NATURAL RESOURCES JOURNAL

Volume 43
Issue 4 *Fall 2003*

Fall 2003

Some Modest Suggestions for Improving Implementation of the National Environmental Policy Act

Dinah Bear

DINAH BEAR*

Some Modest Suggestions for Improving Implementation of the National Environmental Policy Act

Mention of the National Environmental Policy Act (NEPA)[1] in professional environmental circles will likely elicit one of two reactions. One group will inevitably describe it as "America's environmental magna carta," hallowed for its prescient policies and for its unprecedented requirement that federal agencies disclose to the public the likely effects of their proposed action. Such supporters view almost any change to either the law or the Council on Environmental Quality's[2] (CEQ) implementing regulations as a potential travesty, either on the merits or because the entire environmental impact assessment process might be dismantled if the proverbial door was opened. They point with pride to the fact that the basic procedural process developed to implement NEPA—often referred to as the environmental impact assessment process—has been adopted by over a hundred countries and many significant multilateral organizations, as well as some U.S. state and municipal and tribal governments.

The second group of environmental professionals often begins by acknowledging that Congress's intent in passing NEPA in 1969 was good and that it was needed at the time. But, they will go on to say, NEPA is an old law that may no longer fit the times now that Congress has passed so many other environmental statutes. NEPA has spawned an industry of environmental consultants and litigators and cost a lot of the taxpayer's money, but where are the studies showing that it has done some good? NEPA is used by environmental public interest groups in court, but, some say, the paperwork done to respond to the threat of

---

* Ms. Bear has served since 1981 as Deputy General Counsel and then General Counsel of the Council on Environmental Quality. However, this article is written in her personal capacity and, other than as specifically noted, should not be interpreted as representing the views, opinions, or positions of either the Council on Environmental Quality or the U.S. government.

1. National Environmental Policy Act of 1969, 42 U.S.C. § 4332 (2003).

2. The Council on Environmental Quality was established by Congress in NEPA as an independent agency within the Executive Office of the President. It advises the President on environmental matters, assists in coordinating the development and implementation of environmental policy in the executive branch, and oversees implementation of NEPA. CEQ issues regulations to implement the procedural provisions of NEPA. 40 C.F.R. §§ 1500–1508 (2003).

litigation has thwarted land managers' ability to be good stewards of the public's land. Recently some have suggested that the requirement to identify and analyze "reasonable alternatives" to a federal agency's proposed action, characterized in CEQ's regulations as "the heart of the environmental impact statement,"[3] are not only time-consuming, but could even be counterproductive.

Even NEPA's most ardent critics generally shy away from calling for its repeal and hesitate to propose significant amendments to the law itself, believing that it would be difficult or impossible to achieve legislative victory. Much activity currently focuses on "streamlining" the NEPA process. The specific proposals run the gamut from modest to major. Legislative efforts are focused on streamlining the NEPA process for proposed actions in particular sectors (*i.e.*, transportation, energy, forestry).

It is plausible, although not inevitable, that for most federal actions the environmental impact assessment process will emerge from this period basically intact. But dodging draconian changes should not be viewed by NEPA fans as a victory, but as, at best, a stalemate. To continue "business-as-usual" NEPA practice neither matches the spirit of this remarkable piece of legislation nor guarantees its survival into the second half of this century. To avoid, at best, an ossified, mechanical approach to the NEPA process and, at worst, a direct or de facto repeal of important parts of NEPA, much work needs to be done.

At its heart, the NEPA process is grounded on certain basic beliefs about the relationship between citizens and their government. Those core beliefs include an assumption that citizens should actively participate in their government, that information matters, that the environmental impact assessment process should be implemented with both common sense and imagination, and that there is much about the world that we do not yet understand. NEPA also rests on a belief that the social and economic welfare of human beings is intimately interconnected with the environment. Actions taken to strengthen understanding and implementation of Congress's original intent for NEPA[4] should be predicated on these philosophical groundings. Some suggestions follow.

---

3. 40 C.F.R. § 1502.14 (2003).

4. *See generally* LYNTON KEITH CALDWELL, THE NATIONAL ENVIRONMENTAL POLICY ACT: AN AGENDA FOR THE FUTURE (1998); Lynton K. Caldwell, *Beyond NEPA: Future Significance of the National Environmental Policy Act*, 22 HARV. ENV. L. REV. 203 (1998). Dr. Caldwell was a consultant to Senator Henry M. Jackson, a principal Senate sponsor of NEPA. Dr. Caldwell has written a great deal about Congress's intent in passing NEPA and has continued to follow its development since its passage in 1969. The author and all who care about NEPA owe Dr. Caldwell a great debt.

CIVIC EDUCATION

Knowledge will forever govern ignorance: And a people who mean to be their own Governors must arm themselves with the power that knowledge gives.[5]

James Madison

It is no insult to the "average" member of the public, whoever that person is, to observe that public understanding of the very law responsible for opening up federal decision making to the public runs from flawed to non-existent. Since its passage, NEPA has been widely mischaracterized and misunderstood[6] and thus the citizenry is largely misinformed.

Because NEPA covers all types of environmental impacts, it does not have the type of ready-made constituency for it that many laws directed at the use, enjoyment, and/or protection of a specific resource enjoy. But NEPA's policy goals and process potentially affect every American and must be understood by some meaningful segment of society at large if they are to endure as more than platitudes. NEPA, after all, was passed to implement its title: a national environmental policy. Those policies are far-sighted, wide-ranging, and largely forgotten.[7] Even more overlooked is Congress's recognition in NEPA "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."[8]

The environmental impact assessment process designed by CEQ as the procedural framework for implementing NEPA's policies is better known but also misunderstood in fundamental ways by both the public and professionals. A considerable body of pernicious mythology has developed around NEPA. For example, many people believe that NEPA focuses purely on environmental protection to the exclusion of human beings; that NEPA requires expensive analyses of information with no practical value, voluminous documents and numerous public hearings; that federal agencies should ignore alternatives crafted by local communities; that NEPA does not permit agencies to use adaptive

5. Letter from James Madison to W.T. Barry, Aug. 4, 1822, *in* 9 WRITINGS OF JAMES MADISON 103 (Hunt Gaillard ed., 1910).

6. As Dr. Caldwell has pointed out, the New York Times characterized NEPA as an "anti-pollution law" when reporting on President Nixon signing NEPA into law as his first official act of 1970. *Nixon Promises an Urgent Fight to End Pollution; Signs Measure to Establish a 3-Member Council on Environmental Quality*, N.Y. TIMES, Jan. 9, 1970, at A1; *Nixon Appoints 3 in Pollution War*, N.Y. TIMES, Jan. 30, 1970, at A1, 7; *cited in* CALDWELL, THE NATIONAL ENVIRONMENTAL POLICY ACT: AN AGENDA FOR THE FUTURE, *supra* note 4, at 37-38.

7. NEPA's policy goals are reprinted in Appendix A.

8. 42 U.S.C. § 4331(c).

management; and, ultimately, that NEPA is a waste of time. Obviously, the last point is a matter of personal judgment; the other points are false.

There is no reason to be surprised that this state of affairs exists. There has been little work—and no sustained effort—to educate members of the public about NEPA. Surprisingly enough, no comprehensive citizens' guide to NEPA exists; NEPA courses, workshops, and other educational fora are geared to the working environmental professional. Anyone else who has an interest in learning about how the NEPA process works usually signs up for an expensive short course sponsored by consultants or lawyers and geared to environmental professionals[9] or cobbles together some information on an ad hoc basis—sometimes with good results, sometimes not.[10]

Furthermore, efforts at "streamlining the NEPA process" or "reforming NEPA" often bypass sustained interaction with the group intended to benefit most directly from the law—members of the public who encounter NEPA not as part of their job responsibilities, but rather as a process associated with a proposed action that would in some way affect their lives. Those members of the public who care enough to respond when asked about NEPA sometimes have views that may be disconcertingly at odds with the advocacy of parties who purport to represent them. For example, in response to CEQ's recent solicitation of public comments to questions posed by an interagency NEPA Task Force,[11] several letter writers from the western United States asked CEQ to establish a minimum 90-day comment period for all environmental assessments (EAs).[12] This request obviously runs counter to the

9. See Compendium of NEPA Training Courses at http//ceq.eh.doe.gov/NEPA/training/NEPAcourselist.pdf.

10. See Appendix B for a summary of how the NEPA process works.

11. On May 20, 2002, CEQ established the interagency NEPA Task Fore to review current NEPA implementing practices and procedures in particular areas, including technology and information management, interagency and intergovernmental collaboration, programmatic analyses, and adaptive management. 67 Fed. Reg. 45510 (July 9, 2002); 67 Fed. Reg. 53931 (Aug. 20, 2002). For detailed information about the Task Force, see CEQ's NEPAnet website at http://ceq.eh.doe.gov/ntf.

12. *See, e.g.*, Letters from Julie D. Schmidt, N.M. Cattle Growers Ass'n, to NEPA Task Force (Aug. 30, 2003) and Tom Runyan, President, N.M. Wool Growers, Inc. to NEPA Task Force (Aug. 23, 2002) (on file with the *Natural Resources Journal* and currently available on the NEPA Task Force website at http://ceq.eh.doe.gov/ntf/comments/comments.html). Currently, there is no comment period required for EAs under the CEQ regulations, although agencies "shall involve environmental agencies, applicants, and the public, to the extent practicable, in preparing assessments required by [section] 1508.9(a)(1)." 40 C.F.R. § 1501.4(b). Some agencies do have set comment periods for EAs, often 30 days; few agencies have engaged the public in the actual preparation of the EA other than through a comment process. *See also* Citizens for Better Forestry v. U.S. Dep't of Agric., 341 F.3d 961 (9th Cir. 2003) (ruling in favor of mandatory public involvement in the context of environmental assessments).

prevailing sense in Washington, D.C. that NEPA must be streamlined by mandating, among other things, tighter deadlines.

There are periodic efforts of agencies to "check in" and see what the public thinks about NEPA. Recent efforts include the U.S. Institute for Environmental Conflict Resolution's work regarding how collaboration, consensus building, and appropriate dispute resolution processes can improve the implementation of NEPA,[13] CEQ's establishment of an interagency Task Force on NEPA and its solicitation of public comments on the issues raised for consideration by the Task Force, and the Department of the Interior's recent "listening sessions" to seek views and comments on its NEPA process.[14] But without slighting in the least both the need for and the value of these types of efforts at a national level, I would suggest that much more frequent and focused dialogues need to take place with the public at local and regional levels as well as cross-country evaluations. Agency NEPA programs need to then reflect the results of that interaction.

Decision makers also need to be better informed about the NEPA process. Some come to the job with experience in NEPA; for others, it is a mysterious and difficult barrier to their ability to do what they thought they were appointed to do. Indeed, today's status quo includes a cadre of skilled environmental impact assessment professionals but often leaves the public at large and agency decision makers—the two groups that the NEPA process was most intended to inform—as the least knowledgeable and most superficially involved in NEPA's implementation. Priorities need to change. No law—let alone a law like NEPA, with its emphasis on information disclosure, alternatives analysis, and public involvement—should be a mystery to the citizenry at large. And decision makers should be actively involved in shaping the NEPA process to best serve their agency's mission and its constituencies. As Dr. Caldwell has written, "Implementing NEPA requires a process of social learning, which, although not in NEPA's text, implies a process of

13. Congress established the U.S. Institute in 1998 in the Environmental Policy and Conflict and Resolution Act (Pub. L. 105-156). It is part of the Morris K. Udall Foundation, an independent federal agency of the executive branch located in Tucson, Arizona. The Institute's primary purpose is to assist parties in resolving environmental, natural resource, and public lands conflicts. It was also charged with assisting in achieving the substantive goals of NEPA laid out in Section 101. *See National Environmental Policy Act; Pilot Projects; Comment Request; Announcement of Workshop*, 66 Fed. Reg. 24,156 (May 11, 2001), and the U.S. Institute's website at http//www.ecr.gov for information about the National Environmental Conflict Resolution Advisory Committee.

14. See 68 Fed. Reg. 52,595 (Sept. 4, 2003) for a notice of proposed revised procedures based in part on views expressed during those sessions.

"public" education and persuasive teaching."[15] That education is long overdue.

COURAGE AND COMMON SENSE

One of the most interesting dichotomies from the point of view of trying to oversee agencies' NEPA implementation is this: on the one hand, there is a large and ever-swelling chorus of voices based on the premise that what is needed to "streamline" the NEPA process is more flexibility in the process and more deference to the "lead agency."[16] And indeed, when CEQ proposed NEPA regulations in 1978, agencies argued in several instances for flexibility.[17] Yet, on the other hand, one of the complaints that CEQ staff most frequently hear from federal agency employees is that the regulations do not give enough direction! For example, CEQ has heard that the regulations do not give specific direction on how to document and define the purpose and need for a proposal; do not outline specific procedures for environmental assessments, other than direction on the basic content; do not specify a decisionmaking document for actions that are the subject of a finding of no significant impact (as opposed to the Record of Decision for actions subject to an environmental impact statement); and offer too many options, but not enough direction, in the ways of public involvement processes.

Members of the legal tribe sometimes caution against trying new approaches to NEPA implementation for fear that the courts will frown on anything not specifically spelled out in CEQ's regulations or blessed by judicial precedent. But agencies that thoughtfully craft a process that reflects their mission's activities and takes into account the public's need for information and involvement are generally successful. For example, the Bonneville Power Administration (BPA) successfully developed an approach to using programmatic NEPA analyses for multiple decisions.[18]

---

15. CALDWELL, THE NATIONAL ENVIRONMENTAL POLICY ACT: AN AGENDA FOR THE FUTURE, *supra* note 4, at 21.

16. The lead agency is the agency or agencies preparing or having taken primary responsibility for preparing an EIS. 40 C.F.R. § 1508.16. It is typically the agency that is proposing the action or, in the context of a proposal involving multiple agencies, the agency that has the most involvement in project approval. In case of a dispute, the CEQ regulations set forth criteria for selection of the lead agency, and in a contested case, CEQ itself will determine the lead agency. 40 C.F.R. § 1501.5 (2003).

17. For example, CEQ made scoping meetings permissive rather than mandatory in response to comments on the draft NEPA regulations. *Preamble to Final Regulations*, 43 Fed. Reg. 55,990 (Nov. 28, 1978).

18. BPA's use of tiered Records of Decisions was upheld in *Association of Public Agency Customers, Inc. v. Bonneville Power Administration*, 126 F.3d 1158, 1183-84 (9th Cir. 1997). For more examples of this approach, see *Flexibility Is Inherent in NEPA*, NATIONAL

On the other hand, agencies that substitute difficult, literally weighty documentation for thoughtful analysis and involvement often do find themselves on the losing end.[19] Nonetheless, many NEPA practitioners persist in producing lengthy, dense documents and agency representatives complain that this is what the law forces them to do.

At the risk of sounding cranky, let me suggest that many complaints reflect the fact that agency leadership is insufficiently informed about NEPA and, consequently, staff perceive no mandate to be constructively creative about how to conduct the NEPA process for particular types of proposals. CEQ's regulations are not an exercise in "fill-in-the-blank." They are a framework for thinking and making judgments. A bureaucracy that feels the need for precise, step-by-step direction from CEQ has failed to grasp that the flexibility is there because agencies need to adapt the NEPA process to their particular types of actions and constituencies. The type of analysis and interaction needed to make decisions about a small national park located in an urban area is quite different than the interaction and analysis needed for proposals to extract oil and gas from northwest Alaska. The salient features of the NEPA process for a national rulemaking on nuclear waste disposal is obviously going to be different than for the construction of a new post office in a mid-sized community in Wyoming. It is difficult to do a good job of implementing the NEPA process if one's aim is only to check off the "NEPA box." Some degree of interest, even excitement, is necessary along with the realization that one can and should exercise common sense and judgment throughout the process. That interest comes easier when decision makers are familiar with the NEPA process and understand that the law is only working if the process actually helps them to make better decisions.

ALTERNATIVES

Is the "Heart of the NEPA Process" Missing a Beat?

One of the most well known features of the NEPA process is the requirement, grounded in the statute itself, to examine alternatives to a proposed action. Indeed, Congress thought this so important that it is

---

ENVIRONMENTAL POLICY ACT: LESSONS LEARNED 6 (U.S. Dep't of Energy Quarterly Report, Sept. 2003), available through DOE's NEPA office (202-586-9326) or at tis.eh.doe.gov/nepa.

19. See *Blue Mountain Biodiversity Project v. Blackwood*, 161 F.3d 1208 (9th Cir. 1998) for an example of a case where the length of an EA helped persuade a judge that the agency really needed to prepare an EIS, and *Oregon Environmental Council v. Kunzman*, 614 F. Supp. 657 (D. Ore. 1985) for a case where the judge found an EIS inadequate in part on the grounds that it was not understandable (citing CEQ's regulation on writing at 40 C.F.R. § 1502.8).

included twice—first, in the provision outlining the required contents of the "detailed statement" now known as an environmental impact statement,[20] and again for "any proposal which involves unresolved conflicts concerning alternative uses of available resources."[21] Early case law highlighted the importance of alternatives,[22] and the CEQ regulations themselves characterize alternatives as "the heart of the environmental impact statement."[23] Specifically, agencies must "rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated."[24] They must accord substantial treatment to each alternative considered in detail allowing for a valid comparison of all of the alternatives;[25] include reasonable alternatives not within the jurisdiction of the lead agency;[26] and provide the alternative of no action.[27] The agency must also identify the agency's preferred alternative(s), if one or more exists in the draft EIS, and affirmatively identify a preferred alternative in the final statement unless prohibited from doing so by another law.[28]

For many years, alternatives were accepted as a basic requirement of the environmental impact assessment. Despite some fretting by agency personnel over how many alternatives were needed in an EIS[29] and criticism directed to agencies for including too many "strawman" alternatives, the necessity for alternatives in the environmental impact assessment process seemed to be taken for granted.

Those days are gone. The view that requiring agencies to identify and analyze alternative means of achieving their purpose and need is being fundamentally questioned. Most significantly, several important bills in Congress either limit the requirement to identify "reasonable alternatives" to those that the decision maker determines are

20. 42 U.S.C. § 4332(2)(C)(iii) (2000).

21. 42 U.S.C. § 4332(2)(E) (2000). This is the statutory underpinning for analysis of alternatives in environmental assessments.

22. *See, e.g.*, Natural Res. Defense Council v. Morton, 458 F.2d 817 (D.C. Cir. 1972) (holding that sometimes "reasonable alternatives" may include those outside of the lead agency's jurisdiction).

23. 40 C.F.R. § 1502.14 (2003).

24. 40 C.F.R. § 1502.14(a) (2003).

25. 40 C.F.R. § 1502.14(b) (2003).

26. 40 C.F.R. § 1502.14(c) (2003).

27. 40 C.F.R. § 1502.14(d) (2003).

28. 40 C.F.R. § 1502.14(e) (2003).

29. Answer: how ever many reasonable alternatives that meet the purpose and need of the proposed action are identified.

"reasonable,"[30] or eliminates the requirement altogether in the context of NEPA compliance for a particular type of activity.[31]

There are two rationales for this newly found aversion to alternatives. One line of thought holds that alternatives simply take too much time and elimination of them will further streamline the environmental review process. The implication is obviously that the time spent on alternatives is not time well spent.[32]

The second line of argument holds that requiring alternatives identification and analysis is antithetical to collaboration. To proponents of this way of thinking, the preferred way of arriving at a decision is to seek consensus through collaboration. They believe that the alternatives requirement serves to foster division, not unity, in the decisionmaking process. One letter received by the NEPA Task Force put it this way:

> NEPA's culture polarizes decision-making and fails to support the development of good projects. Much of today's concerns for streamlining of environmental permitting focuses on the complexity of project permits and the tangled course of meeting their substantive and procedural preconditions. These are important problems. But we believe another issue deserves more attention than it has received. This is the question of whether "alternatives analysis," in the shape it now takes in NEPA, creates a context for discussion and problem-solving that maximizes the polarization of opinion, the staking out of positions, and the exclusion of iteration and compromise in problem solving. Is it possible that part of the frustration at delay and gridlock that now animates NEPA's critics grows from the analytic mechanism of "alternatives" in which project examination now finds itself mired? We think CEQ should at least broach to behavioral scientists and students of

30. For example, the Century of Aviation Reauthorization Act, H.R 2115, was marked up in conference in July, 2003, with language stating that any federal or state agency participating in a coordinated environmental review process "shall consider only those alternatives to the project that the Secretary has determined are reasonable." Subsection 47171(k). This approach may indeed seem reasonable, to use a popular word, particularly in light of numerous cases that defer to the agency's determination of purpose and need and give a high degree of deference to the agency's selection of alternatives. However, it effectively moves the standard for measuring the reasonableness of alternatives from a reasonable person standard to a one person standard. *See also* H.R. 2557, Water Resources Development Act of 2003 (permitting the Secretary to eliminate from consideration any alternatives he or she deems are not reasonable or are not reasonably anticipated to meet project purpose and need).

31. H.R. 1904, Section 104(b), as passed in the House.

32. CEQ is not aware of any systematic analysis of the time devoted by federal agencies to identifying and analyzing reasonable alternatives.

> decision-making the question whether the terms of engagement for NEPA "alternatives" analysis inherently frustrates the process of reaching decisions on project undertakings.[33]

The letter writer is not alone in his thinking. This is a serious challenge. Those of us who advocate alternatives analysis do so in part because of the belief that human beings naturally like their own ideas and have trouble being critical of them. Doing real alternative analysis is tough. It runs against human nature to spend time and money to publicly highlight someone else's idea, especially if one is convinced that one's own idea is a much better one. Indeed, it is somewhat surprising that the requirement was ever passed in the first place and that it has endured until now. Not surprisingly, even individuals and groups that are typically strong advocates of NEPA sometimes resist the NEPA process when they perceive themselves to be in a winning position.[34] Another problem exists when agencies engage in only the most superficial of processes to probe themselves and the interested public for real alternatives and then simply fabricate some number of alternatives so they will appear to have mechanically met the requirement to examine alternatives. This exercise may make it look as though an agency has complied with NEPA, but it inevitably fails to satisfy anyone and lends credence to the belief that the process wastes time and money through the production of strawmen alternatives.

A legally required process that forces decision makers to go through at least the mechanics of looking at other ideas for achieving the purpose and need of the project is valuable for the very reason that such consideration does not come naturally but has, in hindsight, often proven valuable. That said, there has been no systematic assessment of the alternatives requirement. There is much in the way of anecdotal evidence to suggest that some decision makers have found it (in hindsight) critical. Some of that evidence is dramatic. For example, in 1992, then Secretary of Energy James Watkins made this statement to the House Armed Services Committee regarding his decision to defer selection of a tritium production technology: "Thank God for NEPA because there were so many pressures to make a selection for a

33. Letter from Douglas B. MacDonald, Secretary of Transportation, Washington State Dep't of Transportation, to James L. Connaughton, Chairman, Council on Environmental Quality, NEPA Task Force (Sept. 23, 2002) (on file with the *Natural Resources Journal* and currently available at http://ceq.eh.doe.gov/ntf/comments/comments.html).

34. For example, environmental groups have sometimes strongly opposed NEPA's applicability to proposed actions when they have been part of a collaborative effort that developed a proposal for a land exchange that seems to them clearly beneficial.

technology that might have been forced upon us and that would have been wrong for the country...."

The question of how the alternatives requirement under NEPA affects efforts at collaborative or even consensus-based decision making deserves some concrete, objective study by those familiar with decision-making processes and dispute resolution. A credible examination of the alternatives process is clearly warranted before significant changes are made to the process.

THE MISSING PART OF NEPA

Where's the Rest of NEPA? Implementing Post-Decisional NEPA Could Help the Quality of Information

Typically, NEPA pundits characterize the purpose of the NEPA process as two-fold: to inform a federal decision maker of the environmental consequences of the decision that he or she is about to make and to ensure the involvement of the public (and other governmental entities) in that process. Even when the public is excluded from involvement by virtue of the nature of the information,[35] agencies must comply with NEPA to assist in decision making.[36] Both of these purposes assume (1) that information matters in the course of decision making and (2) that there is relevant, available, and legitimate information.

The extent to which information matters in decision making will always be open to debate. Certainly, it is not an easily quantifiable factor. Probably the most accurate summary is, of course, much of the time, information matters a lot. But it is not the only factor in decision making and sometimes it is not the main factor.[37] More work needs to be done in this field, as well as in developing a better understanding of how

35. For a discussion of the relationship between NEPA and classified information, see *Weinberger v. Catholic Action of Hawaii/Peace Education Project*, 454 U.S. 139 (1981). Post September 11, 2001, concerns about the distribution of certain types of non-classified information clearly has implications for NEPA and other public disclosure laws and was one of the issues raised for public discourse by the NEPA Task Force.

36. Classified EISs have been prepared and filed with the Environmental Protection Agency (EPA). Staff at both EPA and CEQ maintain security clearances to review such documents.

37. *See* Peter Hoagland & Scott Farrow, *Planning versus Reality: Political and Scientific Determinants of Outer Continental Shelf Lease Sales*, *in* THE POLITICAL ECONOMY OF ENVIRONMENTAL PROTECTION ch. 7 (Roger D. Congleton ed., 1996); Scott Farrow, *Does Analysis Matter? Economics and Planning in the Department of the Interior*, 73 REV. ECON. & STATS. 172-76 (1991).

information is acquired[38] and how the presentation of information affects a person's understanding and acceptance of it. Most decision makers, however, whether making a decision or affected by it, would like to believe that they are basing their decisions, at least in part, on good quality information.

Congress passed NEPA at a time when it was ready to acknowledge a profound collective need to know more about how the world works and that need seemed apparent and widely accepted. One of NEPA's four purposes is "to enrich the understanding of the ecological systems and natural resources important to the Nation...."[39] Congress went on to require that all agencies of the federal government, inter alia, "utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts, in planning and in decisionmaking which may have an impact on man's environment"[40] and "initiate and utilize ecological information in the planning and development of resource-oriented projects...."[41]

CEQ's implementing regulations speak to the nature of the information that is to be used in NEPA analyses. "The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA."[42] A portion of CEQ's regulations entitled "Methodology and scientific accuracy" states that

> [a]gencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements. They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement. An agency may place discussion of methodology in the appendix.[43]

CEQ has always resisted directing agencies to use any particular methodology. During the lengthy exercise of amending the regulation

38. *See, e.g.*, Peter Adler & Juliana Birkhoff, *Building Trust—When Knowledge From "Here" Meets Knowledge from "Away"* (The National Policy Consensus Center), *available at* www.policyconsensus.org.

39. 42 U.S.C. § 4321 (2000). The other purposes of the Act are "[t]o declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; and to establish a Council on Environmental Quality." *Id.*

40. 42 U.S.C. § 4332(2)(A) (2000).

41. 42 U.S.C. § (2)(H) (2000).

42. 40 C.F.R.§ 1500.1(b) (2000).

43. 40 C.F.R. § 1502.24 (2003).

that addresses "Incomplete and unavailable information,"[44] CEQ declined recommendations to require a particular recognized scientific method for evaluating uncertainty, such as a risk assessment approach. As stated in the preamble to that amendment:

> Because of the wide variety of types of incomplete or unavailable information which may potentially fall within the scope of this regulation, CEQ does not choose to specify a particular methodology. Rather, each agency should select that approach which best meets the goals of evaluating potential impacts in the face of unavailable information. Further, a requirement that a particular methodology be utilized might be soon outdated by scientific developments in a particular field.[45]

While CEQ has stayed above-the-fray regarding methodology, it is difficult to look at the environmental communication and decisionmaking field today without observing that the criticism heaped on many agencies for using bad or "junk science" undermines both the civility and credibility of environmental decision making. Any proposal that is seen as goring one side's ox almost inevitably provokes the accusation that the proposal (1) is based on slavishly giving in to the most extreme arm of the proponent's assumed constituency and (2) is supported by only biased, unprofessional scientific support. Advocates on all sides of many issues purport to simply want to ensure that "good science" is used and usually display confidence that, if it were used, they would be satisfied with the outcome because it would coincide with their view of their world.

All three branches of government and many public interest and academic organizations have engaged in attempts to address the lack of confidence in information used by government agencies. In a rider to a 2001 appropriations bill,[46] Congress passed a provision requiring federal agencies to ensure and maximize the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by agencies. Federal agencies have just completed developing implementing procedures for the law and the implications, while hotly debated, are not yet clear.[47] The Office of Information and Regulatory

44. 40 C.F.R. § 1502.22 (2003).

45. Preamble to amendment to 40 C.F.R. § 1502.22, 51 Fed. Reg. 15,625 (Apr. 25, 1986).

46. Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001, Pub. L. 106-554.

47. *See* government-wide guidelines promulgated by the Office of Management and Budget, 67 Fed. Reg. 8,452 (Feb. 22, 2002) and individual agency guidelines, generally available on agency websites or in their reading rooms; *see also* OMB website, *at* www.whitehouse.gov/omb/inforeg/infopoltech.ntm#dq.

Affairs in the Executive Office of the President recently proposed government-wide draft peer review standards for regulatory science.[48]

The Supreme Court articulated evidentiary standards for scientific and technical analysis in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*,[49] although federal courts have differed over whether these standards apply to cases involving decision making by federal agencies under the Administrative Procedure Act (and hence, NEPA)[50] and commentators have varied widely in their assessment of the effect of *Daubert* and its progeny.[51] Meanwhile, the debate continues, often most bitterly in the context of decision making about conflicts over public land use, water, and wildlife.[52]

While neither an easy nor an exclusive remedy, one significant step the government could take to improve the quality of information would be to implement post-decisional NEPA monitoring and mitigation. Most of the attention understandably and, in the beginning of NEPA's implementation, necessarily has been focused on NEPA's pre-decisional requirements. But that single-minded focus has come at the cost of largely ignoring serious analysis of whether the predictions

---

48. *See* OMB website, *supra* note 47, Proposed Bulletin, "Peer Review and Information Quality," Aug. 29, 2003.

49. 509 U.S. 579 (1993). The factors set forth in the opinion are (i) whether the theory or technique has been subject to peer review and publication (relevant, though not dispositive, (ii) whether the theory or technique at issue can be tested to see if it can be falsified, (iii) what the court understands about the known or potential rate of error for a particular scientific technique, and (iv) whether the theory or technique has received general acceptance or at least more than minimal support.

50. *Compare* Sierra Club v. Marita, 46 F.3d 606, 622 (1995) (declining to use *Daubert* standards to judge the adequacy of the Forest Service's scientific assertions because the rule "is intrusive, undeferential, and not required") *and* Stewart v. Potts, 996 F. Supp. 668, 678 (1997) (stating that *Daubert* does not apply to APA review of agency action because the court's task under the APA is to ensure that the agency's decisions are not arbitrary or capricious, not to evaluate their scientific methods, and the Court must give a high degree of deference to the agency's expertise) *with* Hells Canyon Preservation Council v. Jacoby, 9 F. Supp. 2d 1216, 1223 (1998) (finding that the court's analysis of the Federal Highway Administration's reconstruction of a road was governed by *Daubert* and that, in this case, the agency's analysis met that test).

51. *Compare, for example,* Daubert: *The Most Influential Supreme Court Ruling You've Never Heard Of* (Project on Scientific Knowledge and Public Policy, Tellus Institute, June 2003) (concluding that "the application of *Daubert* and *Daubert*-like challenges threaten to paralyze the systems we use to protect public health and the environment") *with* Patricia King, *Applying* Daubert *to the "hard look" Requirement of NEPA: Scientific Evidence before the Forest Service in* Sierra Club v. Marita, 2 WIS. ENVTL. L. REV. 147 (1995) (arguing that *Daubert* standards were relevant to examining the adequacy of the forest management plans for the Nicolet and Chequqmegon National Forests and that application of the *Daubert* standard would have compelled serious consideration by the Forest Service of conservation biology in developing those plans).

52. Laura Paskus, *Sound Science Goes Sour*, 35 HIGH COUNTRY NEWS, June 23, 2003, at 1.

presented in NEPA analyses are accurate,[53] whether promised mitigation measures are implemented, and, if so, whether they are effective. It is also the dynamic that has made NEPA documents the one-shot deals that they usually are, rather than the living libraries that they could become.[54]

Many responsible agency employees know that they should be monitoring their mitigation commitments and know that they are not capable of doing so. There have been a variety of obstacles over the years, but constant among them has been a lack of resources. Money for monitoring and mitigation, particularly in the absence of a particularly high-profile issue or binding agreement, is notoriously tough to get and, along with training for agency employees, always seems to be first on the budgetary chopping block. Post-decisional NEPA has been like the dark side of the moon: one knows it is there, but in the world of government agencies, no one can see it.

There are, however, glimmers of light on the horizon. For example, the Department of the Army (the military side) has identified and addressed the problem in their NEPA procedures in an unprecedented and significant way. Beginning in March 2002, the Army proponent of an action is required not only to identify mitigation measures for inclusion on a decision, but also to

> implement those identified mitigations, because they are commitments made as a part of the Army decision. The proponent is responsible for responding to inquiries from the public or other agencies regarding the status of mitigation measures adopted in the NEPA process. The mitigation shall become a line item in the proponent's budget or other funding document, if appropriate, or included in the legal document implementing the action (for example, contracts, leases or grants). Only those practical mitigation measures that can reasonably be

53. PAUL J. CULHANE ET AL., FORECASTS AND ENVIRONMENTAL DECISIONMAKING (1987).

54. CEQ was lamenting this situation as early as 1975, stating in the *Sixth Annual Report on Environmental Quality* that, "[u]nfortunately, few agencies look back at projects to evaluate their effects, or people's perceptions of their effects, in order to improve future forecasting and decisionmaking." *Id.* at 656. CEQ again recognized the problem with the "one-time event" model of NEPA compliance in its 1997 study, *The National Environmental Policy Act: A Study of Its Effectiveness after Twenty-Five Years* (CEQ 1997). Unfortunately, the fact that "agencies do not typically collect long-term data on the environmental impacts of actions" has not changed since the time of that report. *See Adaptive Management and Monitoring, in* MODERNIZING NEPA IMPLEMENTATION ch. 4 (NEPA Task Force Report to the CEQ, Sept. 2003) [hereinafter NEPA Task Force]. *See also* Bradley C. Karkkainen, *Toward a Smarter NEPA: Monitoring and Managing Government's Environmental Performance*, 102 COLUM. L. REV. 93 (2002).

> accomplished as part of a proposed alternative will be identified. Any mitigation measures selected by the proponent will be clearly outlined in the NEPA decision document, will be budgeted and funded (or funding arranged) by the proponent, and will be identified, with the appropriate fund code, in the EPR (AR 2-1). Mitigations will be monitored through environmental compliance reporting, such as the ISR (AR-2001) or the Environmental Quality Report.[55]

The Army regulation goes on to mandate a monitoring and enforcement program for any adopted mitigation and discusses in detail enforcement and effectiveness monitoring and publicly-available reporting requirements for these steps.[56] Even more remarkably, the Army took the precedent-setting step of acknowledging that not all mitigation measures may, in fact, be implemented. Thus, the regulations require an Army proponent who relied on mitigation to justify a Finding of No Significant Impact (thus avoiding preparation of an EIS) to, in fact, reverse course and prepare an EIS if any of the identified measures do not occur.[57]

An excellent government-wide opportunity to remedy this situation presents itself in the recent and bi-partisan interest in both environmental management systems (EMS), an approach developed initially in a business and industrial context, and adaptive management, a term most often used in the land management and natural resources context. While of different origins, the two processes have very similar goals. Significantly, both EMS and adaptive management, strongly supported by policy officials of both the Clinton and George W. Bush administrations,[58] require post-decisional monitoring.

As the result of international negotiations to establish common standards, EMS models are more precisely defined than adaptive management. Although other EMS models are available, most federal agencies are designing models to follow the ISO 14001 standard, which has the following components:

---

55. Department of the Army, Environmental Analysis of Army Actions, Final Rule, 32 C.F.R. § 651.15(b) (2003).

56. *Id.* § 651.15(h)(i).

57. *Id.* § 651.15(c).

58. Exec. Order No. 13,148, Greening the Government through Leadership in Environmental Management (Apr. 21, 2000); *see also* Memoranda from Chairman James L. Connaughton, Chairman, Council on Environmental Quality, & Mitchell Daniels, Director, Office of Management and Budget, to cabinet secretaries and administrators requiring annual reporting on progress in establishing and implementing EMS, Apr. 1, 2002, available on CEQ website, *at* www.whitehouse.gov/ceq EMS Memoranda (also on file with the *Natural Resources Journal*).

- An environmental policy with a commitment to continual improvement, pollution prevention, and compliance with relevant environmental legislation and regulations;
- Procedures to identify an organization's or facility's environmental impacts, legal and other responsibilities, and environmental management programs;
- System implementation and operation, including identification of responsibilities, training and awareness, documentation, and operational controls;
- Checking and corrective actions, including monitoring and measuring performance to meet targets for continual improvement; and
- Management reviews to ensure that EMS is suited to changing conditions and information.

Adaptive management definitions abound in both natural resources practice[59] and academic literature.[60] But common to all are two elements: a monitoring system and a response system.

The work of the interagency NEPA Task Force in this area includes recommendations for CEQ to convene an adaptive management work group that should, among other things, consider establishing a definition for adaptive management in the NEPA process, prepare appropriate adaptive management guidance or regulatory changes, consider integrating the NEPA process with EMS, and initiate a pilot study to identify the types of actions best suited for integrating adaptive management.[61] One place where these processes have already come together is at the spectacular Valles Caldera National Preserve in northern New Mexico. The Valles Caldera Trust, established by Congress as an independent entity,[62] manages approximately 89,000 acres of an ancient collapsed volcanic field, formerly known as the Baca ranch, in north-central New Mexico. Congress found that "an experimental management regime should be provided by the establishment of

59. *See, for example,* Adaptive Harvest Management used by the U.S. Fish & Wildlife Service to set duck-hunting regulations, *at* http://migratorybirds.fws.gov/mgmt/ahm/AHM-intro.htm.

60. *See* ADAPTIVE MANAGEMENT: FROM THEORY TO PRACTICE (J.A.E. Oglethorpe ed., 2002).

61. NEPA Task Force, *supra* note 54.

62. Valles Caldera Preservation Act, 16 U.S.C. § 698v (2000). The Trust is responsible for management of the land and resources of the Preserve and, by law, is a federal entity for purposes of compliance with all federal environmental laws and for many other purposes.

a trust capable of using new methods of public land management that may prove to be cost-effective and environmentally sensitive"[63] and established the Preserve "to protect and preserve the scientific scenic, geologic, watershed, fish, wildlife, historic, cultural, and recreational values of the Preserve, and to provide for multiple use and sustained yield of renewable resources within the Preserve...."[64]

While these purposes are not notably different than the multiple use mandate of other land management agencies, the Board has set about their work determined to make learning about the land they administer the major touchstone of its management. Shortly after establishment, the Board committed to building an organizational culture and structure that would fully support adaptive management. The Trust has invested heavily in the kinds of inventory and monitoring work needed to provide baseline information for the comparative evaluation of future resource conditions. It has also designed a framework for long-term monitoring that is intended to result in periodic, viable assessments of the cumulative effects of preserve activity. In its effort to integrate a vigorous ongoing program of experimental field science with day-to-day management, the Valles Caldera Trust is unique.

The Trust's newly published NEPA procedures establish a systematic framework for using the information gained by this on-the-ground scientific work in an iterative process involving the public at every step.[65] The procedures set forth the Trust's values and vision for management of the Trust and state that "[m]onitoring and evaluation of stewardship actions, research, and detailed studies provide the public and the Trust with the basis for adapting on-going and future stewardship actions to achieve the goals of the Trust and the requirements of NEPA."[66] Adaptive management is defined and declared to be "the preferred method for managing complex natural systems."[67] The responsible official may make an implementing decision to authorize a "stewardship action"[68] only if he or she has (1) the available

63. *Id.* § 102(a)(12).

64. *Id.* §§ 698v-3; 105(b).

65. 68 Fed. Reg. 42,460 (July 17, 2003); also available on the Valles Caldera Trust's website at www.valescaldera.gov.

66. 16 U.S.C. § 101.1(c) (2000).

67. "'Adaptive management' means adjusting stewardship actions or strategic guidance based on knowledge gained from new information, experience, experimentation, and monitoring results. *Id.* § 101.2.

68. "'Sewardship action' means an activity or group of activities consisting of at least one goal, objective, and performance requirement proposed or implemented by the Responsible Official that may: (1) Guide or prescribe alternative uses of the Preserve upon which future implementing decisions will be based; or (2) Utilize or manage the resources of the Preserve." *Id.* § 101.2.

information regarding the purpose and need for the proposal and the anticipated outcome is suitable and (2) at least one monitored outcome is identified in the stewardship register.[69] Importantly, the Trust must evaluate each monitored outcome,[70] make the evaluations available to the public,[71] and take action appropriate to responding to the monitoring conclusions or other new information.[72] It is important to understand that all of these provisions are fully within the framework of NEPA and the CEQ regulations and, indeed, are very much applauded by CEQ.[73]

If the Trust succeeds in its goals of integrating science, decision making, and the accountability to and involvement by the public, it could make a difference in how troubled land management agencies think about NEPA—in no small measure just by demonstrating that NEPA is not a barrier but rather a framework for implementing adaptive management. And while "streamlining" has become a value-laden term in the context of NEPA, the acquisition of on-the-ground information could certainly reduce the need to engage in the type of costly, lengthy modeling exercises that some agencies feel obliged to undertake because of lack of empirical information. However, there is obviously a huge difference in the resources needed to manage 89,000 acres and the millions of acres of public land across the nation. Pointing to the Valles Caldera, or any other particular "pilot project," as a model may help stimulate interest and acceptance in these ideas, but NEPA implementation for land management practices will not change until both the executive and legislative branches of government not only endorse the value of post-decisional NEPA but fund its implementation as well.

NEPA'S GEOGRAPHICAL REACH

Trouble at the Borders

Borders have long attracted conflict, whether political, military, or social. The world of NEPA is no exception to this truism. "The law concerning extraterritorial application of NEPA is unsettled," observed one federal judge recently.[74] Indeed, NEPA's reach across borders is the longest running debate regarding the law. It has surfaced in all three branches of government and in a variety of geopolitical settings: federal

69. *Id.* § 101.8(a).
70. *Id.* § 101.9(a).
71. *Id.*
72. *Id.* § 101.9(b).
73. *See* letter from James Connaughton, Chairman, Council on Environmental Quality, to William deBuys, Chairman, Valles Caldera Trust, Oct. 22, 2003.
74. Born Free USA v. Norton, 2003 WL 217871640 (D.D.C. 2003) (quoting from Sale v. Hatian Ctrs. Council, Inc., 509 U.S. 155, 173 (1993).

actions in the United States affecting a neighboring country; U.S. trust territories; the exclusive economic zone; the high seas; military installations overseas; as well as actions in another country, the Antarctic, and even outer space.

NEPA explicitly addresses the environment beyond the United States in two sections. In describing the purposes of the Act, Congress stated that it was, in part, "to prevent or eliminate damage to the environment and biosphere.[75] In section 102(2)(F), Congress "recognized the worldwide and long-range character of environmental problems" and directed "all agencies of the Federal Government" to, "where consistent with the foreign policy of the United States, lend appropriate support to initiatives, resolutions and programs designed to maximize international cooperation in anticipating and preventing a decline in the quality of mankind's world environment."[76]

The exhaustive tomes that have been written about this issue will not be repeated here.[77] At its root is a bona fide conflict between those who argue that the logic, spirit, and direction of NEPA argue against stopping analysis at a political boundary and those who argue that, as a matter of law, it does. Post-passage legislative statements made by some of NEPA's primary sponsors, who proclaimed that they intended NEPA's requirements to apply to all federal actions wherever they took place, are juxtaposed with the pre-passage fact of the "Foley doctrine."[78] The Foley doctrine says that Congress will be presumed to be legislating only for this country, unless it explicitly states otherwise in a statute.

The conflict between these two positions has played out primarily within the executive branch. The most significant development to date occurred in 1979 when President Carter signed Executive Order 12114, "Environmental Effects Abroad of Major Federal Actions."[79] The Order states that it "represents the United States government's exclusive and complete determination of the procedural and other actions to be

75. 42 U.S.C. § 4331 (2000).

76. 41 U.S.C. § 4332(F) (2000).

77. *See* Wayne J Carroll, *International Application of the National Environmental Policy Act*, 4 ILSA J. INT'L & COMP. L. 1 (1997); *The Forum: Should NEPA Apply Abroad?* 24-31 (The Envtl. Forum, Envtl. Law Institute, Nov./Dec. 1991); Comment, *NEPA's Role in Protecting the World Environment*, 131 U. PA. L. REV. 353 (1982); Comment, *The Extraterritorial Scope of NEPA's Environmental Impact Statement Requirement*, 74 MICH. L. REV. 349 (1975); Comment, *Renewed Controversy Over the International Reach of NEPA*, 7 ENVTL. L. REP. 10205 (Nov. 1977); Nicholas Robinson, *Extraterritorial Environmental Protection Obligations of Foreign Affairs Agencies: The Unfulfilled Mandate of NEPA*, 7, INT'L L. & POLS. ENVTL. PROTECTION 157 (1974); A. Dan Tarlock, *The Application of the National Environmental Policy Act of 1969 to the Darien Gap Highway Project*, 7, INT'L L. & POLS. ENVTL. PROTECTION 459 (1974).

78. Foley Bros., Inc., v. Filardo, 336 U.S. 218 (1949).

79. Jan. 4, 1979.

taken by Federal agencies to further the purpose of the National Environmental Policy Act, with respect to the environment outside the United States, its territories and possessions."[80] Another important development occurred in 1993, when the Clinton administration chose not to appeal an adverse decision in *Environmental Defense Fund v. Massey*,[81] thus letting stand a decision that NEPA applies to the National Science Foundation's management of McMurdo Station in Antarctica.[82]

The years in between and following these developments have been filled with judicial decisions that have largely avoided addressing the core issue,[83] a failed attempt in Congress to explicitly legislate NEPA abroad,[84] and a number of difficult interagency dialogues. Attempts were made in both 1990 and 1993 to arrive at an interagency consensus for amendment of Executive Order 12114, but both efforts failed.[85] Recently, litigation has focused on NEPA's applicability in the Exclusive Economic Zone (EEZ)[86] and to transboundary effects of actions taking place in the United States.[87]

---

80. Exec. Order No. 12,114, § 1-1, Purpose and Scope.

81. 986 F.2528 (D.C. Cir. 1993).

82. The decision has been both praised and derided, but its precedential effect has been weakened by the Supreme Court's subsequent decision in *Smith v. United States*, 507 U.S. 197, 204 n.5 (1993), which involves the applicability of the Federal Torts Claim Act to the Antarctica. In its decision, the majority stressed that the presumption against extraterritoriality is not grounded exclusively in concerns about potential conflicts of law problems. Note that Executive Order 12114 purports to apply to U.S. actions in the Antarctica. E.O. 12114, § 2-3(a).

83. Sierra Club v. Adams, 578 F.2d 389 (D.C. 1978); NORML v. U.S. Dep't. of State, 452 F. Supp. 1226 (1978); Sierra Club v. Coleman, 405 F. Supp. 53 (D.D.C. 1975); Sierra Club v. Atomic Energy Comm'n, 4 ELR 20885 (D.D.C. 1974).

84. H.R. 1113 passed the House in the 101st Congress, despite opposition from the Bush administration, but its companion bill, S. 1089, did not pass the Senate. Similar legislation was defeated in the 102nd Congress (S. 1278).

85. The 1990 Interagency Task Force on Environmental Impacts Abroad was led by CEQ; the 1993 effort was launched by the National Security Council as Presidential Review Directive/NSC-23.

86. President Reagan established the U.S. EEZ on March 10, 1983 (Proclamation 5030). It extends to a distance of 200 nautical miles from the baseline from which the breadth of the territorial sea is measured.

> Within the [EEZ], the United States has, to the extent permitted by international law, (a) sovereign rights for the purpose of exploring, exploiting, conserving, and managing natural resources, both living and non-living, of the seabed and subsoil and the superjacent waters and with regard to other activities for the economic exploitation and exploration of the zone, such as the production of energy from the water, current and winds; and (b) jurisdiction with regard to the establishment and use of artificial islands, and installations and structures having economic purposes, and the protection and preservation of the marine environment.

Id. Recent litigation has included *Natural Defense Council v. U.S. Dep't of the Navy*, 2002 WL 31095131 (C.D. Cal. Sept. 17, 2002) (finding that NEPA did apply to the Navy's program of

The decades of debate on this issue have resulted in little constructive progress in this arena.[88] Executive Order 12114 is an amalgamation of strained compromise that fails to resolve many issues, omits any mention of public involvement, and offers little direction on some important issues. There has been little oversight of its implementation, and the Order provides no mechanism for a remedy in case of noncompliance or inadequate compliance. Constructive work on implementation issues has generally taken a backseat to the ongoing tensions over the legal issues. These observations are not made to suggest that agencies have been ignoring environmental analysis of all environmental effects abroad; indeed, some agencies proposing actions with environmental effects abroad have taken pains to exceed the requirements of Executive Order 12114 in significant ways.[89]

A first step in reconciling positions on this issue would be to reach a common understanding of what triggers the need to engage in environmental impact assessment. The statutory requirements at issue are embodied in sections 102(2)(C)[90] and 102(2)(E)[91] of NEPA. Both of those provisions speak of the trigger for their applicability as recommendations for "action." The law's procedural requirements, interpreted through CEQ's regulations, likewise focus on the proposed action as the trigger for NEPA compliance in the United States.[92] The degree of federal control and responsibility over a particular action is a

---

active sonar but ruling against the plaintiffs on other grounds) and Center for Biological Diversity v. National Science Foundation, 2002 WL 31548073, (N. Dist. Cal, Oct. 30, 2002).

87. *See* Government of the Province of Manitoba v. Norton, D.D. C., Civil Action No. 02-02057 (RMC) (Nov. 14, 2003) (denying the U.S. government's motion for judgment on the pleadings). The case challenges the adequacy of the Bureau of Reclamation's environmental assessment for the Northwest Area Water Supply project, alleging that it fails to fully analyze the risks associated with the project that would allegedly have an adverse effect on fish and wildlife resources in Manitoba.

88. It should be noted that a separate process, laid out in Executive Order 13141 (signed on Nov. 16, 1999 and reaffirmed by the Bush administration, Apr. 20, 2001 "USTR Reaffirms Environmental Review of Trade Agreements") governs the environmental review of trade agreements. For the first time, an environmental review of a proposed trade agreement was published for public review and comment while negotiation rounds are taking place. Notice of Availability and Request for Public Comment on Interim Environmental Review of United States-Central American Free Trade Agreement, 68 Fed. Reg. 51822-23 (Aug. 28, 2003).

89. The Army, for example, in preparing their environmental analysis for the shipment of chemical weapons from West Germany to Johnston Atoll, went beyond the strict requirements of Exec. Order 12114. The federal court deciding litigation in this matter was clearly impressed by the Army's efforts. Greenpeace v. Stone, 748 F. Supp. 749 (D.C. Haw. 1990).

90. 42 U.S.C. § 4332(2)(C) (2000).

91. 42 U.S.C. § 4332(2)(E) (2000).

92. 40 C.F.R. §§ 1500-1508 (2003); see 40 C.F.R. § 1508.18 (2003) for the definition of "Major federal action" and 40 C.F.R. § 1508.23 (2003) for the definition of "Proposal."

key factor in analyzing whether an action is a major federal action for purposes of NEPA in the United States. Thus, the considerable body of NEPA law that has developed domestically to determine whether an action is subject to NEPA as a threshold matter focuses on analyzing the character of the proposed action. The question of what effects need to be analyzed is an issue reached only after the conclusion has been reached that the action itself is subject to NEPA. The temporal and spatial range for the analysis of a proposed action's effects is then up to the agency to establish, guided by CEQ's regulations and applicable case law.

Analysis under Executive Order 12114 proceeds very differently. Indeed, the Order is entitled "Environmental Effects Abroad of Major Federal Actions," shifting the focus from the locus of the action to its effects. From this perspective, the analysis regarding whether NEPA applies does not distinguish between an action that is subject to complete federal control and responsibility and one that is not, but rather focuses solely on where the probable effects will occur.

If an agency reaches the conclusion that Executive Order 12114 applies, then the question of whether any analysis is required is informed by whether the proposed action would take place in another country with the cooperation of the host government (in which case, absent certain exceptions,[93] no analysis is required) or whether the proposed action would have effects in areas where there is no such sovereign nation involvement (*i.e.*, the "global commons" or an "innocent bystander" country that is affected by a U.S. action that would take place in another country).

As discussed earlier, analysis under Executive Order 12114 differs substantially from NEPA requirements. Further, the Order does not clearly address requirements for transboundary effects resulting from actions in the United States, nor does it deal with actions or effects in the Exclusive Economic Zone.

There is tremendous potential for doing good in the area of environmental impact assessment outside of U.S. boundaries. Indeed, many countries and multilateral organizations now have environmental impact procedures of their own and joint work among countries involved in a proposed action could be of significant benefit to all

93. Analysis would be required if the proposed action provided a product or physical project producing a principal product or an emission or effluent that is prohibited or strictly regulated by federal law in the United States because its toxic effects on the environment create a serious public health risk; or a physical project that is prohibited in the United States or strictly regulated by Federal law to protect the environment against radioactive substances, or significantly affects natural or ecological resources of global importance designed for protection by the President (no such designations have ever occurred) or by the Secretary of State in the case of a resource protected by international agreement binding on the United States. Exec. Order 12,114, § 2-3(c)(d).

concerned. Fresh attempts should be made to constructively move past the barriers outlined above.

HUMAN BEINGS AS PART OF THE ENVIRONMENT

> *An environmental policy is a policy for people. Its primary concern is with man and his future. The basic principle of the policy is that we must strive, in all that we do, to achieve a standard of excellent in man's relationships to his physical surroundings.*[94]
>
> Senator Henry M. Jackson

> *When we speak of the environment, basically, we are talking about the relationship between man and these physical and biological and social forces that impact upon him. A public policy for the environment is not a public policy for those things out there. It is a policy for people.*[95]
>
> Dr. Lynton Caldwell

Environmental law irritates and even infuriates those who believe the law puts "bugs and bunnies" or "empty" land over peoples' wants and needs. Long before this feeling emerged as a political force, Congress explicitly linked human beings with their environment in NEPA. In fact, the core term in NEPA's requirement to analyze the effects of proposals for legislation and other major federal action is, after all, "the human environment," and Section 101, outlining environmental policies for the country, is replete with references to people and fulfilling the "social, economic, and other requirements of present and future generations of Americans" while creating and maintaining conditions under which people and nature can exist in productive harmony.[96] CEQ has defined "human environment" expansively "to include the natural and physical environment and the relationship of people with that environment."[97] The effects to be analyzed in either an EA or an EIS include aesthetic, historic, cultural, economic, social, or health impacts, as well as indirect effects such as growth inducing effects and other effects related to induced changes in the pattern of land use, population

94. Senator Henry M. Jackson, speaking on the Senate floor in favor of S. 1075, the National Environmental Policy Act of 1969, July 10, 1969, Congressional Record-Senate, 19009.

95. Dr. Lynton Caldwell, consultant to Senator Jackson and a primary drafter of NEPA, testifying at hearings on S. 1075, S. 237, and S. 1752 before the Senate Committee on Interior and Insular Affairs, 91st Congress 1st Sess. 118 (1969).

96. 42. U.S.C. § 4331 (2000).

97. 40 C.F.R. § 1508.14 (2003).

density, or growth rate.[98] Yet the "people part" of the NEPA process usually seems to get secondary treatment.

What accounts for this curious development? Many people and institutions most closely associated with the development of the NEPA process have been uncertain about how much prominence economic and social impacts should have in the context of NEPA. Many have felt that economic impacts, in particular, usually get a lot of attention in a decisionmaking process (officially or otherwise) and that the point of NEPA was to put environmental considerations on a level playing field with economic factors.

Social impacts often have gotten lost in the debate entirely. No federal agency typically involved in environmental analysis has a portfolio that includes jurisdiction over social issues per se, and expertise in this area is often not available to an agency or its staff. NEPA is often the only law applicable to a proposed action that requires any thought at all of the social effects of proposed federal action.[99]

Persons hired to prepare NEPA analysis are often unprepared professionally to thoughtfully analyze the social and economic effects of environmental impacts. As a result, rather than an integration of these three critical components, a reader is subjected to a data dump of information about such things as the number of manufacturing plants, bridges, cemeteries, and schools in a given area.[100] Another line of misguided thought that persists in some quarters and affects the status of social impact analysis is the myth that agencies are not required to comply with NEPA for projects in urban areas.[101]

---

98. 40 C.F.R. § 1508.8 (2003).

99. While the field is not crowded with social impact assessment practitioners working for federal agencies, there has been some useful work sponsored by a few federal agencies. *See* Interorganizational Committee on Guidelines and Principles for Social Impact Assessment, *Guidelines and Principles for Social Impact Assessment* (U.S. Dep't of Commerce National Oceanic and Atmospheric Administration's National Marine Fisheries Service, May, 1994), *available at* http://www.nzaia.org.nz/iaia/siaguidelines.htm; Social Impact Analysis (Proceedings of a National Workshop, Forest Service, Albuquerque, N.M, 1993. An update of the guidelines is soon to be published in Vol. 20(3) of *Impact Assessment and Project Appraisal*, the professional journal of the International Association for Impact Assessment.

100. "In my view environmental impact analysis takes cognizance of social and economic impacts of *environmental* effects, but need not extend to a detailed analysis of the economic and social effects per se in an impacted area. There is an important difference in an analysis which separately assesses social, economic and environmental effects as if they could be desegregated and though separate were equal (in terms of NEPA's intent." Personal correspondence from Lynton K. Caldwell, Arthur F. Bentley Professor of Political Science Emeritus and Professor of Public Environmental Affairs, Dec. 27, 1994.

101. *To the contrary, see* Waterbury Action to Conserve Our Heritage, Inc. v. Harris, 603 F.2d 310, 973 (2nd Cir. 1976) (NEPA applicable to the quality of life in the urban setting); City of Rochester v. USPS, 541 F.2d 967, 973 (2d Cir. 1976) (in transferring 1400 employees to new facility, U.S. Postal Service must prepare an EIS considering environmental effects

Superficially, case law has not seemed particularly friendly toward challenges based on social and economic effects. Indeed, one early case actually held that the environment NEPA created did not encompass human beings![102] A more on-the-mark, if ironic, perspective, was expressed in a later decision that stated,

> A review of NEPA's language casts some doubt upon the contention that the environment does not include human beings....The statute is replete with references to the interrelationship of man and his surroundings and concern for human welfare. An examination of judicial decisions in the area demonstrates that the term reaches just about everything important to people, including crime and overpopulation, race relations, employment, and the availability of schools and housing.[103]

The predominant line of cases on social and economic impacts in the 1970s and early 1980s dealt with cases challenging DOD's compliance with NEPA for decisions to close particular military installations. Courts consistently rejected these claims because of a lack of alleged physical environmental effects.[104] The black-letter law resulting from this line of cases was to the effect that "economic or social effects are not intended by themselves to require preparation of an environmental impact statement"[105] and has been interpreted by many persons to mean that they can safely ignore these types of effects.[106] As in

---

of increased commuter traffic to new facility and loss of job opportunities and urban decay in area of abandoned facility).

102. Clinton Community Hosp. Corp. v. S. Md. Med. Ctr., 374 F. Supp. 450 (D. Md. 1974).

103. Monarch Chem. Works, Inc. v. Exxon, 466 F. Supp. 639 (D. Neb. 1979).

104. *See, e.g.*, Concerned Citizens for the 442nd T.A.W. v. Bodycombe, 538 F. Supp. 184 (W.D. Mo. 1982); Image of Greater San Antonio v. Brown, 570 F.2s 517 (5th Cir. 1978). Query as to whether these cases would either be pled or decided the same today, in light of numerous environmental issues that have arisen both in the context of installation closure and installation moves and consolidations. However, Congress has consistently exempted base closure decisions from NEPA since the mid 1980s, although the military services must still comply with NEPA once the decision to close an installation has taken place in order to identify and decide upon alternative reuses of the facility. See also *Olmsted Citizens for a Better Community v. United States*, 793 F.2d 201 (8th Cir. 1986) for a case involving the proposed acquisition of land for use as a federal prison hospital. As reflected in the *Olmsted* decision, courts have guarded against letting plaintiffs use NEPA as a device to act on "the mere dislike or fear of a certain socioeconomic class of persons...." *Id.* at 205. While the instinct is admirable, the result has been some weak analytical rationale in this area of the law. The lines can be hard to draw in this area, but the point here is that little serious work has been done to do it.

105. 40 C.F.R. § 1508.14 (2003).

106. For example, many people wrongly assume that agencies need not include social and economic effects in environmental assessments (EAs). In fact, the types of effects to be

far too many other areas of NEPA, if an issue is viewed by agency counsel as unlikely to be subject to judicial enforcement, its importance is minimized.[107]

Unfortunately, this neglect is neither benign nor sustainable. The promise of NEPA very much is grounded in its mandate to consider the relationships between human beings and their environment. An emphasis on one at the expense of the other not only violates the law but also justifies skepticism about its value and attendant time and expense. It also reduces the effectiveness of agency communications to the public. NEPA practitioners, fans and skeptics alike, should use the rich resources available from academic institutions, government officials, native peoples, communities, public interest organizations, and others to do a far better job of addressing this area so that NEPA's mandate 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"[108] can begin to be realized.

APPENDIX A

Congressional Declaration of National Environmental Policy, Sec. 101 (42 U.S.C. § 4331 (2000))

(a) The Congress, recognizing the profound impact of man's activity on the interrelations of all components of the natural environment, particularly the profound influences of population growth, high-density urbanization, industrial expansion, resource exploitation, and new and expanding technological advances and recognizing further the critical importance of restoring and maintaining environmental quality to the overall welfare and development of man, declares that it is the

---

identified in EAs are the same as for EISs. In this context, those effects include aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. 40 C.F.R. § 1508.8(b) (2003).

107. In the case of economic and social impacts, this confidence may also be misplaced. Many of the cases in this area actually involve questions of standing and whether plaintiffs come within NEPA's zone of interest. Thus, claims that courts view as driven by purely economic concerns, perhaps brought by economic competitors, or claims raising fears of changes in the ethnic makeup of neighborhoods are not well received. *See* Nat'l Assoc. of Gov't. Employees v. Rumsfeld, 418 F. Supp. 1302, 1305-07 (E.D. Pa. 1976); Nuclus of Chicago Homeowners Ass'n. v. Lynn, 524 F.2d 225, 231 (7th Cir. 1975), *cert. denied*, 424 U.S. 967 (1976). But when plaintiffs prove they have standing and are within NEPA's zone of interest, the results are quite different. *See* Natural Res. Defense Council v. Duvall, 777 F. Supp. 1533 (E.D. Cal. 1991). In the later case, the court rejected an environmental assessment prepared by the Bureau of Reclamation for proposed regulations to implement provisions of the Reclamation Reform Act in large part because of faulty economic assumptions made in the EA.

108. 42 U.S.C. § 4331(b) (2000).

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 calculated 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 Act, it is the continuing responsibility of the Federal Government to use all practicable means, consistent with other essential considerations of national policy, to improve and coordinate Federal plans, functions, programs, and resources to the end that the Nation may—

> (1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
>
> (2) assure for all Americans safe, healthful, productive and 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;
>
> (5) achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and
>
> (6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

(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.

APPENDIX B

How the NEPA Process Works

Generally, NEPA applies only to federal actions proposed by federal agencies. Sometimes, if a federal benefit is going directly to another level of government, a law will delegate the responsibility to implement NEPA to a state, local community, or tribal government. All federal agencies in the executive branch are required to have NEPA

procedures that apply CEQ's NEPA regulations to their own agency activities. These agency NEPA procedures typically identify three classes of actions: proposed actions that typically require the preparation of environmental impact statements; those that typically require preparation of environmental assessments, and those that are typically categorically excluded.

A proposed action must be analyzed in an environmental impact statement (EIS) if it is a major federal action significantly affecting the quality of the human environment. If an agency is going to do an EIS, it takes the following steps. First, it publishes a notice in the Federal Register to let people know that it plans to do an EIS on a particular proposal and to give some basic information about its plans and a contact name and number. Next, the "scoping process" begins with the involvement of federal, state, local, and tribal agencies and the public. Through scoping, the significant issues for further study are identified as well as the working relationship between different agencies (*i.e.*, cooperating agencies) and the timeline and organization for the rest of the process. The agency then prepares, or has prepared, a draft EIS that includes a description of the proposal and reasonable alternatives; the affected environment; an analysis of the environmental and interrelated social and economic direct, indirect, and cumulative effects of the proposed action and reasonable alternatives; and possible mitigation. The draft EIS is circulated for public comment for at least 45 days. The agency must then respond to substantive comments about the analysis in the draft EIS and publish a final EIS that includes those responses. In most circumstances, agencies must wait 30 days after the publication of the notice of availability of the final EIS in the Federal Register before it can make the final decision on the proposal. The decision maker will sign a Record of Decision explaining the decision and any relevant monitoring and mitigation. In the Record of Decision, the decision maker must identify the most environmental preferably alternative that was analyzed in the EIS. The agency decision maker need not select that alternative, but, if it is not selected, he or she must explain the considerations that led to the selection of another alternative.

If there are substantial changes in the proposed action or there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action and its impacts, a supplemental EIS should be prepared.

An environmental assessment (EA) is a much briefer analysis of the proposed action, alternatives (if there are unresolved conflicts over the use of available resources), and effects. Public involvement is less formal. After preparation of an EA, an agency either concludes that preparation of an EIS is not necessary based upon a Finding of No Significant Impact (FONSI) or moves to preparation of an EIS. CEQ's

guidance is that EAs should generally be no more than 10–15 pages long, although, in practice, agencies often exceed this length. Like EISs, EAs and FONSIs are public documents.

Agencies may also identify classes of actions called categorical exclusions that, based upon the agency's experience, normally do not have an individual or cumulatively significant effect on the human environment. These classes are identified in the agency's procedures and are an indication that the agency is not usually obligated to prepare an EIS or an EA for a proposed action that falls into one of these classes. However, actions in categorical exclusions are exempted from NEPA and an extraordinary circumstance may exist in the context of a particular proposed action that would normally be categorically excluded that will require the agency to prepare an EA or, in rare cases, an EIS.

All agency NEPA procedures are reviewed by CEQ at the draft stage and approved at the final stage, after the agency has published them for review and comment. Many agencies publish their NEPA procedures in the Code of Federal Regulations, but some do not. All agencies will provide a copy of their NEPA procedures through their NEPA offices (see NEPAnet at http//ceq.eh.doe.gov/NEPA/nepanet.htm for a list of agency contacts or contact CEQ at (202) 395-5750 for assistance).