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Richard N. Andrews L.

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AGENCY RESPONSES TO NEPA: A COMPARISON AND IMPLICATIONS*

RICHARD N. L. ANDREWS**

INTRODUCTION

The National Environmental Policy Act of 1969 (NEPA) has been acclaimed as a Congressional mandate requiring all federal agencies, whatever their traditional missions and responsibilities, to give increased consideration to the impacts of their actions upon the human environment.¹ Five years have passed since NEPA was enacted, and though much has been written about it, few studies have investigated the response to the law by the various federal agencies. This paper reports some findings of a study comparing two agencies engaged in similar activities.²

It is important to bear in mind the full content of NEPA to evaluate its implementation, particularly since the detailed statements (environmental impact statements, or EIS's) it requires are frequently discussed without reference to the purposes of the Act. NEPA included three major elements: the declaration of a national environmental policy; the establishment of a set of procedural requirements, including but not limited to the EIS; and the creation of a Council on Environmental Quality (CEQ) to advise the President and oversee implementation of the Act. These elements were mutually supportive and interdependent. The procedures were not intended to be treated as ends in themselves, but as action-forcing provisions to compel implementation of the law's policy purposes.³ Two fundamental criteria should be employed to evaluate agency responses to the Act: the extent to which an agency has incorporated

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**Associate Professor of Natural Resource Policy, Univ. of Michigan.

1. National Environmental Policy Act of 1969, 42 U.S.C. § 4321, *et seq.* (1970).

2. For a full report of this research see R. Andrews, *Environmental Policy and Administrative Change* (Ph.D. dissertation, University of North Carolina, 1972), to be published in revised and updated form in July 1976 by D. C. Heath & Co. One other comparative evaluation study is U.S. Council on Environmental Quality, *An Evaluation of Implementation and Administration of NEPA by the Forest Service and Bureau of Land Management* (Preliminary Report, February 1974). For a general five-year overview of NEPA's implementation see U.S. Council on Environmental Quality, *Environmental Quality—1974* ch. 4. (1974).

3. National Environmental Policy Act of 1969, Sen. Rep. No. 91-296, 91st Cong., 1st Sess., at 9 (July 9, 1969).

the law's procedural requirements and the extent to which such incorporation has led to outcomes consistent with NEPA's policy goals.

Policies and procedures established by NEPA required considerable interpretation to translate them into operational criteria for administrative action, and this interpretive task was largely left to the discretion of each agency and administrator. This discretion may have been unavoidable in view of the wide range of actions and administrative processes affected by the Act, but one consequence was to permit great variation in response among and within federal agencies. CEQ was made responsible for reviewing and appraising implementation of the law and was authorized by executive order to issue guidelines on the subject.⁴ In practice CEQ merely issued guidelines concerning the preparation of EIS's, leaving interpretation of the law's substantive policy, other procedural duties, and certain questions concerning the impact statements themselves to the operating agencies.

It is instructive to compare the initial responses to this law of federal agencies engaged in similar activities. Such comparison provides insight into behavior patterns of agencies, and into the effectiveness of new legislative mandates in bringing about changes in administrative behavior. This study compares two water resource development programs, the Civil Works Program of the Army Corps of Engineers and the Small Watersheds Program of the Soil Conservation Service (SCS).

THE CORPS AND THE SOIL CONSERVATION SERVICE

The effectiveness of NEPA must ultimately be measured by its ability to cut through intervening organizational and political variables that shape the behavior of government agencies and influence the substantive activities in which those agencies engage. The Corps of Engineers and the Soil Conservation Service (SCS) differ in important aspects of their organization and political environment, but engage in certain similar (and sometimes identical) activities. The differences in environment and the similarities in activities must be appreciated to understand each agency's ability to respond to NEPA.

The Corps is fundamentally an engineering agency whose mission is the construction of public works projects. The construction of water resource development projects is one of its principal activities,

4. NEPA, § 204(3) 42 U.S.C. § 4344 (1970); Executive Order No. 11514, March 5, 1970, 35 *Fed. Reg.* 4247. For a full evaluation of the Council see Liroff, *The Council on Environmental Quality*, 3 *Environmental L. Rep.* 50051 (1973).

though it also carries out extensive military and post office construction, military combat support, and other engineering functions. Its water resource engineering mandate originated in nineteenth century political pressures to use federal funds for internal improvements of navigable water courses to foster economic development. Its professional staff consists primarily of civil engineers, though in recent years it has increased its representation of other relevant professions.⁵ The staff of 30,000 consists overwhelmingly of civilians who work under a military chain of command directed by approximately 250 engineer officers.

The Corps has broad options for shaping its program within the general mission of civil works construction. It has a large budget (\$1.3 billion in 1971), 60 per cent of which is devoted to actual construction,⁶ and there are no limits on the size or costs of its projects as long as the benefits, exceed the costs and Congress is willing to fund them. The benefits may be calculated against a broad range of authorized project purposes, including navigation, flood control, hydroelectric power production, recreation, fish and wildlife enhancement and municipal water supply.⁷ Corps projects may require local cooperation, but the agency has much discretion in the planning, design, implementation and operation of its projects.

Finally, the Corps has great flexibility in the development and execution of its activities as a result of its administrative and political circumstances. It has almost complete administrative autonomy within the Department of Defense to carry out civil works functions, since these activities are only remotely related to the central mission of that Department. This autonomy is assured by strong support for those functions in Congress and the fact that supervision is vested in Congressional committees which oversee public works rather than military expenditures. The Corps has broad geographic flexibility, permitting it to construct projects in any state or Congressional district. Its constituency includes both urban and rural populations, accounting for its broad political appeal in Congress. The Corps usually has a backlog of several hundred projects that have been authorized but not yet funded. By obtaining Congressional approval, it can easily adjust its priorities among these projects in response to changing political demands.⁸

5. Staff of the Senate Committee on Public Works, 89th Cong., 2d Sess. *Civil Works Program of the Corps of Engineers: A Report to the Secretary of the Army by the Civil Works Study Board*, at 21-23, 55-61 (Comm. Print 1966).

6. U.S. Office of Management and Budget, *The Budget of the United States Government Fiscal Year 1972*, at 288-91 (1971).

7. *Civil Works Program*, *supra* note 5, at 24-38, 29-54, 62-63.

8. *Id.* at 62-63, 39-54.

The Soil Conservation Service, in contrast, is not primarily an engineering agency, and it differs significantly from the Corps in important characteristics of its organization and political environment. Its central historical mission is agricultural soil and water conservation. SCS became involved in water management because of the role water plays in soil conservation and because of the need for conservation assistance for farmers during the Depression dust bowls.⁹ Conservation of these resources is still perceived as the primary mission of the agency.¹⁰ Other activities of SCS include soil and snow surveys, land inventory and monitoring, plant testing for conservation purposes, and technical and financial assistance in conservation practices for cropland, pastures, woodland, wildlife, and other soil-related resources. Represented on its professional staff are a mixture of resource-related disciplines, including civil engineers.

SCS has a narrower range of options available to it than does the Corps in planning and designing water resource projects. Its watershed program budget is one-tenth the size of the Corps', and its projects are limited by law in size and costs, requiring the agency to defer to the Corps if action of greater magnitude becomes necessary.¹¹ The range of purposes authorized for SCS projects is narrower than for the Corps. SCS has no responsibility or authority in the areas of navigation and hydroelectric power production, and there are differences in the levels of permissible cost-sharing. SCS' staff is one of the largest in the Department of Agriculture (15,000), but only half the size of the Corps, and only a fraction of that staff is engaged in water resource activities. Finally, the SCS water resource program operates by means of technical and financial assistance to local sponsoring organizations, and is constrained by the necessity of arriving at a legal agreement mutually acceptable to the agency and the local organization.¹² It therefore has less discretion than the Corps in its choice of clients and in the development of projects. Furthermore, its authority to implement and operate projects that it finances is limited to ensuring that provisions of the work plan agreement are adhered to.

SCS does not have great autonomy within the Department of

9. See, e.g., A. Schlesinger, Jr., *The Coming of the New Deal* ch. 20 (1958).

10. *Hearings on Agriculture-Environmental and Consumer Protection Appropriations for 1974 Before the House Comm. on Appropriations*, 93d Cong., 1st Sess., at 146-271 (1973); see also U.S. Department of Agriculture, *Assistance Available from the Soil Conservation Service*, Agriculture Information Bulletin No. 345 (1970).

11. *Hearings on Agriculture-Environmental . . . Appropriations*, *supra* note 10, at 148-149; see also *Watershed Protection and Flood Prevention Act*, Public Law 83-566, 16 U.S.C. § § 1001-1008 as amended (Small Watershed Act).

12. *Id.*

Agriculture, since its water resource activities are viewed as one of the Department's major sources of technical and financial aid for farmers. Larger projects are subject to oversight by Congressional public works committees, but all other activities fall under agricultural committees including agriculture appropriations subcommittees. SCS' access to diverse clienteles is limited by the agricultural orientation of its principal activities and overseers, and by its low visibility in urbanized areas from which many Congressmen are elected.

While these two agencies differ in some organizational and political respects, their water resource development activities have important similarities. Both agencies impound streams behind dams and line stream channels with concrete and it is reasonable to compare the effects of NEPA's environmental policy mandate on the execution of such environmental modifications. The purposes for which these activities are carried out are also similar. While the Corps' mission is broader, both build dam and channel projects with the intent of providing flood damage reduction, municipal water supply, recreation opportunities, and fish and wildlife habitat enhancement.

Finally, the criteria by which the two agencies' projects are justified are identical and predicated upon economic benefits rather than physical conservation objectives.¹³ The fundamental mission of SCS may be conservation of soil and water, but it justifies water resource projects on the basis of economic benefits, as does the Corps, and its budget for water resource projects represents nearly 40 per cent of its annual appropriations.¹⁴ It should not be assumed that SCS projects are more consistent with environmental policy purposes than projects proposed by the Corps because economic assistance to farmers is no more inherently environmentally sound than economic assistance to commerce and industry.

COMPARISON OF RESPONSES TO NEPA

The Corps and SCS both recognized that NEPA applied to their water resource programs and took steps to implement the Act. They differed in the extent and timing of those steps, in their treatment of

13. From 1962 until 1973 both agencies were required to justify their proposed projects using criteria established in Sen. Comm. on Public Works, Policies, Standards and Procedures in the Formulation, Evaluation and Review of Plans for Use and Development of Water and Related Land Resources, Sen. Doc. No. 87-97, 87th Cong., 2nd Sess. (1962). In 1973 these were superseded by U.S. Water Resource Council, *Principles and Standards for Planning Water and Related Land Resources*, 38 Fed. Reg. 24778 (1973). The latter document loosened in principle the emphasis of the former upon economic measures, but it has not yet been fully implemented.

14. *Hearings on Agriculture-Environmental . . . Appropriations*, *supra* note 10, at 148.

projects underway, and in their openness to the public involvement mandate of NEPA. Despite these differences, both agencies' responses were directed primarily to NEPA's procedures rather than its substantive policy goals, and both were motivated by external political pressures rather than commitment by agency administrators to NEPA's objectives.

Implementation of NEPA's Policy

The Corps interpreted NEPA as a mandate to be reflected on its plans and decisions, while SCS, at least until 1974, interpreted it as a reiteration of its existing objectives.

The Corps took the position that NEPA created a new criterion for federal action, authorizing it to consider a broader range of effects than had been considered previously. It directed recognition of environmental quality as a new objective for planning,¹⁵ and requested funds and personnel to carry out its new responsibilities.¹⁶ According to the testimony of the Corps' Director of Civil Works:

It wasn't until the passage of the National Environmental Policy Act that we really had in our hands the authority to spend money, time and effort in this field over and above what were the precedent-setting studies in which economic development and the benefit-cost ratio were the be-all-and-end-all.¹⁷

SCS, in contrast, interpreted NEPA as a reinforcement of its previous missions and policies. For at least two years after NEPA's enactment it directed no change in the range of considerations entering into its water resource planning process and requested no new funds or personnel to carry out the mandate of NEPA. Proponents and critics of water resource projects agree that traditional criteria narrowly focused on economic development, yet only the Corps interpreted NEPA as broadening those criteria and recognized the law's mandate for increased attention to noneconomic measures of environmental quality. Until 1974 SCS's policy was that NEPA "reinforces the mission of the Soil Conservation Service."¹⁸

15. U.S. Army Corps of Engineers, Engineer Circular (hereinafter EC) 1165-2-83, March 3, 1970; EC 1165-2-86, April 30, 1970; and EC 1165-2-500, November 30, 1970, Environmental Guidelines for the Civil Works Program of the Corps of Engineers.

16. See *Hearings on Public Works for Water and Power Development and Atomic Energy Commission Appropriations, Fiscal Year 1972 Before the Sen. Comm. on Public Works*, 92nd Cong., 1st Sess., Pt. 1 (1971).

17. Testimony of Major General Frank P. Koisch, *Hearings on Stream Channelization Before the House Comm. on Gov't Operations*, 92nd Cong., 1st Sess., Pt. 2, at 556, 580 (1971).

18. U.S. Department of Agriculture, Soil Conservation Service, at 2-3, Mar. 19, 1971; see also U.S. Congress, *Hearings on Red Tape Before the House Comm. on Public Works*, 92nd

In a general sense NEPA reinforces the mission of conserving soil and water and demands precisely the sort of harmonious relationship between human activities and their biological and physical resource base that SCS was established to achieve. But in taking this policy position, SCS ignored the crucial differences between the physical conservation mission of the agency as a whole and the fundamental economic mission of its Small Watershed Program. It failed to take the position of policy leadership in implementing NEPA that might have been expected of it.

Moreover, SCS failed to recognize conflict between policy and procedures established by NEPA and the isolated pursuit of *any* single mission—even soil conservation. SCS has a tradition of expertise in agricultural soil erosion and runoff, but admits to little experience in such closely related topics as water quality, erosion and sediment transport characteristics of streams, downstream and ground water effects of stream channelization, and the effects of its actions on water quality, fish, wildlife habitat, and wetland productivity.¹⁹ NEPA provided an opportunity for SCS significantly to broaden the range of its concerns, but the agency chose instead to interpret the Act as a reinforcement of its normal activities.

In 1974 SCS guidelines for implementation of NEPA finally reinterpreted the agency's own mission to give equal weight to three related goals:

- 1) Quality in the natural resource base for sustained use;
- 2) Quality in environment to provide attractive, convenient, and satisfying places to live, work and play; and
- 3) Quality in the standard of living based on community improvement and adequate income.²⁰

With these guidelines SCS recognized the necessity of redefining its mission more broadly to fulfill the purposes of NEPA. At approximately the same time, SCS inaugurated intensive and reportedly outstanding ecological training programs for staff members, projected to include more than 400 individuals from key positions throughout the organization.²¹

Cong., 1st Sess., ser. 92-15, at 217 (1971); Environment Memorandum 1 (Revised), December 11, 1971, 36 Fed. Reg. 23674.

19. For testimony see SCS, Questions and Answers with respect to Watershed Program Activities prepared by SCS Watershed Group, August 1971. Reprinted in *Hearings on Agriculture-Environmental . . . Appropriations*, *supra* note 10, at 344-380.

20. 39 Fed. Reg. 19646 *et seq.*, June 3, 1974.

21. Staff members of the Council on Environmental Quality praised these training programs in conversations with the author.

Implementation of NEPA's Procedures

The Corps responded immediately and affirmatively to NEPA's procedural requirements, particularly that of environmental impact statements, and made early and sustained policy commitments to their implementations. SCS, in contrast, sought to avoid these requirements for two or three years, and not until 1973 and 1974 did its procedures approach the level of implementation previously attained by the Corps.

The Corps provided detailed instructions for procedural implementation to its field offices in April and September 1970 and May 1971, and reinforced these with a series of supplementary directives. The instructions contained discussions of problems noted by the Washington office concerning EIS's submitted from the field, increasingly detailed specification of the procedures to be followed in implementing NEPA, the environmental impacts to be considered, and repeated emphasis on new policies adopted by the Corps in its official response to NEPA.²² Other instructions followed, and thorough revisions were issued in February 1973 and again in April 1974.²³ By 1974 the Corps' guidelines were still exemplary among federal agencies, they required integrated assessment of social, economic, and environmental impacts, coordination with other agencies and citizens throughout the planning of projects, development of alternatives weighted toward environmental protection and enhancement, and environmental analyses as detailed as engineering, economic, and other studies.

SCS displayed far less progress in its implementation of NEPA's procedures during this period. One general policy memorandum was issued in May 1970; specific instructions were not issued until March and April 1971. These later instructions merely restated the language of the Act without elaboration.²⁴ No suggestions to improve admittedly deficient EIS's were issued nor were changes in environmental standards ordered.²⁵

Not until mid-1972 were important new changes issued. At that time SCS personnel were directed to perform an environmental inventory during the first pre-planning environmental reconnaissance

22. EC 1165-2-83 (March 3, 1970); EC 1165-2-86 (April 30, 1970); ENG/CW-C M/1 (June 2, 1970); EC 1120-2-56 (September 25, 1970); EC 1165-2-500 (November 30, 1970); and ER 1105-2-507 (May 28, 1971); 36 Fed. Reg. 11309 (June 11, 1971).

23. 38 Fed. Reg. 9242 (February 16, 1973); 39 Fed. Reg. 12737 (April 8, 1974).

24. Soil Conservation Service, Watersheds Memorandum 103 (May 1, 1970); Environment Memorandum 1 (March 19, 1971); Watershed Protection Handbook Notice 1-17 (April 7, 1971).

25. See *Hearings on Administration of NEPA Before House Comm. on Merchant Marine and Fisheries*, 91st. Cong., 2d Sess., Pt. 1, at 985 (1970).

study, to present all feasible alternatives (including objectives which differed from those of local project sponsors) in the impact statement, to conduct a public information meeting on the preliminary investigation report, and to append to the final EIS copies of all substantive letters of comment submitted on the draft statement. They were also instructed to prepare EIS's for all stream channel excavation projects that might have significant environmental impacts.²⁶ Instructions similar to these, and in most cases *more* detailed, had been given to Corps personnel a year earlier in May 1971. Corps procedures were available to SCS, and there is evidence of direct pressure on SCS during and after 1971 from CEQ to improve policies and procedures.²⁷ Evidently SCS deliberately chose not to move as far or as fast as the Corps during this period.

Between 1972 and 1974, SCS' procedural guidelines underwent sweeping revision, and by 1974 they were comparable to those of the Corps. Among the changes made were requirements that collection of data for the EIS begin simultaneously with preparation of the project application; that cumulative and regional impacts be considered along with impacts on historical, social, and economic values; and that SCS field offices take an active role to ensure broad public access to planning and decision processes.²⁸ In June 1973 SCS issued a lengthy advisory memorandum, which commented in detail on deficiencies in earlier impact statements and recommended specific corrective measures. Then in 1974 the agency issued for trial use an "Environmental Assessment Procedure" to assist its field staff in preparing the substance of EIS's.²⁹

The changes in SCS guidelines between 1972 and 1974 represented a major shift in posture toward implementation of NEPA's procedures. SCS documents prior to 1972 reflected a desire to avoid NEPA's procedures rather than to interpret and apply them. SCS instructions from 1972 on, in contrast, demonstrated a symbolic commitment to embrace and implement these procedures. Significantly, CEQ testified in 1974 that the impact statements produced by the Corps of Engineers were the best among federal agencies, and those of SCS were among the most improved.³⁰

26. Watershed Protection Handbook Notice 1-19, May 24, 1972.

27. Letter dated December 15, 1970, from Mr. Timothy Atkeson (CEQ) to Dr. T. C. Byerly (U.S.D.A.). Quoted in *Hearings on Stream Channelization*, *supra* note 17, at 392.

28. See Environment Memoranda 9, 10, 12, and 13 (all 1972); and 39 Fed. Reg. 19646 *et seq.* (June 3, 1974).

29. Soil Conservation Service, Advisory WS-26 (June 25, 1973); Soil Conservation Service, Environmental Assessment Procedure, May 1974.

30. *Hearings on Agriculture-Environmental and Consumer Protection Appropriations for 1973 Before House Comm. on Appropriations*, Pt. 5, at 944 (1974).

Application of NEPA to Previously Authorized Projects

The agencies differed in their treatment of projects authorized or planned prior to the law's enactment. NEPA contained no grandfather clause exempting such projects from its requirements, and required an EIS whenever any major federal action remained to be taken. The Corps and SCS applied this test in quite different ways.

The Corps directed that EIS's be prepared by its field offices for *all* projects on which any major federal action remained to be taken and that any doubt be resolved in favor of preparing the statement. While not directing that these statements include substantive review of the projects' merits in light of NEPA's policy goals, the Corps did require that EIS's be prepared and made public in fulfillment of the letter of the Act. As a result, by the end of 1971 the Corps had submitted 435 statements to CEQ, far more than any other agency except the Department of Transportation.³¹

SCS, in contrast, directed that EIS's be prepared for partially planned projects on a case-by-case basis, leaving great discretion to field officials to weigh the costs and benefits of doing so. In practice this meant that while the Corps and SCS each had between 1,000 and 1,200 backlogged projects at the time of NEPA's enactment, SCS had prepared only 87 detailed statements on water projects by the end of 1971 in contrast to the Corps' 435.³²

While it prepared far fewer impact statements, SCS did order a *substantive* review of all projects that involved stream channelization. These amounted to two-thirds of its authorized projects at the time of the directive in February 1971, which stated that NEPA was the primary basis for this review.³³ Stream channelization projects were virtually the only category of SCS actions that aroused concern about environmental impacts, so this directive amounted to a review of all SCS activities that were environmentally controversial at the time. Unfortunately, no new criteria were established to reflect NEPA's purposes. Channelization was still to be used to permit the profitable use of flood plains, though serious consideration should be given to nonstructural alternatives. No explicit relationship was established between this review and the detailed statement requirement. The purpose of the review was to group channelization projects into three categories: those with none, some, and serious environmental impacts. The categorization was to be accomplished

31. EC 1165-2-83 (March 3, 1970); U.S. Council on Environmental Quality, I 102 Monitor No. 12, at 66.

32. Soil Conservation Service, Environment Memorandum 1 at 4-5 (March 19, 1971); Council on Environmental Quality I 102 Monitor No. 12, at 66.

33. Soil Conservation Service, Watersheds Memorandum 108 (February 4, 1971).

with the participation of fish and wildlife agencies, but in practice there were significant differences of opinion between the agencies concerning appropriate classification of many projects. In some cases these classifications permitted evasion of the procedures established by NEPA.^{3 4}

The Corps sought to ensure that its actions subsequent to the enactment of NEPA were procedurally in compliance with the Act, while SCS sought to avoid involving itself with NEPA's procedures but substantively reviewed the one category of actions considered environmentally controversial. The difference is important, since NEPA's procedures were intended to be the action-forcing mechanism which would ensure implementation of its policy goals. The Corps' approach imposed a heavy paperwork burden on its staff and generated a substantial number of superficial documents, but did force a learning process throughout the organization by necessitating that NEPA-related questions be considered in conjunction with program decisions. The SCS' approach was less burdensome, but it evaded the educational process of writing EIS's and focused on environmental *controversiality* rather than environmental *impacts* as the implicit criterion for reassessment of its activities. In view of their histories and missions, SCS may not have needed the environmental education process as badly as the Corps. In any case, SCS did not initially use the detailed statement requirement to stimulate such a process.

Public Involvement

The Corps' policy statements and guidelines linked preparation of impact statements to procedures for early and repeated public involvement in project planning, including active solicitation of comments at early stages in its administrative processes. SCS, in contrast, encouraged a flow of information about proposed projects from local sponsoring organizations to the public, but until 1974 did not itself take an active role in soliciting public comments, nor did it encourage or permit early public review of EIS's.

The Corps delegated responsibility for the preparation, public disclosure, and defense of EIS's to its District Engineers and required that these actions precede submission of recommendations to

34. NEPA's EIS requirement could be evaded by striking bargains with fish and wildlife agencies concerning project design and mitigation measures, following which the projects could be redefined as having no significant environmental impacts and thus not requiring preparation of an impact statement. The danger in this practice was that other agencies and the public were not necessarily parties to these discussions, and thus non-fish and wildlife impacts that might be identified from an EIS might never surface.

Washington. It also emphasized the necessity of integrating environmental assessment into all phases of planning.³⁵ Corps guidelines stressed early and continuous liaison with interested sectors of the public to raise and resolve potential objections as early as possible, and ordered that multiple public meetings and other vehicles for such liaison be utilized during the course of planning. The agency's policy is captured succinctly in the testimony of its Director of Civil Works in December 1970: "We want [potential controversies] out just as soon as we can get them out."³⁶

SCS required local sponsors to disseminate information to the public throughout the project planning, and beginning in mid-1972 required that a first public meeting be held at the completion of the preliminary investigation report. This meeting was to include discussion of tentative agreements reached by the sponsors and SCS concerning potential alternatives. However, SCS guidelines treated the public information provision as primarily a one-way process to be initiated after tentative agreements had been reached, rather than as an active solicitation of public preferences and objections. Moreover, the guidelines defined this information process as the responsibility of the sponsoring organization, not SCS. Finally, the impact statement was to be made public only at the final stage of project review formalities, after tentative agreement had been reached on a final work plan and after Washington had reviewed the plan and the EIS.³⁷ Not until issuance of the 1973 and 1974 guideline revisions did SCS direct that draft impact statements be prepared and made public in the field, and that SCS officials actively seek out and involve four different categories of publics in their planning and decision processes.³⁸

Procedural Versus Substantive Changes

The actions that both agencies took in response to NEPA focused on the Act's procedural requirements rather than its policy goals, particularly on procedures for preparation of EIS's. However, significant differences were evident between the two agencies' water resource programs and priorities during the period; these differences

35. EC 1165-2-86 (April 30, 1970).

36. *Hearings on Administration of NEPA*, *supra* note 25, at 926 (testimony of Major General Frank P. Koisch). See also the remarks of Lt. General F. J. Clarke, Chief of Engineers, quoted in EC 1165-2-100 (May 28, 1971), Public Participation in Water Resource Planning.

37. Watershed Protection Handbook Notice 1-17, April 7, 1971, §§ 113.132(b), 113.133, 113.1331, 113.1332.

38. 39 Fed. Reg. 19646 *et seq.* June 3, 1974.

must be noted though they may have been only indirectly influenced by NEPA.

The guidelines of both the Corps and SCS were confined primarily to implementation of the detailed statement requirement of NEPA. Neither agency provided formal guidance for compliance with Section 102(2)(B), which required the development of procedures and methods for giving appropriate consideration to unquantifiable values. Nor was there guidance concerning the applicability of the law's policy goals such as preservation of diversity, achieving balance between population and resource use, enhancing the quality of renewable resources, and maximizing recycling of depletable resources. The water resource activities of the Corps' and SCS have important implications for the achievement of such goals, yet efforts of both agencies, as well as of CEQ, reflected a strong preoccupation with the detailed statement procedure rather than with the law as a whole.

Available evidence suggests that few substantive changes in proposed water projects were made by either agency as a direct consequence of NEPA. In the case of the Corps, survey responses in late 1971 indicated that less than one-fifth of the projects for which impact statements had been prepared (six per cent of authorized projects) had been affected in any substantive way as a result of NEPA. In more than 60 per cent of these cases the effect was listed as postponement rather than cancellation or significant change.³⁹ Similar survey responses from SCS indicated substantive effects on approximately six per cent of its authorized watershed planning processes. In two-thirds of these cases the effect was identified simply as a postponement. It is possible that these percentages would increase as agency efforts gradually turned to projects less fully planned at the inception of NEPA, yet such changes would have to be attributed increasingly to intervening variables rather than the specific influence of the Act. Changes in the agencies that were specifically attributable to NEPA were primarily procedural.

Despite similar preoccupation with NEPA's procedures and the similar paucity of substantive changes in their projects, important differences were evident in the two agencies' overall programmatic priorities during this period.

While the Corps did not renounce its traditional engineering

39. Survey questionnaires were mailed to all District Engineers of the Corps and all State Conservationists of the SCS in October 1971, asking a series of questions concerning effort and cost devoted to preparation of impact statements, effects of NEPA on planned actions, and other dimensions of response to NEPA. Responses were received from 75 to 90 per cent of the individuals surveyed, depending on the question.

activities, it did initiate significant program changes between 1972 and 1974. One was a pilot program of environmental reconnaissance inventories intended to develop and synthesize information on significant environmental and resource values on a statewide or district-wide basis. Another was a proposal to use strictly nonstructural measures (specifically, the purchase of flood plain lands) in three projects, a proposal which was subsequently approved by Congress in 1973.⁴⁰ A third was a new program of urban studies which grew from five pilot wastewater management studies to studies in more than 26 urban areas within one year. More than one-third of the agency's total study funds for fiscal year 1974 were devoted to this program.

Though these programs were experimental rather than central to the Corps' activities, the depth and rapidity of its plunge into urban water quality studies suggested the possibility that a major new mission for the Corps was in the making. Realizing that an increasingly urban population might oppose its traditional flood control projects, the agency was astute enough to seek authority for popular activities and to turn some of its engineering skills from rural dam construction or urban wastewater management.

SCS, in contrast, showed virtually no signs of change in the priorities of its water resource program during this period, and in fact the agency congratulated itself during its budget hearings each year because it was setting new records for water project construction during an era of environmental concerns.⁴¹ SCS testimony indicates deliberate avoidance of environmentally controversial projects in setting agency priorities, but no change in traditional purposes, clients, or types of water resource activities comparable to those of the Corps.⁴²

40. Water Resource Development Act of 1973, 42 U.S.C. § 1962d-5c (Supp. IV, 1974).

41. *Hearings on Agriculture . . . Appropriations for 1974*, *supra* note 10, at 192, 278, 328, 419; *Hearings on Agriculture . . . Appropriations for 1973*, Pt. 2, at 360, 416, 430.

42. *Hearings on Agriculture . . . Appropriations for 1974*, *supra* note 10, at Hearings, Part 2, pp. 392-393. It is important to note that the reasons for this posture did not necessarily lie within the agency. Significantly, SCS was given authority by two laws enacted in 1972 and 1973 to broaden its program (and potentially to shift its priorities), including such activities as flood plain purchase, land use inventory and monitoring, water quality management, and other environmental enhancement activities. See, the Water Resource Development Act of 1973, 42 U.S.C. § 1962d-5c (Supp. IV 1974); and the Rural Development Act of 1972, 42 U.S.C. § 3122 (Supp. IV 1974). By the end of 1974, however, it still had not been delegated the authority or provided with funds to implement these activities. Several political considerations may help to explain this circumstance, but a central one appears to be the continuing commitment of the chairman of the House Agricultural Appropriation Subcommittee, who was also an author of the Small Watersheds Act, to keeping SCS' water resources program as primarily a program of technical and financial assistance to farmers.

Changes in the Corps' program were due only in part to the influence of NEPA, and the lack of change in SCS' water program demonstrates that NEPA did not effectively compel such changes. It is likely, however, that changes were made more feasible by the existence of NEPA and the forces it set in motion. The extent to which such influence occurred is probably of far greater consequence than the limited changes in specific projects and procedures.

The crucial difference between the Corps and SCS on this count is that the Corps was able to view NEPA entrepreneurially as an opportunity for change rather than as a threat, while SCS was not able to do so.

Causes of Change

Available evidence suggests that political pressures from sources external to each agency were principal forces driving the implementation of NEPA, but that the sources and mixture of such pressures differed. In the case of the Corps these pressures were strong, reasonably unified and emanated principally from the vanguard of the environmental movement and the courts. Political pressures on SCS from the environmental movement were weaker. Only a handful of lawsuits were initiated against the SCS, and these were neutralized by counterpressure from the agency's traditional supporters in Congress. The only concerted pressures on SCS came from the fish and wildlife agencies and their constituencies, traditional foes of SCS' stream channelization programs, who seized on NEPA's interagency review requirements as a tactical instrument of opposition to those activities.

The Corps was subjected to immediate and continuing pressures to implement NEPA. From the nature of its activities and its symbolic position as the federal government's principal engineering agency, it could not doubt that it would be a principal target of environmental interest groups. It was sued for noncompliance with NEPA six times within eight months after the law's enactment and lost at least eight such lawsuits by the end of 1971.⁴³ It was sued repeatedly thereafter, and while certain general boundaries in court rulings were evident by 1973, the threat and reality of extensive litigation effectively placed pressure on the Corps to comply at least procedurally with NEPA.

Survey responses from Corps officials attributed nearly three-quarters of all NEPA-related decisions to cancel, postpone, or change projects to pressures from outside the federal government. These

43. See F. Anderson, *NEPA in the Courts* (1973).

included adverse state or local review, public controversy, or judicial decisions. Interestingly, few decisions significantly to change projects were attributed to judicial decisions, but an overwhelming proportion of all projects affected by NEPA in any substantive way were located in districts that had been subjected to at least one NEPA-related lawsuit.⁴⁴ A similar disproportion was evident in the estimates of *effort* devoted to the preparation of EIS's.⁴⁵ These findings suggest that lawsuits may have had indirect beneficial consequences considerably greater than their modest effectiveness in challenging specific projects.

The Soil Conservation Service, in contrast, was not subjected to overwhelming pressures to implement NEPA. The first NEPA lawsuit was not initiated against the SCS until late 1971.⁴⁶ While by 1974 it had been defeated on several procedural issues in that particular case involving the Chicod Creek watershed in eastern North Carolina, it had been sued only half a dozen times and did not lose a second case until early 1975. Its only politically controversial practice was stream channelization, an activity which various fish and wildlife agencies and several Congressional committees were attempting to stop. But this was a long-standing battle in which NEPA simply provided a new tactical weapon rather than a new political force.⁴⁷ Unlike the Corps, SCS could point to its conservation label and to the fact that most of its activities were not environmentally controversial. Insofar as Congressional pressures were concerned, its own oversight committees were both solidly in favor of the use of channelization and powerful enough to defeat any pressure that the Conservation and fish and wildlife committees were attempting to generate.⁴⁸

44. Twenty-seven per cent of the districts responding had been sued at least once, but 100 per cent of the projects cancelled, 58 per cent of those postponed, 35 per cent of those significantly changed, and 55 per cent of all projects in these three categories were located in these districts.

45. Districts that had been sued reported a mean of 11 per cent more effort (median nine per cent) for noncontroversial projects and 32 per cent more effort (median 42 per cent) for controversial projects than districts not sued.

46. *Natural Resources Defense Council v. Grant*, 341 F. Supp. 356 (E.D. N. C. 1972). The Chicod Creek project.

47. See *Hearings on Stream Channelization*, *supra* note 17, a lengthy series of hearings held by the Subcommittee on Conservation and Natural Resources of the House Committee on Government Operations, chaired by Rep. Henry Reuss. Parallel hearings were held in the Senate. Even in the NEPA oversight hearings in December 1970 (*Hearings on Administration of NEPA*, *supra* note 25), virtually all questioning of SCS centered on its authority to require fish and wildlife enhancement measures rather than on its implementation of NEPA per se. These hearings were held by the Subcommittee on Fisheries and Wildlife Conservation of the House Committee on Merchant Marine and Fisheries, chaired by Rep. John Dingell. This committee was the House sponsor of NEPA, but apparently was more concerned with a particular traditional battle in its questioning of the SCS.

48. Rep. Reuss' efforts to withhold funding of channelization projects were defeated;

Survey responses from SCS officials indicated that external pressures played a lesser role in affecting projects than in the case of the Corps. Such pressures reportedly influenced only 40 per cent of project postponements by SCS, as opposed to nearly three-quarters of all NEPA-related project modifications by the Corps. Obviously, judicial decisions played no role at all during the period prior to the survey, since none had yet been issued. There is at least circumstantial evidence, however, that the Chicod Creek decision against the SCS in early 1972 may have helped bring about the subsequent series of reversals in SCS policy mentioned above.

Interestingly, the dominant force influencing NEPA-related project changes by SCS was comments by other federal agencies, combined with SCS internal reevaluation or nonfederal pressures. Such comments were the most frequently reported cause of project postponements and the second most frequently reported cause of significant changes in projects. This finding tends to confirm that pressures on SCS originated primarily with the federal fish and wildlife agency and its constituencies rather than with the vanguard of the new environmental movement that was pressuring the Corps.⁴⁹

Similarities in Response

In highlighting differences between the agencies' responses it is important to keep in mind their substantial similarities in other respects. Few clear differences could be discerned, for instance, in the average quality of the EIS's submitted by the Corps and SCS during this period, although the Corps' *best* statements were distinctly more sophisticated than any prepared by SCS. There was little difference in the total number of project postponements or changes reported by field officials of each agency, though they attributed these changes to different factors. Finally, though Corps policies appeared more enlightened than those of SCS, in practice it does not appear to have enforced these policies systematically, and many extremely superficial EIS's were merely approved and passed along rather than returned to the field for improvement. These similarities suggest caution in attempting sweeping conclusions from the contrasts, though they do not diminish the importance of the differences themselves.

and the red tape hearings, *supra* note 18, were held by the Public Works Committee at the same time as the stream channelization hearings. They were used by the SCS Watersheds Administrator as a platform for complaints about Reuss' efforts. *See, e.g., Hearings on Red Tape, supra* note 18, at 217-18.

49. Federal agency comments were cited by SCS state conservationists among the causes of 48 per cent of the postponements and 27 per cent of the "significant changes."

EXPLANATION OF RESPONSES

How might the differences between the two agencies' responses to NEPA best be explained? Three different explanations might be attempted; one interpreting agency behavior as that of rational actors pursuing different objectives, a second attributing behavior to differences in organizational characteristics, and a third emphasizing differences in the political pressures operating on them.⁵⁰ No one is complete in itself, but taken together they offer what appears to be a reasonably detailed picture.

Objectives

Differences in *program* objectives do not explain variations in agency responses to NEPA since the two water programs showed similarity in their objectives and criteria for water resource development actions. SCS' range of authorized purposes is narrower than that of the Corps, but there is no reason why it could not have used NEPA (as the Corps did) as a lever to broaden that field of purposes.

Differences in *agency* objectives provide a better explanation, one particularly appealing to supporters of SCS. SCS is a conservation agency, the Corps an engineering one; it is not surprising that they should respond differently to NEPA. Yet the direction of response is the opposite of what one might expect, with the Corps appearing to lead the federal government in implementation of the law and SCS lagging several years behind. One would have expected SCS to take an early and strong role in interpreting and implementing NEPA because the Act's mandate was closely related (though not identical) to its traditional mission. NEPA could have provided SCS with a broad lever for conservation of the physical environment to use against the shortsighted economic criteria of other agencies. Similarly, one would expect the Corps to dig in its heels and resist a mandate so divergent from its traditional mission and practices. As this study demonstrates, however, the opposite occurred.

Organizational Characteristics

An analysis of the differences between the agencies as bureaucratic organizations leads to another promising explanation. Arguably the Corps was more responsive to NEPA because it is a larger and more autonomous agency, and its broad range of activities permits flexibility to change priorities without threat to organizational survival. Moreover, it builds larger projects whose budgets can more easily accommodate the expense of additional environmental studies.

50. These three approaches loosely follow Allison; see G. Allison, *Essence of Decision: Explaining the Cuban Missile Crisis* (1971).

These organizational characteristics help explain several observed differences between the agencies' responses to NEPA, but leave other important questions unanswered. Why did the agencies differ so sharply for four years in applying NEPA's policy to their water resource activities? Why did SCS identify environmental impacts primarily as affecting fish and wildlife, while the Corps adopted a more holistic approach to the environment? And why did the agencies display such divergent attitudes towards public involvement? These differences are not explained by organizational characteristics alone, though such characteristics undoubtedly played an important contributory role in the overall pattern of agency behavior and response.

Political Pressures

In confronting these questions, a plausible explanation emerges from a comparison of the sets of competing pressures in each agency's political environment. Differences in the mixtures of these political pressures did exist during the period studied, and were perceived as being different by responsible field officials of the two agencies.

The Corps was the subject of numerous attacks during this period by ad hoc coalitions and groups in the vanguard of the new environmental movement, and the pressures brought were converted into credible threats by unprecedented numbers of injunctions granted against Corps projects by the federal judiciary. The Corps was also subjected to widespread notoriety in the press as a central political symbol of the callous modification of natural environments and was vulnerable (despite the vaunted political strength of its beneficiaries' lobby) to changes in the attitudes and preferences of the general public. It appears there was sympathy for the Corps' image problem in key quarters, including its Congressional oversight committees and the Office of Management and Budget. As a result it was *permitted* occasionally to take costly and unprecedented measures in response. These measures included making new studies, hiring personnel, involvement in urban programs, and flood plain acquisition.

SCS appears to have been insulated from the pressures of opponents through this period by its lower profile with the environmental movement and the aggressive protection of its Congressional overseers. SCS did not initially have the image problem that the Corps did because it was a smaller and more rural agency, less visible to the predominantly urban and suburban constituents of the environmental movement. Also, its engineering activities were less obvious under the broad umbrella of soil conservation. Perhaps as a

result, it was not authorized to make costly or innovative changes in response to the law.

SCS eventually developed an image problem as the press and Congress began investigating stream channelization, but this problem was limited to that category of activities rather than the mission of the agency as a whole, and political forces were not united even against this activity. In contrast, its Congressional oversight committees pressed actively and effectively for the continuation of its traditional activities, including channelization. Not until 1972, and more forcefully in 1974, did SCS change its posture towards NEPA. This occurred after its first defeat in a NEPA lawsuit, the retirement of its outspokenly traditionalist watershed administrator, and the settling of boundaries of acceptable response to NEPA by other agencies including the Corps.

CONCLUSION

It appears that NEPA did force action by the federal water resource agencies, but that it did so in different ways and with varying degrees of effectiveness. Both organizational characteristics and political pressures were of major significance in determining the magnitude, speed, and character of the agencies' responses.

First, even in the agencies' official policies and guidelines, significant differences in interpretation could and did occur. Though public positions do not provide complete indications of agency behavior, since they may be reinforced or contradicted by other factors (such as budgetary decisions, vigor of enforcement, or attitudinal differences among field officials), they do demonstrate the crucial role played by administrative discretion in the implementation of legislative directives.

Second, implementation of NEPA's procedures did not alone force implementation of NEPA's policy goals. The evidence presented indicates that during the first few years, NEPA's procedures were implemented largely without reference to its substantive purposes. The agencies acted in the context of sharply divergent interpretations of the relationship between the Act's policy and their own dam construction and stream channel excavation activities. One agency perceived the law as a strategic opportunity, the other as a tactical threat; both concentrated principally on procedures rather than on policy goals.

Third, the environmental impact statement has proved to be not a single action-forcing mechanism, but the pivotal document of three such mechanisms which operate in different ways on different

agencies. These mechanisms are internal review as the EIS accompanies action proposals upward through the initiating agency, inter-agency circulation of the EIS for review and comment by affected federal agencies, and publication of the statement to nongovernmental individuals and interest groups for review.

Each mechanism has played an important role in influencing implementation of NEPA. The first serves an educational function, forcing the consideration of new questions in project planning and providing a new warning system for potential controversies. The second provides a new instrument in old bureaucratic battles and a source of information to agency officials concerning actions potentially in conflict with their own.^{5 1} The third provides a short-term tactic for redistributing access to federal decisionmaking processes, for delaying (though rarely stopping) federal action proposals, and for indirectly forcing fuller implementation of NEPA's procedures.

Fourth, the last of these mechanisms, EIS review by nongovernmental individuals and groups, was accompanied by the threat of ad hoc involvement and legal action. This made it the most effective action-forcing mechanism contributing to NEPA implementation during this initial period. It is not clear whether this mechanism is a force that can sustain its effectiveness indefinitely, but no agencies have made substantial efforts to implement NEPA in the absence of effective external pressures to do so.

Despite these initial conclusions, the long-term implications of the agencies' responses to NEPA during this period are unclear. Litigation was an important tactic in the short run, but its effectiveness was limited to actions opposed by financially able and politically sophisticated plaintiffs. Its effectiveness over a longer period might be limited by the unwillingness of the courts to substitute their judgments for those of the agencies on substantive matters, once standards for procedural compliance have been established satisfactorily. One perennial possibility is that Congress will weaken NEPA's requirements by amendment.^{5 2}

It is conceivable that some, if not most, of the effectiveness of

51. For the value of such statements to state agencies, see M. Hufschmidt, *Environmental Statements and Water Resource Planning in North Carolina* (Water Resources Research Institute of the University of North Carolina, June 1974, Report No. 94).

52. By the end of 1974 such efforts had succeeded in a small number of specific instances, e.g., emergency licensing of nuclear power plants, exemption of water quality permit activities of EPA, construction of the Trans-Alaska Pipeline System, and a few others. But no general amendments to NEPA had yet been enacted despite several campaigns to do so. See U.S. Congress, Senate Comm. on Interior and Insular Affairs, *National Environmental Policy Act of 1969: An Analysis of Proposed Legislative Modifications—First Session, 93rd Congress* (Comm. Print 1973), prepared by the Environmental Policy Division of the Congressional Research Service, The Library of Congress.

political pressures by environmentalists was a short-run phenomenon and not indicative of genuine shifts in the agencies' priorities. NEPA has not changed the legal relationships between agencies and their clients, nor has it altered the natural communities of interest between construction agencies, such as the Corps, and their beneficiaries in the construction industry. The Act has not overturned long-term forces such as organizing costs that tend selectively to favor producer over consumer interests in the political process,⁵³ nor has it altered the structure of Congressional committees responsible for oversight of agencies with development missions which are still disproportionately populated by advocates of those missions. Programmatic changes that did occur during this period were partly influenced by NEPA, but an even more important influence was political forces operating independently of environmental policy purposes.

Federal agencies have been preoccupied with NEPA's environmental impact statement requirement since the law's enactment. However, NEPA contains a number of other substantial provisions for the achievement of its purposes which have not yet been tested. CEQ, for instance, could issue tougher and more explicit guidelines concerning overall implementation of NEPA and link EIS's to the achievement of NEPA's substantive policies. While CEQ lacks the authority to veto agency actions, its guidelines would undoubtedly be treated as important tests in subsequent judicial decisions. Lawsuits could be based on other provisions of NEPA, such as failure to develop procedures for appropriate consideration of unquantifiable values, promotion of imbalance between population and resource use, or degradation of the quality of renewable resources.

The most important failure of NEPA so far is not the attenuation of its tactical mechanisms for forcing action in individual cases, but the rarity of its influence upon truly major federal decisions at the policy, programmatic, and legislative levels. The enactment of NEPA was an attempt to bring about administrative change by changes in procedures, and it may yet prove to have achieved some enduring success. However, such success should probably be attributed to the maintenance of political forces that have been engendered by the Act and the prevalent climate of environmental and related values, not to the direct effect of NEPA procedures on agency activities.

53. See Downs, *Up and Down with Ecology: The "Issue-Attention Cycle,"* *The Public Interest*, Summer 1972, 38-50; and M. Olson, *The Logic of Collective Action* (1968).