertheless, the dismantling of the universal mandate has been broad and effective. The federal programs on air and water pollution are effectively excluded. The economic poison and noise control programs are probably exempt. The urban programs and the massive highway program are delegated to one degree or another. The review of most water quality issues is barred in all impact statements. And the special interests continue to pick over the carcass of the Act.

II. THE REFERRAL MECHANISM

NEPA requires that before a detailed environmental impact statement is prepared, the proposing agency shall obtain the comments of federal agencies with relevant jurisdiction or special exper-

65. *See* notes 131-35 and accompanying text *infra*.

66. The FWPCA Amendments were prepared by the Public Works Committee. *See* H. REP. No. 911, 92d Cong., 2d Sess. (1972); Letter from Edmund Muskie to Jennings Randolph, Dec. 20, 1972 in ENVIRONMENTAL POLICY DIVISION, CONGRESSIONAL RESEARCH SERVICE, 93D CONG., 1ST SESS., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972 iii (Comm. Print 1972). The 1975 Amendment of NEPA also began in the Public Works Committee. *See* S. REP. No. 152, 94th Cong., 1st Sess. 5 (1975).

tise relating to the environmental impact. Further, the comments of appropriate federal, state and local agencies are to accompany the proposal through the agency review process.[67] In addition, the Administrator of the EPA has the responsibility under the Clean Air Act Amendments of 1970 to comment on matters affecting the environment[68] and therefore must comment on all NEPA impact statements.

NEPA expanded the mandate of all federal agencies to include environmental considerations, and few, if any, had the expertise or knowledge to comply fully with the terms of the Act. Thus, the referral mechanism was crucial if the full knowledge and abilities of the federal government were to be brought to bear on environmental issues. There is little in the original debates on the Act that touches on this requirement, but in 1972 Senator Jackson forcefully pointed out the importance of the mechanism, noting that, "[t]his consultation procedure guarantees that single-purpose, mission-oriented objectives do not have unintended and unanticipated consequences far beyond the intent of the agency proposing the action under consideration."[69]

The effective operation of the referral mechanism has depended on the interest and commitment of the commenting agencies. The failure of agencies aggressively and actively to exploit this opportunity is difficult to document, but the impression that few agencies have labored to make this part of the Act work is substantiated by a number of facts.

Under the Fish and Wildlife Coordination Act the Department of the Interior, particularly the Fish and Wildlife Service, and the

67. 42 U.S.C. § 4332(2)(C) (1970). There has been comparatively little judicial interpretation of these requirements. Agencies which have failed to circulate impact statements altogether have been found to be in violation of the Act. *See, e.g.*, Environmental Defense Fund v. Corps of Engineers, 325 F. Supp. 749 (E.D. Ark. 1971), *vacated*, 342 F. Supp. 1211 (E.D. Ark. 1972), *aff'd*, 470 F.2d 289 (8th Cir. 1972), *cert. denied*, 412 U.S. 391 (1973). Except for such cases, there is very little discussion of what, if anything, an agency must do to obtain the comments of other agencies beyond forwarding the impact statement. *See* Sierra Club v. Callaway, 499 F.2d 982 (5th Cir. 1974); Simmons v. Grant, 370 F. Supp. 5 (S.D. Tex. 1974).

68. The Clean Air Act Amendments of 1970 require that the EPA Administrator review and comment in writing on matters within his responsibility contained in any environmental impact statement. 42 U.S.C. § 1857h-7(a) (1970). Where the Administrator finds the action unsatisfactory from the standpoint of environmental quality, he is to refer the matter to the CEQ. 42 U.S.C. § 1857h-7(b) (1970).

69. 118 CONG. REC. 33709 (1972).

Department of Commerce, particularly the National Marine Fisheries Service, have a responsibility to consult with agencies which license or themselves undertake alterations to the nation's waterways.[70] This is, of course, the equivalent of their NEPA responsibility on such projects. Moreover, the fish and wildlife expertise of those agencies is obviously of the sort which NEPA sought as a regular matter to incorporate into the making of all federal decisions which affect the environment. The General Accounting Office (GAO) in a study of the compliance by the Departments of the Interior and Commerce with the requirements of the Coordination Act indicates that the funding and manpower of these agencies must be doubled if the Coordination Act responsibilities are to be effectively carried out.[71] Thus, with respect to obtaining expert federal assistance concerning fish and animal life, half the work necessary to meet NEPA's requirements is being performed. This is particularly significant since for other major areas of pollution, such as air and water, Congress has passed major standard-setting legislation since 1970 which may independently protect those aspects of the environment.[72] As nothing of a comparable sort exists on the federal level for animal life, NEPA is of particular importance in that field.

An Interior Department study has also shown that the Department's budget requests for its responsibilities in the preparation and review of impact statements have been chronically underestimated.[73] Unanticipated costs not reflected in budget requests varied from 30-60 percent of the total NEPA-related expenditures during fiscal years 1970-1974.[74] The importance of the review work is brought home by the fact that apart from the Interior Depart-

70. 16 U.S.C. §§ 661-68 (1970).

71. GENERAL ACCOUNTING OFFICE, REP. B-118370, IMPROVED FEDERAL EFFORTS NEEDED TO EQUALLY CONSIDER WILDLIFE CONSERVATION WITH OTHER FEATURES OF WATER RESOURCE DEVELOPMENTS 54-59 (1974). *See Hearings on GAO Rep. B-118370, H.R. 42, H.R. 2285, H.R. 2288, H.R. 2291, H.R. 2292, H.R. 10651 and H.R. 14527 Before the Subcomm. on Fish and Wildlife Conservation and the Environment of the House Comm. on Merchant Marine and Fisheries*, 93d Cong., 2d Sess., ser. 93-33, at 591, 600-05 (1974).

72. Clean Air Act Amendments of 1970, 42 U.S.C. §§ 1857-58a (1970); Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. §§ 1251-1376 (Supp. IV, 1974).

73. U.S. Dep't of the Interior, A Review of Environmental Impact Statement Processes Within the Department of the Interior (1974).

74. *Id.* at I-23.

ment's own negative declarations, a greater part of its workload is devoted to review of other agencies' draft environmental statements than to any other category of NEPA activity.[75]

The CEQ has noted not only the lack of funds and manpower in some agencies which makes commenting on a large volume of impact statements difficult, but also the constraint of short comment periods which makes analysis of a complex impact statement almost impossible.[76] The Council advocated curing the situation through increases of manpower and earlier notice of the time of availability of draft impact statements.[77] It has acted to put the early warning system into effect;[78] but much of what it recognized as the basic problem remains: even with adequate resources, it is often impossible to prepare comments in forty-five days that will do justice to a draft statement that may have taken years to prepare.[79]

There is another irony in the operation of the referral mechanism. A statement which is well-developed and presents usable data is much easier for an analyst to review than a statement which is so opaque and uninformative that the commentator must essentially start from scratch himself, collecting or producing the basic data. Thus, the quality of the comments on an impact statement is frequently proportional to the quality of the statement being commented upon. This is a new and sad variation of the old precept of "garbage in, garbage out." This principle can be illustrated by a brief examination of impact statements on power plants on the Hudson River. Two fossil-fuel plants on the Hudson River, Bowline Point and Roseton, are subject to impact statements prepared by the Army Corps of Engineers.[80] Three nuclear plants at Indian Point in the same reach of the River are subject to impact statements prepared by the AEC, now the Nuclear Regulatory Com-

75. *Id.* at I-30.

76. COUNCIL ON ENVIRONMENTAL QUALITY, ENVIRONMENTAL QUALITY: THE THIRD ANNUAL REPORT OF THE COUNCIL ON ENVIRONMENTAL QUALITY 237 (1972).

77. *Id.* at 237-38.

78. 40 C.F.R. § 1500.7 (1975).

79. 40 C.F.R. § 1500.9 (1975).

80. The statements were formally required to be prepared pursuant to consent judgments in the following cases, although the Corps had prepared draft statements for the Bowline plant prior to such judgments: Hudson River Fishermen's Ass'n v. Orange & Rockland Utilities, Civil No. 72-5460 (S.D.N.Y., filed Dec. 29, 1972); Hudson River Fishermen's Ass'n v. Central Hudson Gas & Electric Co., Civil No. 72-5459 (S.D.N.Y., filed Dec. 29, 1972).

mission (NRC). All of the plants withdraw large quantities of water from the River for cooling purposes—the smallest taking approximately 650,000 gallons per minute—and all the plants pose a major threat to the aquatic biota of the Hudson River by withdrawing the eggs and larvae of the fish with the water and destroying them in passage through the plants' cooling systems.[81] The impact statement prepared by the AEC for Indian Point in 1972 took well over 100 pages to analyze both the hydrology of the River and its aquatic life.[82] The statements by the Corps of Engineers developed between 1971 and 1973 with respect to the Bowline plant devoted no more than five or ten pages to these issues.[83] On the whole, the commenting procedure was much more effective with the AEC where it was needed less.[84] In that statement the analyst had something to

81. Percent reduction values of [striped bass] juveniles per spawning season ranges from 21-32% with once-through cooling at Indian Point Units Nos. 1, 2 and 3 alone, but these values increase in the range from 34-50% if the effects of once-through cooling at Bowline, Lovett, Danskammer and Roseton plants are included in the calculation. The percent reduction values are increased to 47-64% by also including the Cornwall Pumped Storage Facility in the calculation.
U.S. Nuclear Regulatory Commission, Office of Nuclear Reactor Regulation, Environmental Statement (Final), Indian Point Nuclear Generating Plant No. 3, Hudson River, New York (February 1975) [hereinafter cited as "Indian Point 3 Statement"], at V-146 and summary at vi.

82. U.S. Atomic Energy Commission, Directorate of Licensing, Environmental Statement (Final), Indian Point Generating Plant Unit No. 2, Hudson River, New York (September 1972) [hereinafter cited as "Indian Point 2 Statement"], at Vol. I, V-7 to -74, XII-23 to -38, A-II-1 to -27, A-V-36 to -97.

83. U.S. Army Corps of Engineers, New York, New York District, Environmental Statement (Draft), Orange and Rockland Utilities, Inc., Bowline Point Generating Station, Haverstraw, New York (September 1972) [hereinafter cited as "Bowline Statement, Draft"], at 20-24 *passim;* U.S. Army Corps of Engineers, New York, New York District, Environmental Statement (Revised Draft), Orange and Rockland Utilities, Inc., Bowline Point Generating Station, Haverstraw, New York (May 1973) [hereinafter cited as "Bowline Statement, Revised Draft"], at 20-24 *passim.*

84. In response to the draft statement circulated by the Corps of Engineers in 1971 on the Bowline plant, Bowline Statement, Draft, *supra* note 83, the Interior Department pointed out general deficiencies but made no detailed analysis of fish life or specific recommendations beyond suggesting that the permit requested be held in abeyance until certain issues were adequately covered in the environmental statement. Letter of Richard E. Griffith to Mark Abelson, April 28, 1971; Letter of Mark Abelson to Col. James W. Barnett, July 1, 1971, *appended to* Bowline Statement, Revised Draft, *supra* note 83. In reviewing the Indian Point 2 Statement, the Interior Department stated that the probable loss of aquatic biota was "unacceptable to this Department on a long-term basis" and recommended seven specific and strict licensing conditions to the AEC. Comments of the U.S. Dep't of the Interior, Indian Point 2 Statement, *supra* note 82, at Vol. 2, 45-52.

which he could address himself, while in response to the Corps of Engineers' work, there was little to be said unless the commentator was willing to do the entire research job for himself.

There is no question that a thorough study of the commenting work undertaken by the agencies would be very valuable. In its absence it is still probably a fair judgment that the referral mechanism is an opportunity that has largely been foregone and will not be properly exploited without aggressive agency personnel provided with sufficient funds and manpower.

III. Public Participation

NEPA has been praised in the Congress as a full disclosure law,[85] and courts have solidly stood behind the principles of the Act which open the doors of the executive agencies to the view and participation of the public, the Congress, and for that matter, other executive agencies.[86] However, there is one brutal necessity for effective participation by the general public in the NEPA procedure: money. It is a coarse-grained but essentially accurate generalization that environmental matters are usually complex and highly technical and that the development of such issues on a factual and legal basis demands substantial funds for experts and attorneys. It is also true that funds to meet these needs are more readily available to the proponents of a project or development, who may treat such costs as a necessary part of their investment in the project, than to the general and largely unorganized public that wishes to see a project abandoned or modified.

Again, there is a paucity of data on the costs of effectuating NEPA procedure, but the general point is substantiated by a few available statistics. The Deputy Director for Reactor Projects in the NRC has estimated that the cost of an impact statement covering the licensing of a nuclear reactor averages $1,700,000, with costs to the license applicant ranging from $1-3,000,000, and those of the Commission from $225,000 to $400,000.[87] One analysis calculated the cost of a full-scale intervention in a nuclear plant licensing at $75,000 to $100,000 and described those sums accurately as "an ex-

85. 118 Cong. Rec. 37059-60 (1972).
86. *See* note 14 *supra.*
87. 6 Envir. Rptr.-Current Dev. 206 (1975).

tremely small fraction of the total costs of constructing a nuclear power plant."[88] Another study conducted in connection with the Kennedy Amendment to the Energy Reorganization Act, which would have provided funds to intervenors in proceedings on the licensing of nuclear power plants, estimated that utilities budget $500,000 to $1,000,000 for such proceedings while intervenors spend on the average $50,000 to $65,000.[89] A report on the issue of whether financial assistance should be given by the NRC to intervenors in its licensing proceedings does not take issue with these figures.[90] In a hard-fought battle utility expenditures can be much higher. Consolidated Edison Co. of New York is now spending more than $15,000,000 over five years to justify the cooling systems on its Hudson River plants which were ordered altered by the AEC under the authority of NEPA.[91]

Since most of the basic research has to be undertaken by the applicant, some disparity in financial resources is reasonable; but differences of ten or twenty or more to one put public participation in a different perspective and raise the question of whether the public can ever be very effective fighting odds of that magnitude. In addition, simply raising $50,000 is a Herculean effort for most citizens' groups; and although projects of lesser magnitude than nuclear plants may demand less in financial resources, they also have the disadvantage of not appealing to as wide a public.

On the funding issue, NEPA finds itself the poor sister among environmental statutes. It stands virtually alone among the major ecological acts of the 1970's as having no fee-shifting provision included by Congress.[92] For a time, it appeared that this omission might be remedied by the courts by application of the private attorney general doctrine whereby collection of attorneys' fees was permitted in cases in which private litigants vindicated provisions

88. S. EBBIN & R. KASPER, CITIZENS GROUPS AND THE NUCLEAR POWER CONTROVERSY: USE OF SCIENTIFIC AND TECHNOLOGICAL INFORMATION 285 (1974).

89. 120 CONG. REC. 18725 (daily ed. Oct. 10, 1974).

90. Boasberg, Hewes, Klores & Kass, Report to the Nuclear Regulatory Commission: Policy Issues Raised by Intervenor Requests for Financial Assistance in NRC Proceedings (1975).

91. Consolidated Edison Company of New York, Inc., Summary of Hudson River Research Programs, Approximate Cost of Ecological Studies (November 19, 1974).

92. *See* 42 U.S.C. § 1857h-2(d) (1970); 33 U.S.C. § 1365(d) (Supp. IV, 1974).

of the Constitution or enforced strong congressional policies involving substantial public rights and benefiting a broad population.[93] This possibility has effectively been closed, however, by the decision of the Supreme Court in *Alyeska Pipeline Service Co. v. Wilderness Society,* in which the Court ruled that it was for Congress and not for the courts to decide when the American rule that each party to a litigation bears its own attorney's fees would be altered to allow fee-shifting in litigation.[94] Advocates of the Act have not been so successful as its opponents in obtaining congressional relief from a court decision. No amendment to the Act dealing with fee-shifting has yet been passed.

It is also essential to bear in mind that in many NEPA proceedings the bulk of expenses may occur during administrative hearings before an agency. This is generally true for agencies such as the NRC or the FPC which sit as fact-finders and whose decisions are reviewable directly by the Courts of Appeals.[95] In such cases the expenses of trial preparation and presentation, as well as experts' fees, come before litigation begins in the courts. The agency may have discretion to award fees for experts and attorneys to public groups in their proceedings, and the NRC at least is actively investigating such an arrangement.[96] However, no agency with an

93. The Second and Fourth Circuits declined to honor the private attorney general doctrine. *See, e.g.,* Bridgeport Guardians, Inc. v. Members of Bridgeport Civil Service Comm'n, 497 F.2d 1113 (2d Cir. 1974), *cert. denied,* 421 U.S. 991 (1975); Bradley v. School Bd. of City of Richmond, 472 F.2d 318 (4th Cir. 1972), *rev'd on other grounds,* 416 U.S. 696 (1974). The District of Columbia, First, Third, Fifth, Sixth, Seventh, Eighth and Ninth Circuits and some 23 district courts accepted and applied the private attorney general doctrine. *See, e.g.,* Milburn v. Huecker, 500 F.2d 1279 (6th Cir. 1974); Fowler v. Schwarzwalder, 498 F.2d 143 (8th Cir. 1974); Brandenburger v. Thompson, 494 F.2d 885 (9th Cir. 1974); Skehan v. Bd. of Trustees of Bloomsburg State College, 501 F.2d 31 (3d Cir. 1974), *vacated and remanded,* 421 U.S. 983 (1975); Natural Resources Defense Council v. EPA, 484 F.2d 1331 (1st Cir. 1973); Donahue v. Stauntan, 471 F.2d 475 (7th Cir. 1972), *cert. denied,* 410 U.S. 955 (1973); Knight v. Auciello, 453 F.2d 852 (1st Cir. 1972); Lee v. Southern Homes Sites Corp., 444 F.2d 143 (5th Cir. 1971). Among the best known applications of the doctrine to environmental causes by a district court is La Raza Unida v. Volpe, 337 F. Supp. 221 (N.D. Cal. 1972), *aff'd* 488 F.2d 559 (9th Cir. 1973), *cert. denied,* 417 U.S. 968 (1974). *See also* Delaware Citizens for Clean Air, Inc. v. Stauffer Chemical Co., 62 F.R.D. 353 (D. Del. 1974), *aff'd* 510 F.2d 969 (3d Cir. 1975).

94. 421 U.S. 240 (1975).

95. *E.g.,* 42 U.S.C. § 2239(b) (1970); 16 U.S.C. § 825*l*(b) (1970).

96. *In re* Consumers Power Co. (Big Rock Point Nuclear Plant) CLI-74-42, RAI-74-11-820 (Nov. 20, 1974). The arguments for and against funding intervenors

appreciable number of environmental cases presently shifts fees on a regular basis.

A glance at the reporters makes it obvious that litigation under the Act continues apace. Nevertheless, the volume and effectiveness of litigation depends to a measureable extent on funds being available for pursuing it, and NEPA contains no provision making such funds available in court or agency proceedings. The true power of the Act will lie dormant until the resources are available to enforce it effectively.

IV. THE QUALITY AND REVIEW OF IMPACT STATEMENTS

The qualitative operation of the Act, its success in providing competent analysis of and effective protection for the environment, has had a checkered history. Definitive judgments in this area are impossible without reviewing the data and conclusions of hundreds of impact statements. However, five years of experience with the Act does allow tentative judgments to be made on a number of issues which are repeatedly posed in the operation of NEPA: the

in NRC proceedings have been summarized in a lengthy study of the issue prepared for the Commission:

> Those favoring financing claim: (1) intervenors have made and can make significant contributions to the NRC regulatory process; (2) they serve as a gadfly to the staff and [Atomic Safety and Licensing] boards; (3) their funding will increase the public's education and confidence in the efficacy and safety of nuclear technology; (4) they add an extra review layer to important health, safety, and environmental determinations of the potentially dangerous use of nuclear power; and (5) intervenors represent an outside view which should be heeded in a field dominated by government and powerful commercial interests.
>
> On the other hand, those opposing financing claim: (1) the costs of intervenor delay and blackmail outweigh any alleged benefits; (2) the NRC procedures are already laden with ample safeguards, and the dangers associated with nuclear reactors have been grossly exaggerated; (3) Congress has determined that the agency best represents the public interest, and the taxpayers should not have to support additional self-appointed guardians and unaccountable private groups; (4) financing will further polarize the hearing process, turning it into a courtroom drama, and making it even more difficult to adduce scientific and technological truth; and (5) there are better alternatives available to the Commission [*e.g.*, providing public counsel, providing funds to back-up centers for intervenors, reducing the procedural costs of intervention such as transcript and reproduction costs], and implementation of direct financing creates insurmountable administrative problems.

Boasberg, Hewes, Klores & Kass, *supra* note 90, at 129-30.

scope of the statement undertaken by the agency; the sources of information on which the analysis rests; the quality of the impact statement analysis itself and the review of the statement. These factors obviously merge in a determination of whether or not the broad view and the quality of analysis which effective operation of the Act demands can or is being reasonably met.

A. *Scope of Impact Statements*

The extent of an impact statement and its timing are, of course, of great significance. Consideration of a project or program that has been artificially segmented through preparation of statements for its component parts does not allow a rational choice of alternatives, and a statement made after significant sums have been spent for research and development will be propelled by the momentum of those investments toward the alternative in which the investment has already been made. At least rhetorically, the courts have generally been firm in stating that projects may not be fragmented in order to avoid proper NEPA review and that impact statements must be written at an early point, when options are still truly open.[97] Many highway cases[98] and some decisions involving the Army Corps of Engineers[99] have addressed the issue of segmentation; and cases such as *Scientists Institute for Public Information v. AEC*,[100] requiring an impact statement on the Commission's breeder

97. *See* notes 101-02 and accompanying text *infra*.

98. *E.g.*, Conservation Society of Southern Vermont v. Secretary of Transportation, 508 F.2d 927 (2d Cir. 1974), *vacated and remanded for further consideration*, 96 S. Ct. 19 (1975); Indian Lookout Alliance v. Volpe, 484 F.2d 11 (8th Cir. 1973), *modifying* 345 F. Supp. 1167 (S.D. Iowa 1972); Named Individual Members of the San Antonio Conservation Society v. Texas Highway Dep't, 446 F.2d 1013 (5th Cir.), *cert. denied*, 403 U.S. 932 (1971).

99. *E.g.*, Atchison, Topeka & Santa Fe Ry. Co. v. Callaway, 382 F. Supp. 610 (D.D.C. 1974); Sierra Club v. Callaway, 499 F.2d 982 (5th Cir. 1974).

100. 481 F.2d 1079 (D.C. Cir. 1973). *See also* Greene County Planning Bd. v. FPC, 455 F.2d 412 (2d Cir.), *cert. denied*, 409 U.S. 849 (1972); Calvert Cliffs' Coordinating Comm. v. AEC, 449 F.2d 1109 (D.C. Cir. 1971) (insisting that the agency's impact statement be prepared sufficiently early to accompany its proposal through every stage of the review process, including public hearings). Some doubt has been cast on these decisions, however, by the Supreme Court's recent decision in Aberdeen & Rockfish R.R. Co. v. Students Challenging Regulatory Agency Procedures, 422 U.S. 289, 320-21 (1975), holding that NEPA did not require preparation of a final impact statement until the ICC actually announced its decision (*i.e.*, its proposal) not to suspend selective increases in a general

reactor program, have emphasized the importance of preparation of the statement early in the program.

The courts have devised various formulae for testing claims of improper segmentation. Some have held that if a proposed federal action will have a coercive effect on the performance of additional actions which are related either by geography, or by virtue of being contemplated as part of the same plan or program, an impact statement must be prepared which includes an analysis of the coerced actions.[101] Other courts have held that if an individual project, such as a dam or highway section, has "independent utility," consideration may be limited to the effects of that project despite the fact that it is a component of a larger plan.[102] Realistically, one must admit that the determination of the point at which one entity ends and another begins remains a metaphysical problem. There is no logical termination point to the analysis of many long-range programs. The most egregious decisions violating the spirit of the Act

revenue proceeding after public hearings were held. It is difficult to know what the sweep of this reading of NEPA will be. If the time at which an agency makes a recommendation or a report on a proposal for federal action is interpreted to be the time of final decision by the agency, then review of impact statements could be stripped to the point of meaninglessness. If it is interpreted as the time when the staff of an agency takes a position on a proposal, then NEPA's operation should not be as seriously affected. Since the purpose of the NEPA review is to integrate environmental considerations into the fiber of agency actions and to provide information to the public, the Congress and the executive branch at a time when options remain open, the second interpretation appears to be more faithful to the Act. It also makes NEPA's requirement that the statement accompany the proposal "through the existing agency review process" have a common sense value, since it clearly integrates environmental issues into the review processes. It may be that the peculiarities of ICC proceedings in which the rates filed by the railroads become effective unless suspended by the Commission led the Court to take the position which it did. In any case there is now some doubt as to the timing and review of NEPA statements which is not likely to be fully resolved until the Supreme Court addresses the matter again.

101. Conservation Society of Southern Vermont v. Secretary of Transportation, 508 F.2d 927 (2d Cir. 1974), *vacated and remanded for further consideration*, 96 S. Ct. 19 (1975); Scientists Institute for Public Information v. AEC, 481 F.2d 1079 (D.C. Cir. 1973); Appalachian Mountain Club v. Brinegar, 394 F. Supp. 105 (D.N.H. 1974); Sierra Club v. Volpe, 351 F. Supp. 1002 (N.D. Cal. 1972). *See also* Council on Environmental Quality, Preparation of Environmental Impact Statement: Guidelines, 40 C.F.R. § 1500.6 (1975).

102. *E.g.*, Sierra Club v. Callaway, 499 F.2d 982 (5th Cir. 1974); Sierra Club v. Stamm, 507 F.2d 788 (10th Cir. 1974); Trout Unlimited v. Morton, 509 F.2d 1276 (9th Cir. 1974); Indian Lookout Alliance v. Volpe, 484 F.2d 11 (8th Cir. 1973), *modifying* 345 F. Supp. 1167 (S.D. Iowa 1972).

may be stopped by litigation,[103] but over time the most important question must be whether the agencies can or will make the policies of the Act their own so that their discretion is exercised to reflect reasonably the interests of NEPA.

Within the operation of the agencies there are two major obstacles to this goal: first, the jurisdictional organization of the agencies; and, second, the problem of providing a broad view for those agencies which are constantly faced with making small, discrete decisions within the context of a single environmental milieu. The difficulties potentially arising from the jurisdictional organization of the agencies are easily seen in the area of energy production. The scheme for energy development in the Northern Great Plains may be used as an illustration. The Northern Great Plains Province, covering large parts of Wyoming, Montana and the Dakotas, as well as segments of Nebraska and Colorado, contains vast quantities of readily accessible low-sulphur coal. Approximately 85 percent of the country's low-sulphur coal reserves are located in public lands under the jurisdiction of the Secretary of the Interior. In 1972 the Secretary initiated the Northern Great Plains Resources Program in order to assess the social, economic and environmental impacts of developing the resources and to provide a basis for comprehensive treatment of the area.[104] If massive development of the Northern Great Plains reserves for energy production is pursued it will require decisions by and approval of numerous federal agencies. Mining leases on federal lands and Indian reservations must be obtained. Water rights must be acquired. Permits for discharging pollutants into the air and water must be received. Transmission line corridors must be obtained. A project of this nature is

103. *E.g.*, Named Individual Members of the San Antonio Conservation Society v. Texas Highway Dep't, 446 F.2d 1013 (5th Cir.), *cert. denied*, 403 U.S. 932 (1971). An appeal to Congress is still available, however. In section 154 of the Federal Highway Act of 1973, Congress specifically exempted the highway project which was improperly segmented in *San Antonio* from the requirements of NEPA upon the agreement of the State of Texas to repay any federal funds utilized in the project. 87 Stat. 276 (1973). The Fifth Circuit later deferred to this statutory command. Named Individual Members of the San Antonio Conservation Society v. Texas Highway Dep't, 496 F.2d 1017 (5th Cir. 1974), *cert. denied*, 420 U.S. 926 (1975).

104. Factual portions of the following discussion are taken from Sierra Club v. Morton, 514 F.2d 856 (D.C. Cir. 1975).

massive and utterly dependent on the policies of the federal government, as expressed through four or five agencies.

A parallel case is found on the Hudson River where the FPC, the Army Corps of Engineers and the NRC have all licensed power plants over the past five years. These plants withdraw vast quantities of water from the River with the consequent likelihood of damage to the river's fishery and other aquatic biota.[105] Here NEPA applied to each licensing proceeding, but no agency voluntarily examined the effect on the estuary of any plant outside its own jurisdiction. As a result, there has been no comprehensive federal environmental policy on the treatment of the Hudson River and its use as a productive fish spawning and nursery ground or as a cooling sluice for power plants. Only the NRC has produced an impact statement with the necessary comprehensive treatment of the River,[106] and that was prepared only under legal pressure from intervenors in an NRC proceeding.[107]

Impact statements are organized by an agency's concept of the project being undertaken. In the Northern Great Plains, the division of authority has made the comprehensive analysis of potential development a long and tortuous procedure demanding coordinated action among comparatively independent arms of the government.[108] On the Hudson River there has been no real cooperation or coordination among the agencies licensing projects.[109] In both cases, a single human demand, energy production, is producing the environmental intrusions which must be analyzed under the Act. In both cases, analysis of the intrusions and the control of their effects are divided among a number of agencies with independent histories and traditions and a legal responsibility to reach their own judgments. Through the referral mechanism the Act provides a possible way to cure this fragmentation. The practical use of this tool is essential if federal agencies are, at a minimum, to make contiguous decisions founded on equivalent bases of data and commonly understood arguments. It is clearly the aim of the Act to achieve such a

105. A. Macbeth, *Structuring the Legal Regulation of Estuaries,* in ESTUARINE POLLUTION CONTROL: A NATIONAL ASSESSMENT (to be published 1976).

106. Indian Point 3 Statement, *supra* note 81, at ch. V.

107. Transcript at 6141-69, 10010-19, *In re* Consolidated Edison Company of New York, Inc. (Indian Point 2), No. 50-247 (N.R.C., Dec. 6, 1965).

108. Sierra Club v. Morton, 514 F.2d 856 (D.C. Cir. 1975).

109. Macbeth, *supra* note 105.

coordinated approach. The broad policy statement of section 101 of the Act is prefaced with the command that

> it is the continuing responsibility of the Federal Government to use all practicable means . . . to improve and coordinate Federal plans, functions, programs and resources.[110]

It remains for the mandate to be put effectively into action.

A similar challenge is presented by the agencies which confine their thinking to a multitude of small actions. This problem was recognized by Congress at the time NEPA was passed:

> Important decisions concerning the use and the shape of man's future environment continue to be made in small but steady increments which perpetuate rather than avoid the recognized mistakes of previous decades.[111]

The dredge and fill permits issued by the Army Corps of Engineers for dredging in navigable waters and for the disposal of the dredged spoil are a clear example. Unlike energy development, numerous dredge and fill applications are not part of a single, massive scheme or plan. Thus, it is essential that the agency have a clear conception of the total context within which the small, individual actions take place. The Corps of Engineers has not come close to thinking in these terms for bodies of water such as Long Island Sound or the Chesapeake Bay. The rash of tidal wetlands statutes now passed by the Eastern seaboard states is ample evidence that the Corps of Engineers has not approached its responsibilities in the large or comprehensive terms that would have made detailed state regulation unnecessary.[112]

The first judicial rulings in this area are now beginning to appear. The Second Circuit has held in *Natural Resources Defense*

110. 42 U.S.C. § 4331(b) (1970).

111. S. REP. No. 296, 91st Cong., 1st Sess. 5 (1969).

112. ME. REV. STAT. ANN. tit. 38, §§ 471-78 (Supp. 1975); N.H. REV. STAT. ANN. ch. 483-A, §§ 1-6 (Supp. 1975); MASS. ANN. LAWS ch. 130, §§ 23-26 (Supp. 1975); R.I. GEN. LAWS ANN. § 11-46.1-1 (Supp. 1975); CONN. GEN. STAT. ANN. §§ 22a-28 to -35 (1958); N.Y.E.C.L. §§ 25-0101 to -0601 (McKinney Supp. 1975); N.J. STAT. ANN. §§ 13: 9A-1 to -10 (Supp. 1975); DEL. CODE ANN. tit. 7, §§ 7001-08 (Supp. 1975); MD. ANN. CODE NR § 9-201 to -202 (1974); VA. CODE ANN. §§ 62.1-13.1 to -13.20 (Supp. 1975); N.C. GEN. STAT. § 113-229 (Supp. 1975); GA. CODE ANN. §§ 45-136 to -147 (1974).

Council v. Callaway that the Navy, in developing an impact statement for its program for dredging and dumping in Long Island Sound, must consider not only its own program but other dredging and dumping programs that have passed beyond mere speculation, that are in the same geographical area, and that will produce similar environmental effects.[113] The clear significance of this decision lies in the fact that it places on the federal agency the responsibility of reviewing and analyzing the intrusions into the environment not in terms of a program or project but in terms of cumulative impact of projects on an ecosystem regardless of their origin or end.

There are, from time to time, signs that agencies do see the larger environment and put the medley of separate projects in perspective. For instance, in the draft impact statement for the Fire Island National Seashore, the National Park Service spoke eloquently of the barrier island system of the East Coast and the agency's role in its management:

> The barrier islands of the eastern United States provide a topographic continuum for observing the ecological transition from the cold temperate climate of northern New England to the subtropical climate of Florida and the Gulf of Mexico. As one of the longest chains of major barrier islands in the world, this dynamic system is of global importance. About 21 percent of the total barrier-island mileage of the United States is managed by the Federal Government. Nearly 400 miles of the barrier island are administered by the National Park Service in seven national seashores. . . . Most other Federal lands on barrier islands are managed as wildlife refuges by the U.S. Fish and Wildlife Service. Federal barrier-island holdings are scattered rather uniformly from Massachusetts to Texas. If these islands were managed as a continuous and dynamic ecological system under provisions of an ecologically compatible management program, perpetuation of the ecological diversity of the system would be virtually assured. If, on the other hand, different management programs were adopted on different islands (for instance, some stabilized to protect development, others allowed to evolve totally in response to natural forces of change), the continuity of the entire system—and therefore much of its value—could be jeopardized. All Federal barrier-island lands, as well as other preserved tracts in the chain

113. 524 F.2d 79 (2d Cir. 1975).

> under non-Federal ownership, are therefore affected by management programs adopted on Fire Island, just as Fire Island is affected by the ways other barrier islands are managed.[114]

This analytic approach is clearly the proper one. It treats the natural environment as the primary concern and the contours of a particular project as secondary. The simple realization that the environment is organized without regard to projects makes the point evident. How difficult it is for agencies to reverse their thinking is brought home by the fact that despite its powerful rhetoric the Park Service proposed reducing both the size of the Fire Island National Seashore and its control over the non-federally owned portion of Fire Island, thus lessening the management controls on the barrier island system.[115] A long, uphill struggle remains before the environmental imperatives predominate over the management imperatives.

B. *Quality of Analysis in Impact Statements*

The question of the quality of analysis in impact statements is a central issue of the Act's effectiveness and success, and is undoubtedly the one on which it is most difficult to reach fair and accurate judgments. It is not sufficient to address a question of this magnitude by anecdote, and there is no reliable general review of the issue. One must approach the question through an examination of limited indicative facts.

The EPA reviews draft statements under section 309 of the Clean Air Act, and rates the quality of each statement as "Adequate", "Insufficient Information" or "Inadequate".[116] The Agency's desig-

114. U.S. Dep't of the Interior, Environmental Statement (Draft), Master Plan, Fire Island National Seashore, New York (1975), at 25-27.

115. *Id.* at 72-78.

116. The EPA defines the categories in the following manner:

Category 1—Adequate

The draft impact statement adequately sets forth the environmental impact of the proposed project or action as well as alternatives reasonably available to the project or action.

Category 2—Insufficient information

EPA believes that the draft impact statement does not contain sufficient information to assess fully the environmental impact of the proposed project or action. However, from the information submitted, the Agency is able to make a preliminary determination of the impact on the environment. EPA has requested

nation provides at least some index to performance under the Act. An analysis of the statements reviewed in the last six months of 1974 provides the following results:

EPA EVALUATION OF DRAFT ENVIRONMENTAL IMPACT STATEMENTS JULY-DECEMBER, 1974[117]

Agency	Adequate	Percentage of Adequate Statements	Insufficient Information	Percentage of Insufficient Information Statements	Inadequate	Percentage of Inadequate Statements
Department of Agriculture	25	37%	42	63%	0	0%
Atomic Energy Commission	1	7	11	73	3	20
Corps of Engineers	29	22	95	72	8	6
Department of Defense	1	8	10	84	1	8
General Service Administration	7	58	5	42	0	0
Department of the Interior	54	73	18	24	2	3
Department of Transportation	46	23	136	70	13	7
Department of Housing & Urban Development	0	0	9	82	2	18
Civil Aeronautics Board	0		1		0	
Department of Commerce	1		1		0	
Delaware River Basin Commission	1		0		0	
Federal Power Commission	2		3		1	
Interstate Commerce Commission	0		2		0	
Department of Labor	0		1		0	
Panama Canal	0		1		0	
Department of State	0		3		0	
Tennessee Valley Authority	1		4		0	
Department of the Treasury	0		1		0	
Veterans Administration	0		1		0	
Water Resources Council	0		0		1	
Totals	168	31%	344	63%	31	6%

that the originator provide the information that was not included in the draft statement.

Category 3—Inadequate

EPA believes that the draft impact statement does not adequately assess the environmental impact of the proposed project or action, or that the statement inadequately analyzes reasonable available alternatives. The Agency has requested more information and analysis concerning the potential environmental hazards and has asked that substantial revision be made to the impact statement. 39 Fed. Reg. 34100 (1974).

117. 39 Fed. Reg. 29046-47, 30540-41, 32644, 34099-100, 36042, 37242-43, 39085-86, 40977-78, 45069-70 (1974); 40 Fed. Reg. 4335-36 (1975).

Percentage figures are given for those agencies which produced ten or more statements. This collection of figures over a period of six months has no pretension of being a statistically reliable review and should be viewed as indicative only. Moreover, figures for particular agencies must be used with caution. For instance, the figures for the Department of the Interior include impact statements prepared by entities as disparate as the National Park Service, the Fish and Wildlife Service,

The most remarkable statistic here is the percentage of draft statements which have insufficient information to assess the project proposed. In this category, moreover, the agencies have not shown any substantial improvement over time. Under a different classification system used between October 1971 and November 1972, over half the draft statements reviewed contained inadequate information.[118] In the period between November 1972 and May 1973 under the current guidelines, the EPA found that 59 percent of the impact statements reviewed had insufficient information.[119]

These figures raise the question of what sources of information are or should be used for NEPA analysis. It is a rare federal agency that has a highly developed research capability in environmental data. Consequently, the agencies usually pass along to the beneficiary of the project the task of compiling the data bases from which the analysis is made. Realistically, this method of procedure is not likely to change, but its opportunity for omission as well as self-serving bias—often not explicit or overt—underscores the essential need for independent and high quality analysis of the data by the agency itself, as well as the ability to make fair judgments on what data is needed for competent analysis. For instance, in the environmental report which Consolidated Edison Co. of New York submitted to the AEC in 1971 on its nuclear plants on the Hudson River,[120] the company failed to submit analyses of the River's fishery which it had financed in response to the decision of the Second Circuit in *Scenic Hudson Preservation Conference v. FPC* (*Scenic Hudson I*)[121] and which in *Scenic Hudson Preservation Conference*

which operates the national wildlife refuges, and the Bureau of Land Management, which has the massive coal and offshore oil leasing programs. In the period reviewed there were more than a dozen draft statements on national parks and wildlife refuges in Alaska prepared by the Department of the Interior, all of which were found adequate, two draft statements on coal leasing which were found inadequate, and one on offshore oil leasing which was found to have insufficient information.

118. Liroff, EPA Comments on Environmental Impact Statements: One Indicator of Administrative Response to the National Environmental Policy Act of 1969 (unpublished paper prepared at the Brookings Institution, 1972).

119. F. Anderson, *The National Environmental Policy Act*, in FEDERAL ENVIRONMENTAL LAW 272 (Dolgin & Guilbert ed. 1974).

120. Consolidated Edison Co., Environmental Report Supplement No. 1, Indian Point Unit No. 2 (September 1971). The omitted document to which no substantial reference was made is Hudson River Policy Committee, Hudson River Fisheries Investigation 1965-1968 (1969).

121. 354 F.2d 608 (2d Cir. 1965), *cert. denied*, 384 U.S. 941 (1966).

v. FPC (*Scenic Hudson II*)[122] it later had praised as the "best studies possible."[123] The AEC located and analyzed these on its own and used the data contained therein to draw conclusions on the impact of power plant operation on the Hudson fishery which were wholly at variance with those reached by the FPC and its consultants.[124] This sequence of events is unusual both in the diligence of the staff in obtaining the relevant data which was not offered to it by the license applicant and in its refusal to accept the conclusions which were drawn from such data by another agency. Undoubtedly, one reason for the thorough nature of the AEC's analysis lies in the fact that the Commission had at its disposal national laboratories, such as Oak Ridge, with their enormous reservoir of expertise. The all too typical result is that reached by the Corps of Engineers which in licensing two fossil-fuel power plants on the Hudson River close to those licensed by the FPC and the AEC, relied heavily on the utility companies in drawing up its first impact statement, failed to show any awareness of the study prepared in response to *Scenic Hudson I*, and evidenced a lack of understanding of the facts of the estuary's operation beyond the limited information supplied by the utilities.[125] The referral mechanism and public participation may remedy these failings but only at great expense by those least able to afford it. The efficient and fair dispatch of the agency's duties under the Act demand that the agency writing the statement be conscientiously responsible for assembling and reviewing the data on which its analysis rests.

The EPA does not issue similar ratings on final statements, and

122. 453 F.2d 463 (2d Cir. 1971), *cert. denied*, 407 U.S. 926 (1972).

123. Brief for Intervenor, Consolidated Edison Co. of New York, at 73, Scenic Hudson Preservation Conference v. FPC, 453 F.2d 463 (2d Cir. 1971).

124. The FPC was unwilling to review its conclusion in light of the AEC staff finding, but the Second Circuit refused to allow the license to stand when it rested on facts which might be grossly in error. The court remanded the case to the FPC for a second time. Hudson River Fishermen's Ass'n v. FPC, 498 F.2d 827 (2d Cir. 1974).

125. There is no mention of the Hudson River Fisheries Investigation, 1965-1968, note 120 *supra*, and no use of its data base in the Corps of Engineers' statements issued before the consent judgments were entered in *Hudson River Fishermen's Ass'n v. Orange & Rockland Utilities* Civil No. 72-5460 (S.D.N.Y., filed Dec. 29, 1972) and *Hudson River Fishermen's Ass'n* v. *Central Gas & Electric Co.* Civil No. 72-5459 (S.D.N.Y., filed Dec. 29, 1972). The Corps of Engineers openly admitted in those statements that its major source for the analysis of marine biology consisted of documents prepared by the utility's consultants. Bowline Statement, Draft and Revised Draft, *supra* note 83, at 20.

undoubtedly there is improvement from draft to final statements in many instances. Nevertheless, it seems clear that five years after the passage of the Act most agencies, particularly the developmental agencies, are still not able to meet the basic requirements of the Act on a regular basis. This conclusion is buttressed by a recent study of the performance of the Department of Housing and Urban Development under the Act carried out by the GAO.[126] The GAO emphasized that the Department determines that many projects do not warrant impact statements under the Act, but that its files frequently do not contain adequate information to justify that conclusion or even to show on what consideration the conclusion was reached. This analysis raises the serious question of whether the threshold inquiry into whether or not to prepare an impact statement under the Act is properly answered by the relevant agency. If it is not, then the rough figures provided by the EPA's review of the draft statements grossly underestimate the lack of compliance with the Act. An index of money and manpower spent by the agencies on impact statement work would be another valuable, rough guide to determine the extent to which the agencies have taken the Act to heart. Unfortunately, such numbers do not exist.

Suffice it to say that the EPA ratings and a money and manpower table are at best very speculative guides to performance under the Act. The first academic case studies of the Act's operation are now appearing,[127] and the CEQ itself is commissioning an analysis of various agencies.[128] The results so far remain very sketchy. The

126. GENERAL ACCOUNTING OFFICE, ENVIRONMENTAL ASSESSMENT EFFORTS AND PROPOSED PROJECTS HAVE BEEN INEFFECTIVE—DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (1975).

127. *E.g.*, Culhane, *Federal Agency Organizational Change in Response to Environmentalism*, 2 HUMBOLDT J. SOC. REL. 31 (1974); Friesema & Culhane, Social Impacts, Politics and the Environmental Process, Public Law Project, Center for Urban Affairs, Northwestern University (1975); Strohbehn, *NEPA's Impact on Federal Decisionmaking: Examples of Noncompliance and Suggestions for Change*, 4 ECOL. L.Q. 93 (1974). The Institute for Ecology is carrying out a review of selected impact statements which is to result in proposed guidelines for the writing of statements. COUNCIL ON ENVIRONMENTAL QUALITY, ENVIRONMENTAL QUALITY: FIFTH ANNUAL REPORT OF THE COUNCIL ON ENVIRONMENTAL QUALITY 386 (1974).

128. COUNCIL ON ENVIRONMENTAL QUALITY, ENVIRONMENTAL QUALITY: THE FIFTH ANNUAL REPORT OF THE COUNCIL ON ENVIRONMENTAL QUALITY 386 (1974). A preliminary report has been made on the implementation and administration of the Act by the Forest Service and the Bureau of Land Management, and a final report on NEPA implementation by the Navy.

issue remains an urgent order of business if competent evaluation of the Act on an impartial review of the facts is to be obtained.

C. *Review*

The issues of sources of information and quality of analysis are of great importance because substantive review under the Act is and is likely to remain weak. The courts have emphasized the procedural requirements of NEPA; but while many will measure the statement against the substantive policies of the Act, they are unwilling to reverse agency decisions that are not clearly arbitrary or obviously give insufficient weight to environmental values.[129] Regardless of the standard of review employed by a court, the blunt analysis provided by the court in *Environmental Defense Fund, Inc. v. Froelke* is likely to remain true:

> It is simply unrealistic for plaintiffs in this case to assume that this or any other Court is going to make findings of fact which would attempt to resolve the conflicts between data contained and relied upon in the final EIS which may conflict with data which plaintiffs believe is more reliable. . . .
>
> [Congress] did not, in our judgment, contemplate or anticipate that courts were to make choices and determine the merits of conflicting views between the two or more schools of scientific thought and to thereafter disapprove any final EIS which may rely upon data which was inconsistent with the court's finding.[130]

129. It is unquestioned that NEPA establishes procedural requirements which must be complied with to the fullest extent possible. A number of circuit courts have further held that the procedural requirements of section 102(2) were established so that the agencies will consider and meet the substantive goals of section 101 and that courts may review the substance of the section 102 statements. *E.g.*, Environmental Defense Fund v. Corps of Engineers, 470 F.2d 289 (8th Cir. 1972), *cert. denied*, 412 U.S. 931 (1973). This review has generally required the agencies to meet two standards: first, that the statement be compiled in good faith as interpreted by the rule of reason; and, second, that the balance of costs and benefits struck not be arbitrary or clearly give insufficient weight to environmental values. *E.g.*, Sierra Club v. Morton, 510 F.2d 813 (5th Cir. 1975); Calvert Cliffs' Coordinating Comm. v. AEC, 449 F.2d 1109 (D.C. Cir. 1971); National Helium Corp. v. Morton, 486 F.2d 995 (10th Cir. 1973), *cert. denied*, 416 U.S. 993 (1974). The formulation of these standards varies from court to court, and some courts have maintained a strictly procedural standard. *E.g.*, Cady v. Morton, ____ F.2d ____, 8 ERC 1097 (9th Cir. 1975).

130. 368 F. Supp. 231, 240 (W.D. Mo.), *aff'd*, 477 F.2d 1033 (8th Cir. 1973).

Moreover, the EPA and the other referral agencies can do little beyond commenting, and the CEQ has interpreted its own position to be the recipient of impact statements with a very limited substantive review function.[131] It is unfortunate that the Council has not chosen to take a more assertive position given the deference that many courts,[132] with the exception of the Fifth Circuit,[133] have given to its guidelines and administrative interpretation of NEPA. Had the CEQ taken the position that the Act's requirement that impact statements be made available to it[134] contained the implicit power to reject inadequate statements, it might have had great influence on the courts and promoted compliance with the Act "to the fullest extent possible."[135]

V. The Future

There is no doubt that the environmental movement has come a long way in five years. Since the passage of NEPA there have been major enactments in the fields of air and water pollution at the

131. Anderson, *supra* note 119, at 248-49.

132. *E.g.*, Greene County Planning Bd. v. FPC, 455 F.2d 412, 421 (2d Cir.), *cert. denied*, 409 U.S. 849 (1972); Warm Springs Task Force v. Gribble, 417 U.S. 1301 (stay of district court order by Douglas, J.).

133. Sierra Club. v. Callaway, 499 F.2d 982 (5th Cir. 1974); Hiram Clarke Civic Club v. Lynn, 476 F.2d 421 (5th Cir. 1973).

134. 42 U.S.C. § 4332 (1970).

135. The CEQ functions both as the recipient of NEPA statements and as an environmental advisor to the President, 42 U.S.C. § 4332(2)(C) (1970). It has largely chosen to emphasize its role as advisor and not to exploit or attempt to expand its role as a reviewer of NEPA statements. Anderson, *supra* note 119, at 249. The language of NEPA simply states that impact statements shall be made available to the CEQ. 42 U.S.C. § 4344 (1970). Congress has turned aside at least one attempt to make the CEQ's powers more explicit. In the Senate version of what is now section 309 of the Clean Air Act Amendments of 1970, the EPA was given the responsibility to review impact statements, and where a statement was found unsatisfactory, "the matter shall be referred to the Council on Environmental Quality for a determination and recommendation to the President which shall be made public." S. Rep. No. 4358, 91st Cong., 2d Sess. 310 (1970). The Act as passed simply states that the matter shall be referred to the CEQ. 42 U.S.C. § 1857h-7 (1970). The Conference report gives no explanation of why the deletion was made. H. Conf. Rep. No. 1783, 91st Cong., 2d Sess. (1970). The vagueness of NEPA and the Clean Air Act as to the CEQ's responsibilities provide ample foundation for the Council's apparent unwillingness to assert its moral authority on a regular basis by condemning those impact statements filed with it which are patently inadequate, and thus enhancing its responsibility under the Act and executive orders to oversee the operation of the Act.

federal level, increasing efforts by the states to control the use of land, and passage of many "little NEPAs."[136] The Act has undoubtedly made a major difference in the attitude and actions of federal agencies. Nevertheless, there has been steady erosion of the scope and force of the Act in Congress and the agencies, and time has exposed weaknesses in the scheme of regulation which the Act established in law. It is a tribute to the power of the Act that it has been contested as bitterly as the congressional amendments and the volume of litigation indicate. If NEPA is to continue with that force and to be improved, there are several cardinal points to which attention must be given in the next five years.

1. The Act's mandate should be universal and should require federal preparation of and responsibility for impact statements. The argument for the universal mandate is a simple one. Both the environment and the federal government are ubiquitous. The policies of the Act are therefore both national and comprehensive. The environmental conditions vary enormously from one milieu to another, and the imperatives of public policies are equally variable. Thus NEPA's process of analysis and judgment based on the review of the facts in particular cases, in the context of a national policy, is sound. The open participation of other agencies and the public in the process is a responsive form of government and one of the best methods for overcoming agency bias and private influence. There are, of course, true emergency situations where the time necessary for such an analysis is not available.[137] However, there is no basis for wide or general exceptions. For instance, the exclusion of water quality issues from the review process of the impact statement can only unbalance the broad and comprehensive policies of the Act.

The argument for maintaining federal preparation of and responsibility for impact statements proceeds on two lines. First, delegation of that responsibility has most often been made to those who are applying for federal funds or licenses.[138] This is the case, for in-

136. *See* note 16 *supra.*

137. For example, where regulations under a statute must be issued within fifteen days of enactment as in the case of the Emergency Petroleum Allocation Act of 1973. Gulf Oil Corp. v. Simon, 373 F. Supp. 1102 (D.D.C.), *aff'd,* 502 F.2d 1154 (Tem. Emer. Ct. App. 1974).

138. *See* notes 34-38 *supra.*

stance, with the 1975 amendment to NEPA.[139] This establishes an inherently self-serving bias in the preparation of the impact statement, and destroys much of the independent analysis that is crucial to the effective operation of the Act. Second, delegation to state or local authorities frequently means delegation to a group which does not undertake a particular type of project on a regular basis and consequently is less likely to have, or even understand the need for having, the environmental expertise for fully discharging its responsibilities under the Act. Officials of the EPA are already beginning to criticize the performance of local authorities under the 1974 Housing and Community Development Act on these grounds.[140] The EPA has found local performance very uneven, and thus the national aspect of the Act is effectively lost.

The counter argument to this position is generally two-fold: first, state or local authorities are closer to the actual circumstances of a particular plan or project and are better able to analyze its effects; and, second, state or local agencies often have a broader mandate and view than does a narrowly focused federal agency, such as the FHWA, which does not have responsibility for transportation systems other than roads. The general answer is that federal responsibility in no way has or should prevent effective local contribution to the preparation of an impact statement. More directly, the first argument is little more than an undermining of the independent analysis for which the Act calls. The answer to the second argument should be to make the referral mechanism work effectively and insure that the requirement of examining alternatives is enforced. In the final analysis, local control of local destinies is preserved in most cases by the choice of not accepting funding under a federal program.

2. The referral mechanism must be made more effective, and in some cases consultation should be made mandatory. NEPA recognizes that many agencies do not have a full range of environmental expertise while others such as the EPA, the Fish and Wildlife Service or state and local agencies are repositories of information which should be available throughout the federal government. So long as providing this service to sister agencies is discretionary and the service must compete for funds against mandatory agency

139. *See* discussion at notes 50-53 *supra*.
140. ENVIR. RPTR.-CURRENT DEV. 1074 (1975).

programs, the referral mechanism is likely to be effective only on a sporadic basis. The funding for review under the referral mechanism should be made open and explicit in each agency of the federal government so that basic compliance with the scheme can be assured. In addition, at least for those agencies which review their own projects and programs under NEPA, such as the dam-building operations of the Corps of Engineers or the construction of major government installations by the Department of Defense or the General Services Administration, consultation with the leading environmental agencies should be mandatory. This is the most obvious method within the framework of the Act to eliminate self-serving bias within the federal agencies themselves. The courts have long deferred to administrative agencies with particular expertise in a subject matter. It can be expected that environmental values will be given more of the weight which NEPA assigned to them when the views of environmental agencies must be heard and considered under the terms of the Act.

3. A fee-shifting provision should be added to the Act so that in both court and agency proceedings public participation can continue as an active reality. So long as the shifting of fees for attorneys and expert witnesses remains discretionary, harassing litigation will not be encouraged. Suits under NEPA in which citizens prevail essentially require government agencies to do that work which it was their statutory duty to perform. It is hard to accept the argument that particular citizens should have to pay to assure the public that the government obeys the law. In addition, the disproportionate resources brought to most NEPA controversies by government or industry in opposition to citizens' groups make it evident that fee-shifting would not throw a major burden on the proponents of projects.

4. Environmental national laboratories should be established so that agencies will have available a source of data and analysis whose primary concern is ecological systems and not the promotion and production of projects. This kind of resource is particularly needed where large-scale environmental systems are affected either by massive proposals for development or by constant, cumulative impacts. In these situations, a view of the larger context, greater than that likely to be developed by a line agency on an ad hoc basis, should be available. Some work of this sort was carried on at the national laboratories under the jurisdiction of the AEC. Similar

resources are available in other places such as the EPA's national laboratories. More of those resources are needed, and they are needed in a form which will make them readily available to all federal agencies. For instance, the FPC does not license a large number of dams or pumped storage projects, but any such project is likely to be on a large scale. If the FPC had ready access to a body of scientists within the government with environmental knowledge and the ability to perform impartial and high quality analytic work, the Commission's responsibilities under the Act could be more effectively and economically carried out. This system of accessible laboratories should go a reasonable distance toward redressing the imbalance between agency managerial imperatives and environmental imperatives under the Act.

The Act has accomplished a great deal. The opposition to it from many quarters as well as the victories which the defenders of the Act have achieved in court are testimony to that fact. But much remains to be done. No other act has the scope of application or the breadth of policy to achieve as much. The will and the resources must be applied to assure that the promise of the Act is achieved.