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*[I]t is the continuing responsibility of the Federal Government to use all practicable means . . . to improve and coordinate Federal plans, functions, programs, and resources to the end that the Nation may . . . fulfill the responsibilities of each generation as trustee for succeeding generations . . . .***

*[E]very decision we make must reflect consideration of the welfare of the seventh generation to come. . . .****

Introduction

The National Environmental Policy Act of 1969 (NEPA)[1] has been with us for twenty years now. NEPA is described in implementing regulations issued by the Council on Environmental Quality (CEQ) as "our basic national charter for protection of the environment."[2] The CEQ regulations, which are binding on all federal agencies,[3] were published as final rules more than eleven years ago.[4]

Some legal scholars have referred to NEPA as a statute of constitutional dimensions, in the sense that it is a kind of social compact between the people and the government which "empowers citizens to participate directly in environmental planning and [which] forces coordination among federal, state, municipal, and private agencies that would not otherwise occur."[5] Although NEPA does not provide citizens with any meaningful substantive rights,[6] the procedural requirements imposed on federal agencies by NEPA and the CEQ's regulations have established meaningful opportunities for state and local government agencies, Indian tribes, private citizens, and public-interest organizations to participate in federal agency decision making. Environmental organizations have been critical of what they perceive as shortcomings in the NEPA process; it is nonetheless undeniable that in many instances, through participation in the NEPA

** National Environmental Policy Act of 1969 (NEPA) § 101(b), (c), 42 U.S.C. § 4331(b) (1988).

*** HAUDENOSAUNEE GREAT LAW OF PEACE (oral tradition).

1. NEPA was passed by Congress on December 22, 1969, and signed by President Nixon on January 1, 1970. Pub. L. 91-190, 83 Stat. 852 (codified as amended at 42 U.S.C. §§ 4321-4347 (1988)).

2. 40 C.F.R. § 1500.1(a) (1990).

3. 40 C.F.R. §§ 1500.3, 1507.1 (1990); *see* Andrus v. Sierra Club, 442 U.S. 347, 358 (1979).

4. 40 C.F.R. §§ 1500-1508 (1990). See *infra* note 56 and accompanying text regarding twenty-seven amendments to the CEQ regulations.

5. ENVTL. LAW REPORTER, NEPA DESKBOOK at v (1989) [hereinafter DESKBOOK].

6. *See infra* notes 25-26, 171-82 and accompanying text.

process, concerned citizens have blocked environmentally unsound actions or contributed to the development of environmentally preferable alternatives.

In the twenty years since its enactment NEPA has spawned a substantial amount of litigation — more than two thousand reported cases,[7] eleven of which have resulted in decisions by the United States Supreme Court.[8] In light of the large amount of litigation, it should not be surprising that a number of issues which were once subjects of spirited debate in the legal community have now been more or less resolved. A comprehensive review of the case law is beyond the scope of this article, although some of the key judicial decisions are briefly discussed.

The scope of this article is the application of NEPA to "development" on Indian lands. The word "development" is enclosed within quotation marks because it is a word that is widely used, but has no commonly accepted meaning. In my view, the use of the word "development" to describe the extraction of non-renewable resources or the unsustainable exploitation of renewable resources is simply not appropriate. When the word is used as part of the term "economic development," however, it has at least some potential for appropriate usage. In part V of this article the concept of "economic development" is explored in detail in the context of some lessons that might be drawn from experiences in the Third World.

Fortunately for tribal officials, their lawyers and those who do business in Indian Country, the application of NEPA in Indian Country can be quite adequately explained without the necessity to reach consensus on the meaning of the word "development." Since the application of NEPA is triggered by a proposed federal agency action, it does not matter whether or not the federal action is described as "development." Rather, what matters is whether the proposed federal action might have significant effects on the quality of the human environment.[9]

The most important focus of this article is the NEPA process prescribed by the CEQ regulations, as supplemented by imple-

7. DESKBOOK, *supra* note 5, at v.

8. Abstracts of these eleven cases are contained in DESKBOOK, *supra* note 5, at 347-50.

9. See *infra* notes 59-71 and accompanying text. "Indian Country," as defined in 18 U.S.C. § 1151 (1988), includes some lands that are neither held in trust by or subject to a restraint on alientation imposed by the United States. If trust or restricted lands are involved in a proposed action, however, approval by the Secretary of the Interior is likely to be required, and the requirement of secretarial approval is sufficient to trigger the application of NEPA, regardless of whether the proposed action is described as "development."

menting procedures issued by the Department of the Interior (DOI) and internal guidance issued by the Bureau of Indian Affairs (BIA). In explaining the NEPA process, I suggest several specific ways in which tribal governments and Indian people generally can use the NEPA process more effectively to control activities within Indian Country that have environmental effects and to influence federal agency activities outside Indian Country that may affect tribal interests.

The most important recommendation made in this article is that the BIA provide tribes and the affected public with guidance on its implementation of NEPA and that such guidance be made readily available to the affected public through publication in title 25 of the Code of Federal Regulations (CFR). Considering it has been twenty years since NEPA's enactment and eleven years since the promulgation of binding regulations, one may find it somewhat incongruous that an article on the application of NEPA to Indian lands should emphasize the seemingly mundane topic of BIA guidance to the affected public. Nevertheless, the codification in title 25 of the CFR concerning guidance on NEPA for the affected public would be a significant improvement in the BIA's program for NEPA compliance. This step would also be relatively easy to perform. By making it easier for the affected public to hold the BIA accountable, such guidance should contribute to improving the record of the BIA in complying with both the letter and the spirit of NEPA. Furthermore, while the BIA has legally enforceable responsibilities under NEPA for many kinds of activities that affect the environment within Indian Country, tribal governments, individual Indians, and private parties doing business in Indian Country must also accept some responsibility for preserving environmental quality. In situations in which the BIA lacks adequate financial or human resources to carry out its NEPA responsibilities in a timely manner, tribal governments and private parties can assume appropriate shares of the work involved in producing NEPA documents. Although this practice is permissible under the CEQ regulations and the DOI's implementing procedures,[10] this is not readily apparent from the current guidance that the BIA has provided to the public. Perhaps most important, the kind of guidance proposed in this article would also help tribal governments to utilize NEPA to serve tribal interests in self-government and self-determination.

10. See *infra* notes 204-08 and accompanying text.

The starting point for an article such as this must be the statute itself, and part I presents an overview of NEPA's language. Part II provides some historical background on the early implementation of NEPA and the promulgation of regulations by the CEQ. Part III explains the NEPA process as prescribed in the CEQ regulations. Part IV explains the NEPA implementing procedures of the DOI, including the BIA's NEPA Handbook, and also presents some suggestions for making NEPA work better in Indian Country. Part IV also explains my proposal that the BIA promulgate guidance to the affected public and codify such guidance in title 25 of the CFR. My draft of such guidance is an appendix to this article.

Part V explores the concept of "economic development" in the context of lessons from Third World experiences and suggests that tribal leaders employ a multi-dimensional conception of this term, with an emphasis on the emerging paradigm of environmentally benign "sustainable development." Part V also suggests that tribal officials consider the planning process promoted by World Bank in its lending for "developmental projects," particularly the "project cycle," which is a multi-dimensional planning process which includes the environment as one dimension. This approach reflects the fact that "development" is usually sought for reasons that have little to do with the environment. Tribes could adapt the project-cycle approach for their use, incorporating a NEPA-like process for addressing the environmental dimension. Through such an approach, tribes could insure that environmental considerations are incorporated into the planning and implementation of "development."

I. The Statutory Language of NEPA

NEPA was the first major environmental law enacted during the 1970s. The act is quite brief in comparison to other federal environmental statutes such as the Clean Air Act,[11] Federal Water Pollution Control Act (also known as the Clean Water Act),[12] Safe Drinking Water Act,[13] Resource Conservation and Recovery Act,[14] and Comprehensive Environmental Response, Compensation and Liability Act (also known as "Superfund").[15] NEPA contains profound statements of national policy, which are discussed in more detail later in this article. NEPA also has an institution-building aspect because it established the CEQ in

11. 42 U.S.C. §§ 7401-7626 (1988).
12. 33 U.S.C. §§ 1251-1387 (1988).
13. 42 U.S.C. §§ 300f-300j (1988).
14. *Id.* §§ 6901-6992k.
15. *Id.* §§ 9601-9675.

the Executive Office of the President.[16] NEPA is best known for its requirement that — prior to taking any major federal action "significantly affecting the quality of the human environment" — the responsible federal agency must prepare a document known as an environmental impact statement (EIS).[17]

A. The Requirement to Prepare an Environmental Impact Statement

The requirement to prepare an EIS is contained in section 102(2)(C) of NEPA, which directs that "to the fullest extent possible" all agencies of the federal government shall:

> (C) Include in every recommendation or report on proposals for legislation and other major federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on —
>
> (i) the environmental impact of the proposed action,
>
> (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,
>
> (iii) alternatives to the proposed action,
>
> (iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and
>
> (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

Prior to making any detailed statement, the responsible federal official shall consult with and obtain the comments of any federal agency which has jurisdiction by law or possesses special expertise with respect to the environmental impact involved. Copies of such statement and the comments and views of appropriate federal, state, and local agencies, which are authorized to develop and enforce environmental standards, shall be made available to the President, the Council on Environmental Quality, and to the public as provided by 5 U.S.C. § 552, and shall accompany the proposal through the existing agency review processes.[18]

16. *Id.* §§ 4341-4347.
17. *Id.* § 4332(2)(C).
18. *Id.*

The "detailed statement" required by section 102(2)(C) has become known as an "environmental impact statement" (EIS). This section has been involved in most of the litigation in which NEPA has been at issue. For example, in 1980 some 201 cases based on environmental statutes were filed in which the United States was a defendant; a cause of action based on NEPA was involved in seventy percent of these cases.[19] In 1985, seventy-seven NEPA cases were filed; thirty-seven of those complaints alleged that an EIS should have been prepared and eighteen complaints alleged that the EIS that had been prepared was inadequate.[20] In recent years there has been a trend toward filing fewer NEPA cases,[21] perhaps because federal agencies have gained both experience and expertise in complying with their NEPA responsibilities.

B. The Purposes and Policy of NEPA

It is ironic that the success of litigants in suing to enforce NEPA's procedural requirements has contributed to the widely held impression that the preparation of environmental impact statements is all there is to NEPA. In response, the General Counsel of the CEQ has called for the rereading of NEPA's statement of purposes and pronouncements of national policy because of the present environmental challenges.[22] The statements of purpose and policy in NEPA are indeed profound; those who would seek to have the actions of federal agencies truly meet NEPA's pronouncements of our "national environmental policy" should carefully consider just what that policy is. Section 101 of NEPA proclaims a comprehensive policy encompassing a full spectrum of governmental responsibilities:

> (a) The Congress . . . declares that it is the continuing policy of the Federal Government, in cooperation with State and local governments, and other concerned public and private organizations, to use all practicable means and measures, including financial and technical assistance, in a manner calcu-

19. DESKBOOK, *supra* note 5, at 18 (citing ANNUAL REPORT OF THE DIRECTOR OF THE ADMINISTRATIVE OFFICE OF THE UNITED STATES COURTS, 1980, at 374 (1981)).

20. DESKBOOK, *supra* note 5, at 18, n.257 (citing COUNCIL ON ENVTL. QUALITY, ENVIRONMENTAL QUALITY 1986, at 240, 242 (1988)).

21. The largest number of NEPA cases filed in any one year since the enactment of NEPA was 189 cases in 1974. *Id.*

22. Bear, *NEPA at 19: A Primer on an "Old" Law with Solutions to New Problems*, 19 Envtl. L. Rep. (Envtl. L. Inst.) 10,060 (1989).

lated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.

(b) In order to carry out the policy set forth in this chapter, it is the continuing responsibility of the Federal Government to use all practicable means, consistent with other considerations of national policy, to improve and coordinate Federal plans, functions, programs, and resources to the end that the Nation may —

(1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;

(2) assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;

(3) attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;

(4) preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice; . . .

(6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

(c) The Congress recognizes that each person should enjoy a healthful environment and that each person has a responsibility to contribute to the preservation and enhancement of the environment.[23]

Despite the profound nature of these federal responsibilities, enforceability is another matter. There are numerous examples of lower court decisions which have cited section 101 for support.[24] However, the Supreme Court, while acknowledging the "significant substantive goals" of NEPA, has ruled that its

23. 42 U.S.C. § 4331 (1988).

24. *E.g.*, Colorado River Indian Tribes v. Marsh, 605 F. Supp 1425, 1430 n.3 (1985).

mandate to federal agencies is "essentially procedural."[25] In the Court's view:

> The sweeping policy goals announced in § 101 of NEPA are . . . realized through [the] . . . 'action-forcing' procedures [of § 102(2)(C)] that require that agencies take a "hard look" at environmental consequences,' . . . and that provide for broad dissemination of relevant environmental information. Although these procedures are almost certain to affect the agency's substantive decision, it is now well settled that NEPA itself does not mandate particular results, but simply prescribes the necessary process.[26]

The extent to which the substantive goals of NEPA have in fact been realized as a result of its action-forcing procedures is, of course, subject to debate. Many people in the environmental movement believe that all too often federal agencies fall far short of realizing NEPA's substantive goals.[27] As a procedural statute, though, there is widespread agreement that NEPA works, and that the CEQ regulations do provide meaningful opportunities for the affected public, including Indian tribes, to influence federal agency decisions. The extent to which the substantive goals of NEPA have not been realized in federal agency actions affecting Indian Country is largely a function of less-than-fully effective use of NEPA's procedural provisions by Indian tribes[28] and by their federal trustee, the Bureau of Indian Affairs. The primary purpose of this article is to help rectify this situation.

II. Some Historical Background

In the early years of NEPA, some federal agencies narrowly interpreted the EIS requirement of section 102(2)(C), and in effect said that this provision was not intended to apply to their

25. Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, 435 U.S. 519, 557 (1978). *See* Weinstein, *Substantive Review Under NEPA after Vermont Yankee IV*, 36 SYRACUSE L. REV. 837 (1985).

26. Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350 (1989) (citations omitted).

27. *See, e.g.*, Pollack, *Reimagining NEPA: Choices for Environmentalists*, 9 HARV. ENVTL. L. REV. 359 (1985) (discussing some of the criticisms of federal agency compliance with NEPA raised by grassroots environmentalists and deep ecologists).

28. *See* Northern Cheyenne Tribe v. Hodel, 851 F.2d 1152, 1158 (9th Cir. 1988) (holding the district court had abused its discretion by engaging in a balancing of equities based on an inadequate record).

actions. For example, the Atomic Energy Commission (AEC) took the position that it lacked statutory authority to consider the environmental effects of its action. The D.C. Circuit held otherwise, saying that NEPA "makes environmental protection a part of the mandate of every federal agency and department."[29]

A. BIA Resistance to NEPA

The BIA employed a similarly narrow interpretation and "steadfastly maintained the position that NEPA [was] inapplicable to [Indian land and natural resource] transactions where the only federal involvement is approval."[30] In *Davis v. Morton*[31] the Tenth Circuit, rejecting the BIA's interpretation, held that approval by the BIA of a long-term lease of Indian land for the development of a large vacation-home community for non-Indians did require the preparation of an EIS. The government argued that it was the trustee's duty to approve such a lease if it would be advantageous to the trust beneficiaries, and that to impose the administrative costs and delays associated with the burden of the EIS requirement of NEPA on the BIA's fiduciary review of leases of Indian lands would place Indian landowners at a competitive disadvantage with respect to private landowners whose lands were not subject to those same environmental restrictions.[32] The Court rejected this reasoning, noting that Congress had clearly intended NEPA to apply to all federal agencies.[33]

The statutory authority for the BIA to approve the lease involved in *Davis* is found at 25 U.S.C. § 415, which authorizes Indian landowners to enter into leases for a variety of purposes, subject to the approval of the Secretary of the Interior. Coin-

29. Calvert Cliffs' Coordinating Comm. v. United States Atomic Energy Comm'n, 449 F.2d 1109, 1112 (D.C. Cir. 1971); *see also* Flint Ridge Dev. Co. v. Scenic Rivers Ass'n, 426 U.S. 776, 788 (1976) (interpreting the term "to the fullest extent possible" in § 102 of NEPA and holding that the EIS requirement does not apply when there is a "clear and unavoidable conflict" between the requirements of NEPA and another statute).

30. Memorandum from Marvin L. Franklin, Assistant to the Secretary for Indian Affairs, to All Area Directors, (Feb. 22, 1973). *See generally* F. COHEN, HANDBOOK OF FEDERAL INDIAN LAW 537 (1982 ed.).

31. 469 F.2d 593 (10th Cir. 1972).

32. *Id.* at 597. The government's characterization of this situation as a dilemma is an example of a conflict between two of the duties of a trustee, the duty to preserve the corpus of the trust and the duty to make the corpus of the trust productive. *See* RESTATEMENT (SECOND) OF TRUSTS §§ 176, 181 (1959).

33. *Id.* at 597-98.

cidentally, section 415 had been amended a few days after the lease in *Davis* was approved.[34] Although the primary purpose of the amendment was to add a particular tribe to the list of tribes whose lands can be leased for terms as long as 99 years, the amendment also enacted statutory language requiring the Secretary to "satisfy himself that adequate consideration has been given to . . . the effect on the environment of the uses to which the leased lands will be subject."[35] The lower court in *Davis* held that this amendment to section 415 indicated that Congress must have considered NEPA inapplicable to the approval of such leases; *Davis* further held that the amendment did not apply to the lease at issue, since the amendment had not become effective until after the lease had been approved.[36] The Tenth Circuit rejected this reasoning, noting that, unlike NEPA, section 415 contains no specific procedural guidelines.[37] The Tenth Circuit held that, since the obligations imposed by NEPA are not mutually exclusive with the obligations imposed by the amendment section 415, the specific procedural requirements of NEPA remain in force.[38]

After the Tenth Circuit rendered its decision in *Davis*, the alternative approaches open to the BIA in fulfilling its NEPA responsibilities ranged over a spectrum which included two extremes. At one extreme the BIA could assume a recalcitrant posture and make only a minimal effort to comply with NEPA. At the other extreme the BIA might have taken the position that the best way to minimize the costs and delays associated with NEPA compliance, and thus to alleviate any perceived burdens on the competitiveness of Indian landowners who want to lease their lands, would be to build its professional staff so that it could produce the interdisciplinary documents required by NEPA in an expeditious manner. Given the close relationship between Indian cultures and the natural environment, and given the widespread disruption of tribal cultures that had occurred over several generations of assimilationist federal policies, those who recognize the inherent value of tribal cultures might have wished for the BIA to take the latter approach.

34. The lease was approved by the BIA on May 24, 1970, and the statute was amended by Act of June 2, 1970, Pub. L. 91-275, §§ 1-2, 84 Stat. 303 (codified at 25 U.S.C. § 415(a) (1988)). *See* Davis v. Morton, 335 F. Supp. 1258, 1259-60 (D.N.M. 1971), *rev'd*, 469 F.2d 593 (10th Cir. 1972).

35. 25 U.S.C. § 415(a) (1988).

36. Davis v. Morton, 335 F. Supp. 1258, 1260-61 (D.N.M. 1971).

37. Davis v. Morton, 469 F.2d 593 (10th Cir. 1972).

38. *Id.*

The BIA did take certain actions in order to comply with the requirements of NEPA, including the issuance of internal guidance[39] and some efforts to build staff capacity, but NEPA compliance was not a very high priority matter for the BIA.[40] There were a number of individuals within the BIA who were not persuaded by the Tenth Circuit's reasoning, and the DOI recommended to the Department of Justice that Supreme Court review be sought, although the Solicitor General declined.[41] For several years the BIA included in its list of legislative proposals a draft bill that would have effectively overturned the result in *Davis*.[42] Fortunately, the BIA did not devote substantial resources to seeking the enactment of such a bill. The staff unit within the Central Office that was responsible for NEPA compliance was located several layers down in the bureaucratic hierarchy and was comprised of two professional staff positions.[43] In the area offices NEPA responsibilities were typically added to the duties of existing staff positions. Although there

39. On January 21, 1974, the BIA issued to its field offices a document entitled "Environmental Quality Handbook," every page of which was stamped "INTERIM GUIDELINES." The transmittal memo directed that the "Interim Guidelines" were to be used rather than the procedures that the BIA had previously published in the *Federal Register*. *See* 37 Fed. Reg. 22,677 (1972). Although this document was designated "30 BIAM Supplement 1," it was not formally issued through the Bureau Directives System (the BIA Manual). It continued to be used on an "interim" basis until after the CEQ regulations had taken effect, and was eventually withdrawn on July 10, 1980, when the BIA issued its first formal internal guidance on compliance with federal environmental laws, 30 BIAM. (The author of this article was the primary author of 30 BIAM).

40. The statements in this paragraph are based on the author's experience as an employee of the BIA from 1978 to 1982.

41. Memorandum from Marvin L. Franklin, *supra* note 30.

42. One version of such a draft bill would have provided that "actions by the Secretary of the Interior in his capacity as trustee for individual Indians or Indian Tribes . . . shall not be considered major federal actions for purposes of [NEPA]." A draft bill prepared by the BIA Phoenix Area Office at the request of the Central Office, transmitted with a memorandum from the Phoenix Area Director, dated March 22, 1974. The rationale advanced by the Phoenix Area Director in support of this draft bill was that the holding in *Davis v. Morton* placed Indian landowners in a "uniquely disadvantageous position [in that they must] not only secure the approval of Federal officials for any transaction involving their lands, but they must also wait months and perhaps years for administrators to comply with NEPA before such approval can be obtained."

43. The BIA was by no means unique in this regard. In a 1976 report the CEQ noted that "[i]n most agencies NEPA officials report directly to agency heads, deputies, or assistant secretaries. When NEPA officials are more remote from agency leaders and the agency decisionmaking process, their impact and efficiency have been impaired." COUNCIL ON ENVTL. QUALITY, ENVIRONMENTAL IMPACT STATEMENTS: AN ANALYSIS OF SIX YEARS' EXPERIENCE BY SEVENTY FEDERAL AGENCIES 10 (1976) [hereinafter CEQ ANALYSIS].

were individuals throughout the BIA who believed that compliance with NEPA should have been a higher priority, those in the upper rungs of the hierarchy generally did not hold such a view, and the individuals who were selected to fill the two central office NEPA positions simply lacked the dynamism that would have been needed to bring about a change in attitude among those at higher levels. In the 1980s the BIA has continued to produce evidence that basic misconceptions about the NEPA process still persist at policy-making levels in the BIA.[44]

B. The Bigger Picture: Problems in the Early Implementation of NEPA by Federal Agencies

Many other federal agencies had mixed records in their compliance with NEPA during the 1970s. Some agencies made genuine efforts to comply with the spirit of NEPA; others went only so far as the affected public could force them through the

44. DEP'T OF THE INTERIOR, REPORT OF THE TASK FORCE ON INDIAN ECONOMIC DEVELOPMENT (1986) [hereinafter TASK FORCE REPORT]. This Report recommends "regulatory relief" for Indian enterprise zones, in order "to reduce paperwork requirements for land use planning, environmental impact statements, and other formal study procedures," but qualifies this recommendation by adding, "[e]xemption from existing regulations would be precluded for important environmental regulations protecting key environmental and land use assets." *Id.* at 189. With respect to NEPA, the Task Force's recommendation could be accomplished by adding certain kinds of actions taken within an Indian enterprise zone to the BIA's list of categorical exclusions, as discussed *infra* at note 196 and accompanying text. The BIA and DOI members of the DOI Task Force were apparently unaware of this administratively simple way to implement their recommendation, and it did not occur to anyone else who had input into the Report. This Task Force recommendation likely was based in part upon the 1984 report of the Presidential Commission on Indian Reservation Economies. In the section of the report which lists "Federal Obstacles to Indian Reservation Economic Development," the report states:

> The National Environmental Protection [sic] Act requires that environmental impact statements be completed before any projects can be undertaken. Such regulation is seen as costly and intrusive. Delegating NEPA enforcement to Indian tribes and permitting their determination of when a statement should be filed would decrease costs in appropriate cases.

PRESIDENTIAL COMM'N ON INDIAN RESERVATION ECONOMIES, REPORT AND RECOMMENDATIONS TO THE PRESIDENT OF THE UNITED STATES pt. II, at 66 (1984) [hereinafter PRESIDENTIAL COMM'N REPORT].

The first sentence in the passage quoted above is simply not true — an EIS is required only for proposed actions that may significantly affect the environment. Moreover, as explained at various points in this article, the existing process provides tribes with a broad range of ways to be involved in the preparation of NEPA documents, including preparing their own environmental assessments (EAs) which may serve as the basis for a finding of no significant impact (FONSI). While deciding whether an EIS is required for a specific proposed action is the responsibility of the federal agency, tribes can certainly influence such decisions.

courts. NEPA is essentially a self-regulatory statute since each federal agency must consider the environmental impacts of its decisions without any agency exercising an oversight function. Thus, the enforcement of NEPA ultimately depends on the courts.[45] Consequently, in the early years of NEPA many agencies found themselves in court.

Among the public, some interest groups saw NEPA as a step by Congress in the right direction, but only a step. Other interest groups believed that Congress had taken a step too far, and they saw NEPA as a source of interminable delay. Among the most common complaints about the NEPA process were the delays that were often involved in preparing EISs, the length of EISs, the lack of uniformity among federal agencies, and the perception that EISs were disregarded in many federal decisions.[46] A number of state governments believed that federal agencies prepared EISs only because they were required to and that state agency comments on draft EISs were not adequately considered.[47] Even federal agencies that had developed their staff capacities for producing the EISs reported that they were not able to review consistently and comment on EISs prepared by other agencies.[48] By the mid-1970s a consensus was emerging on at least one aspect of the NEPA process. All sides seemed to agree that, despite all the litigation and the EIS reports that had been written, the NEPA process generally was not working adequately. It was taking too long to prepare EISs, and, all too often, the decision that was eventually made did not reflect either the policies of NEPA or the analyses and information contained in EISs.

C. The Issuance of Binding Regulations by the CEQ

To address problems with the NEPA process, President Carter issued Executive Order 11991, directing the CEQ to promulgate regulations that would be binding on all federal agencies.[49] In complying with this mandate, the CEQ stated the purpose of the regulations as follows:

45. *See* DESKBOOK, *supra* note 5, at 17.

46. *See* Bear, *supra* note 22, at 10,062; CEQ ANALYSIS, *supra* note 43; Yost, *Streamlining NEPA — An Environmental Success Story*, 9 B.C. ENVTL. AFF. L. REV. 507 (1981-82) (discussing how new regulations alleviate complaints).

47. CEQ ANALYSIS, *supra* note 43, at H-1 to H-5.

48. *Id.* at 38 (appendix H).

49. Exec. Order No. 11991, 3 C.F.R. § 123 (1977) (amending Exec. Order No. 11514, 3 C.F.R. § 902 (1966-1970)), *reprinted as amended in* DESKBOOK, *supra* note 5, at 45. The directive in Executive Order No. 11991 to promulgate regulations is in § 3(h).

> Their purpose is to provide all Federal agencies with efficient, uniform procedures for translating the law into practical action. We expect the new regulations to accomplish *three principal aims*: To *reduce paperwork,* to *reduce delays*, and at the same time to *produce better decisions*, which further the national policy to protect and enhance the quality of the human environment.[50]

One way in which the regulations sought to reduce paperwork was by establishing a recommended page limit for EISs of 150 pages or less, or 300 pages or less for "proposals of unusual scope and complexity."[51] Reducing the length of EISs was also intended to aid in accomplishing the other two principal aims of the CEQ — to reduce delays in the process (since more concise documents should take less time to prepare and to review) and to contribute to better decisions (since more concise documents are more likely to be used by federal decisionmakers). There are many other ways in which the regulations seek to attain these three principal aims, some of which are discussed in part III.

As part of the process of developing its regulations, the CEQ engaged in substantial efforts to encourage involvement of federal agencies, state and local agencies, environmental groups, industry groups, and the general public.[52] If the CEQ actively sought the involvement of Indian tribes, it is not apparent from the record. The proposed regulations contained two references to Indian tribes,[53] and there was no mention of tribes in the preamble. The preamble to the final rules states that "[s]everal commentors stated that the regulations should clarify the role of Indian Tribes in the NEPA process," and that the CEQ responded by expressly identifying tribes as participants at sev-

50. The statement quoted above appears in the preamble to both the proposed regulations, 43 Fed. Reg. 25,230 (1978), *reprinted in* DESKBOOK, *supra* note 5, at 245, and the final regulations, 43 Fed. Reg. 55978 (1978), *reprinted in* DESKBOOK, *supra* note 5, at 248 (emphasis added).

51. 40 C.F.R. § 1502.7 (1990).

52. 43 Fed. Reg. 25,230 (1978), *reprinted in* DESKBOOK, *supra* note 5, at 250-51 (preamble to the final regulations).

53. Section 1501.7(a) of the proposed rules included "any affected Indian tribe" among the parties required to be invited by the lead agency to participate in scoping, and § 1508.5 provided that "when the effects are on a reservation," a tribe could become a cooperating agency. 43 Fed. Reg. 25,230, 25,235, 25,244 (1978).

eral points in the process.[54] Although the apparently limited involvement by tribes was regrettable, the overall level of public involvement was impressive and no doubt contributed to the widespread support that emerged when the regulations were reviewed by the 1981 Vice President's Regulatory Relief Task Force.[55] The regulations have been amended only once since they were adopted.[56]

By issuing regulations that are binding on all federal agencies, the CEQ addressed one of the widely-acknowledged problems in the early implementation of NEPA — the lack of uniformity among federal agencies. The regulations established consistent terminology. For example, the term "environmental assessment" (EA) replaced a variety of terms which had been used by the different agencies. The EA (by its various names) had been an optional document which agencies frequently prepared to help decide whether or not to prepare an EIS. Similarly, the term "finding of no significant impact (FONSI)" became the standard term for a decision, based on an EA, not to prepare an EIS.

More important than terminology, the regulations established the EA as an essential part of the NEPA process. An EA is a concise document that presents enough information and analysis to enable the responsible federal official to decide whether an EIS is required for a proposed action. In the regulations the content and function of an EA are defined, and, as discussed in parts III and IV, a requirement has been established that an EA be prepared for certain categories of proposed actions.

III. Overview of the NEPA Process

This part presents an overview of the NEPA process as prescribed in the CEQ regulations. There are, of course, limits to

54. 43 Fed. Reg. 25,230 (1978), *reprinted in* DESKBOOK, *supra* note 5, at 259 (preamble to the final regulations). The preamble listed §§ 1501.2(d)(2), 1501.7(a)(1), 1502.15(c), and 1503.1(a)(2)(ii) as provisions which expressly identify Indian tribes as participants in the NEPA process. Some of these revisions were apparently made at least in part in response to comments on the proposed regulations submitted by the BIA through the DOI. Memorandum from the Director, Office of Trust Responsibilities, BIA, to the Director, Office of Environmental Project Review, DOI (July 28, 1978).

55. 43 Fed. Reg. 15,619 (1978), *reprinted in* DESKBOOK, *supra* note 5, at 261 (preamble to the final rule withdrawing the worst case analysis requirement).

56. *Id.* The provision of the regulations that was revised is § 1502.22, which formerly required an EIS to contain a "worst case analysis" in certain cases involving incomplete or unavailable information. The Supreme Court has indicated that the revised regulation is entitled to substantial deference. *See* Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 355 (1989).

the uniformity that can be achieved in regulations that are binding on all agencies, and so the CEQ regulations require all agencies to adopt agency-specific implementing procedures.[57] For agencies such as the DOI which are comprised of a number of sub-agencies, this requirement has meant two layers of implementing procedures. The presentation in this part sometimes draws on the DOI implementing procedures for illustrative purposes, although for the most part the discussion of the DOI procedures is reserved for part IV. There are numerous other sources which discuss the CEQ regulations in detail.[58] Yet since the CEQ regulations define the framework of the NEPA process within which all federal agencies must carry out their responsibilities, an overview should be helpful to most readers before moving on to the discussion of the DOI and BIA implementing procedures in part IV.

A. Determining Whether an EIS is Required

NEPA requires that an EIS be prepared for "every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment . . . ."[59] As noted earlier, this language is the most litigated language in NEPA, having been the subject of more than 2,000 lawsuits. One of the basic purposes of the CEQ regulations is to help agencies determine whether or not this requirement applies to a specific proposed action.

1. Defining the terms

To help agencies make this threshold determination, the CEQ regulations provide guidance on the meaning of almost every word or phrase in NEPA. A "*proposal*" exists when an agency "has a goal and is actively preparing to make a decision on one or more alternative means of accomplishing that goal and the effects can be meaningfully evaluated. . . . A proposal may exist in fact as well as by agency declaration that one exists."[60] "*Legislation*" does not include requests for appropriations, but it does include "a bill or legislative proposal to Congress de-

57. 40 C.F.R. § 1507.3 (1990).

58. *E.g.*, DESKBOOK, *supra* note 5; D. MANDELKER, NEPA LAW AND LITIGATION (1984); F. SKILLERN, ENVIRONMENTAL PROTECTION: THE LEGAL FRAMEWORK (1981).

59. NEPA § 102(2)(C), 42 U.S.C. § 4332(2)(C) (1988).

60. 40 C.F.R. § 1508.23 (1990).

veloped by or with the significant cooperation and support of a Federal agency . . . ."[61] "*Major Federal action*" includes both continuing and new activities as well as failures to act.[62] The regulations state that federal actions tend to fall into one of four categories: policies, plans, programs, and specific projects. The category of specific projects includes "actions approved by permit or other regulatory decision, as well as federal and federally assisted activities."[63] Thus, any activity on Indian lands that requires the approval of the BIA is a federal action.

"*Significantly*" is perhaps the most important word in section 102(2)(C). The regulations state that the use of this word "requires considerations of both context and intensity."[64] "Context" means that a proposed action must be analyzed in terms of its effects on "society as a whole (human, national), the affected region, the affected interests, and the locality."[65] "Intensity" is a term that describes the severity of environmental impacts. The regulations list ten factors that should be considered, including: adverse effects on public health or safety; adverse effects on unique environmental characteristics; the degree of controversy regarding environmental effects; unique or unknown risks; whether the proposed action would set a precedent for or otherwise be linked to other actions that may have cumulative impacts; adverse effects on historic properties; adverse effects on endangered or threatened species or the habitat of such species; and whether the proposed action might violate a federal, state, or local environmental law.[66]

"*Affecting*" means that an action "will or may have an effect on,"[67] and "effects" means both "direct effects" and "indirect

61. *Id.* § 1508.17. The Supreme Court has upheld the exclusion of appropriations requests from the requirement to prepare an EIS on proposals for legislation. *See* Andrus v. Sierra Club, 442 U.S. 347 (1979).

62. 40 C.F.R. § 1508.18 (1990).

63. *Id.* However, the "possibility of federal funding in the future" does not make a project a major federal action during the planning stage. *See* Atlanta Coalition on Transp. Crisis, Inc. v. Atlanta Regional Comm'n, 599 F.2d 1333 (5th Cir. 1979); Enos v. Marsh, 769 F.2d 1363 (9th Cir. 1985). The regulations also state that "major" has no meaning independent of "significantly." 40 C.F.R. § 1508.18 (1990). This position is supported by City of Davis v. Coleman, 521 F.2d 661, 673 n.15 (9th Cir. 1975). *But see* Save the Bay, Inc. v. U.S. Army Corps of Eng., 610 F.2d 322 (5th Cir.), *cert. denied*, 449 U.S. 900 (1980); Winnebago Tribe v. Ray, 621 F.2d 269 (8th Cir.), *cert. denied*, 449 U.S. 836 (1980).

64. 40 C.F.R. § 1508.27 (1990).

65. *Id.* § 1508.27(a).

66. *Id.* § 1508.27(b). The DOI procedures add "tribal" to the list of environmental laws. 516 DM 2, app. 2, § 2.10.

67. 40 C.F.R. § 1508.3 (1990).

effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable."[63] "*Effects*" and "*impacts*" are used as synonyms.[69] "*Human environment*" is defined "comprehensively to include both the natural and physical environment and the relationship of people with that environment."[70] Although social and economic effects must be included in an EIS, the statement is not required for a proposed action which will cause social or economic effects unless the proposed action may or will also cause significant effects on the natural or physical environment.[71]

2. The NEPA screening process

One of the requirements imposed on agencies by the CEQ regulations is that an agency's implementing procedures establish what in essence is a screening process to help decide what specific actions require an EIS and what actions do not.[72] This screening process has worked well to help agencies avoid becoming entangled in the threshold question of whether or not an EIS is required. In mandating this screening process the CEQ has recognized that there are some broad classes of actions for which the decision whether to prepare an EIS is fairly clear cut, but that there are also many broad classes of actions in which a case-by-case approach is generally warranted. For those classes of actions in this middle ground, the preparation of an EA is generally necessary to determine whether a specific action will require an EIS. Accordingly, the CEQ regulations require each federal agency to adopt criteria through which all classes of actions that the agency might propose to take can be placed in one of three categories:

> (i) [those w]hich normally do require environmental impact statements;
>
> (ii) [those w]hich normally do not require either an environmental impact statement or an environmental assessment (categorical exclusions (§ 1508.4));

68. *Id.* § 1508.8.

69. *Id.*

70. *Id.* § 1508.14.

71. *Id.* Impacts on human health, including psychological impacts, are cognizable under NEPA, but the Supreme Court has ruled that there must be "a reasonably close causal relationship between a change in the physical environment and the effect at issue." Metropolitan Edison Co. v. People Against Nuclear Energy, 460 U.S. 766, 774 (1983).

72. 40 C.F.R. § 1507.3(b)(2) (1990).

(iii) [those w]hich normally require environmental assessments but not necessarily environmental impact statements.[73]

a) EIS normally required

Not surprisingly, identifying all the different kinds of actions that any given agency takes, or might take in the future, and sorting them among these three categories is not an easy task. Agencies are quite understandably not eager to prepare EISs, and there has been a tendency to limit the kinds of actions included in the first category — actions which normally do require an EIS.[74] The regulations recognize that even this category should allow for exceptions, *i.e.*, it is possible that a particular proposed action which falls within a class included in this category will not have significant environmental impacts. In such a case an agency may decide to prepare an EA rather than an EIS, but the regulations impose additional requirements regarding public notice, including waiting at least 30 days after making the finding of no significant impact (FONSI). This procedure makes the EA available for public review before making a final agency decision whether an EIS should be prepared on the proposed action.[75] The additional notice requirements also apply to any proposed action which is without precedent for an agency.[76]

b) Categorical exclusions (and exceptions)

To realize the aims of reducing unnecessary paperwork and delay the CEQ regulations provide for entire categories of actions to be excluded from the NEPA process. These categories of actions which normally do not require either an EIS or an EA are called "categorical exclusions."[77] For this category there may also be exceptions, *i.e.*, instances in which significant environmental impacts may result from a proposed action even though it fits within a categorical exclusion. Therefore, the

73. *Id.*

74. For example, the BIA has determined that only two kinds of actions normally require an EIS: (a) certain kinds of new mines and (b) certain kinds of new water development projects. Department of Interior NEPA procedures, 516 DM 6, app. 4, § 4.3, *reprinted in* the appendix to this article at § 260.8.

75. 40 C.F.R. § 1501.4(e)(2) (1990).

76. *Id.*

77. *Id.* § 1508.4.

regulations require that agency implementing procedures provide means to identify such exceptions, but the regulations do not provide detailed guidance on how to do so.[78] The DOI implementing procedures use criteria that are derived from the definition of "significantly" in the regulations.[79]

It is understandable and completely appropriate for agencies to include as many categories of actions within categorical exclusions as can reasonably be made to fit. Given the constraints on both financial and human resources within which all agencies function, it makes little sense to devote resources to preparing EAs on a great multitude of actions that are highly unlikely to result in significant environmental impacts. The presumably small number of specific actions within categorical exclusions that may result in significant impacts should not cause serious problems if the process for identifying exceptions works in practice. How well this process works in practice is subject to empirical evaluation for each agency. It is quite likely that a substantial number of actions that should be identified as exceptions do slip through the screening process without EAs being prepared. What NEPA requires, however, is that an EIS be prepared for any action that may have significant environmental impacts. An EA is not a statutory requirement, but rather a tool established by the regulations to help determine whether an EIS is required. The vast majority of EAs result in decisions not to prepare an EIS. Accordingly, the likelihood of significant adverse environmental impacts resulting from such exceptions slipping through is probably not very high.

Regardless of the probability that significant adverse impacts may result from an action slipping through the screening process, the adverse environmental impacts in such a situation can be just as real and just as severe as the impacts associated with a proposed action for which an EIS has been prepared. Persons whose interests have been adversely affected in such a situation are not likely to take much comfort from an explanation that relies on the need to balance an agency's human and financial resource limitations against the probability that environmental damage might result from any given proposed action. Concerned

78. *Id.*

79. 516 DM § 2.3A(3) & app. 2. The DOI procedures add "tribal" to the list of environmental laws — the violation of which may render the environmental impacts of proposed action significant. 516 DM 2, app. 2, § 2.10 (previously codified at 516 DM § 2.3A(3)(i)). This provision gives tribal governments the power, through carefully drafted legislation, to require DOI agencies to prepare EAs for proposed actions that may have effects within tribal territorial jurisdiction.

citizens and public interest organizations can play an important role in keeping federal agencies honest in such situations, especially when an agency's implementing procedures clearly indicate that an exception applies and that an EA is therefore required. In cases in which a nonfederal party notifies the agency that an exception clearly applies, preparing an EA tends to be preferable to litigation from an agency perspective.[80] Indian tribes can also play such a monitoring role, if they have the human resources to monitor the NEPA-related flow of information produced by federal agencies whose activities affect their reservations and their off-reservation interests.[81]

c) Environmental assessments (EAs)

In the NEPA screening process, the third category of classes of agency actions includes those that will normally require an

80. Such actions account for a small proportion of NEPA litigation, three of the 77 suits filed in 1985 alleged that an EA should have been prepared but was not. COUNCIL ON ENVTL. QUALITY, ENVIRONMENTAL QUALITY 1986, at 242 (1988) (table B-3) [hereinafter ENVTL. QUALITY 1986]. The applicable standards for judicial review of an agency decision not to prepare an EA are those prescribed in § 706 of the Administrative Procedure Act. 5 U.S.C. § 706 (1988). If an exception clearly applies, the standard should be "without observance of procedure required by law." *Id.* § 706(2)(D). If there is some question whether an exception applies, however, a reviewing court may treat the issue as a question of fact that should not be set aside unless arbitrary and capricious. It may express deference to the agency's interpretation of its own regulations. *See* City of Alexandria v. Federal Highway Admin., 756 F.2d 1014 (4th Cir. 1985).

81. The author was involved in an instance in which two tribes used the NEPA screening process to persuade a federal agency to prepare an EA. In that case the federal agency was the National Park Service (NPS) and the controversy involved the Big Cypress National Preserve (the Preserve) in south Florida. The act of Congress that established the Preserve provides that members of both the Miccosukee Tribe of Indians of Florida and the Seminole Tribe of Florida "shall be permitted, subject to reasonable regulations established by the Secretary [of the Interior], to continue their usual and customary use and occupancy of . . . lands and waters within the preserve, including hunting, fishing, and trapping on a subsistence basis and traditional tribal ceremonies." Act of Oct. 11, 1974, Pub. L. 93-440, § 5, 88 Stat. 1258, 1260 (codified at 16 U.S.C. § 698j (1988)). In May 1988, the NPS published proposed rules to regulate Indian use and occupancy within the preserve. 53 Fed. Reg. 16,561 (1988). The firm of Hobbs, Straus, Dean and Wilder serves as legal counsel for both tribes.

Both tribes regarded the proposed rules as overly restrictive of their statutorily recognized rights in the preserve and also believed that the NPS had developed the proposed rules without adequate consultation with the tribes and without an adequate data base on Indian use and occupancy of the preserve. We asked the NPS to prepare an EA on the proposed regulations. One of the problems that we pointed out was that the proposed regulations did not provide an adequate level of protection for two tribal ceremonial sites, both of which the NPS had identified as eligible for listing on the National Register of Historic Places; thus, even though the proposed action was included within a categorical exclusion (516 DM 6, app. 7.4 (10)), an exception specified in the DOI implementing procedures (516 DM 2, app. 2.7) applied. Therefore, an EA was required, and the NPS agreed to prepare one.

EA, but not necessarily an EIS. The regulations provide that if a proposed action does not fit into one of the first two categories, then an agency must prepare an EA.[82] In addition, an agency may prepare an EA "on any action at any time in order to assist agency planning and decisionmaking."[83]

The importance of EAs in the NEPA process should not be underestimated. For many federal agencies, particularly land-managing agencies, this category includes a substantial number of classes of actions. A typical land managing agency may prepare hundreds of EAs each year, with only a relative few resulting in decisions to prepare an EIS.

Despite the importance of EAs, the CEQ regulations provide little guidance on the preparation of EAs. The primary purpose of an EA is to determine whether or not an EIS is required.[84] In addition, an EA serves to "[a]id an agency's compliance with [NEPA] when no [EIS] is necessary" and to "[f]acilitate preparation of [an EIS] when one is necessary."[85] An EA is supposed to be a concise document that contains sufficient detail to determine whether the environmental impacts of a proposed action may or will be significant. At a minimum, an EA must include "brief discussions of the need for the proposal, of the alternatives as required by section 102(2)(E) [of NEPA], of the environmental impacts of the proposed action and alternatives, and a listing of agencies and persons consulted."[86]

If the EA supports a conclusion that the impacts will not be significant, the responsible federal official signs a finding of no significant impact (FONSI).[87] After a FONSI has been made available to the public,[88] the agency can proceed with the proposed action.[89] There is no "waiting period" specified in the

82. 40 C.F.R. § 1501.4(b) (1990). *See also id.* § 1501.3(a).
83. 40 C.F.R. § 1501.3(b) (1990).
84. *Id.* § 1508.9(a)(1).
85. *Id.* § 1508.9(a)(2)-(3).
86. *Id.* § 1508.9(b).
87. *Id.* § 1508.13.
88. *Id.* §§ 1501.4(e)(1), 1506.6(b).
89. The standards for judicial review of an agency decision not to prepare an EIS after preparing an EA are those prescribed in § 706 of the Administrative Procedure Act. 5 U.S.C. § 706 (1988). This decision is usually a question of fact, and the arbitrary and capricious standard is applied. *See* Foundation on Economic Trends v. Lyng, 680 F. Supp. 10 (D.D.C. 1988). Seven of 77 NEPA suits filed in 1985 alleged that the EA which had been prepared was inadequate. ENVTL. QUALITY 1986, *supra* note 80, at 242 (table B-3). *See* Hoskins, *Judicial Review of an Agency's Decision Not to Prepare an Environmental Impact Statement*, 18 Envtl. L. Rep. (Envtl. L. Inst.) 10331 (1988).

regulations except, as noted above, in the case of actions which normally require an EIS and actions which are without precedent.[90]

If, however, an EA does not support a FONSI — or rather, if the analyses and data presented in an EA lead to a conclusion that the proposed action will or may result in significant environmental impacts — and the agency is committed to proceeding with the proposed action, then the agency must publish in the *Federal Register* a notice of intent to prepare an EIS.[91] In such cases failure to proceed directly to preparation of an EIS may result in unnecessary delay, since this action means that it will take that much longer for the minimum time periods prescribed in the regulations to elapse. If an agency is not firmly committed to proceeding with the proposed action, however, further work on the EA may lead to the development of an alternative that would avoid the possibility of significant environmental impacts.

d) Impacts sufficiently covered in an earlier environmental document

In addition to these three categories, there is a fourth: actions that may have environmental impacts, but the impacts have been sufficiently addressed in an earlier EIS or EA. This category of actions is not specifically listed in the CEQ regulations, but it can be viewed as a logical fourth category and is specifically included in the DOI implementing procedures.[92] An example of an action that might fit into this category would be a specific action included within the broad or programmatic scope of an EA or EIS that was previously prepared. Another example would be an action that is taken on a periodic basis, such as the renewal of a lease or permit, if an EA or EIS had already been prepared when the prior action was taken.

B. Agency Action When an EIS is Required

Once an agency has decided that an EIS must be prepared for any specific proposed action, the regulations establish requirements for both the content of the EIS and the procedure through which the EIS is prepared, reviewed, and revised. In this section, the required procedural steps are explained and, as I move sequentially through the process, the key concepts are

90. 40 C.F.R. § 1501.4(e)(2) (1990).
91. *Id.* §§ 1501.7, 1508.22.
92. 516 D.M. § 3.2A.

introduced. After this introduction, I will return to what the regulations describe as "the heart of the environmental impact statement"[93] — the consideration of alternatives.

1. Scoping

The first procedural step in the preparation of an EIS is the publication of a notice of intent to prepare an EIS in the *Federal Register*.[94] The actual preparation of an EIS begins with a *scoping process*.[95] The lead federal agency is required to invite "affected Federal, State, and local agencies, any affected Indian tribe, the proponent of the action, and other interested persons (including those who might not be in accord with the action on environmental grounds)" to participate in the scoping process.[96] The regulations provide that the scoping process may include one or more scoping meetings, but such meetings are not required.[97]

As the name suggests, a basic purpose of the scoping process is to determine the "scope" of an EIS, which is explained in the regulations as consisting of "the range of actions, alternatives, and impacts" to be considered in the EIS.[98] The kinds of actions to be considered include connected, cumulative, and similar actions. Alternatives to be considered include the "no action" alternative, other reasonable courses of action, and mitigation measures not included in the proposed action. Impacts to be considered include direct, indirect, and cumulative impacts.[99] In determining the scope of an EIS, the relationship between the proposed action and other federal actions can sometimes be addressed through the concept of "*tiering*," which refers to the way in which one EIS builds on another, incorporating earlier documentation by reference and deferring analysis of some issues for later *environmental documents* in order to focus on the issues that are ripe for decision.[100]

93. 40 C.F.R. § 1502.14 (1990).

94. *Id.* § 1501.7.

95. *Id.* An EIS on a proposal for legislation, however, is not required to use a scoping process. *Id.* § 1506.8(b)(1).

96. *Id.* § 1501.7(a)(1).

97. *Id.* § 1501.7(b)(4).

98. *Id.* § 1508.25.

99. *Id.*

100. "Tiering" is defined in *id.* § 1508.28. The term "environmental document" is defined in *id.* § 1508.10, as including environmental assessment, environmental impact statement, finding of no significant impact, and notice of intent.

Through the scoping process the *lead agency*,[101] with input from others who chose to participate in scoping, identifies both the significant issues that will be analyzed in detail in the EIS and those issues that will be eliminated from detailed study, either because they are not significant or because they have been covered in a prior environmental review.[102] The lead agency's responsibilities in the scoping process also include: identifying other EISs and EAs that have been prepared or are planned for actions that are related to but not part of the scope of the EIS under consideration; identifying other environmental review and consultation requirements so that the necessary analyses can be integrated into the EIS; allocating assignments among itself and cooperating agencies for preparation of the EIS; and indicating the relationship between the timing of the EIS and the agency's decision-making schedule.[103] In addition, if the lead agency chooses to set page limits and time limits for the EIS, it can do so during scoping.[104]

2. Cooperating agencies

A basic objective of the CEQ regulations is to achieve cooperation among federal and other governmental agencies early in the preparation of an EIS for a proposed federal action. To this end, during the scoping process the lead agency allocates assignments among itself and any *cooperating agencies*, which may include other federal agencies, state and local agencies, and Indian tribes.[105] Any federal agency which has *jurisdiction by law*[106] shall be a cooperating agency if requested by the lead agency. Federal agencies which have *special expertise*[107] may be

101. *See id.* §§ 1501.5, 1508.16. As the term implies, the lead agency is the agency that takes primary responsibility for preparing an EIS. Two or more agencies can serve as joint lead agencies. The lead agency is always a federal agency, except that, if there are joint lead agencies, at least one of the agencies must be federal. *Id.* § 1501.5(b). For purposes of the CEQ regulations, state agencies, units of general local government, and Indian tribes assuming NEPA responsibilities under § 104(h) of the Housing and Community Development Act of 1974 are considered to be federal agencies. *Id.* § 1508.12; *see* Housing and Community Development Act of 1974, 42 U.S.C. §§ 5301-5320 (1988).

102. 40 C.F.R. § 1501.7(a) (1990).

103. *Id.* § 1501.7(a).

104. *Id.* § 1501.7(b).

105. *See id.* §§ 1501.6, 1508.5.

106. *Id.* § 1508.15 defines jurisdiction by law as meaning "agency authority to approve, veto, or finance all or part of a proposal."

107. *Id.* § 1508.26 defines special expertise as meaning "statutory responsibility, agency mission, or related program experience." Appendix II to the CEQ regulations provides a detailed listing of "Federal and Federal-State Agencies With Jurisdiction by Law or Special Expertise on Environmental Quality Issues." The CEQ appendices are not codified with regulations. *See infra* note 118.

cooperating agencies if requested by the lead agency.[108] An agency may also request to be designated as a cooperating agency.[109] A state or local agency may become a cooperating agency if it has jurisdiction by law or special expertise. An Indian tribe may become a cooperating agency if the proposed action may effect a reservation.[110]

The option of becoming a cooperating agency offers tribes a substantial degree of involvement in the NEPA process which can be advantageous if the proposed action may significantly affect tribal interests. The main advantage of becoming a cooperating agency is direct involvement, both in determining the scope of an EIS and in the actual preparation of the EIS. For tribes whose interests are affected by federal agencies that have shown themselves to be relatively insensitive toward tribal interests and/or uninformed regarding tribal governmental status, becoming a cooperating agency offers a means to facilitate the institutional instruction of such agencies. For example, a lead agency is required to meet with a cooperating agency at the latter's request.[111] It is possible for such meetings to be meaningless exercises, but it is also possible for them to be useful steps toward developing ongoing relationships between federal agencies and tribes.

There are, of course, responsibilities as well as benefits in becoming a cooperating agency, and, if a tribe considers the responsibilities too burdensome, an alternative would be to persuade the BIA to become a cooperating agency for the purpose of ensuring adequate consideration of the tribe's interests. For those tribes that have more staff expertise than the BIA agency and its area offices, however, this alternative would be less advantageous than direct tribal involvement as a cooperating agency. One possible arrangement would be for the BIA to provide funding through a contract pursuant to the Indian Self-Determination Act[112] to a tribe to enable the tribe to assume the responsibilities of a cooperating agency.[113]

108. 40 C.F.R. § 1501.6 (1990).
109. *Id.*
110. *Id.* § 1508.5.
111. *Id.* §§ 1501.6(a)-(c).
112. 25 U.S.C. §§ 450-450n (1988).
113. Statutory authorization for the BIA to serve as a cooperating agency can be derived from NEPA, particularly from several provisions in § 102. *See* 42 U.S.C. § 4332 (1988). Thus, unless a declination criteria applies, this activity appears to be contractible, although lack of sufficient funds in the BIA budget could prevent such contracts from becoming a standard practice. The CEQ regulations state that a coop-

3. *Other environmental review and consultation requirements*

One of the basic purposes for inviting other governmental agencies to participate in scoping, possibly by becoming cooperating agencies, is so that compliance with environmental review and consultation requirements established by laws other than NEPA can be integrated into the preparation of an EIS. This purpose is in keeping with one of the "three principal aims" of the CEQ regulations discussed earlier — to reduce unnecessary delay. The regulations state: "To the fullest extent possible, agencies shall prepare draft environmental impact statements concurrently with and integrated with" analyses conducted for the purpose of complying with the requirements of "other environmental review laws and executive orders."[114] Other environmental review and consultation requirements have been established by an array of laws, regulations, and executive orders. The regulations, however, specifically list only three such requirements: the Fish and Wildlife Coordination Act,[115] the National Historic Preservation Act,[116] and the Endangered Species Act.[117] Some indication of the applicability of other environmental review and consultation requirements can be gained from the CEQ's Appendix II to the regulations.[118]

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erating agency shall normally use its own funds but that a lead agency may provide funds for those major activities or analyses it requests from cooperating agencies. *See* 40 C.F.R. § 1501.6(b)(5) (1990). Thus, a lead agency could request that the BIA or a tribe conduct certain activities or analyses and provide funding to the BIA, which could then be provided to the tribe through a self-determination contract.

114. 40 C.F.R. § 1502.25(a) (1990).

115. 16 U.S.C. §§ 661-668d (1988).

116. *Id.* §§ 470-470w-6.

117. *Id.* §§ 1531-1544.

118. The CEQ appendices are not codified with regulations, but they have been published in the *Federal Register*. 49 Fed. Reg. 49,750 (1984), *reprinted in* DESKBOOK, *supra* note 5, at 71-95. *See also* SKILLERN, *supra* note 58. A succinct listing of other environmental review and consultation requirements, including some 40 federal statutes and three executive orders, was formerly included in the DOI implementing procedures as an appendix, but this appendix was deleted in 1984. The listing was originally designated 516 DM 4, app. 1. (The appendix which currently has that numerical designation, "Programs of Grants to States in Which Agencies Having Statewide Jurisdiction May Prepare EISs," was formerly designated 516 DM 4, app. 2.) The former appendix 1 included eight categories of statutes and executive orders: cultural resources, water and related land resources, wildlife, public lands, open space, recreation, marine resources, transportation, air quality, and miscellaneous. This change in the DOI implementing procedures was one of several changes announced on May 21, 1984. 49

As the words imply, if an "environmental review" requirement applies to a proposed action, this usually means that the action cannot be taken without a permit or other approval from an agency which has "jurisdiction by law." Examples include the issuance of a dredge and fill permit by the U.S. Army Corps of Engineers pursuant to section 404 of the Clean Water Act[119] and certification (by a state agency or the Environmental Protection Agency (EPA)) of compliance with water quality standards pursuant to section 401 of the Clean Water Act.[120] If a tribe has been certified by the EPA as a "state" for purposes of certain review requirements under the Clean Water Act[121] or any other federal environmental statues, then that tribe is the appropriate agency to be contacted regarding compliance with such review requirements within the tribe's jurisdiction.

If a "consultation" requirement applies to a proposed action, the federal agency must consult with another federal or non-federal government agency that has "special expertise," but the latter agency does not have the authority to veto the proposed action. An example of a consultation requirement is section 106 of the National Historic Preservation Act (NHPA),[122] which requires that if a federal agency has direct or indirect jurisdiction over a federal or federally assisted undertaking that may affect a property either listed on or eligible for listing on the National Register of Historic Places, such an agency must afford the Advisory Council on Historic Places an opportunity to comment prior to the expenditure of funds or the issuance of any permit or license for the proposed undertaking. The section 106 con-

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Fed. Reg. 21,437 (1984); *see also* 14 Envtl. L. Rep. (Envtl. L. Inst.) 10,286 (July 1984). The reason given in the department's Federal Register notice for deleting this appendix was that "it provided no substantive guidance and required too much paperwork to keep current in the Departmental Manual," and the notice further stated that the listing would be updated and reissued as "a supplemental directive of the Office of Environmental Project Review." 49 Fed. Reg. 21,437 (1984). Such a supplemental directive was issued by the DOI's Office of Environmental Project Review on March 29, 1988. *See* PEP Environmental Statement Memorandum No. ES88-3 (Mar. 29, 1988). The listing contained in that memorandum has been incorporated into the appendix to this article at subpart C, §§ 260.32 to 260.39. It may be of some interest to tribes that the cultural resources category in the DOI list includes the American Indian Religious Freedom Act, 42 U.S.C. § 1996 (1988), a statute that is not universally considered by federal agencies to be an environmental review and consultation requirement.

119. Federal Water Pollution Control Act, 33 U.S.C. § 1344 (1988).

120. *Id.* § 1341.

121. *Id.* § 1377.

122. 16 U.S.C. § 470f (1988).

sultation process is governed by regulations issued by the Advisory Council which generally require consultation with the relevant State Historic Preservation Officer rather than, or at least prior to, consultation with the Advisory Council itself.[123] In some cases it is difficult to draw a distinction between a review requirement and a consultation requirement,[124] and in some cases compliance with a consultation requirement may take such a long time that the opportunity to carry out a proposed action is effectively foreclosed.

Review and consultation requirements can be grouped into categories in accordance with the resources or other public values that they are intended to protect. Indian people are frequently concerned with a category that is often referred to by federal agencies as "cultural resources" or "cultural resources management." Two of the most important statutes in this subject area are NHPA and the Archaeological Resources Protection Act of 1979 (ARPA).[125] The regulations implementing both of these statutes include important provisions through which Indian tribes not only can assert control over federal actions affecting Indian lands, but also can influence federal actions affecting properties of religious or cultural importance outside of tribal jurisdiction.[126] ARPA applies to Indian lands and public lands, and tribes are entitled to receive notice and be consulted if the issuance of a permit to conduct an archaeological excavation on public lands would affect a property of tribal cultural or religious importance.[127] The primary consultation requirement established

123. 36 C.F.R. pt. 800 (1990).

124. *E.g.*, the Endangered Species Act authorizes the Secretary of the Interior to effectively veto certain proposed federal actions, but also provides for an appeal from such a veto to a Cabinet level committee. *See* 16 U.S.C. § 1536 (1988).

125. Pub. L. 96-95, 93 Stat. 721 (codified at 16 U.S.C. §§ 470aa-470II (1979)).

126. *See* Suagee, *American Indian Religious Freedom and Cultural Resources Management: Protecting Mother Earth's Caretakers*, 10 AM. INDIAN L. REV. 1, 29-47 (1982).

127. ARPA § 4(c), 16 U.S.C. § 470cc(c) (1988). This statutory requirement is implemented through the uniform rules which were promulgated pursuant to § 10(a) of ARPA, 16 U.S.C. § 470ii (1988), by the Secretaries of the Interior, Agriculture, and Defense, and the Chairman of the Board of the Tennessee Valley Authority, 48 Fed. Reg. 1016 (1984), and are codified in four separate titles of the Code of Federal Regulations, at 43 C.F.R. pt. 7 (1990), 36 C.F.R. pt. 296 (1990), 32 C.F.R. pt. 229 (1990), and 18 C.F.R. pt. 1312 (1991). Section 10(a) of ARPA specifically mandated that the policy established by the American Indian Religious Freedom Act, 92 Stat. 469, 42 U.S.C. § 1996 (1988), be considered in the promulgation of the uniform regulations. The statutory notice requirement of § 4(c) is implemented through § ____.7 of the uniform regulations. *See, e.g.*, 43 C.F.R. § 7.7 (1990). Paragraph (b) of § 7.7 also establishes a proactive requirement that all federal land managing agencies identify and

by the NHPA is section 106, which was discussed briefly above. Although section 106 consultation has been problematic for many tribes, in large part because of the prominent role of the State Historic Preservation Officers, some tribes have achieved a measure of success in litigation involving section 106.[128] Furthermore, in 1986 the Advisory Council issued revisions to its regulations[129] that afford tribes a broader range of opportunities for involvement in section 106 consultation. These opportunities include the right to be invited to participate in consultation regarding proposed actions on Indian lands and proposed actions that "may affect properties of historic value to an Indian tribe on non-Indian lands."[130]

There is such an array of other environmental review and consultation requirements, and it is often not readily apparent whether a particular review requirement applies, especially if a number of alternatives to the proposed action are under consideration; agencies which have "jurisdiction by law" must be vigilant in monitoring the NEPA activities of federal agencies if the objective of integrating other review and consultation requirements into draft EISs is to be achieved. Tribes and other nonfederal entities that are concerned with expediting the processing of particular proposed actions can help by raising ques-

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initiate communication with "all Indian tribes having aboriginal or historic ties to the lands under the Federal land manager's jurisdiction." *Id.* § 7.7(b). The purposes of this requirement are to mitigate potential damage to such sites through avoidance and to maximize the time available for consultation if a proposed federal action may involve the issuance of an archaeological permit in an area of tribal cultural or religious importance. In the author's experience, federal land managing agencies generally have not taken much initiative in complying with this regulatory provision. Tribes that are concerned about potential damage to cultural and religious properties on public lands could make use of § ____.7 of the uniform ARPA regulations to advise federal agencies that the tribes expect to receive appropriate notices and to build a foundation for judicial review.

128. *E.g.*, Colorado River Indian Tribes v. Marsh, 605 F.Supp. 1425, 1438 (1985). *But see* Wilson v. Block, 708 F.2d 735, 755-56 (D.C. Cir.), *cert. denied*, 464 U.S. 956 (1983) (Forest Service's determination that the San Francisco Peaks are not eligible for listing on the National Register held not to be an abuse of discretion).

129. 51 Fed. Reg. 31,118 (1986), 36 C.F.R. pt. 800 (1990).

130. 36 C.F.R. § 800.1(c)(2)(iii) (1990). For actions on Indian lands, a tribe may participate in lieu of the State Historic Preservation Officer (SHPO), with the concurrence of the SHPO. *Id.* A bill was introduced in the 101st Congress that would authorize tribes, at their option, to take over part or all of the § 106 responsibilities of the SHPO within Indian reservations. *See* S. 1579, 101st Cong., 1st Sess. (1989). A similar bill has been introduced in the 102d Congress. S. 684, 102d Cong., 1st Sess. (1991); H.R. 1601, 102d Cong., 1st Sess. (1991).

tions during scoping regarding the applicability of other review and consultation requirements to the proposed action and alternatives. Another way in which tribes can help to expedite compliance with other environmental review and consultation requirements is to maintain working relationships at staff levels with relevant federal and state agencies. Although tribes justifiably resist attempts by state agencies to assert civil regulatory jurisdiction within Indian Country, consultation that does not amount to regulatory view can be mutually beneficial. If tribal staff have working relationships with federal and state agency staff, consultation can be accomplished without inordinate delay.

4. Draft EIS

The CEQ regulations provide that, except for proposals for legislation, the EIS is to be prepared in two stages: draft and final.[131] As the name implies, the draft EIS is circulated to the public for review and comment. The regulations prescribe some standards for the format and content of the draft EIS, some of which are based on the statutory language of NEPA and some of which are based on the objective of making the EIS more useful to decisionmakers and the public by making it conform to a standard format.

The basic purpose of an EIS is "to insure that the policies and goals defined in [NEPA] are infused into the ongoing programs and actions of the Federal Government."[132] Thus, the EIS is to be prepared so that it can be used by federal officials in making decisions, not so that it can be used "to rationalize or justify decisions already made."[133] To this end, the EIS shall be "concise, clear, and to the point," "written in plain language, supplemented with appropriate graphics, and analytic rather than encyclopedic."[134] Furthermore, each EIS "shall state how alternatives considered in it and decisions based on it will or will not achieve the requirements of sections 101 and 102(1) of [NEPA] and other environmental laws and policies."[135] The regulations also state: "Agencies shall not commit resources prejudicing selection of alternatives before making a final decision."[136]

131. 40 C.F.R. § 1502.9(a) (1990).
132. *Id.* § 1502.1.
133. *Id.* § 1502.5.
134. *Id.* §§ 1502.1, 1502.2, 1502.8.
135. *Id.* § 1502.2(d).
136. *Id.* § 1502.2(f).

One of the requirements for an EIS based on the statutory language is that an *interdisciplinary approach* be used. The regulations state that an EIS "shall be prepared using an interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts (section 102(2)(A) of the Act). The disciplines of the preparers shall be appropriate to the scope and issues identified in the scoping process."[137] One of the functions of cooperating agencies is to enhance the lead agency's interdisciplinary capability by making staff support available.[138] Thus, when agencies with jurisdiction by law choose to be cooperating agencies, not only can they help to integrate compliance with the laws and regulations they administer into an EIS, but they can also improve the quality of the EIS by enhancing the interdisciplinary capability of the team charged with preparing the EIS. Similarly, if an Indian tribe is concerned that a federal agency might prepare an EIS without benefit of professional expertise appropriate for the consideration of tribal interests, and the tribe has such expertise on staff or has access to such expertise, the tribe could become a cooperating agency for the purpose of providing such expertise to the interdisciplinary team charged with preparing the EIS.

The regulations call for agencies to use a recommended format which in practice has become the standard format:

(a) Cover sheet.
(b) Summary.
(c) Table of Contents.
(d) Purpose of and need for action.
(e) Alternatives including proposed action.
(f) Affected environment.
(g) Environmental consequences.
(h) List of preparers.
(i) List of agencies, organizations, and persons to whom copies of the statement are sent.
(j) Index.
(k) Appendices (if any).[139]

137. *Id.* § 1502.6. While the lead federal agency is responsibile for the preparation of the EIS, the regulations permit the use of contractors to prepare the EIS, provided that each such contractor execute a disclosure statement specifying that it has "no financial or other interest in the outcome of the project." *Id.* § 1505(c). *See* Sierra Club v. Marsh, 714 F. Supp. 539, 552-55 (D. Ma. 1989); Sierra Club v. Sigler, 695 F.2d 957, 962-63 n.3 (5th Cir. 1983).

138. 40 C.F.R. § 1502.6 (1990).

139. *Id.* § 1502.10.

Within this standard format, the two sections which generally contain the most extensive documentation are the sections on alternatives (including the proposed action) and environmental consequences. The requirement for the consideration of alternatives is based on two statutory provisions. Section 102(2)(C)(iii) simply includes "alternatives to the proposed action" among the requirements for the EIS.[140] Section 102(2)(E) requires agencies to "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources."[141] In the alternatives section, the regulations require agencies to "[r]igorously explore and objectively evaluate all reasonable alternatives," including the "no action" alternative and "reasonable alternatives that are not within the jurisdiction of the lead agency."[142] The requirement for agencies to consider alternatives that are outside their jurisdiction could be described as "counter-bureaucratic," and agencies cannot be expected to devote a substantial level of resources to the exploration of such alternatives. If for a given proposed action, tribes or others who would be affected by the proposed action believe that there are reasonable alternatives outside the lead agency's jurisdiction which should be seriously considered, they should formulate such alternatives during scoping and advocate their inclusion in the EIS.

The alternatives section must discuss mitigation measures if such measures are not already included within the proposed action and alternatives.[143] "*Mitigation*" measures might include: avoiding impacts by not taking an action; minimizing impacts by limiting the action; rectifying impacts through restoration of the affected environment; reducing impacts over time through maintenance operations; and compensating for impacts by providing substitute resources.[144] The kind of mitigation usually preferred by those whose interests would be adversely affected by a proposed federal action is avoidance, either by taking no action or by taking an alternative action which avoids certain particular adverse impacts. Whether an agency is willing to seriously consider mitigation through avoidance, often depends upon the extent to which an agency has committed its resources

140. 42 U.S.C. § 4332(2)(C)(iii) (1988).
141. *Id.* § 4332(2)(E).
142. 40 C.F.R. §§ 1502.14(a), (c)-(d) (1990).
143. *Id.* § 1502.14(f).
144. *Id.* § 1508.20.

to planning a proposed action. This is another reason for those whose interests would be affected by a proposed action to participate in scoping, raising their concerns and suggesting alternatives early in the process before substantial resources have been committed.

The section of the EIS devoted to the environmental consequences of the alternatives "shall consolidate the discussions of those elements required by sections 102(2)(C)(i), (ii), (iv), and (v) of NEPA which are within the scope of the statement and as much of section 102(2)(C)(iii) as is necessary to support the comparison."[145] The regulations provide some specific guidance for the content of the discussions included in this section of the EIS, such as a discussion of possible conflicts between the proposed action and the objectives of land-use plans and policies for the affected area, including tribal land use plans "in the case of a reservation"; the "[e]nergy requirements and conversation potential" of the alternatives; and the use of and conservation potential for natural resources (renewable and depletable) and historic and cultural resources.[146]

The discussion of alternatives and environmental consequences in an EIS is to be presented in a comparative format so that there is a clear basis for the decisionmaker and the public to choose among the options. An EIS may include a "cost-benefit" analysis, but one is not required. The regulations do require, however, that if an agency does prepare a cost-benefit analysis that is relevant to the choice among environmentally different alternatives, the EIS must "discuss the relationship between that analysis and any analyses of unquantified environmental impacts, values, and amenities."[147] Furthermore, the regulations state that "when there are important qualitative considerations" the EIS *should not* present "the weighing of the merits and drawbacks of the various alternatives . . . in a monetary cost-benefit analysis."[148] The concept of cost-benefit analysis is discussed further in part V of this article.[149]

5. Commenting

The regulations prescribe requirements for lead agencies to file draft EISs with the EPA and to distribute copies to and

145. *Id.* § 1502.16. The subsections cited in the regulations are quoted in the text accompanying *supra* note 23, and are also stated almost verbatim in *id.* § 1502.6.

146. *Id.* §§ 1502.16(c), (e)-(g).

147. *Id.* § 1502.23.

148. *Id.*

149. See *infra* notes 284-90 and accompanying text.

seek comments from a variety of governmental entities and private organizations. In some instances a preliminary draft EIS is distributed to federal and state agencies, and presumably would be distributed to tribes acting as cooperating agencies, but such distribution is not required by the regulations. Agencies must allow at least forty-five days for comments on a draft EIS.[150] and agencies frequently allow longer than this minimum. For example, the minimum review period for draft EISs prepared by the DOI bureaus, including BIA, is sixty days from the date of transmittal to the EPA.[151] An agency may not make a decision on a proposed action until a minimum of ninety days from the date the draft EIS is available to the public. This time period begins to run when the draft EIS is listed in the weekly *Federal Register* notice published by the EPA of EIS drafts filed by federal agencies during the preceding week.[152]

Among the organizations and agencies from which comments must be requested are: federal agencies with jurisdiction by law or special expertise, state and local agencies that are authorized to develop and enforce environmental standards, Indian tribes ("when the effects may be on a reservation"), and any agency that has asked to receive EISs for the proposed kind of action.[153] Most federal agencies that propose actions in the vicinity of Indian reservations routinely include tribes when distributing an EIS, although some agencies may be recalcitrant in this regard.

A more important problem for most tribes is what to do with EISs that they receive from various federal agencies. Although EISs now use a standard format and is generally better focused than it was in NEPA's first decade, it is still a detailed and interdisciplinary document. Environmental professionals who are

150. 40 C.F.R. § 1506.10(c) (1990). The Environmental Protection Agency is authorized to reduce this minimum period for "compelling reasons of national policy," but the lead agency does not have this authority. *Id.* § 1506.10(d).

151. 516 DM § 4.24A.

152. 40 C.F.R. § 1506.10(b)(1) (1990).

153. *Id.* §§ 1503.1(a)(1)-(2). Under this regulatory language, it is possible that federal agencies could take a narrow view of their responsibility to include tribes in the distribution of EISs, *i.e.*, not doing so in cases in which the environmental impacts are off-reservation, even though a tribe may have cultural or religious impacts on a tribe and its members. However, such a position would be difficult to reconcile with the Supreme Court's ruling in *Metropolitan Edison*, if there is a sufficiently close causal nexus between environmental impacts off-reservation and cultural or religious or psychological impacts within a reservation. *See* Metropolitan Edison Co. v. People Against Nuclear Energy, 460 U.S. 766, 774 (1983). Moreover, a tribe that is concerned that an agency might take such a narrow view is clearly entitled to be included in the distribution of EISs pursuant to 40 C.F.R. §§ 1503.1(a)(2)(iii), 1503.1(a)(4) (1990).

experienced in reviewing EISs and drafting comments typically require a substantial amount of time to conduct a thorough review. Many tribes do have professional staffs to whom such review responsibilities could be assigned, but the staff typically has a range of other responsibilities. An EIS is only likely to be carefully reviewed in those cases when the likelihood of adverse effects on tribal interests as a result of the proposed action simply cannot be ignored.

The regulations state that agencies with jurisdiction by law or special expertise with respect to any environmental impact have a duty to comment.[154] The CEQ considers the BIA to possess special expertise with regard to all manner of environmental impact on Indian lands and jurisdiction by law over certain kinds of impacts.[155] Thus, a tribe that lacks the resources to review and comment on an EIS for a proposed action which may affect its interests may want to stress the BIA's duty to comment on the particular EIS. There have been instances in which the BIA's comments have been helpful in protecting tribal interests, particularly when tribes have insisted that the BIA play a role in protecting tribal interests.[156] Tribes are familiar, though, with the limitations of the BIA's staff resources. While cooperation among tribes and the BIA in reviewing EISs may well be mutually beneficial, reliance on the BIA to protect tribal interests is not advisable. An alternative that may be workable for some tribes would be to use regional inter-tribal organizations to provide an EIS monitoring service for member tribes.

Regardless of how tribes manage the practical aspects of monitoring an EIS on a proposed action that may affect their interests, it is important to do so somehow. If a tribe has participated in scoping, it may have helped frame the alternatives. In such a case, the tribe's comments on the draft EIS may be limited to stating a preference among alternatives and stressing the need for mitigation measures if the agency selects an alternative that adversely affects tribal interests. If com-

154. 40 C.F.R. § 1503.2 (1990).

155. 49 Fed. Reg. 49,750 (1978), *reprinted in* DESKBOOK, *supra* note 5, at 71-95. *See supra* note 118.

156. *E.g.*, a number of tribes in Nevada and Utah informed the BIA that they were gravely concerned about a proposal by the U.S. Air Force to base the MX missile system in Nevada and Utah, and, in response to this concern, the BIA critically reviewed the EIS distributed in 1980 by the Air Force. *See* Suagee, *supra* note 126, at 51-52. The BIA's comments, as well as those of several tribes, may have contributed to the decision not to proceed with the proposal. The process definitely contributed to institutional learning on the part of the Air Force.

menting on an EIS is a tribe's first input into a proposed action, it may be advisable to provide detailed suggestions for alternatives and mitigation measures, supported by persuasive reasoning. If an agency scrutinizes reasonable alternatives and mitigation measures but decides not to adopt them, courts are not likely to set aside agency action.[157] Those whose interests would be adversely affected must carry the burden of persuasion.

6. Final EIS

After the close of the comment period, a final EIS is prepared (except for an EIS on a proposal for legislation, which requires both a draft and a final EIS only in certain limited instances).[158] The lead agency must respond to the comments that have been filed by modifying one or more of the alternatives, developing new alternatives, revising the analyses, making factual corrections, or explaining why the comments do not warrant further response.[159] All substantive comments are to be included in or attached to the final EIS, whether or not the agency considered the comments worthy of response.[160] The final EIS, like the draft EIS, must be filed with the EPA, which lists all final EISs received during the preceding week in its weekly notice in the *Federal Register*.[161] The minimum time period that an agency must wait after the publication of such notice and before making a decision among the alternatives is thirty days.[162]

The decision that an agency makes based on an EIS is required to be documented in a concise public record of decision (sometimes referred to as "ROD").[163] There is no prescribed format for a record of decision, which can be incorporated into any other record prepared by the agency. The record must state what the decision was; identify all alternatives that were considered; state which alternatives were considered to be environmentally preferable; identify and discuss any non-environmental factors that were taken into account by the agency in making its decision; state whether the agency has adopted "all practicable

157. See *infra* notes 173-84 and accompanying text.

158. 40 C.F.R. § 1506.8(b)(2) (1990).

159. *Id.* § 1503.4.

160. *Id.*

161. *Id.* §§ 1506.9, 1506.10(a).

162. *Id.* § 1506.10(b). If the final EIS is filed with the EPA during the 90-day minimum period prescribed for the draft EIS, the agency must wait until the expiration of whichever time period yields a later date. In practice, the 30-day period from the publication of notice after the filing of a final EIS almost always yields a later date.

163. *Id.* § 1505.2.

means to avoid or minimize environmental harm" associated with the selected alternative; and, if such practicable mitigation measures have not been adopted, explain why not.[164] If mitigation measures have been adopted, the lead agency is responsible for implementing mitigation measures (unless another agency has agreed to carry out the mitigation program) and shall include appropriate conditions in approvals and funding actions.[165] Furthermore, if the decision includes mitigation measures that were proposed by a cooperating or commenting agency, and that agency requests the lead agency to keep it informed on progress in carrying out the mitigation measures, the lead agency is required to do so.[166] Tribes that are concerned about particular proposed actions can use this provision of the regulations to establish reporting requirements if the proposed mitigation measures are ultimately incorporated into the decision.

7. Predecision referral to CEQ

The regulations establish a process by which proposed agency actions can be referred to the CEQ in the event that a federal agency disagrees on environmental grounds with the action that the lead agency plans to take.[167] A federal agency can make such a referral within twenty-five days of the date that the final EIS was made available to the public, which is the date of first publication of notice by the EPA. In addition, the Administrator of the EPA has broad authority under section 309 of the Clean Air Act to refer matters to the CEQ that are "unsatisfactory from the standpoint of public health or welfare or environmental quality."[168] After the lead agency is given the opportunity to respond to the points raised by the referring agency, the CEQ may take a range of actions including referring the matter to the President. The CEQ rarely refers such disputes to the President, but rather usually publishes findings and recommendations, which are not binding on agencies but are usually accepted.[169]

164. *Id.*
165. *Id.* § 1505.3.
166. *Id.*
167. *Id.* § 1504.
168. 42 U.S.C. § 7609 (1988).
169. Bear, *supra* note 22, at 10-11. *See also* S. RAND & M. TAWATER, ENVIRONMENTAL REFERRALS AND THE COUNCIL ON ENVIRONMENTAL QUALITY (1986) (report by the Environmental Law Institute to the Council on Environmental Quality), *reprinted in* COUNCIL ON ENVTL. QUALITY, ENVIRONMENTAL QUALITY [17TH ANNUAL REPORT] 248-66 (1986).

8. Supplemental EIS

In some circumstances it may be appropriate for an agency to prepare a supplement to an EIS, either after the EIS has been distributed as a draft for public review and comments or after the EIS has been released in final form. The regulations direct that agencies shall prepare a supplemental EIS if the agency "makes substantial changes in the proposed action that are relevant to environmental concerns" or if there "are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts."[170] A supplemental EIS may be required if a substantial period of time has elapsed between the preparation of a draft and a final EIS or between the preparation of a final EIS and an agency decision. The decision whether or not to prepare a supplemental EIS has been characterized by the U.S. Supreme Court as an "example of a factual dispute the resolution of which implicates substantial agency expertise," which should not be set aside unless "arbitrary or capricious."[171] If a supplemental EIS is prepared, the regulations provide that it is to be circulated and filed in the same way as a draft and final EIS, except that scoping is not required.[172]

C. The Heart of NEPA: Consideration of Alternatives

As noted earlier, the regulations state that the section on the consideration of alternatives is "the heart" of the EIS.[173] The analysis of alternatives is interrelated with the analysis of the environmental consequences of the proposed action. By formulating alternative ways to realize the agency's objective, adverse environmental consequences can be avoided, or at least mitigated. The regulations require agencies to "[r]igorously explore and objectively evaluate all reasonable alternatives."[174] But just what does this really mean? The consideration of alternatives in the NEPA process has been the subject of a considerable amount of litigation. To extend the metaphor one might say

170. 40 C.F.R. § 1502.9(c) (1990).

171. Marsh v. Oregon Natural Resources Council, 490 U.S. 360, 376-78 (1989). The Court noted that several Courts of Appeal had previously adopted a "reasonableness" standard for judicial review of such cases, and, although the Court did not adopt the "reasonableness" standard, it did say that "the difference between the 'arbitrary and capricious' and 'reasonableness' standards is not of great pragmatic consequence." *Id.* at 377 n.23.

172. 40 C.F.R. § 1502.9(c) (1990).

173. *Id.* § 1502.14. See *supra* notes 140-48 and accompanying text.

174. 40 C.F.R. § 1502.14(a) (1990).

that the rule is that, although an EIS must have a heart, there is no requirement for the heart to influence the agency's decision.

The Supreme Court has made it clear that NEPA is a procedural statute that requires agencies to be aware of environmental consequences, but the statute does not impose substantive requirements on federal agencies.[175] If an agency has complied with NEPA's procedural requirements as implemented through the CEQ regulations, "the agency is not constrained by NEPA from deciding that other values outweigh the environmental costs."[176] On substantive issues the courts have deferred to the agencies' expertise and reviewed the adequacy of the EIS under a "rule of reason" standard.[177]

In *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council*,[178] the Supreme Court said that "the concept of alternatives must be bounded by some notion of feasibility" and that "[t]ime and resources are simply too limited to hold that an impact statement fails because the agency failed to ferret out every possible alternative, regardless of how uncommon or unknown that alternative may have been at the time the project was approved."[179] The Court also ruled that the agency is not solely responsible for identifying the alternatives to be considered; that while "NEPA places upon an agency the obligation to consider every significant aspect of the environmental impact of a proposed action," those who hope to influence the agency's decision must "structure their participation so that it is meaningful, so that it alerts the agency to the [their] position and contentions."[180] *Vermont Yankee* involved the consideration of energy conservation as an alternative to a nuclear power plant. The Court stressed that when the EIS in question had been prepared, energy conservation was a novel idea and the CEQ guidelines then in effect did not require consideration of energy conservation as an alternative.[181] The Court said that

175. Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350-51 (1989).

176. *Id.*

177. *See* D. MANDELKER, *supra* note 58, § 10.13; Mandelker, *NEPA Alive and Well: The Supreme Court Takes Two*, 19 Envtl. L. Rep. (Envtl. L. Inst.) 10, 385 (Sept. 1989). Some courts have shown a willingness to engage in substantive review, but only to the extent necessary to determine if agency action was "arbitrary and capricious." *See* Izaak Walton League of Am. v. Marsh, 655 F.2d 346, 371 & n.67 (D.C. Cir.), *cert. denied*, 454 U.S. 1092 (1981).

178. 435 U.S. 519 (1978).

179. *Id.* at 551.

180. *Id.* at 553.

181. *Id.* at 552. The CEQ regulations do require consideration of "[e]nergy requirements and conversation potential of various alternatives and mitigation measures." 40 C.F.R. § 1502.16(e) (1990). Thus, if a case similar to *Vermont Yankee* were to arise now, the EIS would at least be required to contain considerations of energy conversation.

since the intervenors in that case were "requesting the agency to embark upon an exploration of uncharted territory," the agency had an obligation to do more than merely raise the issue.[182]

Mitigation is an important aspect of the consideration of environmental consequences and alternatives.[183] The Supreme Court has endorsed the requirement in the CEQ regulations that an EIS include consideration of mitigation measures.[184] Still, this requirement does not mean an agency must actually carry out a mitigation plan.[185]

182. *Vermont Yankee*, 435 U.S. at 553. The Court's characterization of energy conservation as "uncharted territory" should be read in the context of the time period during which the planning and decisionmaking at issue in *Vermont Yankee* were executed, which was "the late 1960's and early 1970's." *Id.* In the mid- and late 1970s, energy conservation was the subject of considerable attention from government and the private sector, largely in response to the 1973 embargo by the Organization of Petroleum Exporting Countries (OPEC). By the mid-1980s, it had become clear that this formerly "uncharted territory" is the least expensive and most productive form of energy "supply" available. According to Lovins and Lovins, Department of Energy (DOE) statistics indicate that "[o]f the total increase from 1973 to 1986 in national primary energy supply, savings [*i.e.* energy conservation] provided 69 percent; coal, 15 percent; nuclear power, 10 percent; and renewable sources, at least 6 percent. (Renewables probably supplied about twice that much, but DOE stopped counting most dispersed renewable sources years ago, so we use here conservative official estimates showing that renewables now provide about 11 percent of the total U.S. energy supply and constitute the fastest growing part.)." Lovins & Lovins, *Oil-Risk Insurance: Choosing the Best Buy*, 2 GOV'T ACCT. OFF. J. 52, 55 (Summer 1988) (footnote omitted). Moreover, the DOE statistics overstate the respective contributions of coal and nuclear by giving them credit on the basis of primary energy (*i.e.*, the steam produced in boilers), rather than their electrical power output, which is typically about one-third of their primary energy output. *Id.* Energy conservation measures tend to cost much less than supply options. Using an upper limit of $10 per barrel of oil equivalent, the Rocky Mountain Institute has identified a wide range of practical energy conversation measures which, in the aggregate, would save about "*three-fourths of all oil now used in the United States.*" *Id.* at 58 (emphasis supplied). *See also* Fickett, Gellings, & Lovins, *Efficient Use of Electricity*, SCIENTIFIC AM., Sept. 1990, at 64, 66 (Lovins presents the case that cost-effective energy efficiency improvements could save enough energy to cut electricity consumption in the U.S. to about one-fourth the current level of consumption). The United States formerly had a federal program to provide subsidized loans for investments in energy conservation and solar energy in buildings, known as the Solar Energy and Energy Conservation Bank (Solar Bank). In its final annual report to Congress, the Solar Bank reported that in the 12-month period from July 1986 through June 1987, the Bank had provided subsidies for investments that it predicted would save almost 2.5 million barrels of oil equivalent, at a cost to the federal treasury of $4.25 per barrel. SOLAR ENERGY & ENERGY CONSERVATION BANK, FY 1987 ANNUAL REPORT TO CONGRESS 6. Although the Solar Bank was dismantled before it had a chance to achieve its potential, its record could be used as a benchmark in the NEPA analysis of proposed energy supply projects.

183. 40 C.F.R. §§ 1502.14(f), 1502.16(e)-(h) (1990).

184. Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350-53 (1989).

185. *Id.*

The principle of judicial deference to agency judgment underscores the need for those whose interests may be adversely affected by agency action to participate in the NEPA process early, to raise their concerns effectively, and to suggest specific alternatives in a constructive manner. If participation is not enough to change the minds of federal agency decisionmakers, the only effective way to put the heart back into the process may be to move into the political arena. A well-informed public is important. Alliances with others who have shared concerns can be critical. Through participation in the NEPA process, the public can be informed and alliances can be forged.

IV. The Implementation of NEPA in Indian Country

As a federal agency that is part of the Department of the Interior, the approach that the BIA has taken in carrying out its responsibilities under NEPA and the CEQ regulations[186] has been mandated by the DOI's NEPA implementing procedures.[187] These procedures establish a standard approach for all DOI bureaus. In Indian Country a major disadvantage of following this approach is that the documents explaining the NEPA process are issued through the internal directives systems of the DOI and constituent bureaus, i.e., the Departmental Manual, and for BIA actions, the BIA Manual. Neither of these manuals is readily available in Indian Country. Accordingly, Indian tribes, the affected public, and even BIA staff generally are not knowledgeable about the requirements of the NEPA process. Even individuals who want to become well-informed encounter difficulties in doing so. In contrast with these internal manuals, title 25 of the CFR is widely available in Indian Country. The DOI procedures do authorize bureaus to provide guidance to the affected public through regulations,[188] but bureaus are not required to do so. Not surprisingly, the BIA has not. It would be very helpful for those whose activities in Indian Country become entangled with the BIA's NEPA compliance to be able to find some guidance in title 25 of the CFR. The appendix to this article is a draft of such guidance, a draft that is essentially

186. Agency compliance requirements are specified in 40 C.F.R. pt. 1507 (1990), especially §1507.3(b).

187. 516 DM chs. 1-6, 45 Fed. Reg. 27541 (1980) *as amended by* 49 Fed. Reg. 21,437 (1984), *reprinted in* DESKBOOK, *supra* note 5, at 152-204. In addition, 516 DM ch. 7 provides guidance for DOI bureaus regarding commenting on EISs prepared by other agencies.

188. 516 DM § 6.4A(2).

unchanged in content from the existing DOI procedures.[189] The only real difference is that the draft would unify language from various areas, and would be readily available to the affected public. The place that I suggest is a new part 260 of title 25 of the CFR.[190] Since the content would be essentially unchanged, a review of the existing DOI procedures can serve as an explanation of the content of my suggested part 260.

A. The DOI Implementing Procedures

The existing DOI procedures proclaim statements of policy for the department,[191] assign NEPA responsibilities among departmental officials,[192] and provide guidance on consultation and cooperation with other agencies and organizations, including Indian tribes.[193] As prescribed by the CEQ regulations, the primary function of agency procedures is to establish specific criteria for identifying and sorting classes of actions according to the NEPA screening process described earlier:[194]

(1) Actions which normally require an EIS;
(2) Categorical exclusions; and
(3) Actions which normally require an EA but not necessarily an EIS.

189. This is not to suggest that the content of the existing procedures has been crafted so well that there is no need for any changes. On the contrary, since there has yet to be an effective effort to solicit input from tribes, it is likely that a variety of changes could be suggested. *See infra* note 197. Rather, I have simply decided not to suggest changes at this time. If my suggestion is accepted and the BIA does publish such proposed guidance in the *Federal Register* for comment, I would suggest changes during the comment period. Moreover, from a pragmatic perspective, it may take the BIA some time to adopt my suggested approach, and, in the mean time, by simply reciting the relevant language of the existing procedures I hope that my draft guidance will be useful to tribes and the affected public.

190. The reason for this designation is that the existing parts 261 and 265 bear some relationship to environmental quality. Part 261 deals with permits under the Antiquities Act of 1906, and the existing part 265 deals with the establishment of roadless and wild areas within Indian Country. Revisions to part 261 have been proposed to reflect the fact that the Archaeological Resources Protection Act of 1979 superseded the Antiquities Act for most purposes. *See* Antiquities Act of 1906, 16 U.S.C. § 432 (1988); Archaeological Resources Protection Act of 1979, 16 U.S.C. §§ 470aa-470II (1988). Section 10(b) of ARPA, 16 U.S.C. § 470ii(b) (1988) authorizes agencies to issue implementing regulations to supplement the uniform regulations. ARPA, § 10(b), 16 U.S.C. § 470ii(b) (1988); *see supra* note 129. The BIA has published such implementing regulations as proposed rules. 55 Fed. Reg. 2580 (1990).

191. 516 DM § 1.2.

192. *Id.* § 1.3.

193. *Id.* § 1.5.

194. The three categories are paraphrased from 40 C.F.R. § 1507.3(b)(2) (1990). See *supra* notes 73-92 and accompanying text.

The DOI procedures require each bureau to identify the kinds of actions it performs, sort them according to the screening categories, and list them in an appendix to the DOI procedures.[195] In compliance with this requirement, the BIA developed its appendix to the DOI procedures, which has been published in the *Federal Register* for review and comment twice.[196] Each agency's appendix is required to list those kinds of actions for which an EIS is normally prepared[197] and those kinds of actions that are normally categorical exclusions.[198] In addition, the DOI procedures include a listing of departmental categorical exclusions,[199] as well as a listing of departmental exceptions to categorical exclusions.[200] The DOI procedures do not require bureaus to compile lists of kinds of actions which normally require an EA.[201]

In addition to bureau-specific appendices, the DOI procedures require each bureau to prepare a "NEPA handbook" to provide

195. 516 DM §§ 6.4A(3), 6.5A(3), (4). The BIA's appendix is 516 DM 6, app. 4.

196. 45 Fed. Reg. 49,368 (proposed 1980) (published as adopted 46 Fed. Reg. 7490 (1981)) (no comments were received); 52 Fed. Reg. 42,349 (1987) (published for comment proposing revisions in and additions to the list of categorical exclusions); 53 Fed. Reg. 10,439 (1988) (published as adopted, making slight revisions in categorical exclusions relating to rights-of-way and minerals, deleting some categorical exclusions relating to minerals, and adding some categorical exclusions relating to forestry) (no comments were received). In neither instance were any special efforts made to solicit comments from Indian tribes, such as mailing a copy to each tribal leader with an explanatory letter. Note that the NEPA DESKBOOK, *supra* note 5, includes the original BIA appendix but not the revised version.

197. The list for the BIA is codified at 516 DM 6, app. 4 § 4.3, *reprinted in* the appendix to this article as suggested 25 C.F.R. § 260.18.

198. The list for the BIA is codified at 516 DM 6, app. 4 § 4.4, *reprinted in* the appendix to this article as suggested 25 C.F.R. § 260.21.

199. 516 DM 2, app. 1, *reprinted in* the appendix to this article as suggested 25 C.F.R. § 260.20.

200. 516 DM 2, app. 2, *reprinted in* the appendix to this article as suggested 25 C.F.R. § 260.22. The requirement that agency implementing procedures include criteria to identify "extraordinary circumstances" in which an EA must be prepared for an action, even though it is included within a categorical exclusion, is based on 40 C.F.R. §§ 1507.3(b)(1), 1508.4 (1990).

201. The apparent rationale for not requiring lists for this category is this — if an action is not included in one of the other two lists, then an EA must normally be prepared, unless the environmental effects that might result have been sufficiently covered in an earlier environmental document. *See* 516 DM § 3.2A. Regardless of whether this position is a correct interpretation of the CEQ regulations, 40 C.F.R. § 1507.3(b)(2) (1990), the affected public might find it easier to determine what will be required for NEPA compliance if bureaus also provide a list of those kinds of actions for which an EA is normally required.

guidance to its personnel on how to implement NEPA.[202] Bureau NEPA handbooks are not regulatory in nature, but are intended to explain the CEQ regulations and DOI procedures. The BIA's NEPA handbook reflects the additional purpose of providing guidance to tribal officials.[203] In order to make it easier for BIA personnel to determine what level of documentation is required for NEPA compliance, the BIA's NEPA handbook provides a non-exhaustive list of the kinds of actions for which an EA is normally required.[204]

Besides the screening process, the CEQ regulations require that agency implementing procedures specifically address a number of other provisions in the regulations, one of which states that agency procedures must provide for cases in which they will be called on to become involved in actions that are proposed by other agencies or non-federal entities.[205] This requirement means having written policies in place or making staff available to provide guidance to applicants regarding studies or other information that the agency will need before it can grant its approval or otherwise take action on the proposal. The DOI procedures address this by directing officials charged with responding to externally initiated proposals to "require applicants, to the extent necessary and practicable, to provide environmental information, analyses, and reports as an integral part of their applications."[206] In addition to helping departmental bureaus obtain the information they need to fulfill their NEPA respon-

202. 516 DM § 6.4A(1). The BIA's NEPA handbook was issued through the BIA directives system on Feb. 22, 1982, and is designated 30 BIAM [BIA Manual] Supp. 1. It has been slightly revised at least once, to incorporate the revision to 516 DM 6, app. 4, published on March 31, 1988. 53 Fed. Reg. 10,439 (1988). The author was the primary author of the BIA's NEPA Handbook.

203. 30 BIAM Supp. 1, § 1.1.

204. *Id.* § 3.4B, *reprinted in* the appendix to this article as suggested 25 C.F.R. § 260.19.

205. 40 C.F.R. §§ 1507.3(b)(1), 1501.2(d) (1990). In addition, 40 C.F.R. § 1507.3(b)(1) (1990) lists four other sections that must be addressed in agency implementing procedures: (1) section 1502.9(c)(3), providing that for cases in which a supplemental EIS is prepared, agency procedures must include a process for incorporating the supplemental EIS into the formal administrative record; (2) section 1505.1, providing that environmental documents, including comments from outside the agency and agency responses to comments, must be used in agency decisionmaking (see 516 DM § 5.3); (3) section 1506.6(e), requiring that agency procedures explain how interested people can get information or status reports on EISs and other aspects of the NEPA process (see 516 DM §§ 6.5A(1)-(2)); and (4) section 1508.4, requiring that agency procedures provide a means for identifying exceptions to categorical exclusions (see *supra* notes 78-81 and accompanying text).

206. 516 DM § 1.4C; *see also* 516 DM §§ 2.2B, 4.10A(2).

sibilities, the intent of this requirement is to encourage external applicants to take environmental considerations into account when they develop their plans.

In accordance with this departmental mandate, the BIA's NEPA handbook states that when the BIA is asked to take action on an externally initiated proposal, "the applicant will normally be required to prepare the EA, if one is required, and to provide supporting information and analyses as appropriate."[207] Part of the rationale for this requirement is that BIA field offices generally lack the staff to prepare more than a few EAs at any given time and that requiring applicants to wait for the BIA to prepare them on every proposal creates bottlenecks and delays. Since EAs are relatively brief documents that do not normally require a broad range of professional expertise, it may be more expeditious to require external applicants to prepare them. In addition, requiring external applicants to do their own EAs may contribute to more environmentally sensitive proposals. The BIA may adopt such an externally prepared EA if the responsible BIA official independently determines that it complies with the CEQ regulations and DOI procedures. If the EA is "essentially but not entirely in compliance," the BIA may "augment" such an EA and then adopt it.[208] If the BIA relies on such an EA in making a FONSI, the FONSI must acknowledge the origin of the EA and take full responsibility for its scope and content.[209]

Requiring external applicants to prepare their own EAs could become the standard practice for the BIA, which would help to make the NEPA screening process function more expeditiously. The lack of readily available guidance for external applicants on how to prepare EAs obviously makes this "requirement" more burdensome than it need be. My proposed part 260 would provide such guidance.

B. The Missing Piece: BIA Guidance for "Applicants"

Although required by the DOI implementing procedures to "[p]repare program regulations or directives for applicants," the BIA has not issued such guidance.[210] The BIA's appendix to the

207. 30 BIAM Supp. 1, § 4.2B.

208. 516 DM § 3.6.

209. *Id.*

210. The mandate to prepare guidance is stated in 516 DM § 6.4A(2). For several years the BIA included this issue in the Department of the Interior's semi-annual agenda of rulemaking, but no progress was made toward the promulgation of such guidance.

DOI procedures does contain a list of BIA regulations governing other programs for which environmental documents may sometimes be required, but the regulations cited provide no real guidance.[211] This is particularly unfortunate in light of the fact that guidance can be found if one knows where to look. In the appendix to this article, I have compiled guidance for applicants and the public by drawing upon existing documents — the DOI implementing procedures, the BIA appendix to the DOI procedures, and the BIA NEPA handbook.[212] I propose that this guidance be codified at title 25, part 260 of the CFR, and I have arranged the information in a format that is generally consistent with other regulations contained in title 25. One reason for arranging the information in this format and presenting it as an appendix to this article is to make it more accessible for tribal officials, Indian people, and the affected public, until such time as the BIA decides to adopt my suggested approach.

My suggested part 260 should be considered only a first draft. My approach in drafting has been to use passages from existing documents and to minimize the use of new language. There may be some points on which more guidance would be helpful. No doubt there are sections in my draft in which some language could be deleted. The draft would undoubtedly benefit from circulation among tribal governments for review and comment, and this task should be accomplished prior to publication in the *Federal Register*. Such tribal review might yield suggestions for revisions in some of the source documents, for example, additions to the BIA's list of categorical exclusions.[213] Any such revisions should be accomplished at the same time as the promulgation of part 260. After circulation among the tribes, the BIA should proceed expeditiously to publish this guidance in the *Federal Register* for review and comment, make appropriate revisions, and publish a final version so that the guidance can be made readily available to the public through codification in

211. 516 DM § 6, app. §§ 4.2B, 4.2C. The "guidance" listed in these two sections of app. 4 are listed *infra* note 17 of the appendix to this article.

212. In addition to these source documents, I have included some provisions from the BIA's basic manual issuance on environmental quality, 30 BIAM, and some definitions from the CEQ regulations (since copies of title 40 of the CFR are not as readily available in Indian Country as are copies of title 25).

213. This would not be surprising. The total lack of any comments from tribes the two times that the BIA's appendix to the DOI procedures was published in the *Federal Register*, *see supra* note 195, indicates that tribes have not focused on this aspect of NEPA implementation in Indian Country.

title 25. In the event that the BIA does not respond favorably to this proposal, one or more tribes, or inter-tribal organizations, might petition the Secretary of the Interior for the issuance of part 260 as a rule.[214]

C. *Making NEPA Work Better in Indian Country*

Regardless of whether the proposed part 260 becomes codified in title 25, there are a number of steps that Indian tribal governments can take to make NEPA work better in Indian Country. Most of my suggestions have been mentioned earlier in this article and do not need further elaboration. Briefly, tribes and others whose interests may be affected by actions taken by the BIA and other federal agencies should become involved early in the NEPA process. For actions that would require an EIS, tribes should participate during scoping, and they should consider becoming cooperating agencies. If the proposed action may adversely affect tribal interests, tribes should suggest specific alternatives and/or mitigation measures. A mitigation plan must be incorporated into the federal agency's record of decision to be enforceable.[215] If tribes lack the professional expertise to formulate specific alternatives, they may want to prevail upon their federal trustee for assistance, or they may want to build alliances with educational institutions, non-profit public interest organizations, and others who do have the expertise. In addition, tribes should not let limitations on their staff resources prevent them from expressing their concerns and their value judgments.

If a tribe is the proponent of an action that will require an EIS, it should use the NEPA process in good faith to help identify alternatives and mitigation measures. A wide-ranging exploration of alternatives may identify an alternative that would achieve the tribe's objectives with less adverse environmental impacts. In some instances, well-designed mitigation measures can alleviate environmental impacts to such a degree that the impacts will no longer be "significant," thus avoiding the requirement to prepare an EIS.[216]

While it is important to participate in the EIS process when the actions may affect tribal interests, it is also important to keep in mind that an EIS is prepared for only a small fraction of federal actions. A much larger fraction of federal actions are

214. *See* 43 C.F.R. pt. 14 (1990).

215. 40 C.F.R. §§ 1505.2(c), 1505.3 (1990).

216. *See* Cabinet Mountains Wilderness, 685 F.2d 678, 684 (D.C. Cir. 1982); Sierra Club v. United States Dep't of Transp., 753 F.2d 120, 129 (D.C. Cir. 1985).

taken on the basis of an EA and a FONSI. Tribes could emphasize EAs by making them a standard part of their planning and decisionmaking for tribal actions that may have environmental impacts. By emphasizing the proficient preparation of EAs, tribes can use the NEPA process to reach better decisions, at least in the environmental sense. Tribes can also use the NEPA process to make the BIA do likewise. In appropriate instances, EAs can be completed which are sufficiently broad enough in scope that the environmental effects of certain kinds of subsequent actions will be sufficiently addressed. Subsequent actions that are covered by earlier EAs then will not require additional environmental documents. Tribes can require the BIA to prepare EAs on certain kinds of actions by enacting tribal environmental laws.[217] By requiring private parties who propose "development" activities in Indian Country to prepare EAs on their proposals, tribes can encourage such parties to plan better projects. By addressing other environmental review and consultation requirements in EAs, compliance with these other requirements can be expedited. In summary, by learning to use EAs and insisting that they be prepared when required, tribes could make some real progress toward more effective protection of the environmental quality of their reservations.

A final suggestion is that tribes consider enacting their own NEPA-like statutes. At least fifteen states have enacted such state laws, which are often referred to as "Mini-NEPAs."[218] Tribes might use such laws as models while considering their tribal traditions, hence devising their own unique approaches. Another source that should be considered is the American Law Institute's Model Land Development Code.[219] Such an approach would lend itself to the integration of environmental concerns with the other kinds of concerns that drive "development." Since the reasons for pursuing development generally rise from

217. 516 DM § 2.3A(3); 516 DM 2, app. 2, § 2.10.

218. CAL. PUB. RES. CODE §§ 21000-21177 (West 1986 & Supp. 1991); CONN. GEN. STAT. ANN. §§ 22a-1 to -7b (West 1985 & Supp. 1991); HAW. REV. STAT. §§ 343-1 to -8 (1985 & Supp. 1990); IND. CODE ANN. §§ 13-1-10-1 to -8 (Burns 1990); MASS. ANN. LAWS ch. 30, §§ 61-62H (Law. Co-op. 1983); MD. NAT. RES. CODE ANN. §§ 1-301 to -305 (1989); MINN. STAT. ANN. §§ 116D.01 to .07 (West 1987 & Supp. 1991); MONT. CODE ANN. §§ 75-1-101 to -324 (1989); N.C. GEN. STAT. §§ 113-A-1 to -10 (1988); N.Y. ENVTL. CONSERV. LAW §§ 8-0101 to -0117 (Consol. 1984 & Supp. 1991); P.R. LAWS ANN. tit. 12, §§ 1121-1143h (1978 & Supp. 1988); S.D. CODIFIED LAWS ANN. §§ 34A-9-1 to -13 (1986); VA. CODE ANN. §§ 10.1-107 to -114 (1989 & Supp. 1991); WASH. REV. CODE ANN. §§ 43.21C.010 (1983); WIS. STAT. ANN. § 1.11 (West 1986).

219. MODEL LAND DEV. CODE (1976) (complete text adopted by the ALI at Washington, D.C., May 21, 1975, and reporter's commentary).

"non-environmental" concerns, it is important to try to devise an integrated approach. The next part of this article explores the concept of "development" and presents an integrated approach to development planning.

V. Environmental Considerations in Planning "Economic Development"[220]

In the context of Indian Country in the USA, the term "economic development" has been in widespread use for at least two decades without any consensus on, or even much attention to, what the term means. Although there is a growing literature in the general area of Indian Country economic development,[221] these writings have arisen from many different contexts: some academic, some political, some the work of tribal staff and attorneys attempting to make projects successful. There is no academic discipline or other community of interest that can achieve a consensus on the meanings of terms or that can even focus debate on areas of disagreement until there is at least a common understanding of what the disagreements are. Nevertheless, there does seem to be a consensus that "economic development," whatever its meaning, is desirable. At least five bills were introduced in the 101st Congress relating to Indian economic development.[222] The Assistant Secretary of the Interior for Indian Affairs has launched a major effort to formulate a tribal economic development initiative, in consultation with tribal leaders.[223] In general terms the emphasis of federal support for

220. Part V is condensed from a paper written as an independent study for the Master of Laws (LL.M.) in International Legal Studies, the American University, Washington, D.C. The faculty advisor for this independent study was Professor José Epstein, Department of Economics, the American University.

221. *E.g.*, AN AMERICAN INDIAN FINANCE INSTITUTION, A COMPENDIUM OF PAPERS SUBMITTED TO THE SELECT COMMITTEE ON INDIAN AFFAIRS, *reprinted in* SEN. REP. NO. 142, 99th Cong., 2d Sess. (1986); S. CORNELL & J. KALT, PATHWAYS FROM POVERTY: ECONOMIC DEVELOPMENT AND INSTITUTION-BUILDING ON AMERICAN INDIAN RESERVATIONS (1989) [hereinafter CORNELL & KALT] (which includes a review of some of the literature); *see also* NATIVE AMERICAN RIGHTS FUND, BIBLIOGRAPHY ON INDIAN ECONOMIC DEVELOPMENT (2d ed. 1984); Pommersheim, *Economic Development in Indian Country: What Are The Questions?*, 12 AM. INDIAN L. REV. 195 (1984).

222. Indian Development Finance Corporation Act, S. 143, 101st Cong., 1st Sess. (1989); Indian Preference Act (Buy Indian Act Amendments), S. 321, 101st Cong., 1st Sess. (1989); *see* SEN. REP. NO. 218, 101st Cong., 1st Sess.; Indian Economic Development Act, S. 1203, 101st Cong., 1st Sess. (1989); National Indian Forest and Woodland Enhancement Act, S. 1289, 101st Cong., 1st Sess. (1989); Indian Employment Opportunity Act, S. 1650, 101st Cong., 1st Sess. (1989).

223. Assistant Secretary for Indian Affairs, Proposed Tribal Economic Development Initiative (Mar. 7, 1990) [hereinafter Proposed Tribal Initiative] (unpublished document distributed to tribal leaders).

Indian economic development in the past decade has been to encourage the development of business enterprises in Indian Country.[224]

In the context of economic development in the less developed countries (LDCs), there is a more extensive literature. An academic discipline, development economics, has produced much of this literature. In light of this, section A of this part probes development economics for an explanation of what "economic development" means. Section A also introduces a new paradigm of development that a growing number of people have labeled "sustainable development."

Regardless of disagreements over what economic development means, LDCs have pursued it. Much of the development that has been accomplished in the Third World has been made possible by loans from the World Bank and other multilateral development banks. The World Bank has promoted a "project" approach to planning development that could be used by Indian tribes. Section B of this part presents an overview of this approach. The Bank's project approach is a multi-dimensional and cyclical planning process that includes environmental analysis as one dimension. Tribes may want to consider such an approach since, while the environmental dimension of development is undeniably important, there are other dimensions as well. The reasons tribes pursue development typically arise from the non-environmental dimensions. By using a multi-dimensional and cyclical planning process, tribes may find that they can devise more effective development strategies for their communities. Tribes also might become more adept at formulating specific alternatives when actions proposed by federal agencies and others could adversely affect tribal interests.

A. What Does "Economic Development" Mean? — Some Lessons from Third World Experiences

"Economic development" is a multi-dimensional concept, and thus there really can be no simple answers to questions of its definition. It has often been used to mean development when the economy of a country exhibits "economic growth" as that term is used in neoclassical economics, which means that the productive capacity of a national economy grows and thereby

224. The draft mission statement in the Assistant Secretary's proposed initiative reflects such an emphasis. *Id.* This was also the emphasis of both the Presidential Commission Report and the DOI Task Force Report. *See* TASK FORCE REPORT, *supra* note 44; PRESIDENTIAL COMM'N REPORT, *supra* note 44.

increases levels of national income. During the past two decades all countries — rich, poor, capitalist, socialist, mixed — have sought ways to accelerate the growth rate of their national incomes, usually measured by their gross national product (GNP). In neoclassical economics there are three major factors in economic growth:

(1) Capital accumulation — all new investments in land, physical equipment, and human resources;
(2) Growth in the labor force resulting from population growth;
(3) Technological progress.[225]

LDCs have pursued a variety of strategies for achieving economic growth, such as international trade in natural resources and agricultural products, import substitution, export oriented industrialization, and regional interdependence. There is more to "economic development," however, than just pursuing strategies that are intended to achieve "economic growth." Development economists tend to agree on this point. At the risk of stating the obvious, "economic development" must mean the development of an economy, or an economic system. The term "economic system" has been defined as "the organizational and institutional structure of an economy including the nature of resource ownership and control (*i.e.*, private versus public). Major kinds of economic systems include subsistence economy, pure market capitalism, advanced capitalism, market socialism, command socialism, and the 'mixed' systems that characterize most LDCs."[226] The traditional material cultures of Indian tribes were economic systems and, for many tribes today, what remains of traditional cultures are important components of Indian Country economies.

1. Social change and societal values

When the era of "economic development" began, around 1950, the economic systems of the LDCs were, as a general rule, fundamentally different from the economic systems of the industrialized countries. Generalizations, of course, can be misleading, as there are substantial differences among the LDCs.[227] It is not too misleading, however, to say that around 1950, the economic systems of most LDCs were dominated by subsistence

225. M. TODARO, ECONOMIC DEVELOPMENT IN THE THIRD WORLD 108 (3rd ed., 1985).
226. *Id.* at 583.
227. *See id.* at 21-59; *see also* WORLD BANK, WORLD DEVELOPMENT REPORT 1988 (describing the similarities and differences among the LCDs in general terms and presenting detailed data on more than 100 LDCs).

agriculture, supplemented with some international trade in primary products, often on terms controlled by former colonial powers. "Economic development" in the Third World has meant not just growth, but the transformation of the economic systems of LDCs, including the development of organizational and institutional structures. Most development economists have seen fundamental social and institutional change as not only a prerequisite for "development," but also as inherently desirable. One could even say that the transformation of entire societies is a basic premise of development economics.

The value judgments that are inherent in such societal transformations should be explicitly addressed early and often in the developmental process. There are relationships between the technologies that are favored — and that society's legal institutions and other aspects of social organization. The political processes and governmental institutions that are fashioned as part of the development process should not be based on models found in the industrialized countries, at least not without critical analysis. Institutions, once established, develop their own inertia, and alternatives may be foreclosed without even being considered. The co-directors of the Harvard University Project on American Indian Economic Development have expressed the opinion that, among all the obstacles to Indian economic development that tribes themselves can affect, building institutions for collective decisionmaking and action is the most important.[228] They also argue that, to be effective, tribal institutions must reflect tribal cultures.[229]

Unfortunately, the discussion of basic value judgments generally has been lacking in the literature of economic development in Indian Country,[230] as well as in the LDCs.[231] This omission is not surprising, since economists see themselves as scientists who objectively describe the phenomena that they observe and attempt to formulate principles that will predict the outcome of various governmental and private decisions. In their efforts to be objective, they prefer to leave the value judgments to others. However, values that are not openly addressed tend to find

228. CORNELL & KALT, *supra* note 221, at 40-42.

229. *Id.*

230. *Cf.* Mohawk, *Economic Motivations: An Iroquoian Perspective*, 6 N.E. INDIAN Q., Spring/Summer 1989, at 56. The DOI Task Force on Indian Economic Development did raise the subject of "broader political and cultural issues," and deferred to the tribes and Indian people to resolve these value questions. TASK FORCE REPORT, *supra* note 44, at 30.

231. *See* M. TODARO, *supra* note 225, at 9-10.

expression through hidden biases and unstated assumptions. "Science that pretends to be value-free will serve the values of those who rule the 'establishment.'"[232]

Moreover, since one of the basic functions of law is to enforce important societal norms, questions regarding which norms are enforced inherently involve questions regarding the relative importance of different societal values. Most countries are pluralistic, especially so in the Third World, and the enforcement of one set of values may result in the suppression of the values of cultures which are not vested with law-making power.[233] Since Indian tribes are vested with lawmaking power within our federal system, their laws can and should reflect tribal cultural values.

In the literature of development economics, there are some analysts who have explicitly addressed issues related to fundamental values. One of the early advocates of an emphasis on values is E.F. Schumacher, whose classic work, *Small is Beautiful*,[234] has been a source of inspiration to many in the appropriate technology movement. Although Schumacher was clearly outside the mainstream in development economics, in recent years the number of economists who advocated an emphasis on values has grown.[235] Some have even begun to challenge the belief that economic growth is a prerequisite for economic development.

2. *Schools of thought in development economics*

The pursuit of "economic development" in the Third World must be viewed in its historical context. The era after the end of World War II was marked by the generally successful experience of the Marshall Plan for the reconstruction of western Europe. Many newly independent countries sought the kind of industrialization that had occurred in Europe and the USA. The industrialized democracies were interested in gaining political

232. L. MILBRATH, ENVISIONING A SUSTAINABLE SOCIETY: LEARNING OUR WAY OUT 65 (1989). Milbrath also states that the "myth of a value-free science" is so deeply imbedded in modern culture that philosophical argument alone is unlikely to displace it. *Id.*

233. *See* Nader & Yngvesson, *On Studying the Ethnography of Law and Its Consequences*, in HANDBOOK OF SOCIAL AND CULTURAL ANTHROPOLOGY 883 (J. Honigmann ed. 1973).

234. E.F. SCHUMACHER, SMALL IS BEAUTIFUL: ECONOMICS AS IF PEOPLE MATTERED (1973).

235. *E.g.*, E. MICHAN, INTRODUCTION TO NORMATIVE ECONOMICS (1981); H. DALY & J. COBB, FOR THE COMMON GOOD: REDIRECTING THE ECONOMY TOWARD COMMUNITY, THE ENVIRONMENT, AND A SUSTAINABLE FUTURE (1989); ECONOMICS, ECOLOGY, ETHICS: ESSAYS TOWARD A STEADY STATE ECONOMY (H. Daly ed. 1980).

favor with the newly independent countries, in part because they were concerned that newly independent countries might become aligned with the Soviet Union. The economists of the industrialized democracies, however, "had no readily available conceptual apparatus with which to analyze the process of economic growth in largely peasant societies characterized by the virtual absence of economic structures."[236] Not surprisingly, economists responded to this situation by fashioning a variety of conceptual models.

In his textbook Todaro has identified four major schools of thought in the literature about economic development: (1) linear stages of economic growth theories; (2) neoclassical structural change models; (3) international dependence paradigms;[237] and (4) neoclassical counter-revolution theories.[238] The linear stages approach was dominant in the 1950s and early 1960s but has since lost favor. This theory held that development is a linear process consisting of stages through which all countries must pass. Since the relatively wealthy industrialized countries of that era had only recently developed from agricultural subsistence economies, scholars and government officials widely believed that a similar transformation could be achieved in the LDCs. American economic historian W. W. Rostow proclaimed that all societies, in their economic dimensions, could be described as fitting within one of five categories: the traditional society, the pre-conditions for growth, the take-off into self-sustaining growth, the drive to maturity, and the age of high mass consumption.[239] According to the linear stages theory, a prerequisite for the LDCs to "take-off into self-sustaining growth" was the mobilization of domestic and foreign savings in order to realize a level of investment sufficient to yield accelerated economic growth.[240] The standard methods that were offered for achieving a sufficient increase in the savings rate included increased taxes, sacrifices in general consumption, foreign aid, and private foreign investment. This economic theory provided the rationale for the massive transfers of capital from the industrialized countries to the LDCs which began in the 1950s.

There were some major shortcomings in the conceptual models of development based on linear stages theory. The LDCs were

236. M. TODARO, *supra* note 225, at 63.

237. *Id.* at 62.

238. *Id.* at 82-83 (4th ed. 1989).

239. W. W. ROSTOW, THE STAGES OF ECONOMIC GROWTH: A NON-COMMUNIST MANIFESTO 3 (1960).

240. M. TODARO, *supra* note 225, at 63-64.

generally lacking in the kinds of conditions that had contributed to the success of the Marshall Plan, and many of the implicit assumptions of western economic theory were simply inappropriate or irrelevant to the conditions that existed in the LDCs. So development economists devised new theories. In mainstream Western development economics, the "neoclassical structural change" models became the most widely held theories. This school of thought focuses on the mechanisms through which the economic structures of LDCs are transformed from an emphasis on traditional subsistence agriculture into an urbanized, industrially diverse manufacturing and service economy. Two representative examples of neoclassical structural change models are the "two sector surplus labor" model (a *theoretical* model that was developed by W. Arthur Lewis) and the "patterns of development" model (an empirical analysis developed by Hollis Chenery).[241]

The Lewis two-sector model was the most widely held general theory in the late 1950s and the 1960s, and it still has many adherents, particularly among development economists in the USA. According to the Lewis model, the economy of a typical LDC could be described as consisting of two sectors: a *rural subsistence sector* and an *urban industrialized sector.* The rural sector was characterized as having zero marginal labor productivity. Lewis classified this labor as "surplus" in the sense that it could be withdrawn from the agricultural sector without any loss in productivity. Lewis characterized the urban industrial sector as being highly productive. This model has a dual focus: the transfer of labor from the rural, agricultural sector into the urban, industrial sector and the growth of output and employment in the urban industrial sector. According to this model, the rate of growth in output and employment in the urban industrial sector is determined by the rate of capital accumulation and investment in the urban industrial sector. This growth is assumed to continue until all surplus rural labor is absorbed into the urban industrial sector. Indian people and those who are familiar with the history of federal Indian policy may see parallels between this theory and certain aspects of federal policy during the termination era of the 1950s and 1960s, particularly programs which encouraged Indian people to leave reservations and seek work in an urban area.

The Lewis two-sector model has been criticized for several reasons. Todaro states that some of its key assumptions are

241. *Id.* at 67-78.

based on the growth experiences of western industrialized countries and simply do not apply in the Third World:

> [W]hen one takes into account the labor-saving bias of most modern technological transfer, the existence of substantial capital flight, the widespread non-existence of rural surplus labor, the growing prevalence of urban surplus labor, and the tendency for modern sector wages to rise rapidly even where substantial open unemployment exists, then the Lewis two-sector model — while extremely valuable as an early conceptual portrayal of the development of sectoral interaction and structural change — requires considerable modification in assumptions and analysis to fit the reality of contemporary Third World nations.[242]

In light of these shortcomings in the theoretical model, Harvard economist, Hollis Chenery, devised an empirically-based modification of the Lewis two-sector model, which is known as the "patterns of development" of structural change. Adherents of the "patterns of development" school recognize increased savings and investment as *necessary* but not *sufficient* conditions for economic growth. In addition to these conditions, they see a need for interrelated structural changes in virtually all aspects of economic activity (production, consumer demand, international trade, patterns of resource use), along with changes in socioeconomic and demographic factors. They acknowledge the differences among LDCs and emphasize the constraints on development, both domestic (such as a country's resource endowments, its physical and population size, government policies, and other institutional constraints) and international (such as access to external capital, technology, and international trade).

The "patterns of development" structuralist model is mainly based on Chenery's empirical work during the period from 1950 to 1973, which included both cross-sectional and longitudinal studies of a large number of LDCs. As interpreted by Chenery and adherents to this school of thought, the empirical findings support the proposition that economic development has been an identifiable process with certain features that have been similar in most countries. In most countries there has been a transformation in the structure of production from agriculture to industry which is correlated with both a rise in per capita income and a decline in the share of total domestic demand allocated

242. *Id.* at 69, 71.

to goods consumption. Despite their acknowledgement that many of the factors which constrain development are beyond the control of the governments of the LDCs, the structural change economists nevertheless believe that the patterns of development can be directed by both the development policies of LDC governments and the international trade and foreign assistance policies of the industrialized countries. The structural-change economists are basically optimistic that the correct mix of policies will result in self-sustaining economic growth in the LDCs.

In contrast to the structural change economists, those who profess "international dependence models" of development have a more pessimistic view of the development process. These dependence models have gained support in recent years, particularly among Third World intellectuals. The two major schools of thought are the "neocolonial dependence model" and the "false paradigm model." The "neocolonialist dependence model" is an indirect outgrowth of Marxism. According to this school of thought, underdevelopment in the LDCs is mainly a result of the international capitalist system in which rich countries have exploited poor countries for generations with help from the ruling classes of the LDCs. Given the dominance of the developed countries, adherents to this school of thought believe that it is difficult or impossible for the LDCs to achieve self-reliance and independence. They see the ruling elite as extensions of the developed countries and multilateral institutions that prevent the beneficial results of development from being shared with the wider population.

A more moderate version of the international dependence approach to economic development is the "false paradigm" model, which attributes many of the problems encountered by the LDCs in planning and carrying out development efforts to

> faulty and inappropriate advice provided by well-meaning but often uninformed "expert" advisers from developed country assistance agencies and multilateral donor organizations. These experts offer sophisticated concepts, elegant theoretical structures, and complex econometric models of development that often lead to inappropriate or simply incorrect policies. Because of institutional factors such as the highly unequal ownership of land and other property rights, disproportionate control by local elites over domestic and international financial assets, and very unequal access to credit, these policies, based as they often are on

> mainstream Lewis-type surplus labor and/or Chenery-type structural change models, in many cases merely serve the vested interests of existing power groups, both domestic and international.[243]

According to adherents of the false paradigm school, far too many Third World leaders, intellectuals, civil servants and others receive their higher education in industrialized countries, where they learn doctrine and analytical techniques that are either false or irrelevant. Since they have not learned how to deal with real development problems, they tend to become apologists for the existing power structure.

In the 1980s a school of thought arose that Todaro has labeled "neoclassical counter-revolution" theories.[244] Proponents of this school believe that LDC development planning efforts have been largely counter-productive. They have advocated increased reliance on market forces to correct resource misallocations that resulted from improper pricing policies and too much government intervention. Like the neocolonial dependence model this school of thought has its roots in ideology. Its proponents often fail to recognize that some of their theoretical assumptions do not fit the institutional and political realities of the Third World. Although improper pricing policies have contributed to resource misallocations, calling for reliance on market forces is hollow rhetoric where competitive markets do not exist.

3. Critics of economic growth theory

Todaro says that while adherents of both the neocolonialist and false paradigm schools reject the exclusive emphasis on accelerated growth in GNP as the main index of development, most adherents to these schools nevertheless regard accelerated growth as essential.[245] They would seek to alter the *character* of economic growth through both domestic and international reforms, but see economic growth as a prerequisite to the general improvement of the living conditions of the great majority of the people of the LDCs. In their commitment to growth, these economists share some common ground with both the structural

243. *Id.* at 79.

244. *Id.* at 82-83 (4th ed. 1989). For an example of the literature of this school of thought, see S. LAL, THE POVERTY OF "DEVELOPMENT ECONOMICS" (1983). The DOI Task Force Report noted the rise of this new school, but overstated the extent of its acceptance among development economists. *See* TASK FORCE REPORT, *supra* note 44, at 160.

245. *Id.* at 80.

change theorists and the neoclassical counter-revolutionaries. In recent years some development economists have begun to challenge the assumption that economic growth is a prerequisite for realizing the objectives of development.

The neoclassical doctrine of economic growth contains a rather obvious fundamental contradiction. Orthodox economics (classical and neoclassical) defines itself as the social science that is "concerned primarily with the efficient, least-cost allocation of scarce productive resources and with the optimal growth of these resources over time so as to produce an ever expanding range of goods and services."[246] But how can *scarce resources* be used to produce an *ever expanding outpost* of goods and services if the productive resources are *truly scarce*? Perhaps this is not really a contradiction, but rather a paradox. If so, there is but one explanation which is even plausible: the allocation of scarce productive resources to the ever expanding output of goods and services can only be sustainable over the long term if productive resources are, in some manner, reusable or renewable and thus *not scarce in the sense of being exhaustible.* In other words, the scarce resources that are so used must be income rather than capital. Schumacher recognized this contradiction, and he begins his collection of essays *Small is Beautiful* with the following commentary:

> One of the most fateful errors of our age is the belief that the "problem of production" has been solved. Not only is this belief firmly held by people remote from production and therefore professionally unacquainted with the facts — it is held by virtually all the experts, the captains of industry, the economic managers in the governments of the world, the academic and not-so-academic economists, not to mention the economic journalists. They may disagree on many things but they all agree that the problem of production has been solved; that mankind has at last come of age.
>
> * * *
>
> The arising of this error, so egregious and so firmly rooted, is closely connected with the philosophical, not to say religious, changes during the last three or four centuries in man's attitude to nature . . . . Modern man does not experience himself as a part of nature

246. *Id.* at 7.

> but as an outside force destined to dominate and conquer it. He even talks of a battle with nature, forgetting that, if he won the battle, he would find himself on the losing side. Until quite recently, the battle seemed to go well enough to give him the illusion of unlimited powers, but not so well as to bring the possibility of a total victory into view. This has now come into view, and many people, albeit only a minority, are beginning to realize what this means for the continued existence of humanity.
>
> The illusion of unlimited powers, nourished by astonishing scientific and technical achievements, has produced the concurrent illusion of having solved the problem of production. The latter illusion is based on *the failure to distinguish between income and capital* where this distinction matters most. Every economist and businessman is familiar with the distinction, and applies it conscientiously and with considerable subtlety to all economic affairs — except where it really matters: namely, the irreplaceable capital which man has not made, but simply found, and without which he can do nothing.[247]

Schumacher's essential criticism of the doctrine of unlimited economic growth is that it assigns a transcendent value to the accumulation of material possessions, and, in doing so, it treats selfishness as the primary motivation behind human behavior.[248] He notes that not all human cultures place a positive value on selfishness. Indeed, even the Western industrialized cultures regard selfishness as something of an evil that must be accepted as a means to an end. People want things and they are willing to work for them. People engage in activity that they do not enjoy so they can obtain a medium of exchange (money) which they can use to obtain the things that they want. The aggregation of individual selfish desires is what drives the economic system, which in turn produces the goods and services that people want. Therefore, the material standard of living steadily improves. Schumacher says, "The modern economy is propelled by a

247. E.F. SCHUMACHER, *supra* note 234, at 12-13 (emphasis added). *See also* L. BROWN, C. FLAVIN & S. POSTEL, SAVING THE PLANET: HOW TO SHAPE AN ENVIRONMENTALLY SUSTAINABLE ECONOMY 21-25 (1991) (arguing that economists tend to lack an understanding of the basic ecological concepts, such as the concept of the carrying capacity of ecosystems).

248. *Id.* at 27-49.

frenzy of greed and indulges in an orgy of envy, and these are not accidental features but the very causes of its expansionist success."[249]

Schumacher counsels that what we need in the world, more than prosperity that is attained by cultivating human greed and envy, is wisdom. He says that from "an economic point of view, the central concept of wisdom is permanence."[250] The ever expanding output of goods that must be fashioned from the natural resources of the earth is fundamentally incompatible with the concept of permanence. If we want to achieve permanence, our economic systems should cultivate those aspects of human nature that are concerned with non-material well-being as well as with material well-being: It is those aspects of human nature that will allow us to realize when enough is enough.

4. The new paradigm of "sustainable development"

Throughout the world there is a growing recognition that the ways in which we have pursued economic growth in the last several decades cannot be sustained indefinitely. One of the key factors in crystallizing this awareness was the 1987 publication of the World Commission on Environment and Development report.[251] This Commission was established in 1983 by the United Nations General Assembly and given a mission to re-examine critical environmental, as well as development issues, and to propose solutions, including new forms of international cooperation and new efforts to raise levels of understanding.[252] Through public hearings on five continents, the Commission became focused on a central theme, which the Commission's report describes as follows:

> [M]any present development trends leave increasing numbers of people poor and vulnerable, while at the same time degrading the environment. How can such development serve next century's world of twice as many people relying on the same environment? This realization broadened our view of development. We came to see it not in its restricted context of economic growth in developing countries. We came to see that

249. *Id.* at 28-29.

250. *Id.* at 30.

251. WORLD COMM'N ON ENV'T & DEV., OUR COMMON FUTURE (1987) [hereinafter COMMON FUTURE]. This commission was chaired by Gro Harlem Brundtland, Prime Minister of Norway, and is sometimes referred to as the "Brundtland Commission."

252. *Id.* at 3-4.

> a new development path was required, one that sustained human progress not just in a few places for a few years, but for the entire planet into the distant future. Thus "sustainable development" becomes a goal not just for the "developing" nations, but for industrial ones as well.[253]

The Commission elaborated on the concept of sustainable development by discussing a number of specific elements of strategies to achieve development in sustainable ways, including: alternative (nonchemical) agriculture and natural pest management; aquaculture; protection of forests and agroforestry; preservation of ecosystems and biological diversity; energy conversation, solar energy, and renewable energy systems; and integrated rural development and microenterprise. The Commission's report introduced these topics, but did not dwell on them in any great detail.[254] The main purposes of the Commission's report were to promote awareness of the scope of the interrelated problems of environment and development, to suggest that there are solutions that can be fashioned if there is the political will, and to call people to action throughout the world. The Commission's central focus was to alert people to change the ways society thinks about environment and development.[255]

Whether enough people will realize enough change that society will in fact achieve a transition to sustainable development is, of course, an open question. The empirical evidence suggests that throughout the world a phenomenon is occurring which social scientists describe as "paradigm shift," a shift from what some have labeled the "dominant social paradigm" to the "new environmental paradigm."[256] This is more than a conflict of political beliefs to be waged in the polling booths, although the evidence does indicate that the shift is occurring more swiftly among the general public than among elected officials.[257] This

253. *Id.* at 4.

254. Numerous detailed sources are available. *See, e.g.*, L. BROWN, STATE OF THE WORLD 1990: A WORLDWATCH INSTITUTE REPORT ON PROGRESS TOWARD A SUSTAINABLE SOCIETY (1990); N. TODD & J. TODD, BIOSHELTERS, OCEAN ARKS, CITY FARMING: ECOLOGY AS THE BASIS OF DESIGN (1984); D. DEUDNEY & C. FLAVIN, RENEWABLE ENERGY: THE POWER TO CHOOSE (1983); A. LOVINS & L. LOVINS, BRITTLE POWER: ENERGY STRATEGY FOR NATIONAL SECURITY (1982); J. LECKIE, MORE OTHER HOMES AND GARBAGE: DESIGNS FOR SELF-SUFFICIENT LIVING (1981).

255. *See also* L. MILBRATH, *supra* note 232, at 327.

256. *Id.* at 115-34.

257. *Id.*; *see also* What Countries Think: National Highlights: Public and Leadership Attitudes to the Environment in 14 Countries (United Nations Environment Program, May 1989) (unpublished seminar document).

conflict involves deeply held values, and in such conflicts rational argument is an ineffective way to change people's positions.

One of the basic value differences between the dominant social paradigm and the new environmental paradigm is that the former stresses competition and individualism, while the latter stresses cooperation and partnership.[258] Cooperation is a fundamental value among most Indian cultures, which has caused cultural conflict between Indian peoples and the dominant American society. There seems to be a growing realization that tribal cultural values have always had some distinct advantages. By emphasizing tribal cultural values in public dialogue, tribal leaders can play an important role in achieving the transition to sustainable development.

5. Three core values of development

For development to be sustainable, it must be more than economic growth in the neoclassical sense. Todaro proposes that there are three core values that should serve as a "conceptual basis and practical guideline for understanding the 'inner' meaning of development. These core values are *life-sustenance*, *self-esteem*, and *freedom*."[259]

Life-sustenance means providing for the basic human needs of food, shelter, health, and protection. An economy cannot be said to be developed if it does not provide for basic human needs. The ability of an economy to provide for these basic needs is a necessary but not a sufficient condition for development.[260]

Self-esteem means a sense of self-worth and dignity both individually and collectively. Many peoples in the Third World who previously possessed a profound sense of self-worth have suffered cultural confusion from their contact with industrialized societies and their materialistic value systems.[261] Many Indian peoples have suffered similar cultural confusion as a result of multi-generational contact with the dominant American society over many generations. The lesson in development economists' new-found emphasis on self-esteem is a lesson that many Indian people already know through personal experience — the costs

258. L. MILBRATH, *supra* note 232, at 41-56.

259. M. TODARO, *supra* note 225, at 86-87 (citing D. GOULET, THE CRUEL CHOICE: A NEW CONCEPT IN THE THEORY OF DEVELOPMENT (1971)).

260. There are some who advocate that addressing basic human needs should be the primary emphasis of economic development in the LDCs. *See* P. STREETEN, FIRST THINGS FIRST: MEETING BASIC HUMAN NEEDS IN DEVELOPING COUNTRIES (1981).

261. M. TODARO, *supra* note 225, at 87.

associated with development that take away one's sense of identification with an Indian community are likely to exceed the benefits that such development may yield.

The third core value is *freedom from servitude*, or freedom of choice. Todaro does not mean freedom in the political or ideological sense, but rather freedom from oppressive material living conditions and from "servitude to nature, ignorance, other people, misery, institutions, and dogmatic beliefs."[262] Freedom in this sense allows a person the ability to choose to have more goods and services, to have more leisure, or to deny the importance of material things and live a spiritual life.

The latter two core values are typically considered noneconomic factors, but all three are interrelated and must be addressed. In light of these core values, Todaro suggests that development can be defined as "*both a physical reality and a state of mind* in which society has, through some combination of social, economic, and institutional processes, secured the means for obtaining a better life."[263] Although the specifics of what comprises a better life will vary among societies and peoples, based on these three core values Todaro argues that there are three fundamental objectives of development that apply to all societies. He formulates these as follows:

> 1. To increase the availability and widen the distribution of basic life-sustaining goods such as food, shelter, health, and protection.
> 2. To raise levels of living including, in addition to higher incomes, the provision of more jobs, better education, and greater attention to cultural and humanistic values, all of which will serve not only to enhance material well-being but also to generate greater individual and national self-esteem.
> 3. To expand the range of economic and social choices available to individuals and nations by freeing them from servitude and dependence not only in relation to other people and nation-states but also to the forces of ignorance and human misery.[264]

This formulation of three basic developmental objectives would find widespread support from development economists and LDC officials, although it may be too general to provide much prac-

262. *Id.*
263. *Id.* (emphasis supplied).
264. *Id.*

tical guidance for tribal officials. Perhaps the most basic lesson to be learned from Third World experiences that might be applied in Indian Country is that economic development must be conceptualized as much more than establishing profitable enterprises to provide jobs for tribal members. Economic development must include noneconomic dimensions too. In Indian Country the cultural dimension is particularly important. Many tribal officials are aware of this, and it has been suggested that controlling "the impact of economic development on sociocultural aspects of tribal organization and daily life" is a tribal economic development goal that is widely shared.[265] Tribal officials may find it reassuring to know that Third World experiences lend support to their beliefs.

B. The Project Approach to Development

Having formulated the objectives of development in such broad terms, it is readily apparent that many different general strategies and specific projects can be fashioned to achieve these ends. In the Third World a very substantial portion of the development that has occurred during the last four decades has been made possible by the multilateral development banks. The lenders have devised methods for deciding how to loan money for development, *i.e.*, how to choose among the many different approaches that can be pursued. The banks have done this by lending capital for discreet development projects. Through their experience the banks have devised methods for evaluating and choosing among the wide variety of development projects which the LDCs have asked them to help finance.

The best known of the development banks is the International Bank for Reconstruction and Development, better known as the World Bank. There are also several large regional development banks, including the Inter-American Development Bank, the Asian Development Bank, and the African Development Bank, as well as a number of smaller development banks. Not all development banks are multilateral. In fact the U.S. is perhaps the only non-socialist country that has not established one or more of these institutions.

Congress recently considered the establishment of an Indian Development Finance Corporation, which was conceptualized on the model of the World Bank.[266] This congressional interest in

265. CORNELL & KALT, *supra* note 221, at 21-22.

266. S. 143, 101st Cong., 1st Sess. (1989) (sponsored by Sen. Daniel Inouye, D-Ha.). The 100th Congress did pass such a bill, Senate Bill 721, which was passed as part of House Bill 3621 but was vetoed on Nov. 2, 1988. *See* SEN. REP. No. 306, 100th Cong., 2d Sess.

applying the World Bank model to Indians is one reason for Indian leaders and others concerned with developing the economies of Indian Country to try to learn from the World Bank's accomplishments. Regardless of congressional interest, much can be learned from the experience of the World Bank and other multilateral development banks. The Indian people can learn from the Bank's positive contributions as well as from their mistakes.

This article presents only a summary overview of certain relevant aspects of the way the World Bank operates.[267] The concepts presented comprise an incremental yet long-term approach to development that could be applied in Indian Country with beneficial results. Tribes are not unfamiliar with the concept of the development project. Indeed, it has been reported that most tribal economic development activities to date have been carried out in the context of specific projects.[268]

The planning of such projects, however, has often been driven by the requirements of federal funding agencies rather than by processes devised by the tribes to meet their own self-defined needs. In addition, the emphasis on specific projects has often contributed to a lack of attention to long-term strategies.[269] Through the use of a planning process like the Bank's, tribes could become more adept at integrating the consideration of long-term issues into the planning of specific projects.

The World Bank recognizes that a range of factors must be considered in planning a project and executing the plans. The project approach establishes a process through which the relevant factors can be taken into consideration. This process is especially important in planning and decision-making when there are substantial opportunity costs, *i.e.*, when pursuing development in a particular way means that other options must be foregone. In Indian Country the opportunity costs of some kinds of development can be quite substantial. For example, many tribes have limited land areas on which enterprises can be located, or have limited sites at which physical infrastructure exists or can be provided. In such cases choosing a particular enterprise forecloses consideration of other options.

267. *See generally*, Kammert, *The World Bank Group*, in THE INTERNATIONAL BANKING HANDBOOK 462 (W. Baughn & D. Mandich eds. 1983); W. BAUM & S. TOLBERT, INVESTING IN DEVELOPMENT: LESSONS OF WORLD BANK EXPERIENCE (1985) [hereinafter BAUM & TOLBERT].

268. CORNELL & KALT, *supra* note 221, at 28.

269. *Id.*

1. The concept of project lending

The World Bank's primary purpose is to make capital available to the LDCs for investment in development. This purpose is accomplished through loans or loan guarantees at interest rates which allow the Bank to recover its operating costs (including the cost of obtaining capital in world markets).[270] The Bank's Articles of Agreement stipulate that "loans made or guaranteed by the Bank shall, except in special circumstances, be for the purpose of specific projects of reconstruction or development."[271] Although there stands no standard definition of the term "project" as used in this context, it is clear that the underlying rationale was to ensure that the Bank's resources would only be invested for productive purposes which had been thoroughly planned so that the loans would be repaid.

Based on more than three decades of World Bank experience, Baum and Tolbert have formulated a definition of "project" that is broad enough to include the wide range of activities that have been subsumed within the concept: "[A] discrete package of investments, policy measures, and institutional and other actions designed to achieve a specific development objective (or set of objectives) within a designated period."[272] They further explain the concept as follows:

> The project concept essentially provides a disciplined and systematic approach to analyzing and managing a set of investment activities. However diverse the specific activities they embrace, projects are likely to include several or all of the following elements, although in varying proportions and with different emphases:
>
> Capital investment in civil works, equipment, or both (the so-called bricks and mortar of the project);
>
> Provision of services for design and engineering, supervision of construction, and improvement of operations and maintenance;
>
> Strengthening of local institutions concerned with implementing and operating the project, including the training of local managers and

270. An affiliate of the Bank, the International Development Association (IDA) provides credits (as distinct from loans) on a concessional basis (*i.e.*, no interest, long-term loans) to the poorest LDCs. *See* Kammert, *supra* note 267, at 466.

271. BAUM & TOLBERT, *supra* note 267, at 6.

272. *Id.* at 8.

> staff;
>
> Improvements in policies — such as those on pricing, subsidies, and cost recovery — that affect project performance and the relationship of the project both to the sector in which it falls and to broader national development objectives;
>
> A plan for implementing the above activities to achieve the project's objectives within a given time.[273]

A project is typically focused on a single sector of an LDC's economy. There are various ways of designating the different sectors, and many kinds of economic activities overlap the distinctions that are drawn between sectors. Typical classifications include agriculture, education, energy, industry, population (including health and nutrition), transport, urbanization, and water (supplies and sanitation). Because of the diverse range of development objectives that can be fashioned for the various sectors, the difficulty in precisely defining the concept of the development project is easy to understand.

The World Bank has become the largest lender for development projects, although it typically provides no more than a third of the total financing needed for a given project. During the first three decades of the Bank's existence more than ninety percent of all its lending was for development projects.[274] The emphasis in this article on project lending should not be interpreted as an unqualified endorsement of the Bank's record, because many of the projects that the Bank has supported have had devastating impacts on the natural environment[275] and indigenous peoples.[276] The Bank's staff has learned from its ex-

273. *Id.*

274. *Id.* In the 1980s the World Bank began to devote a substantial portion of its resources to "policy-based" lending, through which it provides "structural adjustment loans" to LDCs that are conditioned on the LDC borrower adopting certain macroeconomic policy reforms.

275. One critic has said that: "The four principle biological foundations of the global economy — forests, croplands, grasslands, and fisheries — are threatened by unsustainable exploitation and by outright destruction from economic activities" supported by the development banks. Rich, *The Multilateral Development Banks, Environmental Policy and the United States*, 12 ECOLOGY L.Q. 681 (1985).

276. The Bank has acknowledged such adverse impacts. *See e.g.*, R. GOODLAND, TRIBAL PEOPLES AND ECONOMIC DEVELOPMENT: HUMAN ECOLOGIC CONSIDERATIONS (1982) (World Bank publication). In recent years the Bank has withdrawn from supporting some projects that indigenous peoples have resisted.

periences, and they have carefully analyzed successful projects, failures, and those projects with mixed results. These analyses are sometimes not reflected in the political decisions of the LDC governmental officials who seek Bank support for development projects and the Bank's funding decisions, though it is probably fair to say that there has been a learning curve. Regardless of whether the results of these analyses are used by their intended audiences, the results are published and are accessible to those who would seek to apply these lessons in Indian Country. In the summary of lessons from World Bank experience presented below, readers who have been involved in Indian Country development will no doubt see many parallels between the Third World and Indian Country.

2. The project cycle

Planning is inherent in the concept of the development project. In the terminology of the World Bank, there are five distinct stages in the planning and execution process: *identification*, *preparation*, *appraisal*, *implementation*, and *ex post evaluation*.[277] These stages are known as the project cycle because they follow a logical progression—each stage leads into the next, and the last stage, evaluation, yields information that is intended to be drawn upon in future projects.

a) Identification

In the first stage of the cycle, development objectives are defined, ideas for possible projects are screened, and an initial feasibility (or "prefeasibility") study is often conducted. In practice, LDCs generally have defined their development objectives prior to the formulation of specific projects. As an LDC becomes committed to the pursuit of a given project, its development objectives may be refined. In addition, there are generally quite a number of potential projects under consideration at any given time, which arise from a variety of sources, both public and private. If a project shows merit, the additional informational needs are identified, and a document known as "Project Brief" is prepared, which (as periodically updated) will be used by decision-makers to track the project as it moves through the project cycle.

277. *See generally* BAUM & TOLBERT, *supra* note 267, at 334-35.

b) Preparation

The core of the preparation stage is a detailed feasibility study (sometimes called a "preparation report"). This study must provide answers to the following questions:

> Does the project conform with the country's development objectives and priorities?
>
> Is the relevant policy framework compatible with achievement of the project's objectives?
>
> Is the project technically sound, and is it the best of the available technical alternatives?
>
> Is the project administratively workable?
>
> Is there adequate demand for the project's output?
>
> Is the project economically justified and financially viable?
>
> Is the project compatible with the customs and traditions of the beneficiaries?
>
> Is the project environmentally sound?[278]

At the preparation stage there are tradeoffs in the level of detail in the feasibility study. There is a point at which available resources might be more productively devoted to project implementation, but inadequate preparation can lead to unexpected problems and costs during implementation. The Bank's practice is to err on the side of more thorough preparation. Some development banks, for example the Inter-American Development Bank, promote thoroughness in project preparation by placing more emphasis on providing technical assistance.[279]

c) Appraisal

In the identification and preparation stages, the LDC borrower has the lead responsibility. The Bank often provides technical assistance. There are other sources of assistance that are available, but the LDC borrower is the responsible party. At the appraisal stage the responsibility shifts to the Bank, because this

278. *Id.* at 348. In light of commentary elsewhere in Baum & Tolbert's book, it is apparent that the word "best" used above in the context of the technical package should be interpreted as meaning the most appropriate for the particular project rather than the most technologically sophisticated or advanced.

279. *See generally*, Epstein, *Inter-American Development Bank*, in INTERNATIONAL BANKING HANDBOOK 503 (W. Baughn & D. Mandich eds. 1983).

is when the Bank decides whether or not to finance a project. The Bank uses its own staff to review the LDC borrower's preparation documents and to prepare the Bank's own appraisal report, which usually involves sending one or more appraisal missions to the field. The elaborate nature of the Bank's appraisal process is one of the reasons that the Bank has had difficulty in funding small-scale projects, *i.e.*, the transaction costs of appraisal can cancel out the project's benefits. Thus, the primary approach that the Bank has taken in funding small-scale projects is to provide loans through financial intermediaries for relending to the sponsors of small-scale projects.

d) Implementation

Implementation is the stage of the project cycle in which the project is actually executed; hence, it is the construction stage if it is a project involving construction. This stage of the project typically takes several years. The planning and management of the implementation stage is obviously critical, no less so than the planning and management that have led up to the decision to carry out a project. Until recently, planning and management has tended to be neglected at this stage, as LDC officials and planners often have focused their attention on securing funding for other proposed projects. In the Bank's experience, there are four main factors that contribute to successful implementation: political commitment, simplicity of design, careful preparation, and good management.[280]

e) Ex post evaluation

As the term infers, the ex-post evaluation occurs after a project has been implemented, when the costs have been firmly established, and when some of the benefits have been realized. The main purpose is to identify the reasons for a project's apparent success or failure, so that successes can be replicated and mistakes can be avoided. Although it has not been the practice for the Bank to conduct an ex-post evaluation of all the projects it has assisted, the Bank has sought to achieve representativeness among those that it has evaluated so that its findings are truly comprehensive. The Bank has also sought to widely disseminate the results of its evaluations through its publications. Baum and Tolbert have summarized the findings of the Bank's review of its evaluation experience as follows:

280. BAUM & TOLBERT, *supra* note 267, at 365-71.

> The institution — its nature, strengths, autonomy, and flexibility — was a dominant factor in determining project sustainability. The projects that maintained their success were those that enhanced institutional capacity, often through a grass-roots organization of the project beneficiaries that gradually assumed increasing responsibility for project activities during implementation and particularly during the operational stages following completion.
>
> Adoption of improved and appropriate technology (and provision for its renewal) was a strong factor in achieving sustainability; conversely, failure to use an appropriate technology was a major factor leading to loss of project benefits.
>
> Sociocultural factors had implications for both institutional development and successful technology transfer. Attempts to accomplish either in ways alien to local traditions or values ran a high risk of failure once the project was in operation. Social forces also affected long-term sustainability when the project worsened — or failed to improve — income distribution among the beneficiaries.
>
> When government policies were incompatible with project objectives or worked at cross purposes with project-initiated activities, they undermined long-run sustainability.
>
> The adequacy of recurrent cost financing also had an important bearing on long-run sustainability. In irrigation, for example, the extent of cost recovery was correlated with the standards achieved in operating and maintaining the system. Inadequately maintained irrigation facilities deteriorated rapidly.[281]

Most of these lessons apply in Indian Country as they do in the Third World. For example, the third point above cautions against pursuing development projects in ways that are contrary to local traditions or values. This is similar to a kind of problem that the Presidential Commission on Indian Reservation Economies labeled "cultural dissonance."[282]

281. *Id.* at 385-86.

282. PRESIDENTIAL COMM'N REPORT, *supra* note 44, pt. II, at 36-37.

3. Dimensions of project analysis

At each stage in the project cycle, the project should be analyzed in terms of several important dimensions: technical, economic, financial, social, institutional, and environmental. These dimensions reflect not just the range of factors that must be considered to plan and execute a successful project, they also reflect the variety of reasons for pursuing development in the first place. Project analysis can be described as an iterative or repetitious process, in that at each stage in the cycle a project is analyzed in terms of the same dimensions, but the depth of the analysis differs and the relative importance of particular dimensions may change. For example, if the environmental dimension is emphasized early in planning, alternatives may be identified (or mitigation measures designed) that will eliminate the likelihood of significant adverse environmental impacts. The environmental dimension may then be of lesser importance at subsequent stages, or the emphasis may shift from analyzing the impacts to planning the mitigation.

a) Technical analysis

The technical dimension of a project is often the point at which project planners begin their analysis. The project objectives have been defined, and planners usually have an idea of how they envision the achievement of the objectives, which often means that the planners have a particular technology or package of technologies in mind. It is important, however, to begin by considering different technological approaches. The alternatives should be identified and narrowed by reference to development objectives and the interrelationship of other dimensions of project analysis. Whether a technology package is appropriate can only be determined through consideration of social, institutional, and environmental dimensions. Thus, interdisciplinary teams should be used from the first phase of project planning. Cost estimates can only be developed in detail after the technology package has been selected, but preliminary estimates must be used in choosing the technology package.

b) Financial analysis

Financial analysis looks at the profitability of a project itself, rather than the overall costs and benefits to the country. The terms "economic" and "financial" are often used interchangeably although there is a fundamental distinction between them.

Financial analysis "deals with costs and benefits measured from the viewpoint of an individual (or an agency or enterprise), [while economic analysis deals] with costs and benefits from the viewpoint of the country as a whole."[283] For all projects — whether or not they will generate revenue — the primary concern of the financial analysis is to ensure that adequate funds will be available to complete the project and for recurring expenses. In practice, operational expenses have frequently been underestimated and sometimes ignored. Obviously, appropriate renewable energy technologies offer substantial possibilities for reducing recurrent expenditures for fossil fuels if the maintenance of such systems is within the capacity of project users or the sponsoring agency.

A second concern of financial analysis is to recover an appropriate portion of the project costs from beneficiaries, through price, tax, or other charges, depending on the nature of the project. Failure to recover costs provides a subsidy to project beneficiaries and deprives the sponsoring agency or enterprise of resources that could be recycled back into the project or used for other projects. There are three necessary ingredients of a cost recovery policy:

> *Economic efficiency* — that is, ensuring that the goods and services produced by the project are utilized efficiently.
>
> *Income distribution* — that is, recovering project costs in a way that promotes a more equitable distribution of income within the society.
>
> *Revenue generation* — that is, enabling the government to capture part or all of the increased net benefits for funding investments in the same sector or elsewhere; and, in the case of revenue-earning enterprises, enabling them to secure the resources necessary to achieve all of their financial objectives.[284]

For revenue-generating (enterprise) projects, issues regarding cost recovery tend to become merged with the overall financial viability of the project. This objective can be broken down into three components: (a) the enterprise must earn a reasonable return on investment, including the generation of sufficient funds to contribute to its future capital needs; (b) the capital structure

283. BAUM & TOLBERT, *supra* note 267, at 420.
284. *Id.* at 452.

of the enterprise must be such that it can meet all of its debt service and other capital obligations in a timely manner; and (c) there must be adequate liquidity (working capital) to cover all current operational requirements. In addition to the overall financial viability of an enterprise project, each specific investment that is included within the project may be analyzed to determine if it is financially justified.

c) Economic analysis

The basic purposes of economic analysis are: (a) to attempt to quantify the costs and benefits of the project from the point of view of the entire country; and (b) to determine whether there is an alternative way to achieve the project's objectives that could yield a greater net societal benefit. In practice, economic analysis often begins with financial analysis, and then attempts to quantify and take into account the societal costs and benefits that have not been considered. Economic analysis is sometimes broadly referred to as "cost-benefit" analysis. Within this broad term, there are four leading methods of measuring project worth that are used in planning and evaluating development projects: net present value, internal rate of return, benefit-cost ratio, and net benefit-investment ratio. A discussion of these methods is beyond the scope of this article, but it is worth noting that a basic function of all of these methods is to present a complex set of predictions in a way that aids governmental officials when making decisions.[285]

A key concept in economic measures of project worth is *time preference and discounting*. The basic notion is that since it is quite difficult to compare costs and benefits which occur at different times, it would be helpful to have some way to express all costs and benefits as if they occurred at the same time. Since most people and societies prefer to receive values sooner rather than later (and to incur costs later rather than sooner), discounting is used to adjust the values of benefits received (and costs incurred) so that they all reflect a common time period (usually the present). The discount rate (which is also referred to as the "opportunity cost of capital") may be chosen in a variety of ways, none of which is very satisfactory. Baum and Tolbert suggest that the discount rate is a national concept because we have an idea of the range in which it ought to fall,

285. *See generally id.* at 417-45. *See also* J.P. GITTINGER, ECONOMIC ANALYSIS OF AGRICULTURAL PROJECTS 299-435 (1981).

but to be precise would require a lot of data as well as guesswork.[286] The World Bank uses a figure of ten percent, net of inflation (i.e., at an inflation rate of six percent, the discount rate would be sixteen percent).

The use of a positive discount rate to compare costs and benefits inherently undervalues long-term environmental expenditures and benefits, since advantages realized by (and the expense imposed on) future generations tend to be discounted to a net present value of zero.[287] This problem is inherent in the technique of time discounting — it encourages investments with long-term costs and discourages investments with long-term benefits. Accordingly, the evaluation of environmental costs and benefits should not be confined to this methodology. In light of this inherent problem in the use of a monetary cost-benefit analysis, it is not surprising that the CEQ regulations do not require such an analysis and further state that one "*should not be* [used] when there are important qualitative considerations."[288]

Economic cost-benefit analysis is not an exact science. Rather, project analysis is an undertaking in which a variety of disciplines should be included and in which professionals from different disciplines (and from the same discipline) will often be at odds with one another. One professional will see benefits where another sees only costs. Some will see entirely different ways of achieving the same objectives. Against this background, Indian people should be mindful of the criticism that Schumacher directed toward the very notion of cost-benefit analysis:

> To press non-economic values into the framework of the economic calculus, economists use the method of cost/benefit analysis. This is generally thought to be an enlightened and progressive development, as it is at least an attempt to take account of costs and benefits which might otherwise be disregarded altogether. In fact, however, it is a procedure by which the higher is reduced to the level of the lower and the priceless given a price. It can therefore never serve to clarify the situation and lead to an enlightened deci-

286. BAUM & TOLBERT, *supra* note 267, at 425.

287. *Id.* at 534-35. Daly and Cobb argue that a discount rate of 10%, as typically used by the World Bank, is unrealistic for projects that are truly sustainable, and that using such a rate unfairly and inappropriately compares projects that could be a sustainable with projects that would not be sustainable. H. DALY & J. COBB, *supra* note 235, at 74-75.

288. 40 C.F.R. § 1502.23 (1990) (emphasis added).

> sion. All it can do is lead to self-deception or the deception of others; for to undertake to measure the immeasurable is absurd and constitutes but an elaborate method of moving from preconceived notions to foregone conclusions; all one has to do to obtain the desired results is to impute suitable values to the immeasurable costs and benefits. The logical absurdity, however, is not the greatest fault of the undertaking: what is worse, and destructive of civilization, is the pretense that everything has a price or, in other words, that money is the highest of all values.[289]

To regard money as the highest value is a real danger for those who promote economic development. Yet, if the limitations of cost-benefit analysis are recognized it can be a useful tool. For example, cost-benefit analysis can be used to reject funding for projects that are promoted for political reasons rather than for their economic merit.[290] Perhaps one of the most important applications of cost-benefit analysis is the ability to determine, in a somewhat objective manner, when a project should not be carried out. Attention to the noneconomic dimensions of project analysis can help in this regard, and such attention can also help to transform a project that should not be done into one that should be. Another worthwhile use of economic cost-benefit analysis is to identify economic obstacles to carrying out projects that appear viable when analyzed in other project dimensions so that such obstacles can be addressed.[291]

d) Social and cultural analysis

Techniques for the analysis of the social and cultural dimensions of projects do exist,[292] but the Bank has had limited experience in the systematic application of such techniques in projects that it has assisted. In their chapter on social analysis,

289. E.F. SCHUMACHER, *supra* note 234, at 43-44. *See also* Ragsdale, *Law and Environment in Modern America and Among the Hopi Indians: A Comparison of Values*, 10 HARV. ENVTL. L. REV. 417 (1986).

290. BAUM & TOLBERT, *supra* note 267, at 444-45.

291. *E.g.*, Chambouleyron, *A Third World View of the Photovoltaic Market*, 36 SOLAR ENERGY 381 (1986).

292. K. FINSTERBUSCH, METHODS FOR SOCIAL IMPACT ASSESSMENT IN DEVELOPING COUNTRIES (1989); C. GEISLER, INDIAN S.I.A.: THE SOCIAL IMPACT ASSESSMENT OF RAPID RESOURCE DEVELOPMENT ON NATIVE PEOPLES (C. Geisler, R. Green, U. Usner, P. West eds. 1982); *see also* J. JORGENSEN, NATIVE AMERICANS AND ENERGY DEVELOPMENT (1978).

Baum and Tolbert state that the lessons that they have presented are based largely on anecdotal information. One of the fundamental lessons is that failure to address social and cultural concerns early in project planning frequently contributes to project failure and that a deliberate effort to address social and cultural concerns contributes to project success.[293]

The role of women often has been overlooked, in part because the contributions of women to an economy are often not accounted for in national economic statistics. For example, agricultural projects in which men are trained to use newly-introduced technology may displace women from roles that they have traditionally performed. These roles are not simply economic activities but also afford women social status through which their interaction with other women has been structured. Attention to the needs and concerns of women and the constraints on their participation in projects can result in substantial opportunities that can contribute to project success.

Another lesson that can be drawn from World Bank experience in social analysis is that there is a genuine need for "bottom-up" participation in the planning and implementation of projects.[294] "Top-down" planning by itself is simply not sufficient. Similarly, in many parts of Indian Country there is a need for better communication between those who plan development projects and the intended beneficiaries of such projects.

e) Institutional analysis

Institutional difficulties are frequently cited as the most important cause of problems that arise in executing Bank-assisted projects.[295] Building effective institutional capabilities in the LDCs

293. BAUM & TOLBERT, *supra* note 267, at 473-74. Baum and Tolbert note that in a review of some 57 World Bank-assisted projects, the 30 projects which were found to be compatible with the social environment also were found to have a higher "economic rate of return," generally more than twice as high as that of the socially incompatible projects. *Id.* This finding appears to be consistent with the problem of "cultural dissonance" as a factor in the failure of many economic development projects in Indian Country, noted by the PRESIDENTIAL COMM'N REPORT, *supra* note 44, pt. II, at 36-37. *See also* P. STREETEN, FIRST THINGS FIRST: MEETING BASIC HUMAN NEEDS IN DEVELOPING COUNTRIES (1981); Kottak, *When People Don't Come First: Some Sociological Lessons from Completed Projects*, in PUTTING PEOPLE FIRST: SOCIOLOGICAL VARIABLES IN DEVELOPMENT PROJECTS (M. Cerea ed. 1985).

294. The DOI Task Force Report makes a similar recommendation in the context of Indian Country: "Rather than a 'top-down' strategy for economic development, more emphasis needs to be placed on a 'bottom-up' strategy." TASK FORCE REPORT, *supra* note 44, at 162.

295. BAUM & TOLBERT, *supra* note 267, at 499.

is often hindered by three sets of problems: counterproductive policy environments, overly complex project objectives, and neglect of the post-investment stage of projects. Overly complex project objectives have been particularly problematic with social or people-oriented projects, in which apparently worthwhile secondary objectives have been added to projects in ways that exceed the capacity of the implementing agencies. This problem occurs partly because the discipline of management arose in the industrial context. Techniques for managing projects in which there are many actors who are not subject to managerial authority are still rather experimental. It is important to simplify the design of such projects, to let the implementing agencies grow as the project proceeds, and to take advantage of inputs and ideas from project beneficiaries. Using an existing organization is generally preferable to trying to establish a new organization specifically designed for the project.[296] Neglect of the post-investment stage is a problem with political overtones, since obtaining commitments for financial assistance is often better rewarded in the political arena than successful project execution. Because too little attention is paid to the post-investment stage, the costs and benefits associated with project operation and maintenance may not be sufficiently analyzed.

Institutional problems are common in both the civil service (the administration of government ministries and agencies) and in the management of publicly-owned enterprises. In the context of publicly-owned enterprises, many analysts and policy makers in the industrialized countries have called for a movement toward privatization, arguing that LDC governments should reconsider their policies favoring public ownership and suggesting that in certain industries private ownership would be more economically efficient.[297] Privatization should be promoted only as a means toward economic efficiency, however, and not as an end in itself.[298] Matters of public interest and national security need to

296. *Id.* at 483.

297. *See, e.g.*, R. HEMMING & A. MANSOOR, PRIVATIZATION AND PUBLIC ENTERPRISES (1988).

298. *Id.* at 2. "Privatization" of tribal enterprises has been an issue in Indian economic development, but the Assistant Secretary's Proposed Initiative indicates that privatization will no longer be promoted by the federal government. *See* Proposed Tribal Initiative, *supra* note 223. The Assistant Secretary's Initiative says that the question of how to get tribal governments out of economic development is the wrong question, and supports this statement with the observation that: "It is clear . . . that many tribes have established effective structures that enable businesses to operate as profit-making enterprises while retaining appropriate tribal control over tribal assets and tribal regulatory control concerning environmental and cultural values while at the same time avoiding tribal political control over the day-to-day management of the business." *Id.* at 2.

be considered in such deliberations. Some institutional problems related to the division between public and private ownership have their roots in the use of institutional models and technology packages that have evolved in the industrialized countries.[299]

The institutional aspects of project development must be addressed with as much attention as other aspects of project planning and implementation. Articulated policies for institutional development, including programs for management and staff development are essential. The development of institutional models within the LDCs requires creativity and adaptation, since the institutional models of the industrialized countries, as well as those of other LDCs, generally are not readily transferable to a particular LDC.

f) Environmental analysis

Like social and institutional analysis, environmental analysis has often been neglected in Bank-assisted projects, and this neglect has contributed to problems that can no longer be ignored. The kinds of environmental problems that are common in the LDCs include desertification, deforestation, depletion of fisheries and wildlife populations, as well as the kinds of problems that are common to the industrialized countries, such as water pollution from industries, agricultural run-off, and acid rain. One especially difficult kind of environmental problem that has arisen frequently in conjunction with LDC development projects concerns indigenous tribal peoples who are involuntarily relocated or otherwise have their traditional ways of life drastically changed. Baum and Tolbert state:

> [U]nless interfered with, these people live sustainably in environments that are marginal for development. When their societies are severely disrupted, they often plummet to the ranks of the indigent burdening the state. This may also lead to the loss of economically valuable information acquired by tribal people over many generations, concerning practical uses of little-known plant and animal species.[300]

In recent years the LDC governments have increasingly recognized that environmental protection is not a luxury to which

299. *E.g.*, the conceptualization of electric power generation as a natural monopoly and the regulatory regime that has evolved as a result of this conceptualization.

300. BAUM & TOLBERT, *supra* note 267, at 525.

only the industrialized countries can afford to devote financial resources. Most of the LDC governments have established environmental ministries.[301] Recognizing the need to address environmental problems, however, is only the first step in building the capacity to meet the need, and the Bank and most LDC governments have only begun to build such capacities. Perhaps the most important lesson from the Bank's experience is that "prevention is more important and virtually always less costly than remedial action, which sometimes may not be feasible at all."[302]

C. Integrating the Environmental Dimension into Project Planning

In addressing the environmental dimension, one approach that can be used by LDCs and Indian tribes is to use a process like that prescribed by NEPA and the CEQ regulations. The LDC governments must learn how to use NEPA-like processes to integrate the environmental dimension into their planning and decisions. Their experience in doing so has been too brief to provide many specific lessons. By analyzing the NEPA process and the development cycle together and trying to integrate them into a single process, however, there are a few principles that readily emerge.

First, an EA should always be prepared early in the planning process. Work on the EA should begin during project identification. At this stage, consideration of alternatives is wide open, and alternatives that may have significant environmental impacts can often be dropped from consideration. The identification of alternatives should always articulate the relationship between the objectives of the development project and the tribe's long-term development goals. There is no need for the environmental dimension to be the most important dimension in identifying alternatives. Rather, alternatives should also be shaped by other dimensions of project analysis. The social/cultural dimension can be addressed in the EA, and usually should be, to avoid the need for a separate document. Any alternatives that may have significant environmental or social/cultural impacts should be labeled as such early in planning, and, if possible, such alternatives should be modified to avoid or at least mitigate adverse impacts.

301. COMMON FUTURE, *supra* note 251, at 310-26.
302. BAUM & TOLBERT, *supra* note 267, at 527.

The EA should be considered a draft and should be periodically (or continuously) revised during project identification and into project preparation. The EA should serve as one of the primary project planning documents, along with financial, economic, and technical analyses. The EA should play a major role in the choice among technology packages.

The point at which the EA is determined to be sufficiently complete to release as a public document will vary with the nature of the project. My view is that it should usually be released by the early part of project preparation. Hence, if the EA leads to a decision that an EIS should be prepared, the EIS can be commenced during the early part of project preparation. If an EIS is prepared, the process of preparing it should be used to help design the alternatives, to choose among them, and to help build community support behind the eventual decision. If an EIS is not prepared, the EA and FONSI should remain available for review and comment throughout project preparation and should be used to inform the community and to help build support for the project.

Whether an EIS is prepared or just an EA, there may be a need for a mitigation plan. Indeed, it may be the mitigation plan that avoids the need for an EIS. If there is a mitigation plan, it should be made a part of the record of decision. In terms of the project cycle, the commitment to the mitigation plan must be made during project appraisal and it must be carried out and monitored during project implementation.

If the development project includes activities by private parties, some of the burden of producing the necessary environmental information and analyses can be placed on the private parties, although this may not be desirable in some cases. Whenever private parties are involved, tribally issued authorizations or permits should provide for enforcement of mitigation plans. If project implementation will include actions to be taken at some future date by the BIA or another federal agency, the tribe may want to prepare its environmental documents with a broad enough scope so that there will be no need for additional environmental documents when the time comes for the future federal action.

These are some of the ways in which the NEPA process could be integrated into the planning of economic development using the World Bank's project cycle approach. There are other ways such integration could be achieved, and I am not suggesting that any given tribe simply adopt, without critical analysis, the approach outlined above. As noted earlier, tribal institutions

should reflect tribal cultures, and the NEPA process is a process that, in effect, has been imposed on tribes from the outside. The NEPA process does have its limitations, but generally, it has been shown to be effective. Tribes should seriously consider taking this process from the dominant American society, adapting it to their needs, and making it their own.

Conclusion: Welcome to the "Green" Decade

As we enter the last decade of the twentieth century, there are signs from around the world that the environmental movement has come of age. Environmentalism, or at least professed environmentalism, has become mainstream in the United States. The number of new books that have been published in recent months on what individuals can do to help save the earth is astonishing.[303] The twentieth anniversary of Earth Day was the occasion for outdoor festivities all over the country with coverage on prime time television. Earth Day was celebrated in as many as 140 countries world wide, which is at least some indication that the environmental movement is an international movement. Another indication is that environmental groups were critical players in the recent political changes in Eastern Europe, which should not be surprising considering the environmental problems in Eastern Block countries. In fact, grassroots environmental groups are springing up around the world.[304] Some of the leading U.S.-based international environmental groups have been involved in alliances with Third World environmental groups and with indigenous peoples in efforts to stop environmental destruction and to promote sustainable development.

That environmental awareness is increasing worldwide is a hopeful sign, but, given the nature of the environmental problems that must be addressed, hopeful signs will not be enough. Many of the environmental problems that we face in the world today, and that Indian people must deal with at the local level, result, directly or indirectly, from the variety of activities that are included in the concept of development. By becoming more adept in the use of the NEPA process, tribes can help to make specific development projects more environmentally responsible — projects sponsored by federal agencies, projects sponsored by others subject to federal approval, and tribal projects too.

303. *See* Sells, *1,851 (and Counting) Ways to Save the Earth*, UTNE READER, May/June 1990, at 93 (reviewing fourteen such books).

304. Durning, *Action at the Grassroots: Fighting Poverty and Environmental Decline*, WORLDWATCH PAPER No. 88 (1989).

It bears repeating, though, that NEPA is but a process. To achieve the substantive policy expressed in NEPA requires governmental decisionmakers to actually use the process in making their decisions. In their exercise of governmental authority, Indian tribes can strive to set an example for others. Through the enlightened exercise of tribal sovereign authority, Indian tribes have the opportunity to help bring about a transition to a more environmentally benign concept of development—a concept that could be sustainable over the long term.

In the twenty years since NEPA has been "our basic national charter for protection of the environment,"[305] there has not been widespread adoption or adaptation of the NEPA process by tribal governments as part of their own processes for making decisions. It may be that a major reason for this is that the NEPA process was fashioned by the dominant American society and unilaterally imposed on federal actions affecting Indian lands. If tribal leaders look to the policy expressed in NEPA, however, I suspect that most will find some significant areas of common ground with their own tribal cultural values. While my view is that the NEPA process could be readily adapted by tribes and would serve them well, ultimately, it is the realization of the policy expressed in NEPA, not the process, that really matters.

305. 40 C.F.R. § 1500.1(a) (1990).

APPENDIX

INFORMATION FOR APPLICANTS AND TRIBES REGARDING COMPLIANCE WITH ENVIRONMENTAL LAWS IN INDIAN COUNTRY

SUGGESTED FOR PROMULGATION BY THE BUREAU OF INDIAN AFFAIRS

TO BE CODIFIED AT 25 CFR PART 260: PROTECTION AND ENHANCEMENT OF ENVIRONMENTAL QUALITY

EXPLANATORY NOTE: The information in this appendix has been compiled from several source documents which currently are in effect and are applicable to the Bureau of Indian Affairs. The source documents have been described in the article and are not further described in this appendix. I have compiled this information for two purposes: (1) to suggest that the Bureau of Indian Affairs formally issue each guidance through the notice and comment procedure of informal rulemaking with the end result codified in title 25 of the Code of Federal Requirements; and (2) to help Indian tribes and others whose activities sometimes require the preparation of environmental documents until such time as the BIA does adopt this suggestion. With respect to the suggested guidance on NEPA, there is no requirement in either the CEQ regulations or DOI implementing procedures that such guidance be issued as "rules" in the sense of section 553 of the Administrative Procedure Act. 5 U.S.C. § 553. There is, however, a need for such guidance to be readily available, and the notice and comment procedure of rulemaking would be helpful both for informing and for seeking comments from the affected public. The draft should be circulated among the tribes for review and comment well in advance of publication in the *Federal Register*. The draft proposed in this appendix would revise a number of provisions in currently applicable BIA regulations (see section 260.17), and thus the Secretary of the Interior could be petitioned to issue this guidance through rulemaking under title 43, part 14 of the CFR.

In each section that follows, the sources of the text are identified in the footnotes. Language that is identical, or nearly identical, with that in the source document is presented in normal type. (The numerical designations of passages taken from source documents have been changed so that the numbering within this

draft is internally consistent.) Language that is new or that makes more than minor changes from the source document is presented in italics. Of course, the titles and numbers of the sections are new, and the order in which the sections are presented is simply one logical approach. The level of detail of some sections could be greater, particularly in "Subpart C — Other Environmental Review and Consultation Requirements," for example, by providing references to regulations that implement the statutes listed. The premise of this draft, however, is to draw together existing guidance from various source documents, not to try to make the existing guidance better. That task simply exceeds the scope of my article.

Some readers may wonder why the guidance provided on the preparation of environmental assessments in section 260.24 is rather detailed while there is virtually no guidance on environmental impact statements. The reason is that when an EIS is prepared the BIA must be directly responsible, and the content and process are governed by the CEQ regulations and DOI implementing procedures. On the other hand, when an EA is required for a proposed BIA action that would be in response to an external "applicant," the applicant can prepare the EA. Indeed, the applicant is "normally required" to prepare the EA. Thus, there is a critical need to provide the affected public with guidance on how to prepare EAs.

25 CFR PART 260: PROTECTION AND ENHANCEMENT OF ENVIRONMENTAL QUALITY

(SUGGESTED FOR PROMULGATION BY THE BUREAU OF INDIAN AFFAIRS)

Subpart A. Coordination with and Support for Tribal Environmental Protection Laws and Policies

Section

260.1 Purpose
260.2 Policy
260.3 Compliance with Tribal Environmental Laws
260.4 Support for Tribal Environmental Programs

Subpart B. Guidance for Compliance with the National Environmental Policy Act (NEPA)

Section

260.11 Purpose
260.12 Relationship of this Subpart to CEQ Regulations
260.13 Definitions
260.14 BIA NEPA Responsibility

ENHANCEMENT OF ENVIRONMENTAL QUALITY

Subpart A. Coordination with and Support for Tribal Environmental Protection Laws and Policies

§ 260.1 Purpose

The purpose of this part is to provide guidance to Indian tribes, the Indian people generally, and the public regarding procedures followed by the Bureau of Indian Affairs to insure compliance with tribal environmental laws and with the National Environmental Policy Act and other federal environmental laws. The purpose of this subpart A is to set forth the Bureau's policy

regarding tribal environment protection laws and policies.[1]

§ 260.2 Policy

In addition to the policies expressed in the authorities listed or referenced in Subparts B and C, it is the policy of the Bureau of Indian Affairs to:

(a) Provide advice and support to the Indian people in preserving and enhancing the quality of their environment.
(b) Seek and obtain tribal participation in the BIA decision-making process involving environmental concerns.
(c) Integrate environmental considerations into the initial stage of all planning processes.
(d) Include in environmental analyses the cultural values of the particular tribe(s) and the relationship between environment and culture.
(e) Assist other federal agencies in their environmental review of projects and programs affecting the environment of the Indian people.
(f) Consult and cooperate with the Administrator of the U.S. Environmental Protection Agency and with state, interstate, local and tribal agencies concerning the best techniques and methods available for the prevention, control and abatement of environmental pollution.[2]

§ 260.3 Compliance with Tribal Environmental Laws

In its programs and activities affecting any reservation, the Bureau will comply with all applicable environmental protection laws enacted by that reservation's tribal government, unless compliance is prohibited by some other legal requirement. Whenever the Bureau proposes to take any action which would threaten to violate any tribal environmental protection law, an environmental assessment will be prepared (516 DM 2.3 A (3)(i)).[3]

§ 260.4 Support for Tribal Environmental Programs

The Bureau recognizes that the protection and enhancement of environmental quality is within the retained sovereign authority of the Indian tribes. The Bureau encourages the tribes to exercise their authority, through the establishment of tribal programs and agencies and other appropriate means. The Bureau can assist tribes through:

(a) *Self-Determination Act Contracts.* Tribes may utilize Self-

1. New language.
2. BIA MANUAL (30 BIAM § 1.2).
3. *Id.* § 1.3E.

Determination Act (P.L. 93-638) contracts to conduct certain governmental activities regarding the environment. (*See* 25 CFR § 271.32.).

(b) *Self-Determination Act Grants.* In order to prepare for contracting pursuant to the Self-Determination Act, tribes may apply for grants pursuant to § 104 [now § 103] of the Self-Determination Act to develop their governmental capabilities regarding environmental matters. These grants may be used to provide the non-federal matching share required by the assistance programs administered by other federal agencies (25 U.S.C. 450h).

(c) *Other Bureau Programs.* Pursuant to the policy of self-determination, tribes may direct other Bureau programs to support their environmental quality programs.

(d) *Procurement Contracts.* Tribal agencies and tribally controlled educational institutions may become involved in the Bureau's environment program through contracting to perform environmental analyses and prepare environmental documents which the responsible Bureau official determines are needed.[4]

Subpart B. Guidance for Compliance with the National Environmental Policy Act (NEPA)

§ 260.11 Purpose

The purpose of this Part is to provide Indian tribes, the Indian people generally, and the public regarding procedures followed by the Bureau of Indian Affairs to insure compliance with tribal environmental laws and with the National Environmental Policy Act. When a person or entity other than an employee of the BIA proposes that the BIA take an action, the person or entity proposing the action may be responsible for preparing an environmental assessment (EA) or otherwise providing environmental information for use by the BIA decisionmaker. This Part provides guidance for determining what kinds of proposed actions require an EA and also provides guidance on the form and content of an EA.[5]

§ 260.12 Relationship of this Subpart to the CEQ regulations.

(a) *What NEPA requires. NEPA requires that an environmental impact statement (EIS) be prepared for every major federal action significantly affecting the quality of the human environment. This statutory requirement has been implemented*

4. *Id.* § 2.3.

5. New language.

through regulations, issued by the Council on Environmental Quality (CEQ), which are binding on all federal agencies and are codified at 40 CFR Parts 1500-1508. The CEQ regulations require each federal agency to adopt implementing procedures, and the Department of the Interior has done so. The DOI procedures are codified at 516 Departmental Manual (DM) Chapters 1-6. For certain kinds of proposed actions, it may not be apparent whether an EIS will be required. In such cases, the CEQ regulations provide for the preparation of an much less detailed environmental document which is called an environmental assessment (EA).

(b) *The NEPA screening process. The CEQ regulations recognize that there are broad categories of actions which are not likely to result in significant environmental impacts, and the regulations allow agencies to exclude such actions from the NEPA process by listing them as categorical exclusions. A primary purpose of agency implementing procedures is to identify the kinds of actions that agencies take and to sort them among three categories: (1) those that normally require an EIS, (2) those that normally require an EA but not necessarily an EIS, and (3) those that are categorically excluded. For BIA actions, this information is contained in 516 DM 6, Appendix 4. A primary purpose of this Subpart is to make the information contained in Appendix 4 and elsewhere in Part 516 of the Departmental Manual readily available to the affected public.*

(c) *Scope of this Subpart. This Subpart does not have the force and effect of rules pursuant to section 553 of the Administrative Procedure Act. 5 U.S.C. § 553. Rather, the purpose of this Subpart is to provide guidance on how the CEQ regulations and DOI implementing procedures apply to actions proposed to be taken by the Bureau of Indian Affairs.*[6]

§ 260.13 Definitions

(a) "Categorical exclusion" means a category of actions which do not, individually or cumulatively, have a significant effect on the human environment and which have been found to have no such effect in procedures adopted by a Federal agency in implementation of the CEQ regulations (40 C.F.R. § 1507.3) and for which, therefore, neither an environmental assessment nor an environmental impact statement is re-

6. New language.

quired. If an exception listed in § 260.22 of this part applies, an environmental assessment must be prepared.[7]

(b) "Effects" include:

(1) Direct effects, which are caused by the action and occur at the same time and place.

(2) Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

"Effects" and "impacts" as used in these regulations are synonyms. "Effects" includes ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. "Effects" may also include those resulting from actions which may have both beneficial and detrimental effects, even if on balance the agency believes that the effect will be beneficial.[8]

(c) "Environmental assessment" (EA):

(1) Means a concise public document for which a Federal agency is responsible that serves to:

(A) Briefly provide sufficient evidence and analysis for determining whether to prepare an environment impact statement or a finding of no significant impact.

(B) Aid an agency's compliance with NEPA when no environmental impact statement is necessary.

(C) Facilitate preparation of a statement when one is necessary.

(2) Shall include brief discussions of the need for the proposal, of alternatives as required by section 102(2)(E), of the environmental impacts of the proposed action and alternatives, and a listing of agencies and persons consulted.[9]

(d) "Environmental document" includes: environmental assessment, environmental impact statement, finding of no significant impact, and notice of intent (to prepare an environmental impact statement).[10]

7. 40 C.F.R. § 1508.4 (1990). Last sentence is new language.
8. *Id.* § 1504.8.
9. *Id.* § 1508.9.
10. *Id.* § 1508.10.

(e) "Environmental impact statement" (EIS) means a detailed written statement as required by section 102(2)(C) of NEPA.[11]

(f) "Finding of no significant impact" (FONSI) means a document by a Federal agency briefly presenting the reasons why an action, not otherwise excluded (see 40 C.F.R. § 1508.4), will not have a significant effect on the human environment and for which an environmental impact statement therefore will not be prepared. It shall include the environmental assessment or a summary of it and shall note any other environmental documents related to it (see 40 C.F.R. § 1501.7(a)(5)). If the assessment is included, the finding need not repeat any of the discussion in the assessment but may incorporate it by reference.[12]

(g) "Mitigation" includes:
  (1) Avoiding the impact altogether by not taking a certain action or parts of an action.
  (2) Minimizing impacts by limiting the degree of magnitude of the action and its implementation.
  (3) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
  (4) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
  (5) Compensating for the impact by replacing or providing substitute resources or environments.[13]

(h) "Significantly" as used in NEPA requires considerations of both context and intensity:
  (1) *Context.* This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.
  (2) *Intensity.* This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following should be considered in evaluating intensity:

11. *Id.* § 1508.11.
12. *Id.* § 1508.13.
13. *Id.* § 1508.20.

(A) Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.
(B) The degree to which the proposed action affects public health or safety.
(C) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.
(D) The degree to which the effects on the quality of the human environment are likely to be highly controversial.
(E) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.
(F) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.
(G) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.
(H) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural or historical resources.
(I) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.
(J) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.[14]

§ 260.14 BIA NEPA Responsibility.

(a) *Assistant Secretary - Indian Affairs* is responsible for the NEPA compliance of Bureau of Indian Affairs (BIA) activities and programs.

14. *Id.* § 1508.27.

(b) *Deputy to the Assistant Secretary - Indian Affairs [Trust and Economic Development]* is responsible for oversight of the BIA program for achieving compliance with NEPA. The Deputy determines the adequacy of all EISs which come before the Assistant Secretary before making decisions for implementing proposed actions.

(c) *The Environmental Services Staff*, [Washington], in the Office of Trust and Economic Development is the focal point for overall NEPA guidance within BIA and is responsible for advising and assisting Area Offices, Agency Superintendents, and other field support personnel in their environmental activities, providing training and acting as the Central Office's liaison with Indian tribal governments on environmental and NEPA compliance matters. Information about BIA NEPA documents or the NEPA process can be obtained by contacting the Environmental Services Staff (telephone: (202) 208-4791).

(d) *Other Central Office Directors and Division Chiefs* are responsible for ensuring that the programs and activities within their jurisdiction comply with NEPA.

(e) *Area Directors and Project Officers* are responsible for conducting all activities under their jurisdiction in compliance with NEPA and providing advice and assistance to Agency Superintendents and consulting with the Indian tribes on environmental matters related to NEPA; and assigning sufficient trained staff to ensure that these responsibilities are carried out. An Environmental Coordinator is located in the agriculture resources division or, in its absence, the realty division.

(f) *Agency Superintendents and Field Unit Supervisors* are responsible, as directed and delegated by the Area Directors, for implementation and enforcement of the BIA environmental policy at the Agency and field unit level, including field inspection and preparation of environmental documents. These documents should be reviewed to the extent practicable for procedural adequacy by the Environmental Coordinator of the Area Office before release to the public.[15]

§ 260.15 Guidance to Applicants

(a) An "applicant" is any entity which proposes to undertake any activity which will at some point require BIA action. These may include tribal governments, private entities, state

15. Department of Interior NEPA procedures, 516 DM 6, app. 4, § 4.1.

and local governments or other federal agencies. BIA compliance with NEPA is a federal responsibility. Compliance is triggered when there will be a BIA decision required to implement an action.

(b) Applicants should contact the BIA official at the appropriate level for assistance. This will be the Agency Superintendent, Area Director or Deputy to the Assistant Secretary - Indian Affairs [Trust and Economic Development], in the Central Office.

(c) If the applicant's proposed action will affect responsibilities of more than one tribal government, one government agency, one BIA agency or where the action may be state-wide or regional significance, in his sole discretion, may assign the environmental responsibilities to one Agency Superintendent to act as the lead office for the proposal. From that point, the Applicant will deal with the designated lead office.

(d) Since much of the applicant's planning may take place outside the BIA planning system, it is the applicant's responsibility to prepare a milestone chart for BIA use at the earliest possible stage in order to coordinate the efforts of both parties. Early communication with the BIA responsible office will expedite determination of such matters as the scope, depth and sources of data for an environmental document.[16]

§ 260.16 Guidance to Tribal Governments

(a) Tribal governments may be applicants, and/or be affected by a proposed action of BIA or another federal agency. Tribal governments affected by a proposed action shall be consulted during the preparation of environmental documents and, at their option, may cooperate in the review or preparation of such documents. Notwithstanding the above, the BIA retains sole responsibility and discretion in all NEPA compliance matters.

(b) Proposed tribal actions that do not require BIA or other federal approval or funding are *not* subject to the NEPA process.[17]

§ 260.17. Relationship of Guidance in this Subpart to Regulations Governing BIA Programs and Decisions.

Many programs administered by the BIA involve federal actions that may result in environmental impacts. Any action which

16. *Id.* § 4.2A.1.
17. *Id.* § 4.2A.2.

may result in significant environmental impacts is subject to the requirements of NEPA regardless of whether regulations governing the operation of such BIA programs codified in other parts of this Title provide any specific guidance on how to achieve compliance. The guidance provided in this Part is intended to help BIA personnel and the affected public determine whether an environmental assessment (EA), an environmental impact statement (EIS), or other environmental document is required for any specific proposed action.[18]

§ 260.18 Actions Normally Requiring an Environmental Impact Statement (EIS)

18. New language. The DOI procedures require each bureau to "Prepare program regulations or directives for applicants" and to include a list of such "program regulations or directives which provide information to applicants" in bureau appendices to 516 DM §§ 6.4A(2), 6.5A(2). The BIA's appendix states: "BIA has implemented regulations for environmental guidance for surface mining in 25 CFR Part 216 (Surface Exploration, Mining and Reclamation of Lands.) Environmental guidance for Forestry activities is found in 25 CFR 163.27 and 53 BIAM Supplement 2 and Supplement 3." 516 DM 6, app. 4. Although Part 216 does address environmental issues, it makes no reference to NEPA or to environmental documents that may be required by NEPA. Section 163.27 makes reference to NEPA, the CEQ regulations, the DOI procedures, and the BIA's NEPA handbook, but the section itself provides no guidance.

In addition to the two specific references to regulations, the BIA's list of "regulations or directives which provide information to applicants" identifies a long list of "Programs under 25 CFR for which BIA has not yet issued regulations or directives for environmental information for applicants." The parts of 25 CFR listed are: 101, 103, 162, 164, 165, 166, 167, 168, 169, 170, 173, 175, 176, 211, 212, 213, 214, 215, 226, 227, 249, 261, 271, 272, 274, 277, 286. Although some of these parts do refer to NEPA, those that do have not been amended since before the CEQ issued its regulations. Even Part 162, which implements 25 U.S.C. § 415, the statute at issue in *Davis v. Morton* has not been substantively amended to address NEPA or the environmental review language of § 415. *See* Davis v. Morton, 469 F.2d 593 (10th Cir. 1972).

The BIA should review all these regulations and at least add a simple cross-reference to Part 260. Such a cross-reference could read as follows:

Section ____. Compliance with Environmental Laws.

Actions taken by BIA officials pursuant to this Part may require the preparation of environmental documents in order to achieve compliance with NEPA. Such actions may require other analyses or documentation in order to achieve compliance with environmental review and consultation requirements other than NEPA. If BIA action requiring such environmental compliance would be taken in response to a request or application from a private person or an entity other than the BIA, including an Indian tribe, the person or entity requesting the BIA to take such action may be responsible for preparing an environmental assessment or other report or analysis. For further information see Part 260 of this Title. Since compliance with NEPA and other environmental review and consultation requirements takes time, applicants are encouraged to identify any such requirements and begin efforts to achieve compliance well in advance of the date on which they desire to have the BIA take a proposed action.

(a) The following BIA actions normally require the preparation of an Environmental Impact Statement (EIS):
  (1) Proposed mining contracts (for other than oil and gas), or the combination of a number of smaller contracts comprising a mining unit for:
    (A) New mines of 640 acres or more, other than surface coal mines.
    (B) New surface coal mines of 1,280 acres or more, or having an annual full production level of 5 million tons or more.
  (2) Proposed water development projects which would, for example, inundate more than 1,000 acres or store more than 30,000 acre-feet, or irrigate more than 5,000 acres of undeveloped land.

(b) If, for any of these actions, it is proposed not to prepare an EIS, an Environmental Assessment (EA) will be prepared and handled in accordance with § 1501.4(e)(2).[19]

§ 260.19 Actions Normally Requiring an Environmental Assessment (EA) But Not Necessarily an EIS.

(a) The following is a non-exhaustive listing of Bureau actions which normally require an EA:
  (1) Granting of rights-of-way.
  (2) Approval of mineral prospecting permits.
  (3) Approval of oil and gas contracts.
  (4) Approval of mining contracts encompassing less than 640 acres (or for new surface coal mines of less than 1,280 acres).
  (5) Granting of leases and permits for geothermal exploration and development.
  (6) Approval of commercial and industrial development leases.
  (7) Approval of housing subdivision leases.
  (8) Development of water reservoirs which inundate less than 1,000 acres at high water level.
  (9) Development of new irrigation projects which occupy less than 5,000 acres.
  (10) Modification of existing irrigation projects.
  (11) Stream alteration and modification.
  (12) New road construction.
  (13) Actions permitting the recreational use of off-road vehicles.

19. 516 DM 6, app. 4, § 4.3.

(14) Construction of schools.
(15) Construction of federal facilities.
(16) Reservation forest management plans.
(17) Timber sales.
(18) Reservation agricultural leasing programs.
(19) Reservation grazing management programs.
(20) Reservation oil and gas leasing programs.
(21) Reservation minerals leasing programs.
(22) Reservation fish and wildlife management programs.
(23) Reservation parks and recreation programs.

(b) In order to minimize the need for NEPA documentation on specific actions, a reasonable grouping of related actions can be considered in the same EA. This may be particularly appropriate if there are impacts from individual actions which do not appear to be significant, but which may be significant when cumulative impacts are considered.[20]

§ 260.20 Departmental Categorical Exclusions

The following actions are categorical exclusions (CX) pursuant to 516 DM 2.3A(2). However, environmental documents will be prepared for individual actions within these CX if the exceptions listed in 516 DM 2, Appendix 2, apply.

(a) Personnel actions and investigations and personnel services contracts.
(b) Internal organizational changes and facility and office reductions and closing.
(c) Routine financial transactions, including such things as salaries and expenses, procurement contracts, guarantees, financial assistance, income transfers, audits, fees, bonds and royalties.
(d) Law enforcement and legal transactions, including such things as arrests, investigations, patents, claims, legal opinions and judicial activities, including their initiation, processing, settlement, appeal or compliance.
(e) Regulatory and enforcement actions, including inspections, assessments, administrative hearings and decisions; when the regulations themselves or the instruments of regulations (leases, permits, licenses, etc.) have previously been covered by the NEPA process or are exempt from it.
(f) Non-destructive data collection, inventory (including field, aerial and satellite surveying and mapping), study, research and monitoring activities.

20. BIA's NEPA HANDBOOK, 30 BIAM Supp. 1, § 3.4B.

(g) Routine and continuing government business, including such things as supervision, administration, operations, maintenance and replacement activities having limited context and intensity; e.g. limited size and magnitude or short-term effects.
(h) Management, formulation, allocation, transfer and reprogramming of the Department's budget at all levels. (This does not exclude the preparation of environmental documents for proposals included in the budget when otherwise required.)
(i) Legislative proposals of an administrative or technical nature, including such things as changes in authorizations for appropriations, and minor boundary changes and land transactions; or having primarily economic, social, individual or institutional effects; and comments and reports on referrals of legislative proposals.
(j) Policies, directives, regulations and guidelines of an administrative financial, legal, technical or procedural nature; or the environmental effects of which are too broad, speculative or conjectural to lend themselves to meaningful analysis and will be subject later to the NEPA process, either collectively, or case-by-case.
(k) Activities which are educational, informational, advisory or consultative to other agencies, public and private entities, visitors, individuals or the general public.[21]

§ 260.21 BIA Categorical Exclusions

In addition to the actions listed in the Department's categorical exclusions in Appendix 1 of 516 DM 2, many of which the BIA also performs, the following BIA actions are hereby designated as categorical exclusions unless the action qualifies as an exception under Appendix 2 of 516 DM 2:

(a) *Operation, maintenance and replacement of existing facilities.* Examples are normal renovation of buildings, road repairs and limited rehabilitation of irrigation structures.
(b) *Transfer of existing federal facilities to other entities.* Transfer of existing operation and maintenance activities of federal facilities to tribal groups, water user organizations, or other entities where the anticipated operation and maintenance activities are agreed to in a contract, follow BIA policy, and no change in operations or maintenance is anticipated.
(c) *Human resources programs having primarily socioeconomic*

21. 516 DM 2, app. 1.

effects. Examples are social services, education services, employment assistance, tribal operations, law enforcement and credit and financing activities.

(d) *Administrative actions and other activities relating to trust resources*. Examples are: management of trust funds, issuance of such documents as certificates of competency, allotments and fee patents; renewal of agricultural and other leases when environmental impacts are addressed in an earlier environmental document.

(e) *Self-determination act grants and contracts.*
   (1) Self-determination act grants.
   (2) Self-determination act contracts for BIA programs which are listed as categorical exclusions, or for programs in which environmental impacts are adequately addressed in an earlier environmental document.

(f) *Rights-of-way*
   (1) Rights-of-way inside another right-of-way, or amendments to rights-of-way where minor deviations from or additions to the original right-of-way are involved and where there is an existing environmental document covering the same or similar impacts in the right-of-way area.
   (2) Service line agreements to an individual residence, building or well from an existing facility where installation will involve no clearance of vegetation from the right-of-way other than for placement of poles or lines.
   (3) Renewals, assignments, and conversions of existing rights-of-way where there would be essentially no change in use and continuation would not lead to environmental degradation.

(g) *Minerals*
   (1) Approval of permits for geologic mapping, inventory, reconnaissance and surface collecting.
   (2) Approval of unitization agreements, pooling or communitization agreements.
   (3) Approval of mineral lease adjustments and transfers, including assignments and sub-leases.

(h) *Forestry*
   (1) Approval of free-use cutting, without permit, to Indian owners for on-reservation personal use of forest products, not to exceed 2,500 feet board measure.
   (2) Approval and issuance of free-use cutting permits for forest products not to exceed $2,500 in value.

(3) Approval and issuance of paid timber cutting permits for products valued at less than $10,000 when in compliance with policies and guidelines established by a current management plan covered by an environmental document.
(4) Approval of annual logging plans when in compliance with policies and guidelines established by a current management plan covered by an environmental document.
(5) Approval of normal five-year plans and/or mobilization plans detailing emergency fire suppression activities.
(6) Approval of emergency forest and range rehabilitation plans when limited to environmental stabilization on less than 10,000 acres.
(7) Approval of timber stand improvement projects of less than 200 acres when in compliance with policies and guidelines established by a current management plan covered by an environmental document.
(8) Approval of timber management access skid trail and logging road construction when consistent with policies and guidelines established by a current management plan covered by an environmental document.
(9) Approval of prescribed burning plans of less than 200 acres when in compliance with policies and guidelines established by a current management plan covered by an environmental document.
(10) Approval of tree planting projects and associated protection and site preparation activities on less than 200 acres when consistent with policies and guidelines established by a current management plan covered by an environmental document.

(i) *Land Conveyance*
(1) Land transfers from federal or state agencies or other DOI Bureaus to the BIA as land to be held in trust for the Indian tribe(s) involving no development, physical alteration or change in land use.
(2) Purchase, sale, abandonment or exchange of tracts of land, mineral rights or other interests in land in which no change in land use or operation is planned.
(3) Lands acquired pursuant to 25 U.S.C. § 465, 25 U.S.C. § 501 and 25 U.S.C. § 2202 where no development, physical alteration or change of land use after acquisition is known or planned.

(j) *Other*

(1) Data gathering activities such as inventories, soil and range surveys, timber cruising, geological, archeological, paleontological and cadastral surveys.
(2) Establishment of non-disturbance environmental quality monitoring programs and field monitoring stations including testing services.
(3) Actions where BIA has concurrence or co-approval with another Bureau and the action is categorically excluded for that Bureau.
(4) Approval of an application for permit to drill for a new water source or observation well.
(5) Approval of conversion of an abandoned oil well to a water well if water facilities are established only near the well site.[22]

§ 260.22. Exceptions to Categorical Exclusions

The following exceptions apply to individual actions within categorical exclusions (CX). Environmental documents must be prepared for actions which may:

(a) Have significant adverse effects on public health or safety.
(b) Have adverse effects on such unique geographic characteristics as historic or cultural resources, park, recreation or refuge lands, wilderness areas, wild or scenic rivers, sole or principal drinking water aquifers, prime farmlands, wetlands, flood plains or ecologically significant or critical areas, including those listed on the Department's National Register of Natural Landmarks.
(c) Have highly controversial environmental effects.
(d) Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks.
(e) Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects.
(f) Be related to other actions with individually insignificant but cumulatively significant environmental effects.
(g) Have adverse effects on properties listed or eligible for listing on the National Register of Historic Places.
(h) Have adverse effects on species listed or proposed to be listed on the List of Endangered or Threatened Species, or have adverse effects on designated Critical Habitat for these species.

22. 516 DM 6, app. 4, § 4.4.

(i) Require compliance with Executive Order 11988 (Protection of Wetlands), or the Fish and Wildlife Coordination Act.
(j) Threaten to violate a federal, state, local, or tribal law or requirement imposed for the protection of the environment.[23]

§ 260.23 Responsibility for Preparing EAs

An EA is a concise public document which provides sufficient analysis for determining whether a proposed action may or will have a significant impact on the quality of the human environment. The EA should be completed early in the decision-making process so that if it becomes apparent that the proposed action may or will have significant impacts, an EIS can be prepared early as well. If the EA reveals no significant impacts, a FONSI is prepared.

(a) *Internally initiated proposals.* (See 516 DM 1.4B) An EA is normally prepared by the program staff which has identified the need for a proposed action and which has lead responsibility for implementing the action. Area and Central Office environmental staff will provide assistance in the preparation of EAs. Staff of other programs will assist in preparing EAs if one or more of the alternatives or mitigation measures fall within their areas of responsibility or if their participation would enhance interdisciplinary analyses. Depending upon the complexity of the proposed action, the responsibility for preparation may be assigned to either an individual or an interdisciplinary team.
(b) *Externally initiated proposals.* (See 516 DM 1.4C) When the proposed Bureau action is a response to an externally initiated proposal, such as a lease of trust land, the applicant will normally be required to prepare the EA, if one is required, and to provide supporting information and analyses as appropriate. The EA should be submitted with the application or as soon thereafter as possible. The Bureau shall make its own evaluation of the environmental issues and shall take responsibility for the scope and content of the EA. § 1506.5(b). The applicant may be required to submit additional information, analyses, or reports if necessary, to adequately address the environmental issues or if it is determined that an EIS will be required. The responsible Bureau official may elect to prepare any or all of an EA or may augment an EA prepared by an external applicant.[24]

23. 516 DM 2.3A(3). *See supra* note 79 of article.
24. 30 BIAM Supp. 1, §§ 4.1, 4.2; *see also* 516 DM § 3.6.

§ 260.24. Guidance on the Form and Content of EAs

As set forth in § 1508.9 and 516 DM 3.4, an EA will, at a minimum, include: brief discussions of the need for the proposal, alternatives as required by § 102(2)(E) of NEPA, and environmental impacts of the proposed action and alternatives. A listing of agencies and personnel consulted shall also be included. In addition, an EA may be expanded to add detail to the description of the proposal, or to discuss a broader range of alternatives and mitigation measures, if to do so would facilitate planning and decision-making. It is important to keep in mind that an EA is not supposed to be a short EIS. Except as required by § 102(2)(E) of NEPA, the analysis in an EA need not go beyond that needed to determine whether impacts will or may be significant. In conducting the analysis for an EA it will be helpful to refer to § 260.13(h) of this Subpart (40 CFR § 1508.27) in order to limit the discussion to that which is necessary to determine significance. An EA should normally be no more than 15 or 20 pages in length, unless it has been decided to prepare a longer, more detailed EA to aid in planning and decision-making. An EA may be combined with another planning or decisionmaking document (516 DM § 3.5B). An EA should be organized as follows. Items marked with an asterisk (*) are optional.

(a) *Cover Sheet.* This will include a brief description of the proposed action. If public comments are being sought, the cover sheet should be clearly marked as a draft and should state the date when comments are due. The cover sheet should be dated and should give the name of the preparer or team leader. If the proposed action is one in which an "applicant," such as an Indian landowner or tribal government, another governmental agency or person has required the Bureau to take the proposed action, the cover sheet shall identify the applicant.

(b) *Table of Contents.** This lists chapter and section headings along with tables, figures and illustrations.

(c) *Purpose or Need for Action.* This section explains in a few sentences the reason why the proposed action is being considered. The purpose of or need for the action should be stated clearly here, in order to ensure that the proposed action and alternatives address it directly. If a programmatic EIS or other program documents have previously been prepared they should be referenced but not repeated.

(d) *Alternatives.* The development of alternative means to achieve the purpose or meet the need identified above is an important

part of the NEPA process. It provides a basis for the choice among options available to the decisionmaker. This step should be creative, and an open mind is needed, along with advice and information from many sources. Using creative problem-solving techniques may prove to be the most helpful method of approaching and meeting the identified need for the action.

(1) *Requirement of § 102(2)(E) of NEPA.* The requirement to consider alternatives in an EA is based upon section 102(2)(E) of NEPA, while the requirement to consider alternatives in an EIS is based upon both sections 102(2)(C) and 102(2)(E). Section 102(2)(E) states that all agencies of the Federal Government shall:

> Study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources.

If a proposed action does not involve such unresolved conflicts, there is no requirement to discuss alternatives. However, since it is usually difficult to tell at the EA stage of a proposal whether or not unresolved conflicts will arise, it is generally advisable to consider all reasonable alternatives.

(2) *Reasonable Alternatives.* For actions which involve unresolved conflicts, all reasonable alternatives must be considered including "no action" (40 CFR § 1502.14). The alternatives should not be merely exercises done to fulfill this requirement; they should be honest attempts to find other ways to meet the identified need or achieve the identified purpose while reducing or eliminating harmful environmental impacts. The alternatives should be described in detail sufficient to permit comparison of their merits, especially if their impacts are different, e.g., in kind, location, intensity, or duration. A brief record should be made of those alternatives initially considered but rejected from further evaluation. The rationale for rejection of such alternatives should also be provided.

(3) *Alternatives Beyond BIA Authority.* The fact that BIA may not have authority to implement a particular alternative is not a reason for discarding it from consideration. Authorities can change in time, special authorization can be provided by Congress, cost or other factors may change as a result of action taken by another agency, or it may simply be that action by another agency or or-

ganization may prove to better serve the identified need. The most appropriate course of action for the BIA may be to advocate that a particular action be taken by another agency.

(e) *Description of the Affected Environment.** The "Affected Environment" section should succinctly describe the area in which the proposed action would occur (40 CFR § 1502.15). Page-sized maps of the general area and the project site help avoid superfluous description. Incorporation of earlier environmental documents by reference may also be appropriate. Components of the environment which should be considered in preparing the EA are listed below. While all of these components should be considered, only those components which will be affected by the proposed action need be discussed. If there are resources which require special attention under any of the statutes or Executive Orders listed in subpart C of this part, such resources should be highlighted.

(1) Land Resources
  (A) Topography (land forms, drainage, gradients)
  (B) Soils (types, characteristics)
  (C) Geologic Setting and Mineral Resources
(2) Water Resources (quality, use, rights)
(3) Air (quality, visibility)
(4) Living Resources
  (A) Wildlife (terrestrial, aquatic, threatened/endangered)
  (B) Vegetation (terrestrial, aquatic, riparian, threatened/endangered)
  (C) Ecosystems and Biological Communities
  (D) Agriculture (livestock and crops)
(5) Cultural Resources
  (A) Historic, Cultural and Religious Properties
  (B) Archeological Resources
(6) Socioeconomic Conditions
  (A) Employment and Income
  (B) Demographic Trends
  (C) Attitudes, Expectations, Lifestyle and Cultural Values
  (D) Community Infrastructure
(7) Resource Use Patterns
  (A) Hunting, Fishing, Gathering
  (B) Timber Harvesting
  (C) Agriculture
  (D) Mining

(E) Recreation
(F) Transportation Networks
(G) Land Use Plans
(8) Other Values
(A) Wilderness
(B) Sound and Noise
(C) Public Health and Safety

(f) *Environmental Consequences.* Good analysis in this section is the key to a good EA. Since the purpose of preparing an EA is to determine whether or not the proposed action will or may significantly affect the human environment, all potential significantly effects, beneficial and adverse, must be noted. The list provided above in subsection (e) of this section may be useful in identifying impacts. Impacts on any of the resources which require special attention under the laws and Executive Orders listed in Subpart C of this Part 260 should be highlighted.

(1) *Nature and Duration of Effects.* This section of the EA should discuss the effects of the proposed action and alternatives on each of the components of the environment listed above. This discussion is not limited to direct effects. Rather, the analysis of effects should be thorough enough to discover any direct and/or cumulative effects of each alternative. The discussion should also distinguish between short-term and long-term effects.

(2) *Interdisciplinary Analysis.* An interdisciplinary analysis should be used. This may be provided in-house, through cooperation with other agencies and affected tribes, or through contracting. The affected public may also contribute to interdisciplinary analysis through comments at public meeting or submitting comments on an EA. It is important that environmental effects be evaluated from different perspectives.

(3) *Organization.* The discussion of environmental consequences may be organized in either of two ways: (a) all of the consequences of an alternative may be discussed before moving on to the next alternative; or (b) the consequences of each alternative on a component of the environment may be discussed before moving on to the next component. The first approach is appropriate for proposals which do not have a broad range of environmental consequences, while the second approach may be more useful for those that do. In either case, it will be

helpful to display a summary of this information in a matrix.

(4) *Impacts on Tribal Cultures.* In assessing the socioeconomic, cultural, and religious effects, special attention should be given to cultural values of the affected tribe(s) and the relationship between environment and culture. (See 30 BIAM § 1.2D.)

(5) *Mitigation Measures.* When adverse effects are noted, mitigation measures to reduce or eliminate such effects should be identified where possible and incorporated into reasonable alternatives. If such mitigation eliminates significant impacts, and the decision-maker selects an alternative which includes the mitigation, an EA may support a FONSI, rather than lead to an EIS.

(6) *Conclusion Regarding Significance.* After the objective analysis of each impact, there must be a conclusion stating whether the impact will, or may be, significant. Section 5.3 of the BIA NEPA Handbook provides guidance for reaching such conclusions. See also § 260.13(h) of this Subpart.

(g) *Consultation and Coordination.* Environmental review and consultation requirements are established by the laws and Executive Orders listed in Subpart C of this Part. This section of the EA must list the agencies and persons consulted, either because an applicable law or Executive Order requires consultation, or because the agency or person has expertise which is appropriate. Affected tribes and appropriate tribal agencies should always be included in this consultation.

If any of these requirements are applicable to any of the alternatives under consideration, compliance should be achieved during the preparation of the EA, if practicable. If simultaneous compliance is not practicable, the EA should identify which requirements are applicable to which alternatives and it should explain how compliance will be achieved if one of the alternatives is implemented. The discussion in the EA should be brief, with correspondence and reports, if any, either referenced or included in an appendix.

For many of the environmental review and consultation requirements, compliance can be achieved by asking the appropriate Federal, tribal, state, and local agencies with jurisdiction by law or special expertise (see 30 BIAM Supp. 1, Appendix D) to contribute to the preparation of the EA or to review the draft EA. This practice will also tend to

enhance the interdisciplinary analysis of an EA, since the staff of such agencies may represent disciplines of the natural and social sciences and environmental design arts which are not represented in the BIA organizational unit charged with the preparation of the EA.

Special attention should be given to some of the statutes listed in Subpart C, because of the time that may be required to achieve compliance and/or because of the importance of the protected resources to affected Indian people. These include:

Archaeological Resources Protection Act
National Historic Preservation Act
American Indian Religious Freedom Act
Clean Water Act
Safe Drinking Water Act
Fish and Wildlife Coordination Act
Endangered Species Act
Clean Air Act

(h) *Appendices.** A listing of BIA staff, with titles, who contributed to the development of the EA may be included as an appendix. Correspondence and reports relating to environmental review and consultation requirements may be included as a separate appendix. If the EA cites more references that can be conveniently cited in the text, then an appendix should be included which lists these references. Any other appropriate material may be included in an appendix.[25]

§ 260.25. Use of EAs by Tribal Governments

Tribal governments have substantial authority for environmental protection within their reservations as an aspect of their retained tribal sovereignty. This tribal governmental authority is distinct form the responsibilities and authority of the Bureau pursuant to NEPA, other federal environmental laws, and the trust responsibility. Thus, activities which affect the environment of Indian reservations often require the approval of both the Bureau and the appropriate tribal government. Because of this dual authority, it is desirable for the Bureau's NEPA process and tribal decision-making processes to be coordinated. Such coordination will help achieve the policies and purposes of the CEQ regulations, especially reducing paperwork and delay, in-

25. 30 BIAM Supp. 1, § 4.3. The references to subpart C in this part are in the BIA's NEPA Handbook references to 516 DM 4, app. 1, which has since been deleted from the Departmental Manual and reissued as PEP — Environmental Statement Memorandum No. ES88-3.

tegrating environmental considerations into the early stages of planning and decision-making, and making the NEPA process more useful to decision makers. This section explains certain ways in which tribal governments can make the Bureau's NEPA process more useful in tribal decisionmaking and more responsive to tribal concerns.

(a) *Waiting for completion of environmental documents.* One way in which tribal governments can make the NEPA process more useful is to wait for the completion of environmental documents required by NEPA before making decisions which affect the environment. If withholding tribal approval is not practicable, a variation of this approach would be to specify that tribal approval is subject to terms and conditions which may be established during the NEPA process.

(b) *Involvement in preparation of environmental documents.* EAs and EISs will generally be more useful for tribal decisionmaking if tribal governments are directly involved in the preparation and review of these documents. When an EIS is required for a proposed action, tribal involvement can best be achieved by the tribe becoming a cooperating agency (see Chapter 6 of the BIA NEPA Handbook, 30 BIAM Supp. 1). Tribal involvement in the preparation and review of EAs can be achieved in a variety of ways (see Chapter 4 of the BIA NEPA Handbook).

(c) *Tribal environmental laws.* If a tribal government has enacted any environmental law(s) which apply to a proposed Bureau action, and the preparation of either an EA or EIS is required, compliance with any such law(s) should be addressed in the EA or EIS. If the proposed Bureau action is categorically excluded, but taking the action would threaten to violate a tribal environmental law, an EA must be prepared (516 DM § 2.3A(3)(i)).

(d) *Excluding insignificant actions.* To focus the NEPA process on actions which have the potential for significant environmental impacts and to avoid devoting time and resources to actions which do not have such potential, the CEQ regulations allow agencies to identify actions as categorical exclusions. The Bureau's list of categorical exclusions (516 DM 6, Appendix 4.4) may be expanded if appropriate actions have been omitted, and the tribes may bring such omissions to the attention of the Central Office environmental staff. The tribes should be aware that tribal actions which do not require Bureau or other federal agency action are not subject

to the NEPA process (516 DM 6, Appendix 4.2A(2)(b)).[26]

§ 260.26 Indian Landowner Use of NEPA.

When actions regarding the use of allotted Indian lands require Bureau action, the Indian landowners may find it to their advantage to await completion of NEPA documents before granting approval, or to grant approval subject to any terms and conditions which may be imposed following completion of NEPA documents.[27]

§ 260.27 Determination of Significance

(a) When the EA is completed the preparer or team presents it to the Bureau decision maker, along with recommendations for action. *If the EA has been prepared by an external applicant, BIA staff will conduct an independent review and provide recommendations to the decisionmaker. BIA staff may suggest that revisions be made in the EA or additional analysis be conducted before the EA is presented to the decisionmaker for a determination of significance.* After reviewing the EA and discussing it with the preparer or team, if necessary, the decisionmaker may decide to take one of the following actions.

(1) *Sign a FONSI.* Notice of availability for all EAs and FONSIs shall be provided as required by § 1506.6(b), and may include publication in a local newspaper of general circulation.

(2) *Direct further work on the EA.* The decisionmaker may decide that the EA is not sufficient to determine whether or not an EIS is required. In such a case the preparer or team may be directed to correct any deficiencies. This may involve further analysis of environmental impacts, consideration of new alternatives or mitigation measures, seeking public involvement, or other measures to make the EA useful to the decisionmaker. When the revised EA is completed, the preparer or team will again present it to the decisionmaker.

(3) *Initiate an EIS.* If the decisionmaker finds that the proposed action may or will have a significant impact and does not adopt an alternative which would *not* have a significant environmental impact, then an EIS must be prepared in accordance with the regulations issued by the Council on Environmental Quality (40 CFR parts 1500-1508) and the Department's implementing procedures (516 DM chapters 4 and 5).

26. 30 BIAM Supp. 1, § 2.6.
27. 30 BIAM Supp. 1, § 2.7.

(b) *Review by Higher Line Officials.* Copies of all EAs prepared below the Area Office level which result in a FONSI should be provided to the appropriate Area Office environmental staff. Copies of all EAs issued by the Area Offices which result in a FONSI should be provided to Central Office Environmental Services Staff. *In any case in which a BIA line official signs a FONSI, the next higher line official is authorized to reverse that decision. In such a case the higher official may direct that an EIS be prepared or that further work be done on the EA, to modify the alternatives or mitigation measures in order to avoid significant environmental impacts.*[28]

(c) *Guidance for Determination of Significance.* The determination of whether the proposed action may cause a significant impact on a given component of the environment is the responsibility of the person(s) analyzing that component. If the EA was prepared by an interdisciplinary team, all members of the team should participate as appropriate in determinations of significance. Upon request, environmental staff of the Area Office or Central Office (as appropriate) will assist in making the determination of significance, and may request other appropriate staff personnel to assist in the determination. Cumulative effects and interactions among factors leading to significant impacts must also be considered. It should be noted that the word "significant" regarding environmental impacts has an important legal connotation and this word should not be used indiscriminately in a NEPA document where it could possibly cause confusion.

(1) *Type and Nature of Impact.* To evaluate impacts, it is necessary to systematically assess each individual environmental component. (See § 260.24(e) of this Subpart.) A determination of significance may be based on impacts resulting on one component of the environment. Also, the sum of less-than-significant impact on separate components of the environment may result in significant cumulative impacts. Impacts may be:

(A) *Direct Impacts.* Impacts which are caused by the action and occur at the same time and place.

(B) *Indirect Impacts.* These are often not obvious during a quick analysis of an action and thus are easy to miss. Many of these indirect impacts affect the social and cultural values of the communities and region.

28. 30 BIAM Supp. 1, §§ 4.4B, 4.4C, 5.4D. New language indicated by italics.

This includes alterations of life style and quality of life considerations that might be caused by the proposed action. Note, however, that significant economic or social effects by themselves do not require the preparation of an EIS (see 40 CFR § 1508.14).

(C) *Cumulative Impacts.* These should not be overlooked. Individual minor actions may collectively have a significant impact. Incremental development or changes may have significant cumulative impacts.

(2) *Criteria to Consider in Determining Significance.* Determinations of significance involve subjective interpretations based upon professional judgment. No hard-and-fast rules are available to conclusively label an action one way or the other. It is important to be as objective as possible when making these determinations. For criteria to consider in making determinations see 40 CFR §§ 1508.18 and 1508.27. Appropriately designed mitigation measures may reduce §§ 1508.18 and 1508.27. Appropriately designed mitigation measures may reduce the significance of impacts to the extent that they are not significant. Unless such measures are included in the proposed action, they should be described and analyzed as alternatives.[29]

§ 260.28 Timing of BIA Action and Reconsideration

If the proposed action is one which is listed in or closely similar to one listed in § 260.18 of this Part as normally requiring an EIS, or if the action is one without precedent, then a 30-day public review period must lapse before the action can be implemented (see 40 CFR § 1501.4(e)(2)). If the above provision does not apply, the CEQ regulations do not establish any minimum time period between the signing of the FONSI and the implementation of the action. If circumstances permit, however, it is generally advisable to allow a reasonable time period for affected parties to make known their views on the FONSI before implementing the action. In any event, 10 working days should be allowed for review by the next higher line official unless the higher level official indicates concurrence in the FONSI. If affected tribe(s), agencies with jurisdiction by law or expertise, or persons who would be affected by the proposed action make known to the BIA that they disagree, it may be advisable to reconsider the FONSI.[30]

29. Subsection (c) is taken from 30 BIAM Supp. 1, § 5.3.

30. 30 BIAM Supp. 1, § 5.5.

Subpart C. Other Environmental Review and Consultation Requirements

§ 260.31 Purpose

The purpose of this subpart is to provide a convenient listing of other environmental review and consultation requirements that may apply to proposed action.[31]

§ 260.32. Cultural Resources

Archeological Resources Protection Act of 1979, 16 U.S.C. § 470aa *et seq.*

Archeological and Historic Preservation Act of 1974, 16 U.S.C. § 469a-1

National Historic Preservation Act of 1966 (§ 106), 16 U.S.C. § 470f

Antiquities Act of 1906, 16 U.S.C. § 431

Executive Order 11593 (Protection and Enhancement of the Cultural Environment) May 13, 1971

American Indian Religious Freedom Act, 42 U.S.C. § 1996

§ 260.33 Water and Related Land Resources

Marine Protection, Research and Sanctuaries Act of 1972 (§§ 102, 103, 301) 16 U.S.C. § 1431 *et seq.*

Safe Drinking Water Act of 1974, 42 U.S.C. § 300f *et seq.*

Flood Disaster Protection Act of 1973, 12 U.S.C. § 24, 1701-1 Supp.; 42 U.S.C. § 4001 *et seq.*

Watershed Protection and Flood Prevention Act, 16 U.S.C. § 1001 *et seq.*

Coastal Zone Management Act of 1972, 16 U.S.C. § 1451 *et seq.*

Coastal Barriers Resources Act, 16 U.S.C. § 3501 *et seq.*

Estuary Protection Act, 16 U.S.C. § 1221

Executive Order 11988 (Floodplain Management)

Executive Order 11990 (Wetlands Protection)

Federal Water Project Recreation Act (§ 6(a)), 16 U.S.C. § 4601-21

Clean Water Act, 33 U.S.C. § 1251 *et seq.*

Rivers and Harbors Act of 1899 (§§ 9 and 10), 33 U.S.C. § 401 *et seq.*

Wild and Scenic Rivers Act of 1968 (§ 7), 16 U.S.C. § 1274 *et seq.*

Federal Power Act, 16 U.S.C. § 797

Water Resources Planning Act of 1965, 42 U.S.C. § 1962 *et seq.*

31. This entire subpart is taken from PEP — Environmental Statement Memorandum No. ES88-3 (Mar. 29, 1988).

Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies

§ 260.34 Wildlife
Migratory Bird Treaty Act, 16 U.S.C. § 703 *et seq.*
Bald Eagle Protection Act of 1973, 16 U.S.C. § 668
Endangered Species Act of 1973 (§ 7), 16 U.S.C. § 1531 *et seq.*
Fish and Wildlife Coordination Act, 16 U.S.C. §§ 661, 662
Fish and Wildlife Conservation at Small Watershed Projects, 16 U.S.C. §§ 1001, 1005(4), 1008
Marine Mammal Protection Act, 16 U.S.C. § 1361 *et seq.*
Anadromous Fish Conservation Act, 16 U.S.C. § 757

§ 260.35 Public Lands, Open Space, Recreation
Federal Land Policy and Management Act, 43 U.S.C. §§ 1701, 1761-1771
Mineral Leasing Act Amendments of 1973, 30 U.S.C. § 185
Federal Coal Leasing Amendments Act of 1976, 30 U.S.C. § 201(a)
Forest and Rangeland Renewable Resources Act, 16 U.S.C. §§ 1601 *et seq.*
Land and Water Conservation Fund Act of 1965 (§ 6(f)); 16 U.S.C. §§ 4501-8(f) *et seq.*
Open Space Lands, 42 U.S.C. § 1500a(d)
Urban Park and Recreation Recovery Act, 16 U.S.C. § 2501 *et seq.*
National Trails System Act, 16 U.S.C. § 1241
Wilderness Act, 16 U.S.C. §§ 1131-1136
Federal Surplus Lands for Parks and Recreation Act of 1970, P.L. 91-485
Recreation Demonstration Projects Act, 56 Stat. 326
Alaska National Interest Lands Conservation Act, 94 Stat. 2371
Executive Orders 11644 and 11989 (Off-Road Vehicles)

§ 260.36 Marine Resources
Deepwater Port Act, 33 U.S.C. §§ 1501, 1503-1505
Ocean Dumping, 33 U.S.C. §§ 1401, 1412, 1413, 1414
Marine Protection, Research and Sanctuaries Act, 16 U.S.C. §§ 1431-1434
Outer Continental Shelf Lands Act, 43 U.S.C. §§ 1331-1356, 1801-1866

§ 260.37 Transportation

Department of Transportation Act of 1966 (§ 4(f)), 49 U.S.C. § 1653(f)
Federal Aid Highway Act of 1958, 23 U.S.C. §§ 128, 138, 155
Urban Mass Transportation Act of 1964, 49 U.S.C. §§ 1602, 1610
Airport and Airway Development Act of 1970, 49 U.S.C. § 1716
Federal Aviation Act, 49 U.S.C. § 3334
Railroad Revitalization and Regulatory Reform Act of 1976, 49 U.S.C. 801

§ 260.38 Air Quality
Clean Air Act, 42 U.S.C. § 7401 *et seq.*
Outer Continental Shelf Lands Act, 43 U.S.C. §§ 1331-1356

§ 260.39 Miscellaneous
Intergovernmental Coordination Act of 1968, 42 U.S.C. §§ 4201, 4231, 4233 (including urban impact analysis)
Executive Orders 12372 and 12416 — Intergovernmental, Review of Federal Programs
Demonstration Cities and Metropolitan Development Act of 1966, 42 U.S.C. § 3334
Surface Mining Control and Reclamation Act of 1977, 30 U.S.C. § 1201 *et seq.*
Resources Conservation and Recovery Act of 1976, 42 U.S.C. § 3251 *et seq.*
Noise Control Act of 1972, as amended, 42 U.S.C. § 4901 *et seq.*
Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. 42 U.S.C. § 4601 *et seq.*
Federal Insecticide, Fungicide and Rodenticide Act, 7 U.S.C. § 136 *et seq.*
Toxic Substance Control Act, 15 U.S.C. § 2601 *et seq.*
Comprehensive Environmental Response, Compensation and Liability Act of 1980. 42 U.S.C. § 9601 *et seq.*