

The Environmental Impact Statement Process

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Presented at the Environmental Impact Statement Seminar of  
the Twin Cities Federal Executive Board, Minneapolis, Minnesota,  
on February 6, 1973.

Twin Cities  
Federal Executive Board  
Environmental Impact Statement Seminar  
February 6, 1973

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Federal Executive Board  
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Good morning ladies and gentlemen. I'm pleased to be with you today to discuss the environmental impact statement process. Professor Steinhart has talked this morning on the history and significance of NEPA. I would like to focus on how the impact statement process operates.

I. General Background

I would like to start our discussion by briefly examining the basic documents which form the impact statement process. The process has given rise to a large number of documents, of various types, setting forth hundreds of different requirements; and the importance and applicability of all these documents is sometimes confusing.

A. Basic Laws, Executive Orders, and Regulations

The basic document, of course, is the National Environmental Policy Act of 1969 (NEPA). Everything done in the impact statement process must be consistent with the words of the Act. In case there is an inconsistency between the words of the Act and guidelines or regulations issued by an agency,

the words of the Act prevail.

Next in importance is the guidance issued by the Council on Environmental Quality (CEQ). Shortly after the passage of NEPA, the President issued Executive Order 11514. This Executive Order requires agencies, in general terms, to implement NEPA and, in specific terms, directs CEQ to issue guidelines to Federal agencies for the preparation of impact statements. As a result of the Executive Order, two sets of guidelines currently exist.

The first set was issued on April 23, 1971. They set up the impact statement process, and, in particular, the concept of draft and final impact statements. As you know, there is nothing in the statute which refers to a draft statement or a final statement. These concepts are the progeny of CEQ, and were developed to facilitate the consultation among Federal agencies that the statute requires. The guidelines set up overall, a comprehensive procedural structure for the impact statement process. The first place to go to with a question about how the process should work, after consulting the statute, is these CEQ guidelines.

The guidelines are somewhat dated, however, and this has resulted in a second set of guidelines being issued by CEQ on May 16, 1972. This second set is supplementary to the first set, and is in the form of recommendations to agencies rather than formal regulations. The second set

essentially tackles a number of questions on procedure and on the contents of an impact statement that arose in the year's experience under the first set of guidelines.

Next in importance, after the statute, the Executive Order, and the CEQ guidelines, are the agency regulations. Separate regulations have been developed by each Federal agency. They exist not only for major agencies like DOT, HEW, and HUD, but also for the smallest agencies of the Federal Government such as the Canal Zone Authority, the National Capital Planning Commission, and others of comparable size. These regulations establish the particular policies and procedures to be followed by that agency in implementing NEPA. Agencies have great latitude in how they go about implementing NEPA, as long as they fulfill the requirements of the statute, the Executive Order, and the CEQ Guidelines. Because this leaves agencies with many options, and because Federal programs within an agency frequently operate so differently, one often finds, especially in the larger agencies, that an agency has issued both general agency-wide regulations and then different implementing regulations for each of its major programs or bureaus. For example, the Department of Interior has general agency-wide regulations plus specific separate regulations for its Bureau of Reclamation, its Bureau of Land Management, its Bureau of Mines, its Bureau



of Indian Affairs, its National Park Service, its U.S. Geological Survey, and so forth. All these regulations set up basic policies and procedures to be followed by the agency (or bureau, or department) in implementing its responsibilities under the National Environmental Policy Act.

These, then, are the major rules governing the impact statement process and their basic interrelationships. The next question, of course, is who are the parties in the impact statement process and what are their roles; what do they do?

#### B. Role of Various Groups in the NEPA Process

The first party is the Council on Environmental Quality. It's a small group. There are about 60 staff, of which only about 15-20 people are primarily involved in the impact statement process. But these 15-20 get a great deal done. They are engaged in three basic activities. First, as talked about a little earlier, they write the guidelines which are the primary rules of the road. Second, they review agency NEPA procedures, frequently suggest changes to them, and generally monitor how adequately each agency is overall implementing NEPA. Third, they troubleshoot problem projects. In the case of such a project, they generally attempt to mediate the disputes, although on occasion they even act as an advocate in the dispute. CEQ does not, however, approve projects.

It has no authority to approve or disapprove projects, nor does it have the staff resources even to read more than a very small fraction of the impact statements it receives. All impact statements must be filed with CEQ, but CEQ is very selective in determining those in which it will intervene.

The next party is the Environmental Protection Agency. The Environmental Protection Agency is like all other Federal agencies in that it, too, must prepare impact statements. EPA is different, however, in that it is the only Federal agency required by law to review and comment in writing on virtually all impact statements that are issued by other Federal agencies. Section 309 of the Clean Air Act Amendments of 1970 requires the Administrator of EPA to review and comment in writing on all those actions subject to the impact statement requirements of NEPA that relate to any of the authorities of the Administrator - that is all those actions that relate to air, water, solid waste, pesticides, radiation, or noise. Section 309 further requires that EPA make its written review of a Federal agency's action public, and that, if the Administrator determines the action to be unsatisfactory from the standpoint of environmental quality, he also make this determination public and refer the action to CEQ. EPA has recently issued, in EPA Order 1640.1, the policies and procedures it follows in reviewing Federal agency actions and

fulfilling its responsibilities under Section 309.

After CEQ and EPA come the Federal agencies of the Government. It is the Federal agencies to whom NEPA is primarily directed. NEPA itself creates no obligations or responsibilities on State or local agencies or public citizen or private industry groups. In the section on impact statements, NEPA directs Federal agencies to do two things. The first is mandatory. The Act requires Federal agencies, before they reach a decision on a proposed major action which may significantly affect the environment, to analyze in detail the likely environmental consequences of the action, and to make this analysis available to the public. This is the heart of the impact statement process. The second responsibility created by NEPA is, contrary to the first, highly discretionary. NEPA requires each Federal agency to make itself available to other Federal agencies for consultation on the environmental effects of the other agencies' proposed actions. As a result of this, each Federal agency is involved not only in preparing its own impact statements, but also in consulting (or commenting) on the statements prepared by other Federal agencies.

Nothing in NEPA extends the obligations imposed on Federal agencies to State or local agencies or public citizens or private industry. In practice, however, these groups are

involved in the same two roles as are Federal agencies. Federal agencies frequently request these groups to prepare an environmental analysis as part of the documentation to be submitted to the Federal agency before the agency will consider the action requested of it. This Federal agency request of applicants could be termed "passing the buck." The Federal agency is responsible for the environmental analysis, but it often requires applicants to do the first round of homework necessary to prepare the environmental analysis. This, I think, makes a lot of sense, because it is the applicant who in the beginning has all the information on how the project is structured and what it is likely to do.

State and local agencies, and public citizens and private industry, are also involved in the second part of the impact statement process. Although Federal agencies are not required to consult with these non-Federal groups under the terms of the statute, these groups are given an opportunity, under the CEQ guidelines, to comment on and criticize the environmental analysis prepared by a Federal agency. One should not underestimate the power of this opportunity. All the comments on an impact statement follow the impact statement through the agency review process, and are made available to the public, the President, and CEQ. A project can be halted if the comments show that the environmental analysis is clearly faulty or the project clearly unjustified.

### C. Action by the Courts in the NEPA Process

CEQ, EPA, other Federal agencies, State and local agencies, and public citizens and private industry are the main groups in the impact statement process - with one exception. The courts have shaped the impact statement process in a manner almost unparalleled in the history of the development of Federal programs. Although this role of major architect may be due in part to the current public consciousness of the environment as an important social issue, the activism of the courts is probably more directly a result of the great ambiguity in the words of the statute. NEPA has been called, by leading judges and legal scholars, one of the most opaque statutes ever written. The types of questions that are being directed to the courts are ordinarily addressed at the time a bill is drafted and enacted by Congress. This was not, however, the case with the National Environmental Policy Act. One simply cannot find in the statute or its legislative history the answers to a number of major questions surrounding the impact statement process. As a result, the courts have been called on, in the name of "interpretation," to develop answers to major policy questions.

Because of this situation, a detailed discussion of the impact statement process demands constant reference to court decisions. Many - perhaps most - of the major points governing the process are a result of pronouncements by a

court. In many cases, there is no source to which one can look for answers to major questions other than these pronouncements.

The courts have to date issued their pronouncements in three general areas. First, they have issued pronouncements on the abstract interpretation of the Act. For example, the NRDC vs. Morton decision addresses itself in detail to the meaning of the requirement to analyze alternatives in Section 102(2)(C) of NEPA. Had the statute been specific on this point, the NRDC v. Morton decision would not be anywhere near the landmark decision that it is. The second major area in which courts have issued decisions involves the validity of an agency's regulations implementing NEPA. Here we have, for example, the Calvert Cliffs decision and the Greene County v. FPC decision. They primarily concern the extent to which an agency's general regulations comport with the court's interpretation of the legal requirements of the Act. Finally, in the third area, the courts have issued decisions on whether an agency, in taking a specific action, has complied with the Act. The Hanly v. Kleindienst decision, for example, looks to whether the specific procedures followed, in GSA's decision to build a Federal jail in Manhattan, comply with the Act.

Because of the number and the extraordinary importance of court decisions in these three general areas, we at EPA find ourselves devoting substantial resources just to keeping track of the decisions and keeping EPA staff involved in the NEPA

process abreast of them. As observers of NEPA in other countries have remarked, the Act sometimes seems to have been primarily tailored to the objective of keeping lawyers employed rather than improving the environment!

## II. Overview of Basic Steps in the Impact Statement Process

It may be helpful, before launching into a discussion of the specific requirements of the impact statement process, to briefly go over the major stages in the process. It is frequently useful to think of the process as involving four major stages. First, a Federal agency has to decide whether a proposed major action requires the preparation of an impact statement. Second, if an impact statement is required, an agency must prepare a draft statement. If no impact statement is required, the Federal agency can directly proceed with its review of the proposed action, although if the decision not to prepare a statement is questionable, the agency would be well advised to document the basis for its determination before going further. Third, the Federal agency must circulate its draft statement for comment and prepare a final statement. Circulation of the draft means sending the draft to all groups directly interested in the proposed action - other Federal agencies, State and local agencies, CEQ, and public and private industry groups. The Federal agency must allow these groups a reasonable time to comment on the draft. This is usually considered to be 30 to 45 days. The agency must then prepare the final statement by revising the draft to reflect the agency's response to all the major comments received. Finally, in the fourth stage, the agency proceeds to reach a decision on the proposed action in



light of the analysis set forth in the final impact statement, and other factors relevant to the decision-making process. Herein lies a murky area which perhaps we can discuss later today. I would be particularly interested in your views on how the final impact statement could, or should, be integrated into an agency's decision-making process.

These four stages very briefly outline how the impact statement process operates. I think it may be useful now to look into each of these steps in some greater detail.

### III. Deciding Whether An Impact Statement Is Required In A Particular Case

#### A. General Requirements

An environmental impact statement is required whenever a Federal agency proposes to take a major action which is likely to significantly affect the environment. This test of whether an impact statement is required can be reduced to three sub-tests. First, is a "Federal action" involved? Second, is the action "major?" And third, is the action likely to "significantly" affect the environment?

The concept of what actions or projects are Federal for purposes of NEPA had been relatively straight-forward until the last year or so. One looked to the overall project, and if the Federal Government provided any essential component of it, then the whole project was Federal for purposes of NEPA. Thus, if a Federal permit or license was required before a project could proceed, an impact statement was required even though the project itself was to be wholly funded, constructed, and operated by private groups. This was the case, for example, of the Trans-Alaska pipeline. Another large group of projects for which impact statements were required resulted from the Federal Government's funding activities. If any Federal funds were provided for a project, the whole project became a Federal project for purposes of NEPA. This was the case, for example, of highways partially funded by FHWA, or sewage

treatment plants partially funded by EPA. Finally, there was the group of activities directly and wholly undertaken by a Federal agency. These were the clearest examples of Federal actions and consisted of such projects as the detonation of a nuclear test blast in Amchitka, Alaska, or the Department of Agriculture deciding to spray national forests with a new pesticide. These three groups of activities - licensing activities, funding activities, and activities directly and wholly undertaken by the Federal Government - constituted the traditional groups of Federal activities subject to the impact statement process of NEPA. There were in addition to these major groups a few minor groups, such as proposals of legislation or major policy-making, but they need not concern us here.

In the last year or so, however, the concept of what activities are Federal activities for purposes of NEPA has become much more complex. I think a recent case will highlight the difficulty sometimes involved. In the Sierra Club v. Volpe case, the court held that reconstruction of a segment of highway was a Federal action even though no Federal funds were to be used in the reconstruction. The case concerned a portion of State Highway #1 in California. Federal funds were used to expand the northerly portion of the highway, and Federal funds were likely to be used to expand the southernly portion.

A part in the middle - a 6.3 mile segment called the Devil's Slide By-Pass - was also planned for Federal funding, until environmental groups requested that an impact statement be prepared. According to the court, the Federal and State officials apparently then decided to get around the requirement to prepare an impact statement by foregoing Federal funds for this controversial segment.

The court ruled that agencies may not circumvent NEPA by dividing up a unified highway project into piecemeal segments. This would thwart the purpose of the Act. The court ruled that a statement had to be prepared. Had the court ruled otherwise, agencies would have been able to divide up a project into those portions which might result in significant environmental damage and those which would not, construct these latter portions without the need to prepare an impact statement, and then bootstrap themselves into justifying the finishing, damaging parts. From this point of view, the court's decision makes a lot of sense. At the same time, however, it greatly complicates the concept of what constitutes a Federal action for purposes of NEPA.

Apart from the requirement that an action be Federal, an action must also be "major" and likely to "significantly" affect the environment before an impact statement needs to be

prepared. I am not able to offer you much elucidation of what the word "major" means. Neither the CEQ Guidelines nor any court decisions of which I am aware effectively address this question. Perhaps the best rule of thumb to follow is that when a Federal action is likely to significantly affect the environment, it is likely to be a major action for purposes of NEPA.

One can do a little better in helping define the concept of "significantly" affecting the environment. It is clear from the CEQ Guidelines and court decisions that the environment is to be thought of in broad terms for purposes of deciding whether it is likely to be significantly affected. The environment is not to be considered just in terms of air or water pollution or of physical changes in the land. The environment also includes the social environment. For example, in the Hanly v. Kleindienst case, the court directed the GSA before constructing its now infamous jail in Manhattan, to consider such matters as exposure of neighbors and passersby to drug addicts, and potential for increased crime in the nearby area. I think one should swiftly add that the court was not asking the impossible. The matters the court asked GSA to investigate are clearly very difficult ones with which to come to grips. What the court was saying, I think, is that one has to look beyond such relatively superficial effects such as generation of garbage or air pollution, and in good faith attempt to consider what the overall effect on the human environment might be. This generally includes examining potential

social as well as physical effects.

There is, then, a notion of what the range of environmental effects is that must be considered. To decide whether these effects are significant for purposes of NEPA, the court in the Hanly v. Kleindienst case suggested two tests. First, the court said that one should look to the extent to which the proposed action will cause adverse environmental effects in excess of those created by existing uses in the affected area. Thus, the generation of 80 decibels of noise might not be significant in a noisy part of a downtown area, but it could be significant in a quiet area near a hospital. One thus has to look at adverse effects not only in terms of their absolute magnitude, but also in terms of the existing degree of degradation in the affected area.

The second test proposed by the court in the Hanly v. Mitchell case is to look at the cumulative harm that may result from the addition of the adverse effects of the project to existing poor environmental conditions in the affected area. The court waived that one must look out for "the straw that breaks the back of the environmental camel." Even a small amount of additional pollution in an area already heavily polluted might have very significant environmental effects.

These are the general requirements establishing when an impact statement must be prepared. The proposed action must involve the Federal Government; the Federal involvement must be a major action; and the action must be likely to result in significant effects on the quality of the human environment. The next question, of course, is who decides whether a proposed action meets these requirements. Who applies these tests?

B. Who Decides Whether An Impact Statement Is Required -  
Role of the "Responsible Official"

The statute states that there is a person, called the responsible official, charged with preparing any environmental impact statement that may be required. Each agency's regulations implementing the statute define who that person is. In some cases, it is a single person for the whole agency. In other cases, it is a different person within the agency depending on the particular agency program for which an impact statement is to be prepared. In almost all cases, the official charged with preparing the impact statement is also the person charged with making the decision of whether an impact statement is required. In any particular situation, to find out who the responsible official is, one must consult the Federal agency's NEPA regulations. For EPA, for example, the same responsible official is charged with deciding both whether an impact statement is required, and, if one is required, with preparing

the actual statement. Designation of the responsible official depends on the EPA program involved, and is generally either an EPA Regional Administrator or an EPA Assistant or Deputy Assistant Administrator. In the case of EPA's funding of sewage treatment projects, the responsible official is the Regional Administrator in whose area the grant would be made. In the case of EPA's funding of research projects, the responsible official is EPA's Assistant Administrator for Research and Monitoring. These delegations or designations are all explicitly set forth in EPA's NEPA regulations.

#### C. When Must the Threshold Decision Be Made

Finally, there is the question of when in the decision-making process the decision of whether to prepare an impact statement needs to be made. In the first instance, one must here also consult an agency's NEPA regulations. But unlike the designation of the responsible official, which is wholly within the discretion of the agency, there are several guiding principles which constrain determination of when the threshold decision must be made. First, the threshold decision must be made prior to final agency action. NEPA requires that, if a statement is to be written, the statement must be available to accompany the proposed action through existing agency review processes. Although stating the constraint in this



abstract way may not be very useful in a particular case, the intent of the statute on this point is reasonably clear. An impact statement, if it is prepared, is to be used. One should not prepare an impact statement merely as the final documentation for a decision that has already in fact been made. This would turn the impact statement process into a mere paper work exercise instead of the decision-making tool it is intended to be.

Second, one has to decide on whether to prepare an impact statement far enough in advance of the final agency decision to comply with the time requirements set forth in CEQ's guidelines. The guidelines state that not less than 30 days must be provided for review of the draft statement, and that an agency should not take final administrative action on a proposal prior to 30 days after the final impact statement has been released to the public. The guidelines also state that this final administrative action should not be taken sooner than 90 days after release of the draft, although this 90 day period and the 30 day period after filing the final statement may run concurrently to the extent that they overlap. Thus, one must decide whether an impact statement is required far enough in advance to be able both to write the statement and to comply with these CEQ time requirements. In exceptional cases CEQ will waive part of the time requirements. For good cause shown, they will sometimes waive part of the 30 day waiting period after the final statement has been filed, although

they are reluctant to do so in other than very extraordinary situations.

If one reflects on this timing question, I think a profound aspect of the whole impact statement process emerges. NEPA assumes that at a single point in the development of a project, an agency will decide to prepare an environmental analysis. This is analagous to saying that at a single point in the development of a project, an agency will decide to prepare a cost analysis. But cost analyses are not very helpful if held up until the end of the planning of the project. Rather, cost analyses need to be prepared as rough approximations during the initial planning of the project and gradually be refined more and more as the planning of the project proceeds and as alternatives are analyzed and perhaps discarded. In this way, the cost analysis at each stage in the planning process is appropriate to the decisions to be made at that stage. The project can be scrapped or modified if it appears to cost too much, and significant resources will then not have been wasted because of lack of understanding of basic unacceptable high costs of the project. Consideration of environmental factors associated with a project should proceed in much the same way as this consideration of cost factors. One starts with a very rough approximation of the environmental effects of the project, and gradually refines this environmental analysis as the concept of the project is developed. If approached in this way, the

NEPA-required impact statement emerges in the normal course of events. No formal decision on whether to prepare an impact statement is then required, and the need for the statement ceases to be a jolt to an agency's operations. And the crucial goal of NEPA - consideration of the environment in the planning of a project - will have been accomplished. The General Accounting Office issued a report on May 18, 1972 on improvements needed in Federal efforts to implement NEPA. One of the main points in their report was that agencies frequently waited until far too late in their planning of a project before considering possible environmental effects. The crash effort at the end of the planning of a project that resulted was almost always highly disruptive of the agency's program operations and frequently of little practical use.

#### IV. Writing a Draft Statement

##### A. Who Writes the Draft Statement?

Assuming that a decision is made to prepare an impact statement, the next major question is who should write the statement? Here it is frequently helpful to distinguish between where responsibility falls for issuing the formal draft impact statement which is circulated for comment and who may prepare environmental analyses as input to the formal draft impact statement. Responsibility for issuance of the formal draft impact statement rests with the Federal agency proposing to take the action. The Federal agency may not divest itself of this responsibility. The Federal agency may, however, request applicants to prepare environmental analyses to be used in the preparation of the formal statement. In some cases, these environmental analyses may be sufficiently detailed and comprehensive so that little additional analysis is required of the Federal agency. In other cases, these environmental analyses may represent only a small step towards preparation of the formal draft statement. The degree of assistance provided by applicants is dependent on how the Federal agency decides to structure its preparation of impact statements. In all cases, however, it is the Federal agency which has final responsibility for the draft impact statement.

Several examples may clarify the different procedures which are followed. EPA, in its program for funding sewage treatment plants, requires applicants for a grant to submit

documents called environmental assessments along with their applications. These environmental assessments must cover the basic topics which are covered in a formal environmental impact statement. EPA uses these assessments to help it decide whether an impact statement needs to be prepared. If one needs to be prepared, EPA uses the assessments in drafting the impact statement. EPA's regulations specifically provide, however, that the EPA official in charge of writing the statement must assume responsibility for the reliability and comprehensiveness of all the data and analysis in the statement, including that provided by the applicant in his environmental assessment.

In a number of other EPA programs, there are no applicants to provide environmental assessments. For example, in EPA's funding of a demonstration project to show the applicability of newly developed technology, there frequently is no identified outside party at the time EPA must reach a decision on whether to prepare an impact statement. In this case, the EPA official in charge of the proposed project must do both the initial environmental analysis necessary to decide whether an impact statement is required, and also the complete writing of a draft statement.

The Federal Highway Administration (FHWA) follows a somewhat different procedure in its funding of highways. Whereas EPA uses an applicant's environmental assessment as input to the writing of the draft statement, the FHWA looks to

the State highway agency for the full preparation of the draft statement. The FHWA reviews this draft statement and takes responsibility for its contents. But the writing and analysis is fully performed by the State agency.

A number of court cases have recently arisen on the question of the extent to which a Federal agency may delegate preparation of a draft impact statement to an outside group. In the National Forest Preservation v. Volpe case, the court held that the FHWA's delegation of the writing of the statement to the State highway agency was not a violation of NEPA. In the Green County v. FPC case, however, the court held a different view. In that case, the court said that the FPC had abdicated a significant part of its responsibility by circulating a statement prepared by the Power Authority of the State of the New York (the applicant) as the draft environmental impact statement. The court ordered the FPC to revise its procedures to provide that the FPC would henceforth prepare its own draft statements.

At the present time, then, courts disagree on the extent which an agency may delegate preparation of the draft statement. It will probably take a year or two before this issue is finally resolved.

#### B. Who Pays the Cost of Preparing the Statement?

Since applicants are often requested to do environmental analyses as part of the Federal agency's responsibility to

issue an impact statement, the question of who foots the expense of these environmental analyses frequently arises. For the answer to this question, one must look to the particular agency's NEPA regulations. Some agencies make no provision for reimbursement to applicants for the cost of the environmental analyses. Other agencies, however, provide that the applicant's costs in preparing the environmental analyses can properly be considered as part of the project's overall costs and therefore eligible for reimbursement by the Federal agency. EPA has such a provision in its NEPA regulations covering sewage treatment plant grants, and this results in applicants being reimbursed up to 75% of their cost of preparing the environmental analyses to be submitted to EPA. To decide in any particular case, then, whether an applicant can be reimbursed, one must consult the regulations of the relevant Federal agency. (I might add, parenthetically, that there are no Federal agencies which to my knowledge charge an applicant for the Federal agency's own costs in preparing an impact statement. Although Federal agencies sometimes reimburse applicants, I do not think any applicants have ever been requested to reimburse the Federal agency for its own costs.)

### C. Contents of the Impact Statement

We come, then, to the question of how to write the impact statement. This is a difficult question to answer in the abstract; but it is an important one to consider, because the language of the sections of NEPA covering this actual preparation

of impact statements is by no means unambiguous.

It appears, to me, that five steps are generally involved in writing a statement. First, one must determine the proper scope of the proposed project for the preparation of a statement. Clearly, neither the erection of lights, in the case of a new airport, nor all possible sources of energy in the U.S., in the case of a new power plant, are proper project entities for a detailed environmental analysis. Second, one must decide on the range of environmental considerations appropriate for analysis for this project entity, i.e. what primary and what induced or secondary environmental effects need to be considered. Third, one must step back and determine what basic data about the project and its surroundings is needed to investigate the environmental effects and what analysis of this data needs to be performed. Only after this is done can one methodically proceed to forecast environmental effects. Fourth, one must look critically at the conclusions resulting from the analysis and make some assessment of them. Finally, one must decide on any alternative formulations of the project which need to be considered and analyze their environmental effects.

The first question, that of defining the proper scope of the proposed project for the preparation of an impact statement, recurringly produces a dilemma. On the one hand, a broad formulation of the project entity often makes analysis unmanageably



complex. A broad formulation of the project also sometimes creates an impasse, because necessary information is not available at the level of the person preparing the statement. For example, the construction of an oil pipeline involves possible damage to the environment. It raises the question of whether alternative national energy policies might be appropriate. Yet this is an exceedingly complex analysis to make, and requires information and judgements readily available to very few people.

A broad formulation also results on occasion in placing too little attention on the particular action at hand. It may also cause unnecessary duplication of effort when statements are written on similar types of projects located in different parts of the country.

The other side of the dilemma is that a narrow formulation of the project entity often makes it very difficult to put the action in perspective. In the case of individually small projects that are related to each other, their cumulative effects may be obscured. In the case of a single large complex project, and in the case of a chain of projects (e.g. the nuclear fuel chain), highly damaging components might erroneously be justified on the grounds that the other components of the project are already constructed, and the benefits resulting from the small additional expenditure outweigh the damage.

What is needed, then, is a finely tuned balance in the

selection of the proper scope of the project for analysis. In some cases a narrow conception of the project may be appropriate. In other cases, a broad conception may be appropriate. In still other cases, two levels of impact statements may be required. An overview impact statement may be needed to look at the broad effects of a program; and individual, more narrowly focused impact statements, may be needed to look at specific projects within the program. The overview statement in this case would serve to highlight the major effects of the program and to provide a background analysis enabling one to put the effects of the individual projects in perspective.

Once one decides on the proper project entity for analysis, one must then determine the range of environmental effects to be analyzed. Obvious questions such as potential for air or water pollution must of course always be considered. But so must other less obvious questions. Two forms of short-sightedness frequently occur. The first is where the initial or primary effects of a project have been taken into consideration, but the secondary or induced effects of the project have been ignored. For example, statements on highways and sewage treatment plants seldom evaluate the impact of their construction and operation on urban growth patterns. These secondary or induced effects may, however, be more damaging than the primary effects.

The second form of shortsightedness is the tendency to consider only changes in the physical environment, and to ignore

possible alterations of the social environment. Yet impacts on population patterns or community behavioral patterns may affect the quality of the human environment much more than impacts on air and solid waste. In determining the range of environmental effects to be analyzed, beware of these two forms of shortsightedness.

Having determined the proper scope of the project for analysis and the range of environmental effects to be investigated, the next step is to gather the basic data on the project and its surroundings and analyze the information. This is frequently difficult to do, because for many kinds of projects, it is unclear what data is relevant and even what types of analysis need to be performed. The field of environmental forecasting is very new, and necessary analytical techniques have not yet all been developed. Nevertheless, a number of major analytical frameworks have recently been completed or are near completion. The Atomic Energy Commission has recently issued several booklets on approaches to preparing environmental analyses for nuclear power plants, and EPA has recently drafted, for limited review, a conceptual framework for analyzing the environmental consequences of highway projects. What is required in writing an impact statement is to set forth, to the greatest extent practical, the project's likely environmental effects. Where forecast techniques do not exist, one need not attempt the impossible. Judging, however, from the impact statements which have been prepared, much room for improvement

exists, even within the bounds of generally available analytical techniques.

After one forecasts environmental effects, the next step is to look critically at the results and make an assessment of them. It's surprising how many impact statements on highways, for example, fail to compare the additional air pollution likely to result from the highway with the existing air pollution in the affected area and with national ambient air quality standards. For an impact statement to be useful in the decision-making process, it must not only forecast environmental effects but must also indicate their significance. If standards will be violated, one must attempt to evaluate by how much the standards will be violated, how frequently this will occur, and whether this is likely to be significant. Without this information, the forecasts are of very limited utility.

Finally, in the last step, one must analyze the alternatives that are available to the project. On the question of what types of alternatives must generally be investigated, CEQ has said, in its May 16, 1972 guidelines:

"The recent decision in NRDC v. Morton discussed... the requirement that agencies consider the 'alternatives' to the proposed action. The most significant aspect of the Morton decision is the court's conclusion that all alternatives reasonably available to the Government as a whole must be discussed - even if some of those alternatives are outside the control of the agency preparing the statement. Discussion of such alternatives is required in order to guide the decision at hand as well as to inform the public of the issues and to guide the decisions of the President and Congress.

"The court in this case was careful, however, to emphasize that it was not requiring the impossible. 'A rule of reason is implicit in this aspect of the law...'  
Detailed discussion is not required of alternatives that 'are deemed only remote and speculative possibilities in view of basic changes required in statutes and policies of other agencies.' And the agencies need not indulge in 'crystal ball inquiry' in assessing the effects of alternatives.

...

"Agencies must indicate in their procedures that all reasonable alternatives and their environmental impacts are to be discussed, including those not within the authority of the agency. Examples of specific types of alternatives that should be considered in connection with specific kinds of actions should be given where possible. Such examples should include, where relevant:

- (1) the alternative of taking no action;
- (2) alternatives requiring actions of a significantly different nature which would provide similar benefits with different environmental impacts (e.g., a fossil fuel v. a nuclear power plant);
- (3) alternatives related to different designs or details of the proposed action, which would present different environmental impacts (e.g., pollution control equipment on a nuclear plant).

"In each case, the analysis of alternatives should be sufficiently detailed and rigorous to permit independent and comparative evaluation of the benefits, costs and environmental risks of the proposed action and each alternative." 1/

These, then, are the major steps involved in writing an impact statement. First, one must determine the proper scope of the project for analysis. Second, one must decide on the range of environmental considerations to be investigated. Third, one must determine the basic data on the project and

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1/ Citations to cases omitted.

its surroundings to be gathered and the analysis to be performed. Fourth, one must look critically at the results of the analysis and make an assessment of them. And fifth, one must analyze the alternatives available to the project.

It may be helpful, in closing this section, to look briefly at an issue which has caused a great deal of confusion. This is the extent to which the impact statement must contain a cost-benefit analysis of the proposed project. CEQ addressed this question in its May 16, 1972 guidelines:

"Inherent in the duty imposed on any agency by NEPA to promote environmental quality is the obligation to weigh the possible environmental effects of a proposal against the effects on other public values the agency is mandated to consider. If the environmental effects are adverse, the agency must consider whether they outweigh the benefits of the proposal in deciding whether to go ahead.

"...NEPA does not specify whether this balancing of environmental and other considerations must be spelled out in the environmental impact statement under Section 102(2)(C). ...[L]egislative history suggests, however, that Congress did expect the 102 statement to record the agency's trade-offs of competing values.

...

"This interpretation is supported by several statements in court decisions. In the Calvert Cliffs case the court stressed the necessity for 'balancing' under NEPA and the role of the 102 statement in showing how the balancing was done:

'In some instances environmental costs may outweigh economic and technical benefits and in other instances they may not. But NEPA mandates a rather finely tuned and 'systematic' balancing analysis in each instance.'

"Similarly, in Natural Resources Defense Council v. Morton, the court observed that:

'The impact statement provides a basis for  
(a) evaluation of the benefits of the proposed  
project in light of its environmental risks, and  
(b) comparison of the net balance for the proposed  
project with the environmental risk presented by  
alternative courses of action.'

"These judicial comments do not, however, detract from the primary purpose of the 102 statement: the assessment of the environmental effects of possible actions. NEPA was enacted out of a concern that environmental considerations were not being fully canvassed before action, and the purpose of Section 102(2)(C) is primarily to require a 'detailed statement' of environmental effects...

[CEQ recommends that] wherever adverse environmental effects are found to be involved in the proposed action, the impact statement should indicate what other interests and considerations of Federal policy might be found to justify those effects. The statement should also indicate the extent to which these stated countervailing benefits could be realized by following reasonable alternatives to the proposed action that would avoid some or all of the adverse environmental effects. In this connection, agencies that prepare cost-benefit analyses of proposed actions should attach such analyses to the environmental impact statement." 1/

Accordingly, the impact statement need not itself contain a detailed cost-benefit analysis. But the impact statement must succinctly explain the nature of the interests to be served which justify the expense of environmental degradation.

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1/ Citations omitted.

V. Circulating the Draft Statement, Preparing Responses  
to the Comments Received; Writing the Final Statement

A. To Whom Must Statements Be Sent?

After a draft impact statement is written it must be circulated and responses must be prepared for the comments received. CEQ has issued a list, as an attachment to its April 23, 1971 guidelines, of the Federal agencies to whom impact statements should normally be sent for comment. This list is subdivided according to both type and incidence of environmental effects (for example, there are headings such as water and air pollution, parks, forests, wetlands and estuaries). Within each subdivision, CEQ has listed the Federal agencies with jurisdiction by law or expertise in the area. This list should be used, however, only as a rough guide. When in doubt on whether a Federal agency should receive a draft impact statement for comment, go ahead and send one! Agencies should seek to distribute their draft impact statements as broadly as is practical.

Most Federal agencies prefer that impact statements sent to them for comment be directed to their regional office in charge of the area in which the proposed project will be situated. EPA, for example, has requested Federal agencies to send all draft impact statements to its regional offices, except in the case where the impact statement relates to legislation, the



development of national policy, or projects of national controversy or significance.

Draft impact statements should also be available to State and local agencies and interested public and private groups for comment. One way to circulate an impact statement among State and local agencies is to have the statement accompany the proposed action through the OMB A-95 review process. To apprise non-governmental groups of the availability of a statement, CEQ has suggested that Federal agencies consider publishing a notice in local newspapers of the release of draft statements. CEQ has also suggested that agencies maintaining a list of groups known to be interested in the Agency's activities and directly notify such groups each time a draft statement is issued. The general objective here is to allow all interested parties the opportunity to comment on the action.

#### B. Length of Allowable Review Period

CEQ's April 23, 1971 guidelines provide that agencies seeking comment on their impact statements may establish time limits of no less than 30 days for reply. After the time set for review has expired, an agency may presume that all agencies which were consulted but failed to respond have no comments to make unless an agency has requested a specified extension of time. The guidelines provide that agencies seeking comment should endeavor to comply with requests for extensions of time of up to 15 days.

### C. Consideration of and Preparation of Responses to Comments Received

Courts have recently said that Federal agencies are obligated to consider opposing views and to respond to all comments received on their draft statements. CEQ discussed this basic idea in its May 16 guidelines, noting:

"Agencies should make an effort to discover and discuss all major points of view in the draft statement itself. Where opposing professional views and responsible opinions have been overlooked in the draft statement and are brought to the agency's attention through the commenting process, the agency should review the positive and negative environmental effects of the action in light of those views and should make a meaningful reference in the final statement to the existence of any responsible opposing view not adequately discussed in the draft statement with respect to adverse environmental effects, indicating the agency's response to the issues raised. All substantive comments received on the draft should be attached to the final statement, whether or not each such comment is thought to merit individual discussion by the agency in the text of the statement. At the same time that copies are sent to the Council, copies of final statements, with comments attached, should also be sent to all entities - Federal, State, and local agencies, private organizations and individuals - that made substantive comments on the draft statement, thus informing such entities of the agency's disposition of their arguments." (emphasis in original)

### D. Writing the Final Statement

Having written a draft statement, circulated it for comment, and prepared responses to the comments received, the agency's writing of the final impact statement often becomes the easiest step in the entire impact statement process. What is required here is simply to revise the draft to reflect the agency's consideration of the points raised by commenting groups. This

requires little effort when the draft has fully analyzed the major environmental effects likely from the action and the promising alternatives to the action. Substantial work is usually involved only where comments on the draft show that there are significant environmental effects or alternatives that were not considered by the preparing agency at the time the draft was written.

Once a final statement is written, CEQ's April 23 guidelines require that it be filed with CEQ, along with copies of all the comments received on the draft. The guidelines also provide that a final agency decision should not be taken earlier than 30 days after the final statement is filed. Thereafter, the procedural requirements of NEPA will normally have been fully satisfied, and the agency can proceed with reaching a final decision on the proposed action.

VI. EPA Review of Impact Statements - Rating by EPA of the Draft Statement and the Project - Referral of Projects by EPA to CEQ

Section 309 of the Clean Air Act Amendments of 1970 provides:

"Sec. 309. (a) The Administrator [of EPA] shall review and comment in writing on the environmental impact of any matter relating to duties and responsibilities granted pursuant to this Act or other provisions of the authority of the Administrator, contained in any (1) legislation proposed by any Federal department or agency, (2) newly authorized Federal projects for construction and any major Federal agency action (other than a project for construction) to which Section 102(2)(C) of Public Law 91-190 applies, and (3) proposed regulations published by any department or agency of the Federal Government. Such written comment shall be made public at the conclusion of any such review.

"(b) In the event the Administrator determines that any such legislation, action, or regulation is unsatisfactory from the standpoint of public health or welfare or environmental quality, he shall publish his determination and the matter shall be referred to the Council on Environmental Quality."

This section obligates EPA to review Federal agency actions. This section is a logical supplement to NEPA. NEPA requires Federal agencies to prepare impact statements, and Section 309 requires EPA to review impact statements. No other Federal agency has an explicit legal mandate to review the environmental effects of agency actions.

To implement this responsibility, EPA has established detailed policies and procedures. They provide that, where an impact statement has been sent to EPA for comment, EPA's comments on the impact statement shall also constitute its comments for purposes of Section 309. As of November 30, 1972,

each such comment letter by EPA contains a rating of both the impact statement and the project. The rating of the impact statement can be a 1, 2, or 3. A "1" rating indicates that EPA believes the impact statement is adequate. A "2" rating indicates that EPA believes the draft impact statement does not contain sufficient information to allow a full assessment of the environmental effects of the proposed action. A "3" rating indicates that EPA believes the impact statement is inadequate and has asked that the statement be substantially revised. Agencies might in this case consider preparing a new draft statement.

EPA also rates the project, in addition to the impact statement. Three ratings are possible here. An "LO" rating indicates that EPA has no environmental objections to the proposed action. An "ER" rating indicates that EPA has reservations about the environmental effects of aspects of the proposed action and that reassessment of these aspects is required. An "EU" rating indicates that EPA believes the proposed action is unsatisfactory because of its overall potentially harmful effect on the environment. (The definitions of these ratings are given in Table I.) Every two weeks, EPA publishes in the Federal Register a listing of its comments on draft impact statements released during the preceding two weeks, along with the rating of each of the draft statements and the projects they cover.

DEFINITION OF RATINGS USED BY EPA  
IN REVIEWING FEDERAL AGENCY ACTIONS  
AND ENVIRONMENTAL IMPACT STATEMENTS

Environmental Impact of the Action

LO--Lack of Objections

EPA has no objections to the proposed action as described in the draft impact statement; or suggests only minor changes in the proposed action.

ER--Environmental Reservations

EPA has reservations concerning the environmental effects of certain aspects of the proposed action. EPA believes that further study of suggested alternatives or modifications is required and has asked the originating Federal agency to reassess these aspects.

EU--Environmentally Unsatisfactory

EPA believes that the proposed action is unsatisfactory because of its potentially harmful effect on the environment. Furthermore, the Agency believes that the potential safeguards which might be utilized may not adequately protect the environment from hazards arising from this action. The Agency recommends that alternatives to the action be analyzed further (including the possibility of no action at all).

Adequacy of the Impact Statement

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 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 reasonably 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.

If a draft impact statement is assigned a Category 3, no rating will be made of the project or action, since a basis does not generally exist on which to make such a determination.

EPA's procedures for implementing its responsibilities under Section 309 also require EPA staff to follow up on selected Federal projects beyond the draft impact statement stage. EPA staff are required to review all final impact statements for which the draft statement or the project at the draft statement stage received a 2, 3, ER, or EU. If the review of the final statement shows that environmental problems surfaced at the draft statement stage have not been adequately resolved, EPA will first notify the originating agency and then prepare formal comments on the final statement. A summary of all such comments issued by EPA is published every two weeks in the Federal Register. The comments on the final impact statement of those projects determined by the Administrator to be unsatisfactory from the standpoint of health, welfare, or environmental quality, are forwarded to the Council on Environmental Quality, and the Administrator's determination is made public.

This is very briefly how EPA implements its responsibilities under Section 309. The policies and procedures it follows are covered much more comprehensively in EPA Order 1640.1. Copies of the Order are available to any interested individual, and can be obtained by writing EPA's Office of Public Affairs.



## VII. Making A Decision In Light of the Final Impact Statement

### A. Must the Responsible Official Actually Consider the Impact Statement? The EDF v. Corps of Engineers (Gilham Dam) Case

We come, then to the last stage in the impact statement process - making a decision in light of the final impact statement. For a long time, the prevailing view among Federal officials was that NEPA simply created a procedural hurdle to surmount. The view was held that once an agency went through the motions and wrote an impact statement, NEPA no longer was relevant to the final decision-making process. This was a reasonable view, I believe, if one looked at the general theme of the court decisions which were being handed down. Most of the questions in dispute in the decisions involved whether an impact statement had to be prepared for a particular proposed project.

Recently, however, several courts and agency officials have started to focus on what NEPA requires a Federal agency to do with the environmental impact statement once it is prepared. The new question being asked is whether NEPA creates more than a procedural requirement (over which only the unwary need stumble).

A recent major case focuses on this question. In the EDF v. Corps of Engineers (the Gilham Dam Case), the U.S. Court of Appeals for the eighth circuit ruled that NEPA is more than an environmental full disclosure law. The court said, "NEPA was intended to effect substantive changes in decision-making... We conclude that purely mechanical compliance with

the procedures of §102 is not sufficient to satisfy the provisions of NEPA." The court went on to say that if it could be demonstrated that an agency did not consider all relevant factors - including the impact statement - in reaching its decision, then the court would enjoin the proposed agency action.

Two questions emerge out of this pronouncement. First, what procedure will the courts follow in reviewing whether an agency has adequately considered environmental values? The court answered this by rejecting the idea of a completely new analysis of the project by the court. The court would not substitute its own weighing for that of an agency. The court also rejected the idea of requiring the agency to produce substantial evidence to support its decision. The proper test, according to the court, is whether an opposing party can demonstrate that the agency decision was arbitrary, capricious, an abuse of discretion, or a clear error in judgement. Thus, an agency must consider environmental values in its decision-making and courts will hold up a proposed action if this is not done, but the procedure used by the court in reviewing an agency's decision requires an outside group to demonstrate that this agency decision represents a clear error in judgement.

The second question raised by this court statement on NEPA is what standards courts will use to decide whether the weight given to environmental values represents a clear error of

judgement. How will courts apply the judicial review procedure just enunciated? The court attempted to answer this by saying that courts should look to the standards set forth in sections 101(b) and 102(1) of NEPA, and determine whether, according to these standards, the actual balance of costs and benefits that was struck by the agency clearly gave insufficient weight to environmental values.

I expect there will be a number of court decisions in the near future on the question of the extent to which NEPA affects an agency's substantive decision-making. Certainly there is a great need for clarification in this area. I think we are seeing in the EDF v. Corps of Engineers case the beginning of a new direction in the courts' thinking about the National Environmental Policy Act.

B. Is the Impact Statement the Decision Document?

Another of the questions which I expect will receive major attention in the future is whether the impact statement represents the decision-making document. If the impact statement is intended to reflect only environmental considerations, then of course there must be separate evaluations of other factors important to consider in the final agency decision. But if the impact statement reflects the balancing of environmental costs and benefits against other relevant considerations, it then effectively becomes the decision document.

No final answer to this question of whether the impact statement is (or should be) the decision document is yet available. I urge you to express your views on this question to the Council on Environmental Quality.

### VIII. Wrap-Up

We have not had time in this survey to discuss a number of major aspects of the impact statement process. We have not looked at the extent to which NEPA applies to continuing activities of agencies, to the development of new programs and policies, or to the discontinuation of long standing programs. We have generally assumed that NEPA applies only to discrete "projects," although its coverage is clearly broader than this. We have not tackled the questions of how NEPA applies to legislative proposals and, in particular, to appropriation requests. These and many other major questions, such as the meaning of recent and proposed amendments affecting NEPA, must await another time.

#### A. Statistics on the Current EIS Process

It may be useful, in closing, to note some statistics on the current impact statement process. At the present time, approximately 125 new draft impact statements are issued for comment each month. Although the exact number of statements issued each month fluctuates between about 80 and 160, there appears to be neither a long-term decrease nor a long-term increase from the mean of 125 statements a month. This represents, then, about 1500 new statements being generated each year. Table 2 shows the number of impact statements which have been prepared, by agency and by type of project, from the beginning of NEPA to December 1, 1972. During this almost three year period,

Summary of 102 Statements Filed With the CEQ Through 11/30/72  
(By Agency)

Table 2

<u>Agency</u>	<u>Draft 102's for actions on which no final 102's have yet been received</u>	<u>Final 102's on Legislation and actions</u>	<u>Total actions which final draft 102 statements for Federal action have been received</u>
Agriculture, Department of	93	163	256
Appalachian Regional Commission	1	0	1
Atomic Energy Commission	48	63	111
Commerce, Department of	6	11	17
Defense, Department of	5	3	8
Air Force	9	6	15
Army	3	13	16
Army Corps of Engineers	244	391	635
Navy	6	10	16
Delaware River Basin Commission	3	1	4
Environmental Protection Agency	6	20	26
Federal Power Commission	73	9	82
General Service Administration	12	31	43
HEW, Department of	4	4	8
HUD, Department of	15	36	51
Interior, Department of	111	75	186
International Boundary and Water Commission--U.S. & Mexico	0	6	6
Interstate Commerce Commission	3	0	3
Justice, Department of	2	1	3
National Aeronautics and Space Adm.	12	13	25
National Capital Planning Comm.	0	2	2
National Science Foundation	1	3	4
New England River Basins Commission	1	0	1
Office of Science and Technology	0	1	1
Pacific Northwest River Basins Comm.	2	0	2
State Department	2	1	3
Tennessee Valley Authority	5	12	17
Transportation, Department of	870	1123	1993
Treasury, Department of	5	4	9
U.S. Postal Service	1	0	1
U.S. Water Resources Council	4	4	8
Veterans Administration	1	2	3
	<u>1543</u>	<u>2010</u>	<u>3553</u>

Table 2  
(continued)

Summary of 102 Statements Filed with the CEQ Through 11/30/72  
(By Project Type)

	<u>Draft statements actions on which no final statements have yet been filed</u>	<u>Final statements on legislation and actions</u>	<u>Total actions on which final or draft statements have been taken</u>
AEC nuclear development	4	21	25
Aircraft, ships and vehicles	1	5	6
Airports	61	206	267
Buildings	9	14	23
Bridge permits	11	11	22
Defense systems	3	3	6
Forestry	23	8	31
Housing, urban problems new communities	10	25	35
International boundary	4	5	9
Land acquisition, disposal	10	39	49
Mass transit	2	6	8
Mining	6	6	12
Military Installation	13	19	32
Natural gas & oil			
Drilling and exploration	3	8	11
Transportation, pipeline	9	7	16
Parks, Wildlife refuges, Recreational facilities	76	29	105
Pesticides, herbicides	13	27	40
Power			
Hydroelectric	69	10	79
Nuclear	42	41	83
Other	16	16	32
Transmission	5	17	22

Table 2  
(Continued)

Railroads	3	1	4
Roads	626	809	1435
Plus roads through parks	161	85	246
Space programs	2	9	11
Waste disposal			
Detoxification of toxic substances	6	3	9
Munition disposal	2	3	5
Radioactive waste disposal	5	1	6
Sewage facilities	9	18	27
Solid wastes	4	0	4
Water			
Beach erosion, hurricane protection	10	26	36
Irrigation	18	16	34
Navigation	90	131	221
Municipal & Industrial supply	10	11	21
Watershed protection & flood control	139	330	469
Weather modification	6	5	11
Research & Development	15	16	31
Miscellaneous	30	23	53
	<hr/> 1543	<hr/> 2010	<hr/> 3553



a total of 3553 statements have been prepared. There have been 2010 final statements, and 1543 draft statements for which no corresponding final statement has yet been released.

The Department of Transportation has prepared the greatest number of statements. It has written 1993 statements, or about 60% of the total. Next comes the Army Corps of Engineers, with 635 statements; the Department of Agriculture with 256 statements; the Department of Interior with 186 statements; and the Atomic Energy Commission with 111 statements. These five agencies account for approximately 90% of all the statements submitted.

In terms of types of projects for which impact statements have been prepared, the category with the largest number of statements is roads, as would be expected from the above figures. Roads have accounted for 1681 of the 3553 statements that have been submitted. The next largest category consists of watershed protection and flood control projects, with 469 statements; next comes airports, with 267 statements; next comes water navigation projects with 221 statements; and after that comes parks, wildlife refuges, and recreational facilities, with 105 statements. As you can see, 80% of all the statements that have been written have been for five categories of projects.

As of December 1, 1972, approximately 350 lawsuits challenging agency compliance with NEPA had been filed. Of these cases, about 250 are active. Each month, an average of 15 new

lawsuits are filed. However, each month, almost an equal number of cases filed in the past are terminated. Thus, there appears to be a somewhat steady level of outstanding cases challenging agency compliance with NEPA, with the new cases initiated each month roughly balancing the number of old cases terminated.

The greatest number of active lawsuits are against the Department of Transportation, with about 65 lawsuits presently outstanding. Next in order are the Army Corps of Engineers, EPA, and HUD, with respectively, about 40, 35, and 26 outstanding active lawsuits against each.

The number of government actions presently halted by court orders resulting from NEPA litigation is approximately 47. This is a rather low number, I think, in view of the close monitoring being conducted on compliance with the impact statement process. During the last year or so, a few new government actions have been temporarily halted each month by court order, and an almost equal number of actions halted in previous months have been allowed to proceed.

The cost of administering the impact statement process has increased substantially during the last few years. This however, appears to reflect Federal agencies gearing up to meet their responsibilities under NEPA, rather than any long term trend. Table 3 shows the outlays by each major Federal agency, for 1971, 1972, and 1973, for preparing, processing, reviewing,

RESOURCE REQUIREMENTS FOR PROSECUTION OF  
NATIONAL ENVIRONMENTAL POLICY ACT (SEC. 102(2)(C))

Agency	1971	1972	1973
Department of Agriculture	730,000	2,934,000	3,932,000
Appalachian Regional Commission	23,000	35,000	35,000
Atomic Energy Commission	1,376,000	6,923,000	8,194,000
Department of Commerce	558,000	659,000	1,593,000
Department of Defense			
Air Force		87,000	116,000
Army		2,664,000	3,543,000
Army Corps of Engineers	4,860,000	12,380,000	19,870,000
Navy		3,711,000	1,478,000
Delaware River Basin Commission	25,000	98,000	223,000
Environmental Protection Agency	1,140,000	2,028,000	2,601,000
Federal Power Commission	320,000	544,000	577,000
Department of HEW	450,000	450,000	450,000
Department of HUD	173,000	880,000	1,095,000
Department of Interior	4,249,000	8,995,000	14,267,000
International Boundary and Water Commission, United States and Mexico	35,000	43,000	61,000
National Aeronautics and Space Administration	436,000	506,000	498,000
National Science Foundation	8,000	9,000	15,000
Tennessee Valley Authority	1,425,000	2,138,000	1,888,000
Department of Transportation	1,296,000	2,972,000	4,219,000
Department of Treasury	5,000	171,000	281,000
Total	17,109,000	48,077,000	64,986,000

and commenting on environmental impact statements. According to this chart, total outlays for the Federal Government in administering the impact statement process rose from \$17 million in 1971, to \$48 million in 1972, to a budgeted \$65 million for fiscal 1973. The agency with the largest expected outlay in fiscal 1973 is the Army Corps of Engineers, with \$20 million budgeted. This represents almost one-third of total Federal Government administrative expenses under NEPA. The agency with the second largest outlay is the Department of Interior, with \$14 million. Next comes the Atomic Energy Commission with \$8 million, and the Department of Transportation with \$4 million.

B. Preparation of "Conceptual Frameworks for Analysis" to Assist Preparers of Impact Statements - New Phase in the EIS Process?

I would like to close by briefly introducing what appears to be a new phase in the impact statement process - the preparation of conceptual frameworks for analysis. During the first few years under NEPA, we have been preoccupied with the procedural requirements of the Act. When are impact statements required? Who prepares them? What is required for a project already under construction at the time of passage of the Act? These were the questions demanding attention.

Now that the procedural questions are fairly well understood, attention is shifting to the quality of the

environmental analyses being prepared. This in turn is directing people to the question of how one goes about forecasting environmental effects. In attempting to answer this question, it has become clear that, at the time NEPA was passed, there was little understanding of how to forecast the environmental effects of major categories of Federal projects.

To help remedy this situation, EPA and a number of other groups have started to prepare conceptual frameworks for analysis for different categories of projects. These frameworks present a detailed methodology for forecasting environmental effects. EPA has just recently completed a draft of a framework for highway projects. It presents the different types or levels of detailed analysis that appear appropriate for different types of highway projects. For example, a small rural highway project generally requires a very different form of analysis than a multi-lane expressway through a congested urban area. For each level of analysis, the framework shows what data needs to be collected to forecast air and noise pollution, and the different methodologies that can be used. To take care of the situation where complete data for a project is not available, the framework contains charts and tables giving average levels of different factors in different general situations. Charts and tables are also provided giving frequently needed reference information, such as average automobile emission factors and

national air quality control regions. To enable one to assess the significance of the results of the forecasts, the framework shows how to evaluate the results in terms of likely background concentrations in the absence of the project and national environmental standards.

We do not look at the framework as a panacea. But we do think it will help significantly improve the quality of environmental forecasts, and thus the usefulness of the impact statement process. We think the preparation and use of these conceptual frameworks may constitute a new level of sophistication, and thus the beginning of a new phase in the impact statement process.

Thank you.