THE NEPA TASK FORCE

REPORT TO
THE COUNCIL ON ENVIRONMENTAL QUALITY

MODERNIZING NEPA IMPLEMENTATION

SEPTEMBER 2003

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Preface

This report presents the results of research and consultations by the National Environmental Policy Task Force concerning the implementation of the environmental impact analysis requirement of the National Environmental Policy Act (NEPA). The task force interviewed Federal agencies; reviewed public comments, literature, reports, and case studies; and spoke with individuals and representatives from Federal, State, and local governments, Tribes, and interest groups. This report represents the views and opinions of the Task Force and does not establish new requirements for NEPA analyses. It is not and should not be viewed as formal CEQ guidance, nor are the recommendations intended to be legally binding.

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Executive Summary

In a memorandum dated April 10, 2002, James L. Connaughton, Chairman, Council on Environmental Quality (CEQ), established the National Environmental Policy Act (NEPA) task force. On May 20, 2002, the task force, composed of Federal agency employees with diverse skills, expertise, and perspectives, began its review of current NEPA implementation practices and procedures to determine opportunities to improve and modernize the NEPA process. The task force examined the "nuts and bolts" of NEPA implementation by focusing on:

- Technology and information management and security;
- Federal and intergovernmental collaboration;
- Programmatic analyzes and tiering;
- Adaptive management and monitoring;
- Categorical exclusions; and
- Environmental assessments.

The task force interviewed Federal agencies; reviewed public comments, literature, reports, and case studies; and spoke with individuals and representatives from State and local governments, Tribes, and interest groups. The task force received comments from more than 650 respondents representing Federal, State, and local governments, Tribes, organizations, and individuals.

The task force prepared this report, recommending actions to improve and modernize the NEPA process, and a document of case studies highlighting useful practices, which will be published separately. This report, "Modernizing NEPA Implementation," represents the professional expertise of the task force members, and our collective thinking and thoughtful deliberation of how NEPA implementation can be improved.

Technology and Information Management and Security

Effective and efficient NEPA implementation requires information-rich communication among Federal, State, and local governments, Tribes, private industry, citizens, and academia. Agency environmental planners must identify significant environmental issues, obtain and analyze relevant data, and convey quality, timely information to the decision makers and the public. Involving the public and other stakeholders in the NEPA analyzes and the development of NEPA documents increases the value of citizens' experience and produces better results. Publishing and distributing NEPA documents is one aspect of effectively and efficiently conveying needed information.

To use information technology to address information management and technology concerns related to the NEPA process, and to enhance the effectiveness and efficiency of the NEPA process, CEQ should:

- Promote the development and use, and coordinate sharing of NEPA information systems by sponsoring meetings, conferences, and workshops.
- Ensure that NEPAnet accommodates and responds to developing information technologies.
- Develop guidance to clarify the appropriate role of communication and information dissemination technologies during the NEPA process to enhance public involvement techniques.
- Establish a NEPA technical working group to coordinate with interagency groups to:
  - Ensure that NEPA-process information requirements are addressed when protocols and standards about data, information management, modeling tools, and information security are developed;
  - Increase awareness of NEPA-process information technology developments throughout the NEPA community; and
  - Facilitate identification and use of information resources developed according to established standards.
- Lead a review by the agencies of their quality control and assurance standards for NEPA analyzes and documentation to ensure conformance with CEQ regulatory requirements and Federal requirements such as Section 515 of the Information Quality Act.
- Contact agencies and organizations that have experience working with sensitive information to establish a work group to develop and promote consistent policies for sensitive information in the NEPA process.

Federal and Intergovernmental Collaboration

Collaboration with stakeholders in the NEPA process is important to help ensure that decision makers have the environmental information they need to efficiently make informed and timely decisions. The task force focused on whether efforts to collaborate on projects subject to NEPA were successful and, if so, what contributed to their success. Our goal was to recommend practical steps for CEQ either to enhance collaborative processes in support of better NEPA analyzes or remove barriers hindering such collaboration. We focused our inquiry on the characteristics of successful collaboration, collaboration barriers, and how training might improve collaborative efforts.

To continue to build better collaborative relationships among agencies and between agencies and the public, CEQ should form a Federal Advisory Committee of diverse individuals, with a variety of experiences in the NEPA process, which can contribute to the development of collaborative guidance and training. The committee should advise CEQ on:

- Focusing on better collaboration among agencies by identifying, developing, and sharing methods of engaging Tribal, State, and local partners in training designed to educate them about the principles of NEPA, partner agencies' missions, communication skills, and public involvement skills.
- Developing guidance addressing the components of successful collaborative agreements and providing templates for memoranda of understanding applicable to various situations and stages in the NEPA process. The guidance should provide the foundation for successful agreements and provide the templates as examples, but it would not dictate the exact construction of the agreements. The templates should include sample language for dispute resolution and termination clauses.
- Examining lessons learned by others through CEQ-sponsored meetings, workshops, and training.
- Developing training that uses traditional and non-classroom methods, such as videos or Web-based training to enhance agencies' work with the public. Some topics include:
  - The requirements of NEPA and explanations of the different NEPA processes, including categorical exclusions, environmental assessments (EAs), environmental impact statements (EISs), and programmatic NEPA analyzes;
  - How to become involved early and effectively contribute to the NEPA process;

— Individual and generic agency needs and requirements, including what agencies look for when soliciting comments, and effective ways to provide comment; and

— How to identify and determine if and how barriers to collaboration can be eliminated.

- Developing a "Citizen's Guide to NEPA"to explain basic NEPA requirements, dispel common misinterpretations, and provide helpful tips about how to participate in the NEPA process. The publication should be posted to the Web and traditionally published.

CEQ should also periodically sponsor forums designed to address topics such as creating documents that satisfy both Federal and State NEPA requirements and how agencies can better integrate the needs of regulatory agencies into their NEPA processes.

Programmatic analyzes and Tiering

Programmatic NEPA analyzes and documents are valuable decisionmaking tools. Some agencies use programmatic analyzes to evaluate cumulative effects effectively and to formulate mitigation efforts comprehensively, while others struggle with how best to use this analytical tool. Still other agencies use programmatic analyzes to address mitigation parameters at the broad landscape, ecosystem or regional level, thereby reducing the need to re-address these measures at the site-specific level.

In discussions with the task force, many issues were raised by the public and Federal agencies concerning programmatic analyzes and tiering. The task force focused on five areas of interest: types of programmatic documents, scope of programmatic analyzes, content of programmatic documents, longevity of programmatic documents, and links to adaptive management and environmental management systems (EMS).

To promote consistent, clear, cost-effective programmatic NEPA analyzes, documents, and tiering that meet agency and stakeholder needs, the task force recommends that CEQ provide guidance to:

- Emphasize the importance of collaboration as agencies expand the use and scope of programmatic NEPA analyzes.
- Include a section in the first tier document that explains the relationship between the programmatic and future tiered analyzes and documents, and describes how stakeholders will be involved.
- Emphasize that programmatic documents should explain where and when deferred issues that were raised by the public or regulatory agencies will be addressed, and describe the proposed temporal and spatial scales that will be used when analyzing those issues.

- Develop criteria for agencies to use when evaluating whether a programmatic document has become outdated, and articulate a general life expectancy for programmatic documents.

To assist it in developing this guidance, CEQ could form a Federal Advisory Committee to provide advice or form a CEQ chartered work group.

The task force also recommends that CEQ convene a Federal Advisory Committee to aid in evaluating and improving understanding of the uses and purposes of programmatic NEPA analyzes and documents by providing advice on:

- Validating the different uses of programmatic analyzes.
- Examining whether programmatic NEPA analyzes and documents for the different uses have similar scope, range of alternatives, and specificity of environmental analysis.
- Evaluating the depth and breadth of the analyzes and documentation associated with the different uses of programmatic documents.
- Proposing guidance or regulatory changes to clearly define the uses and appropriate scope, range of issues, depth of analyzes, and the level of description required in NEPA analyzes and documents.

Adaptive Management and Monitoring

The term "adaptive management" has been used since the late 1970s to describe certain ecosystem management approaches. Adaptive management includes post-decision responses to conditions, circumstances, or acquired information related to the observed impacts of the implemented activity. Although not all Federal actions lend themselves to incorporating adaptive management into the NEPA process, nor do they require the monitoring and evaluation necessary for such an approach, the task force focused on integrating the adaptive management model into the NEPA process to provide agencies with another tool to improve their NEPA implementation.

The task force anticipated that CEQ's 1997 NEPA effectiveness study, "The National Environmental Policy Act: A Study of its Effectiveness After Twenty-five Years," had fostered an understanding of the value of integrating adaptive management into the NEPA process. However, we discovered that fully incorporating adaptive management, to include monitoring and taking adaptive measures, into the NEPA process was still a relatively new concept for many NEPA practitioners.

The task force recommends that CEQ convene an adaptive management work group to consider revising existing regulations or establishing new guidance to facilitate agencies' ability to exercise the option of incorporating adaptive management into their NEPA process. The working group should consider whether it is appropriate and necessary to:

- Establish a definition for adaptive management in the NEPA process.
- Describe how adaptive management measures, or the range of such measures, can be included in alternatives, and how to use adaptive management when the alternatives involve uncertainty or variability affecting the ability to predict the significance of impacts.
- Consider whether adaptive management can be used instead of some or all of the agency's evaluation of significant adverse impacts using theoretical approaches or research methods to address incomplete or unavailable information when the means to obtain the data for such evaluation are not known.
- Use adaptive management for a mitigation monitoring and enforcement program.
- Integrate adaptive management into EAs, especially when a mitigated finding of no significant impact (FONSI) is required to prevent potential impacts from being significant.
- Determine when adaptive management actions are reasonably foreseeable and how they are to be considered in cumulative effects analyzes, including when the impacts should be addressed incrementally or collectively and how to establish the boundaries of the analysis when a series of adaptive management responses is likely.
- Allow for the use of required State or local processes instead of Federal review and/or monitoring processes to assess the potential impacts of adaptive management approaches.
- Identify mechanisms for oversight and enforcement of adaptive management commitments.
- Allow the use of a federally-recognized or independently certified EMS that considers a proposed action and adaptive management measures described in an EIS to satisfy the mitigation and monitoring enforcement provisions in CEQ's regulations.
- Allow the use of a recognized EMS to serve as the mitigation implementation vehicle when a FONSI depends on adaptive management measures.

If the work group determines that new guidance or regulatory revisions are needed, the work group should assist CEQ in preparing and issuing such guidance or revisions. The work group should also gather all NEPA guidance on adaptive management for inclusion in a CEQ reference handbook.

We further recommend that the work group initiate a pilot study to identify the types of actions best suited for integrating adaptive management into the NEPA process. The pilot program should include several diverse actions, including those that could be integrated into an existing EMS, involve a high degree of uncertainty, or contain highly variable potential impacts. Actions associated with enforceable mitigation (e.g.,

conditions of a grant, permit, license, or approval) or when there might be duplicate Federal, State, or local environmental reviews should also be included in the pilot program. The study should identify the appropriate assessment strategies and documentation for incorporating adaptive management into the NEPA process and identify issues requiring CEQ guidance.

Categorical Exclusions

The task force focused its efforts on documenting the basis and process for establishing categorical exclusions, the categorical exclusion approval process, and documenting the use of categorical exclusions.

To promote consistent categorical exclusion development and use, the task force recommends CEQ should expeditiously issue clarifying guidance to:

- Address the documentation prepared at the time a categorical exclusion is used. CEQ should consult with department and agency counsel and the Department of Justice when developing this guidance.
- Suggest methods and information, such as post-implementation monitoring and effects analyzes and studies, categorical exclusion benchmarking studies, and statements of agency professionals, which agencies can use to determine whether a category of activity does not individually or cumulatively have a significant effect on the human environment.
- Encourage agencies to develop categorical exclusions, where appropriate, based on broadly defined criteria that will provide the agency with sufficient flexibility, and encourage the agency to offer examples of frequently conducted activities that would usually fall within the categories.
- Emphasize that agencies should periodically review and update their categorical exclusions, and their procedures for adding, revising, or deleting categorical exclusions. The guidance should also encourage agencies to establish a mechanism to track suggestions from their field offices for developing or revising their categorical exclusions. The guidance should emphasize the benefits of such information when establishing categorical exclusions.
- Clarify the CEQ review process and provide a renewed commitment to meeting the CEQ 30-day period for reviewing proposed categorical exclusions.
- Encourage agencies to expand public outreach beyond the Federal Register notice and comment period to facilitate more public involvement in changing their categorical exclusions and to scale that outreach to the extent of the proposed changes to the categorical exclusions.

Environmental Assessments

The task force considered the appropriate use and structure of EAs, and identified four areas of interest: EA and FONSI use, mitigated EAs and FONSIs, EA alternatives analysis, and EA public involvement.

To consider the appropriate use and structure of EA documents that meet agency and stakeholder needs, new CEQ guidance is needed to:

- Specify existing minimum EA requirements for all EAs in one guidance document. This guidance should also explain:
  - Appropriate analysis of alternatives, including the no action alternative;
  - When mitigation measures must be considered;
  - Appropriate public involvement; and
  - Suitable use of an EA standardized analysis form.
- Address what should be included in an EA and FONSI to demonstrate that agencies have comprehensively considered the potential environmental consequences of the proposed action before taking the action (i.e., taken a "hard look").
- Emphasize that EAs and FONSIs should focus on issues or resources that might be significantly affected or are a public concern. Specifically, the guidance should:
  - Emphasize that agencies should address proposed alternative effects and provide sufficient evidence and analysis about whether to prepare an EIS;
  - Emphasize that agencies should provide and explain effects determinations for each issue of interest to the public and of potential significance;
  - State that following the CEQ EIS format to prepare an EA is unnecessary even though the issues might be similar to those addressed in an EIS;
  - Clarify that the impact discussion requirements within an EA and FONSI should be proportional to their significance and level of public concern;
  - Support and identify the methods to incorporate documents by reference;
  - Recommend that an EA should be attached to a FONSI or incorporated by reference; and

— Emphasize that agencies must ensure the professional integrity and high quality of the environmental information within EAs.

- Provide an easily understood and applied definition of mitigated FONSI, and clarify that a mitigated FONSI is approved based on the mitigation measures and therefore an EIS is not required (i.e., the FONSI would not be appropriate without the mitigation measures). Specifically, the guidance should:
  - — Address mitigated FONSI requirements, including whether post-project monitoring and enforcement are required;
  - — Describe when a monitoring and enforcement program should be adopted and the factors that should be considered in this determination; and
  - — Discuss how mitigation will be conducted and enforced including the length of the mitigation period, how success will be measured, and when alternative monitoring and adaptive management approaches are acceptable.
- Address the ability of a FONSI to serve as a legally binding mechanism to enforce mitigation particularly when mitigation measures must be considered and adopted (e.g., for any project impacts, only when significant adverse impacts exist, for an entire project, only where feasible).
- Discuss how to adequately incorporate the EA analysis into FONSIs.
- Address unresolved conflicts concerning alternative uses of available resources and call upon agencies to clarify their rationale for presenting alternatives within an EA. Specifically, the guidance should:
  - — Define the meaning of "unresolved conflict concerning the alternative uses of available resources";
  - — Identify the core elements of an EA when unresolved conflicts concerning alternative uses of available resources are either present or not;
  - — Clarify that alternatives must be evaluated and documented within the EA when unresolved conflicts concerning alternative uses of available resources exist; and
  - — Specify that each EA should contain a discussion of unresolved conflicts concerning alternative uses of available resources when alternatives beyond the preferred and no-action alternatives are being considered.
- Support documenting eliminated alternatives in a separate section at the beginning of EAs, and identify criteria that agencies can apply to eliminate alternatives including cost, logistics, technology, and greater adverse environmental effects.

- Clarify that all agencies can address the no action alternative by contrasting the current condition and future condition in the absence of the proposed action, and clarify whether this approach can be used when there are unresolved conflicts concerning alternative uses of available resources.
- Clarify and highlight the definition of the no action alternative to foster consistent application.
- Explain that public involvement requirements in an EA should be commensurate with project scale and complexity, required mitigation, and public interest. Specifically, the guidance should:
  - Reemphasize that public availability of EAs and FONSIs is required;
  - Emphasize and clarify special cases where a FONSI must be available for public review for 30 days;
  - Specify the public involvement requirements for EAs that either do or do not have a remaining unresolved conflict in alternative uses of available resources and/or that have been mitigated below the threshold of significance that would usually require an EIS; and
  - Facilitate public involvement in EAs by encouraging agencies to electronically establish and maintain NEPA information and documents, provide information via agency Websites, and develop and maintain links to other agencies' NEPA Websites where ongoing and proposed NEPA work would be advertised. CEQ should provide links to these sites on its NEPAnet Website.

Additional Areas of Consideration

Several issues were raised in public comment and during interviews with Federal agencies concerning procedural aspects of the NEPA process that went beyond the six focus areas examined by the task force. Suggestions included a proposal that the Environmental Protection Agency oversee the NEPA process, strict enforcement of page limits for EAs and EISs, and a requirement that agencies submit annual progress reports about their ability to achieve NEPA-process improvements. Several observations and additional topics presented to the task force warranted recognition and some additional recommendations were developed.

The task force developed specific recommendations for four additional areas that were considered: coordinating compliance with other laws; alternatives; social, cultural and economic effects analyzes; and dispute resolution during and after the NEPA process.

The task force recommends that CEQ:

- In consultation with the Environmental Protection Agency, Advisory Council on Historic Preservation, Fish and Wildlife Service, the National Oceanic and Atmospheric Administration's National Marine Fisheries Service and other agencies, as appropriate, develop a handbook to effectively integrate the NEPA process with Endangered Species Act Section 7 consultation, National Historic Preservation Act Section 106 coordination, Clean Air Act conformity requirements, and Clean Water Act total maximum daily load and Section 404 requirements.
- Explore the use of collaboration to develop and refine alternatives by working with a facilitator, and then provide guidance that outlines how agencies can document the process of refining a proposal and conforming to the CEQ regulations requiring the rigorous and objective evaluation of all reasonable alternatives.
- Develop a handbook on social, cultural and economic analysis similar to the cumulative effects or environmental justice publications.
- Study the effectiveness of alternatives for resolving disputes, including those about environmental mitigation and project implementation, both during and after the NEPA process.

Three recommendations were viewed as essential to improving NEPA implementation and should be acted on in order to enhance CEQ's ability to act on other recommendations and to continue efforts to improve the efficiency and effectiveness of NEPA implementation.

- Establish a professional position, or positions, to provide technical NEPA process consultation and better coordinate advice and guidance to agencies about improving NEPA implementation and environmental analysis.
- Convene an annual NEPA legal forum to discuss important NEPA legal developments, recommend any CEQ guidance needing clarification as a result of the case law, discuss NEPA issues of interest, and facilitate a consensus on addressing legal issues.
- Develop a CEQ develop a handbook that provides existing guidance identified by topic areas and is supplemented as new guidance is issued. The guidebook should be published on the Web, with updates published periodically in hardcopy.

CONCLUSION

This task force report will be published in hardcopy and electronic form. The report will be distributed using established distribution lists as well as by posting on the task force web page. After publishing and considering the report, CEQ will inform the public and other agencies how it will address these recommendations.

We hope that our efforts provide the groundwork for a renewed and dynamic process to improve and modernize NEPA implementation.

Introduction

Congress established the Council on Environmental Quality (CEQ) in 1969 through passage of the National Environmental Policy Act of 1969 (NEPA).[1] The Chair of CEQ, who is appointed by the President with the advice and consent of the Senate, serves as the President's principal environmental policy advisor. CEQ oversees Federal agencies' implementation of NEPA through regulations implementing the procedural provisions of the act[2] and through interpretation of statutory requirements.

In 1997, CEQ published a report entitled, "The National Environmental Policy Act: A Study of its Effectiveness After Twenty-five Years."[3] This report examined NEPA's effectiveness and the prospects for improving the environmental analysis and documentation process outlined in NEPA. Collaboration, strategic planning, public information and input, interagency coordination, place-based decision-making, and adaptive management were identified as areas that could improve the NEPA process. The report highlighted 12 case examples that demonstrated agency efforts to improve the NEPA process.

From 1997 to 2002, CEQ issued several guidance documents such as the recent memorandum regarding cooperating agency status (Appendix A) and the environmental justice guidance.[4] Simultaneously, Federal agencies were developing initiatives to improve their NEPA procedures and the NEPA process.[5]

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1 42 U.S.C. § 4321 et seq. (2000).

2 Council on Environmental Quality, "Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act," 40 C.F.R. Pts. 1500-1508 (2003), *available at* http://ceq.eh.doe.gov/nepa/regs/ceq/toc_ceq.htm.

3 Council on Environmental Quality, "The National Environmental Policy Act: A Study of its Effectiveness After Twenty-five Years" (Jan. 1997), *available at* http://ceq.eh.doe.gov/nepa/nepa25fn.pdf.

4 Council on Environmental Quality, "Environmental Justice—Guidance Under the National Environmental Policy Act" (Dec. 1997), *available at* http://ceq.eh.doe.gov/nepa/regs/ej/justice.pdf.

5 Examples of agencies revising and improving their NEPA procedures include the Department of the Army revision of their NEPA procedures (Department of the Army, "Environmental Analysis of Army Actions," 67 Fed Reg. 15,289 (Mar. 28, 2002), to be codified at 32 C.F.R. pt. 651.), the Advisory Council on Historic Preservation revision of their regulations to coordinate consultations with the NEPA process (Advisory Council on Historic Preservation, "Coordination with the National Environmental Policy Act," 36 C.F.R. § 800.8 (2003)), and the Department of the Interior focusing on increasing public participation and training (Environmental Statement Memoranda, "Procedures for Implementing Public Participation and Community-Based Training (July 2, 2003) *available at* http://www.doi.gov/oepc/esms.html).

On April 10, 2002, James L. Connaughton, Chairman, Council on Environmental Quality, established the CEQ NEPA task force (Appendix B). With this task force, CEQ began evaluating the collective Federal family's progress in achieving the desired outcomes envisioned in the 1997 report, and exploring opportunities to further improve the NEPA process. On May 20, 2002, this task force, composed of Federal agency employees with diverse skills, expertise, and perspectives (Appendix C), began its review of current NEPA implementation practices and procedures to determine opportunities to improve and modernize the NEPA process. We examined the "nuts and bolts" of NEPA implementation by focusing on:

- Technology and information management and security;
- Federal and intergovernmental collaboration;
- Programmatic analyzes and tiering;
- Adaptive management and monitoring;
- Categorical exclusions; and
- Environmental assessments.

The task force interviewed Federal agencies; reviewed public comments, literature, reports, and case studies; and spoke with individuals and representatives from Federal, State, and local governments, Tribes, and interest groups. A 45-day initial public comment period was provided (Appendix D). The comment period was extended an additional 30 days in response to requests from agencies and the public (Appendix E). We received comments from more than 650 respondents representing Federal, State, and local governments, Tribes, organizations, and individuals.[6]

The task force considered substantive comments, developed recommendations, and compiled case studies that presented practices intended to improve the timeliness and efficiency of the NEPA process. Synopses of the recommendations are provided at the end of each chapter for quick reference. Many respondents and interviewees expressed areas of concern that were beyond the resources, time, and expertise of the task force. We summarized the additional areas of concern in a separate chapter and provided recommendations and potential issues for further analysis.

The task force prepared two documents, this report, recommending actions that CEQ should take to improve and modernize the NEPA process, and a document of case studies highlighting useful practices, which will be published separately. This report, although reviewed by professionals within CEQ, reflects the task force's views and positions. CEQ expects that our efforts will help Federal agencies integrate NEPA practices with management concepts, such as environmental management systems and information management technologies, and foster improved Federal agency planning and decisionmaking processes.

[6] Content Analysis Team, Forest Service, "Summary of Public Comment – NEPA Task Force" (Dec. 20, 2002), *available at* http://ceq.eh.doe.gov/ntf/comments/comments.html.

This task force report will be published in hardcopy and electronic form. The report will be distributed using established distribution lists as well as by posting on the task force web page. After publishing and considering the report, CEQ will inform the public and other agencies how it will address these recommendations.

This report represents the professional expertise of the task force members, and our collective thinking and thoughtful deliberation of all information sources. We hope that our efforts provide the groundwork for a renewed and dynamic process to improve and modernize NEPA implementation.

Chapter 1

Technology and Information Management and Security

The task force explored using information technology[7] to enhance the effectiveness and efficiency of the NEPA process. We sought specific examples of innovative technical approaches to the assessment and communication of potential environmental impacts.

Information management[8] is critical to implementing NEPA, and to its goals and mandates. After establishing the nation's environmental policy,[9] Congress set high goals for the Federal government,[10] and called upon all Federal agencies to use and manage environmental information before decisionmaking.[11] CEQ regulations that implement NEPA state that:

> NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and

[7] In this discussion, information technology refers to the hardware, software, and other electronic media used to manage information.

[8] In this discussion, information management includes accessing, acquiring, storing, manipulating, and distributing information.

[9] NEPA Section 101(a) states "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 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." 42 U.S.C. § 4331(a).

[10] NEPA Section 101(b) specifies the following goals: "(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." 42 U.S.C. § 4331(b). NEPA Sections102(2)(G) and (H) also call upon all agencies to "make available to States, counties, municipalities, institutions, and individuals, advice and information useful in restoring, maintaining, and enhancing the quality of the environment" and to "initiate and utilize ecological information in the planning and development of resource-oriented projects." 42 U.S.C. § 4332(2)(G)-(H).

[11] 42 U.S.C. § 4332(2)(C).

> before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA.[12]

Information about the NEPA process, such as the people, cost, and time involved, environmental data, models used to analyze data, and relevant laws and regulations are used during the NEPA process. Analytical documents, including EAs (environmental assessments) and EISs (environmental impact statements), provide information about the analysis and the process. Informing decision makers and the public is essential to the NEPA process. Effective and efficient NEPA implementation requires information-rich communication among Federal, State, and local governments, Tribes, private industry, citizens, and academia. Agencies must identify significant environmental issues and convey quality, timely information to agency planners, decision makers, and the public. Publishing and distributing EAs and EISs is just one aspect of effectively and efficiently conveying needed information, and involving the public and other stakeholders. Participation in preparing the NEPA analyzes and documents increases the value of citizens' experience and produces better results.

1.1. Government Initiatives

Technological advances have dramatically enhanced our capacity to obtain, manage and use information. Legislators and policy makers recognize that the Federal government must keep pace with technological advances. Recent information-technology initiatives and legislation have focused on:

- Information quality;
- Reducing the paperwork associated with Federal government operations;
- Promoting greater consistency in Federal information management policies by improving the efficiency of information collection, maintenance, use, and dissemination, particularly by strengthening partnerships with other levels of government and nongovernmental organizations; and
- Ensuring the timely and equitable exchange of information with the public.

The Office of Management and Budget's (OMB's) "E-Government Strategy–Implementing the President's Management Agenda for E-Government" identified 24 initiatives specifically designed to improve the effectiveness and efficiency of Federal information management and technologies.[13] These initiatives are designed to further the goals of the President's Expanding E-Government Initiative[14] by focusing on:

[12] 40 C.F.R. § 1500.1(b).

[13] Office of Management and Budget, "E-Government Strategy-Implementing the President's Management Agenda for E-Government" (Feb. 27, 2002), *available at* http://www.whitehouse.gov/omb/inforeg/egovstrategy.pdf.

[14] Presidential Memorandum, "Electronic Government's Role in Implementing the President's Management Agenda" (July 10, 2002), *available at* http://www.whitehouse.gov/news/releases/2002/07/20020710-6.html.

- Making it easy for citizens to obtain service from and interact with the Federal government;
- Improving government efficiency and effectiveness; and
- Improving government's responsiveness to citizens.

Several initiatives affect the NEPA process. A goal of the e-Authentication initiative is to build and enable trust to support the widespread use of electronic interactions between the public and government and among governments. A goal of the Geospatial Information One-Stop initiative is to provide access to the Federal government's spatial data assets in one location and to help increase the accessibility of State and local spatial data assets.

Congress has also recently addressed information and information technology issues. Systems that provide public access to information must comply with section 508 of the Rehabilitation Act Amendments of 1998 to ensure that the information technology provided is accessible to people with disabilities.[15] Section 515 of the Treasury and General Government Appropriations Act of Fiscal Year 2001, commonly known as the Information Quality Act,[16] addresses the need to ensure and maximize the quality, objectivity, use, and integrity of information disseminated by Federal agencies. The recently enacted E-Government Act of 2002[17] promotes electronic government services and processes by establishing measures that require Internet-based information technology to enhance access to government information.

Federal initiatives and acts complement the information management goals of NEPA and provide opportunities to enhance the effectiveness and efficiency of the NEPA process. CEQ should continue to promote the use and sharing of NEPA information and information systems by working with OMB, other government officials, nongovernmental organizations, and private businesses and industry to ensure that NEPA information requirements are supported by other Federal information management and technology requirements.

1.2. NEPA-Process Tracking Systems

Through interviews with various agencies, the task force learned about why the NEPA process often experiences delays. Some delays occur at the individual NEPA-process level, while others are more systemic. Lack of timely consultation with regulatory agencies, agency experts unable to devote sufficient time, failing to coordinate NEPA-process timelines with program and project development and cooperating agency schedules, and insufficient staff to oversee the process and work can cause process delays.

[15] 29 U.S.C. § 701 *et seq.* at § 749d.

[16] Pub. L. No. 106-554, 114 Stat. 2763.

[17] Pub. L. No. 107-347, 116 Stat. 2899.

To identify the causes of delay and respond proactively, many agencies are experimenting with software applications that track the NEPA process. Several agencies are also developing systems to better manage NEPA activities agency-wide. The software applications track the process by compiling data such as:

- Proposal description;
- Potentially affected location(s);
- Level of NEPA analysis and documentation (e.g., categorical exclusion, EA, or EIS);
- NEPA and activity planning timelines and milestones;
- Status of the NEPA process (e.g., scoping, draft, or final);
- Public involvement activities;
- Costs associated with activities integrated into the NEPA process; and
- NEPA team members.

Additionally, some tracking systems include the ability to generate e-mail notices to team members when their attention is required.

Many agencies with NEPA-process tracking systems are planning enhancements, such as searchable libraries of NEPA analytical documents and links to geospatial data and other reference documents and studies. Electronically posting and receiving comments and supplementing traditional NEPA document publication and distribution with CD-ROM and Website publication are also being adopted by agencies.

Integrating NEPA-process tracking systems with agency-project management systems has increased interest in using the NEPA systems to track proposal implementation, mitigation effectiveness, and related costs. Agencies actively involved in developing the systems noted that such initiatives could be used to meet a variety of Federal requirements such as E-Government's Electronic Records Management and Geospatial Information One-Stop initiatives,[18] the Government Performance and Results Act of 1993,[19] and Freedom of Information Act[20] requests.

For example, the Department of Energy has developed requirements and procedures for posting its EISs and EAs on the DOE NEPA Web site (http://tis.ch.doe.gov/nepa/). In addition, DOE systematically tracks NEPA process costs and performance metrics, conducts analyzes, and presents the results in quarterly *Lessons Learned* reports, which are made publicly available on the DOE NEPA Web site. The NEPA community could benefit from sharing the experiential knowledge gained from developing electronic NEPA information distribution standards and tracking mechanisms and would likely realize cost savings by reducing redundant development costs.

[18] Office of Management and Budget, "E-Government Strategy-Implementing the President's Management Agenda for E-Government" (Feb. 27, 2002), *available at* http://www.whitehouse.gov/omb/inforeg/egovstrategy.pdf.

[19] Pub. L. No. 103-62, 107 Stat. 287 (codified in part at 31 U.S.C. § 1115 (2000)).

[20] 5 U.S.C. § 552.

Although technologies for enhancing the effectiveness of NEPA implementation are widely available, many agencies lack the resources and knowledge to develop and use information management strategies and information technologies to help manage NEPA process and analytical information. The absence of consolidated and current NEPA information hinders agencies' ability to access basic information and respond to the public, Congress, other public officials, and stakeholders. CEQ encourages agencies to participate in information gathering about the NEPA process. However, additional opportunities to access and share decentralized Federal, State, Tribal, and local knowledge should be explored. The availability of technical and management skills for NEPA analyzes must also be ensured.

1.3. Information Needs for NEPA analyzes

Timely completion of NEPA analyzes depends on the availability of and access to existing information and the ability to collect new information. Reducing the accumulation of extraneous background data and emphasizing relevant environmental issues is key to the successful use of information in the NEPA process.[21]

Searching existing analyzes and documents and coordinating with other agencies can address some requirements. For example, previous NEPA analyzes and documents can be reviewed to better understand the range of Federal activities that might collectively affect a given area and to better understand the success of previous impact prediction techniques. However, Federal agencies identify information needs to ensure that the unique requirements of each proposed action are met.

Information needed to address a proposed action and the potential environmental impacts of that action typically includes engineering and natural resource data. Other common data needs include:

- Wetlands;
- Soils;
- Water quality and quantity;
- Habitat/Threatened and endangered species;
- Land use;
- Archaeological resources;
- Tribal cultural resources;
- Facilities/Infrastructure/Utilities/Rights-of-way;
- Air quality;
- Social/Economic/Demographic; and
- Environmental protection standards.

[21] 40 C.F.R. § 1500.2(b).

Common modeling and analysis needs include:

- Air quality models;
- Noise models;
- Water quality models;
- Transportation models;
- Risk assessments;
- Economic and cost-benefit analyzes; and
- Other impact assessment techniques.

1.3.1. Information Sources

Agencies rely on a combination of internal and external information sources. Data from outside sources is used because:

- Established, well-known sources were adequate for past analyzes;
- Federal, State, and local governments and Tribes have special expertise in environmental, social, or economic impacts associated with a proposed action; and
- The agency might lack the resources or expertise to develop the necessary information and databases internally.

Sources of data include:

- Previous NEPA analyzes with the same geographic area or similar actions;
- Internally maintained databases at the corporate and field level;
- Records of consultations with regulatory agencies;
- Field studies and internally funded research;
- Onsite environmental baseline information and interviews with site personnel;
- Peer-reviewed research presented in journals or at conferences; and
- Clearinghouses and other environmental databases.

Coordinating and consulting with Tribes, State and local governments and planning commissions, environmental and industry groups, and private landowners are also effective sources of information.

Existing information, such as environmental protection standards, data regarding sensitive environmental resources and environmental values, and the evaluation of potential impacts, can inform new decision-making processes. However, information sources must be supplemented to address the unique aspects of many proposed actions, particularly concerning the need for site-specific detail. Insufficient time, money, or expertise needed to collect data; seasonal field-data collection; and

completion of final design alternatives can delay any NEPA process and limit agencies' ability to strategically address data gaps and track environmental trends. Most agencies prefer to use peer-reviewed information; however, timelines are often too short to accommodate the peer-review process. Insufficient availability of resource experts inhibits the ability of agencies to stay abreast of current research, which in turn causes agencies to "reinvent the wheel" rather than leverage existing information resources.

Many agencies use contractors to help develop NEPA analyzes and documentation. In general, the agencies we interviewed indicated that contractor use was effective; however, several concerns were raised including:

- Contracting usually results in acquiring duplicate data rather than updating existing public domain information;
- Data and analyzes provided in ways that do not facilitate reuse; and
- Information provided is sometimes proprietary.

Similar concerns were raised regarding information submitted by applicants. One comment suggested using contract stipulations to ensure that data are delivered according to established standards.

1.3.2. Sharing Information Resources

Several agencies noted that sharing information resources facilitates collaboration. Ensuring coordination with other agencies, including non-Federal agencies and organizations, is important when addressing scientific and technical information issues. The Federal agencies we spoke with generally trusted the validity of information provided by State and local governments more than that provided by interest groups and individuals. Federal agencies noted that they are often hindered by financial and staffing limitations, while State and local governments commented that they are often frustrated when Federal partners do not recognize their information resources and expertise.

The task force received many comments that addressed the benefits of collaboratively sharing information resources. For example, States often have the personnel, expertise, and experience to address local concerns; local municipalities might provide a level of detail that Federal agencies cannot achieve; and State and local governments and Tribes often possess special expertise about the physical environment, customs, culture, and local tax base. Meaningful collaborative relationships between Federal and local interests can reduce financial and human resource burdens at the Federal level, while fostering better intergovernmental relationships.

Many Federal and non-Federal agencies, industry, citizens, and academia recognize the value of NEPA analytic and process information. For example, many NEPA practitioners conduct research across agencies when accomplishing cumulative impact assessments. CEQ should continue to encourage Federal agencies to work collaboratively with Federal, State, and local governments, Tribes, and cooperating agencies to address long-term knowledge-management challenges. Such challenges

include developing scalable information infrastructures, establishing standards for sharing and integrating environmental data, and using technology to ensure natural and social sciences and environmental design arts are incorporated in planning and decisionmaking.

For example, many respondents and agency staff who commented were interested in using spatial data and geographic information systems (GIS) throughout the development of NEPA analyzes and documentation as well as when communicating with the public and decision makers (see the Communication Mechanisms section of this chapter). Understanding the geographic context of proposed activities improves planning by showing the extent of the proposed activities and their associated impacts, promoting more consistent analyzes and reviews, and facilitating cumulative effects analysis and monitoring efforts. However, geospatial data holdings are widely dispersed. Compiling available data across jurisdictional boundaries is often difficult due to differences in data element definitions, sampling methodologies, spatial and temporal resolution, technology, and standards. Lack of adequate metadata and documentation also inhibits the use of non-Federal information. Therefore, to use GIS in the NEPA process successfully, uniform standards for GIS and mapping data are needed.

1.3.3. Initiatives Foster NEPA Information Resources

The difficulties associated with data and modeling requirements and information identification and collection during the NEPA process are common to most agencies. Therefore, several comments supported CEQ developing NEPA document repositories and standardizing environmental information. The respondents believe that such efforts would simplify the identification and compilation of data, ensure the availability of quality data, and facilitate consistent reviews. Although the task force does not think that CEQ is in a position to develop document repositories or standardize environmental information, ongoing Federal initiatives are addressing the development and use of scientific and technical resources in Federal decisionmaking.

For example, OMB Circular A-16, "Geographic Information and Related Spatial Data Activities",[22] established the National Spatial Data Infrastructure and the Federal Geographic Data Committee[23] as the coordinating body to promote the use and dissemination of geospatial data. The recent E-Government Strategy identified the Geospatial Information One-Stop initiative to establish a single point of access to existing Federal spatial data assets and to improve the accessibility of State and local geospatial information resources. While these initiatives are primarily concerned with data collection and access, other efforts, such as the Federal Interagency Hydrologic Modeling Conference,[24] share and promote development of modeling tools. Many

[22] Office of Management and Budget, Circular A-16 Revised, "Coordination of Geographic Information and Related Spatial Data Activities" (Aug. 19, 2002), *available at* http://www.whitehouse.gov/omb/circulars/a016/print/a016_rev.html.

[23] Spatial data policy development, including standards development and coordinating spatial data activities with other levels of government, academia, and the private sector, are examples of the committee's program of work.

[24] The Federal Interagency Hydrologic Modeling Conference occurs under the auspices of the Advisory Committee on Water Information (http://water.usgs.gov/wicp/acwi/), bringing together entities that use water information in a decisionmaking context. Through workshops, symposia, and working groups, the Advisory Committee on Water Information maximizes the effectiveness of water information-related activities and improves standards, guidelines, and procedures for the collection, analysis, management, and dissemination of water information.

agencies interviewed participate in these and similar efforts. The task force believes that the NEPA community should promote the development of data, information, and analytical methodologies applicable to the NEPA process through greater coordination with such initiatives. We also believe that the NEPA community should promote the use of metadata and standards protocols across Federal, State, and local governments for information used in NEPA analyzes.

1.4. Communication and Public Access to Information

Effective implementation of information management and technologies helps the right people receive the right information at the right time in the right form. However, different constituencies have different interests and place different values on different types of information. The NEPA process has benefited from information technologies that provide increased access to information and enhance public participation. However, because the expertise and technological capabilities of participants in the NEPA process can vary widely, determining how much information to provide to what groups, and how and when to provide the information can be challenging.

1.4.1. Communication Mechanisms

The task force found that methods of exchanging information generated the most discussion, particularly concerning individuals who lack access to or training in information technologies. Both Federal and non-Federal groups agree that electronic distribution of information and documents and use of other information technology tools is not substitution for traditional public involvement mechanisms, such as scoping meetings and hardcopy document publication and distribution. Most people favored flexible and adaptable public involvement approaches that use a variety of media and forums and are tailored to the preferences and needs of local constituencies. Although many information technologies have been used to enhance public involvement, a few agencies continue to request additional guidance on the extent to which IT methods can be used.

Although not exclusive to information technologies, a related concern was that communication and information flow is often not interactive. For example, Websites might be a good way to post public meetings and disseminate technical information, but they do not necessarily facilitate two-way communication. Likewise, some Web-based comment forms do not provide a way to clarify information or ask questions. Available two-way communication technologies (e.g., Internet chatrooms, email listservers, or video conferencing) are not often used.

Several organizations noted that the visual nature of GIS helps communicate complex concepts to their constituencies. According to the Western Governors' Association, GIS technology is a vital component of successful NEPA processes that address land management decisions because the decisions are spatial and stakeholders relate to location; therefore, location is often the focus of stakeholder comments and concerns. The U.S. Air Force commented that a Website developed by Eglin Air Force Base to accomplish interdisciplinary reviews of environmental impact analyzes uses GIS to illustrate proposals. Their GIS also provides simultaneous access to operational and environmental information, thereby increasing awareness of environmental issues.

Additionally, using GIS in the NEPA process facilitates timely access to information by decision makers at all organizational levels.

Many agencies that electronically accept public comments have experienced an increase in the volume of comments received, and they expect that trend to continue. While most agencies effectively manage the increased volume and observed that the information technologies provide the tools to manage comments more efficiently and effectively, some concerns were expressed about the increased workload that electronic commenting might produce. A few agencies are reluctant to accept electronic comments due to security issues, uncertainty about how to handle form letters (not a new issue, but one exacerbated by electronic comments), and volume concerns.

1.4.2. Increased Public Interest

The public seems increasingly interested in NEPA-process information and analyzes. In the past, how to respond to comments and distribute NEPA documents was the focus of public communication. However, comments received by the task force indicated that the public is demanding improved access to supporting data and models, particularly scientific and technical information, and that improved public access would:

- Better engage the public;
- Enable the public to develop independent analyzes;
- Facilitate substantive review and comment; and
- Help agencies identify data gaps.

As public interest for NEPA-process information and analyzes has increased, issues surrounding the release of information have become complicated. Many stakeholders would like greater opportunities to review information supporting NEPA analyzes before document distribution. In particular, one public concern is that most comment periods do not give stakeholders sufficient time to educate themselves on the issues and prepare adequate responses, particularly in areas of the country where there is a large Federal presence and many NEPA activities. Additionally, many who commented on this issue want access to supporting technical information to facilitate independent analyzes.

The task force acknowledges that improved and earlier access to technical NEPA-process information is possible; however, the quantity, level of detail, and timing of release of pertinent information must be considered. NEPA is an open process and public interest is growing, however, there is little uniformity in agency procedures regarding the release of information during the NEPA process. Several agencies indicated that they have reservations about releasing information, particularly scientific and technical information, when the analysis is still in progress because:

- The information could be confusing or misinterpreted (e.g., releasing information or analysis that applies to one alternative could be misinterpreted as elimination of the other alternatives);
- Releasing data without accompanying explanatory text could be misunderstood because it might not follow the plain language requirement of all government documents;
- The confidentiality, privacy, or security of applicant, contractor, and other proprietary information might be compromised; and
- Inaccurate or incomplete information could be released if reviews are unfinished.

1.5. NEPA and Information Quality

The CEQ regulations implementing NEPA state that environmental information must be available to public officials and citizens before decisions are made and actions are taken. Additionally, the information must be of high quality because accuracy is essential to implementing NEPA.[25] Additionally, the CEQ regulations state:

> Agencies are to ensure the professional integrity, including scientific integrity, of the discussions and analyzes 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 an appendix.[26]

OMB's "Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies"[27] implementing the Information Quality Act further emphasize the need for high quality information in NEPA analyzes and documents.

Federal agencies and respondents noted that data standards and quality assurance policies establish certain expectations, which in turn facilitate increased participation by a broad variety of participants. Several comments called for development of criteria to evaluate information in the NEPA process. The task force observed that agencies with significant research functions were the most likely to have formal quality-control guidelines.

[25] 40 C.F.R. § 1500.1(b).

[26] 40 C.F.R. § 1502.24.

[27] Office of Management and Budget, "Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies" (Oct. 1, 2001), *available at* http://www.whitehouse.gov/omb/fedreg/final_information_quality_guidelines.html.

1.5.1. Treasury and General Government Appropriations Act for Fiscal Year 2001

Some agencies and stakeholders raised the issue of data quality and the relationship of the Information Quality Act to the NEPA process. Many agencies thought that since NEPA regulations and procedures already contain specific provisions regarding information quality and provide for public review, the provisions of the Information Quality Act are not new requirements. Therefore, they felt that further action by CEQ was unnecessary. The task force agrees that the provisions of the Information Quality Act are consistent with the existing provisions in NEPA regulations. However, we also received many comments criticizing agency objectivity when preparing NEPA analyzes and documentation, with several comments requesting criteria to validate information. Further, some agencies are concerned about potential legal impacts given the willingness of some organizations and the public to litigate information quality issues.

1.5.2. Information Quality Control

Agencies prefer to use peer-reviewed information developed according to established standards, protocols, and quality control procedures to the extent practical. Research and data developed by well-respected research entities are preferred. Information from interest groups or other entities with strong positions on the proposed action are viewed with skepticism. However, many agencies noted that the ability to verify information is often compromised by a lack of internal expertise in specialized areas and a lack of adequate documentation on how the information was developed (i.e., metadata).

Based on the comments received, the task force believes that agencies must disclose how they ensure the adequacy of the data and analyzes used in a NEPA process. The task force believes that if Federal agencies fail to address this situation, either overly prescriptive requirements or requirements that inhibit the dynamic advances in science and technology could be developed through judicial or legislative action. Therefore, the task force urges CEQ and Federal agencies to begin a review of information quality issues and quality control mechanisms. The review should begin by asking:

- What are the current information quality policies and guidelines?
- Do the current policies and guidelines specifically apply to the preparation of NEPA analyzes and documents?
- Do the current policies and guidelines help address public concerns regarding NEPA information quality?

CEQ in conjunction with other agencies should review how agencies accomplish NEPA-information quality control and quality assurance, and determine if CEQ and Federal regulatory requirements are being met. Based upon the results of the review, CEQ should develop any necessary guidance.

1.6. NEPA and Information Security

The task force received comments regarding ensuring security and privacy of information during the NEPA process. In support of the task force, representatives from the Department of Defense conducted a brief review of agencies' treatment of sensitive information[28] during the NEPA process post September 11, 2001. Although agencies expressed a strong desire to continue to inform the public of NEPA analyzes, some agencies suggested that sensitive but unclassifiable information[29] should not be readily available and that policies are needed to address the screening of environmental information to remove sensitive infrastructure security information before any such information is made available to the public.

Agencies were concerned that sharing sensitive information in NEPA documents with cooperating agencies and others might compromise information security. For example, detailing the inventory of hazardous material or the specific location of the material might be inappropriate. Several agencies have requested that their internal security and public affairs offices review and provide advice on the security of the information in NEPA documents. Representatives from the Department of Defense concluded that although information does not meet the standards for classification or qualify for an exemption under the Freedom of Information Act it might be inappropriate for public disclosure. They further concluded that agencies, particularly those working with nuclear and other hazardous materials, want more clarity about how to improve management of sensitive information during the NEPA process.

The task force believes that the security of sensitive information should include consideration of property owners' privacy rights when information is gathered on their property, and the need to protect sensitive resources such as archaeological sites and threatened and endangered species and habitat locations. Some agencies that work closely with tribal agencies are concerned about access to information regarding tribal cultural resources. Federal agencies frequently have difficulty acquiring tribal cultural, private land, and commercial proprietary information due to the originating parties' concerns about public disclosure. Disclosing the location of historic resources, archeological sites, and traditional cultural sites increases the risk of damage and unauthorized collecting and creates a reluctance to provide relevant information.

The desire to protect some types of information in NEPA documents must be balanced with the need to provide sufficient information to ensure informed decision making by Federal agencies, and to facilitate public participation. Some comments expressed concern that potential terrorist attacks and other threats could be used as a pretext to bypass public involvement. While most agencies effectively balance the need for disclosure with protection of sensitive information on a case-by-case basis, some also commented that the current lack of uniform policies leads to disparate treatment of the same information in different agencies' NEPA documents. Therefore, a broad view

[28] Sensitive information was defined by the Department of Defense group as any information that could be used by someone to harm the health and safety of the public or to otherwise undermine U.S. security interests.

[29] Information not subject to controls within the formal system for classifying national security information.

should be taken to determine the types of information that are of concern and what measures might be appropriate for handling that information in the NEPA process.

Criteria should be developed and consistently applied to all types of sensitive information in the NEPA process. Doing so will help ensure the uniform protection of sensitive information while:

- Reinforcing public trust;
- Defining public expectations;
- Facilitating cooperation; and
- Ensuring informed decisionmaking.

CEQ should work with agencies and organizations that have expertise and an interest in handling sensitive information to develop a mechanism for information security, and to promote consistency in NEPA-related sensitive-information policies. CEQ and NEPA practitioners should consider ongoing initiatives, such as OMB's implementation of the Federal Information Security Management Act of 2002,[30] and consider whether guidance specific to the NEPA process is necessary.

1.7. Concerns about Using Information Technology

Many comments received by the task force indicated that technology has improved the availability of information. However, other comments expressed concerns. The following concerns were noted in several comments the task force received:

- Prescriptive mandates for information technologies would ultimately inhibit innovation;
- Increased use of information technology could result in an overwhelming amount of information;
- Advances in information technology, particularly computer models and analytical tools, could become a substitute for human insight and judgment; and
- Information technologies should be used with traditional NEPA process public involvement and community impact assessment techniques for optimal efficiency and effectiveness.

The task force agrees that excessively prescriptive mandates are undesirable, and we commend agencies for their application of information technologies to the NEPA process, especially given limited resources.[31] The task force reviewed several systems designed to:

[30] Section 301 of the E-Government Act of 2002, Pub. L. No. 107-347, 116 Stat. 2899.

[31] Smythe, Robert and Isber, Caroline, "NEPA in the Agencies—2002, A Report to the Natural Resources Council of America" (Oct. 2002), *available at* http://www.naturalresourcescouncil.org.

- Automate repetitive environmental analysis and analytical methods within individual agencies;
- Communicate with and disseminate information to cooperating agencies and stakeholders;
- Facilitate document review where staff is limited; and
- Track the number and status of NEPA projects across an agency.

Although development of the above systems shows agency innovation, information technology is usually unique to each agency's NEPA process. Leadership and coordination can help achieve greater compatibility and improve capabilities across agencies. CEQ should provide that leadership and coordination.

Many agencies indicated that stakeholder groups are increasingly interested in NEPA-process information and that information technologies have played a positive role in making information more readily available. Others expressed concern that information technologies have exacerbated problems associated with determining what information to use, assessing and validating the quality of the information, ensuring that documents are concise, and determining the sufficiency of information for a decision. The Internet has made information that was once only of interest to or accessible by technical specialists, readily available to the average citizen. Several agencies indicated that as the availability and supply of information has increased, stakeholder groups are taking an increasing interest in information and demanding more information. While most respondents agree that NEPA documents must focus on the relevance of the supporting technical information to the decision and confine technical detail to appendices, concerns persist. The task force believes that CEQ and Federal agencies should reinforce that NEPA documents should focus on issues that are significant to the action.[32] CEQ and the agencies should also promote the development and use of information management strategies and technologies to help agencies find and assess relevant information.

The task force acknowledges that information technologies and computer models cannot replace human insight and judgment. Several agencies are developing expert systems; however, the systems are generally designed to guide the user through a series of questions that prompt them for particular types of information. Individuals are ultimately responsible for the proper use and interpretation of the technology and the results.

We recognize that communication technologies can increase effective public involvement, and that the technologies can help manage increased public participation. However, technologies must be combined with existing, non-technological public involvement and communication techniques. There was widespread agreement that neither the electronic distribution of information and documents nor other information technology tools can substitute for traditional public involvement mechanisms, such as scoping and hardcopy document publication and distribution. Accessing and using

[32] 40 C.F.R. § 1500.1(b).

information technologies requires flexible and adaptable public involvement approaches that use a variety of media and forums and are tailored to the preferences and needs of the local constituencies.

1.8. Barriers to Using Information Technology

The task force noted several systemic barriers to the effective and efficient use of NEPA-process information technologies, which are generally encountered during implementation of any information management or information technology program. The legislative and regulatory policies previously discussed have been promulgated to mitigate information technology barriers.

1.8.1. Vision

Many agencies use information technology to replicate paper NEPA processes or have focused on electronic publication and distribution. Better leveraging of technology investments requires innovative ways to broadly use technology. Information technology solutions can eliminate paperwork and integrate activities across established organizations and jurisdictions. Strategic investment decisions must be based on practices that maximize value to the public and government, while providing the privacy and security critical to successful E-Government and NEPA implementation.

1.8.2. Change

Opportunities sometimes involve changes in current procedures, and new initiatives should include development of results-oriented performance measures that enhance information sharing, training, and communications. Adopting new policies and standards to enhance information sharing requires direction and support from leadership, and requires that agencies determine how to align and revise conflicting definitions and requirements.

1.8.3. Interoperability

Agencies generally buy and use computer hardware and software to address internal needs. Frequently, the public must search multiple agency sites to access information, and agencies cannot easily share information. Many innovations in environmental technologies and much of the experiential knowledge about the human impacts on the human environment come from State and local governments and Tribes. The NEPA process' interdisciplinary approach helps to integrate Federal, State, and local stakeholders' ecological, social, and economic data and expertise across administrative and political boundaries.[33] Federal agencies should accomplish cross-agency NEPA-process information sharing to ensure that information resources and technologies interface, and to share information with State and local governments and Tribes.

[33] 40 C.F.R. § 1502.6.

1.8.4. Accessibility

The lack of electronic environmental information and either centralized access or access to field data significantly impacts the NEPA process. Complex interfaces and steep learning curves further discourage the use of available technology tools and resources. Additionally, acquiring information about tribal cultural sites, private land, and commercial proprietary information is often difficult for Federal agencies due to the originating parties' concern about public disclosure. Compiling available data across jurisdictional boundaries is often difficult due to differences in data element definitions, sampling methodologies, spatial and temporal resolution, technology, and standards. Lack of adequate metadata and documentation about how the information was developed were also noted as barriers to using existing information.

1.9. Issues and Recommendations

Throughout this chapter, the task force has discussed issues and recommendations that it believes CEQ should consider regarding guidance or changes to the regulations implementing NEPA. All the issues and recommendations are presented in this section.

The task force recommends that CEQ encourage greater consistency across agencies in notification processes, documentation, information resources, and analytical methodologies through strong coordinating mechanisms. We also recommend that all agencies learn from each other and coordinate with groups outside the NEPA community who are working toward similar goals. CEQ is uniquely positioned to facilitate technology transfer throughout the NEPA community and should work with agencies to ensure that future information management and technology developments for implementing NEPA are aligned with the many ongoing Federal initiatives. To use information technology to address information management and technology concerns related to the NEPA process, and to enhance the effectiveness and efficiency of the NEPA process, CEQ should:

- Promote the development and use, and coordinate sharing of NEPA information systems by sponsoring meetings, conferences, and workshops.
- Ensure that NEPAnet accommodates and responds to developing information technologies.
- Develop guidance to clarify the appropriate role of communication and information dissemination technologies during the NEPA process to enhance public involvement techniques.
- Establish a NEPA technical working group to coordinate with interagency groups to:
  - Ensure that NEPA-process information requirements are addressed when protocols and standards about data, information management, modeling tools, and information security are developed;

— Increase awareness of NEPA-process information technology developments throughout the NEPA community; and

— Facilitate identification and use of information resources developed according to established standards.

- Lead a review by the agencies of their quality control and assurance standards for NEPA analyzes and documentation to ensure conformance with CEQ regulatory requirements[34] and Federal requirements such as Section 515 of the Information Quality Act.[35]
- Contact agencies and organizations that have experience working with sensitive information to establish a work group to develop and promote consistent policies for sensitive information in the NEPA process.

The task force believes that these measures support the long-term goals of working collaboratively with State and local agencies, Tribes, and the public to share and leverage environmental information and technology, and ensuring that data and information used in the NEPA process are available to all Federal, State, and local governments, tribes, and the public. The collaborative effort will foster improved evaluation and efficient information technology strategies and tools to integrate high quality environmental information in agency decisionmaking.

1.10. Summary of Recommendations

The task force recommends that CEQ:

- Promote the development and use and coordinate sharing NEPA information systems through sponsoring meetings, conferences, and workshops. CEQ should also ensure that NEPAnet is able to accommodate and respond to developing information technologies.
- Clarify and endorse the appropriate roles of communications and information dissemination technologies in the NEPA process to enhance public involvement.
- Establish a NEPA technical working group to coordinate with interagency groups to:

  — Ensure that NEPA information requirements are represented in the development of protocols and standards pertaining to data, information management, modeling tools, and information security;

  — Raise awareness of technology developments throughout the NEPA community; and

[34] 40 C.F.R. §§ 1500.1(b), 1502.24.

[35] Treasury and General Government Appropriations Act of Fiscal Year 2001, Pub. L. No. 106-554, 114 Stat 2763 (2001).

— Facilitate the identification and use of information resources developed according to the protocols and standards.

- Lead a review by the agencies of how they perform quality control and quality assurance for NEPA analyzes and documentation to meet the CEQ regulatory requirements for the use of high quality information and Federal requirements such as the Information Quality Act. Any identified gaps should be addressed through clarifying guidance.
- Work with agencies and organizations that have expertise and an interest in handling sensitive information to develop a mechanism to promote consistent policies for dealing with sensitive information in the NEPA process.

Chapter 2

Federal and Intergovernmental Collaboration

On January 30, 2002, CEQ Chair James Connaughton issued a guidance memorandum to the heads of all Federal agencies regarding cooperating agencies, "Cooperating Agencies in Implementing the Procedural Requirements of the National Environmental Policy Act" (Appendix A). The memorandum promotes collaboration[36] among Federal, State, and local agencies and Tribes in preparing and documenting environmental impact analyzes. The memorandum did not grant new authorities, but instead emphasized CEQ's commitment to using cooperating agency status[37] as one means of achieving greater collaboration, and accruing its attendant benefits.

The task force found that collaboration with stakeholders is important to help ensure that decision makers have the environmental information they need to efficiently make informed and timely decisions. The task force focused on whether efforts to collaborate on projects subject to NEPA were successful and, if so, what contributed to their success. Our goal was to recommend practical steps for CEQ either to enhance collaborative processes in support of better NEPA analyzes or remove barriers hindering such collaboration.

We focused our questions on the characteristics of successful collaboration, collaboration barriers, and how training might improve collaborative efforts. In addition, agency staff were asked about joint-lead NEPA efforts, and efforts involving cooperating agencies. Because we received few comments about joint-lead projects, we concentrated on cooperating agencies. Many of the concepts discussed in this section

[36] For this discussion, collaboration means working together using a team or partnership approach.

[37] "Cooperating agency" means any federal agency other than a lead agency which has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal (or a reasonable alternative) for legislation or other major Federal action significantly affecting the quality of the human environment. A state or local agency of similar qualifications or, when the effects are on a reservation, an Indian tribe, may by agreement with the lead agency, become a cooperating agency. 40 C.F.R. § 1508.5.

will not be new to some readers; methods of enhancing collaboration have been studied before. This chapter provides practical advice and recommendations for CEQ to facilitate collaboration on environmental impact analyzes across all government levels. The task force received many comments about integrating members of the public into collaborative efforts; where appropriate, we incorporated that input.

Collaboration is a deceptively simple concept. Most people that we interviewed or that commented on the Federal Register notice (Appendix D) agreed that collaboration in the NEPA process is appropriate. However, while many agencies are trying to use a collaborative process, no uniform approach to successful collaboration exists, and most respondents indicated that improvement is needed. Although many agreed with the concept of collaboration, only a few claimed a successful collaborative experience. How can a generally acceptable idea be so elusive to implement?

The task force believes that although many concepts supporting successful collaboration are inherently understandable, differing priorities and organizational values, and shrinking resources make their execution difficult. Implementing a successful collaborative process can initially be time consuming, and it requires a commitment by all parties. The decision to bring people to the NEPA table and not proceed with the analysis until everyone is comfortable with their role, the process, and the projected products seems to contradict agency objectives to expedite analyzes and decisions. Many comments received from the public, and Federal, State, and local agency staff supported the need for greater collaboration and cooperation among all participants. They also expressed frustration with the process and identified perceived and actual barriers to successful collaboration. If integrating more agencies into NEPA processes is a goal of the Federal government, time must be spent instilling the values underlying that goal. CEQ, as the guardian of the NEPA process, is in a unique position to foster such values.

2.1. Characteristics of Successful Collaborative Practices

It is important to understand the characteristics of successful collaboration in the NEPA process. Although the identified barriers to successful collaboration are often the antitheses of the successful characteristics, they are discussed in the following sections because we believe that their exposition might help future collaborative efforts.

2.1.1. Vision

Sharing the vision of the collaborative process, and taking ownership of that process is essential. The process of creating a shared vision might be time intensive, but it is a critical early step. The comments received revealed that the following elements are needed to establish a shared vision:

- Clarify the process expectations;
- Identify the statutory and regulatory tensions;

- Define the outcomes; and
- Commit the resources to do the job.

Before formally beginning the process, lead agencies need to identify other agencies that might have an interest in the new or revised proposal or project. Affected tribes and Federal, State, and local agencies should be invited to engage in the process. In addition, Federal, State, and local agencies and Tribes with jurisdiction by law or special expertise,[38] should be invited to participate as cooperating agencies,[39] and their needs and expertise should be recognized as an important part of the NEPA process.

To clarify the process, the lead agency should ensure that all cooperating agencies and other participants in the collaborative process understand the lead agency's mission, needs, and NEPA procedures. Time must be allowed for participants to define their role in the process, as they see it, and to resolve differences. Frustration and tension increase when collaborative efforts move forward without agreement on roles.

Both the public and Federal agencies recognize that the collaborative process is inefficient if tension between different agencies' laws, statutes, policies, missions, and cultures is not addressed early. Some agency staffs were frustrated that resource and regulatory agencies sometimes focus only on their issue, ignoring other agencies' missions and needs. Additionally, inconsistency in the interpretation of regulations and guidance among national and regional staffs can create a dysfunctional collaborative effort. Trying to overcome these differences by ignoring them or forcing agreement is not productive.

One method for overcoming such differences is to provide opportunities for interagency training and team building to promote better understanding among agencies. For example, the U.S. Environmental Protection Agency (EPA) invites agencies to assign a senior staff person to work in EPA's NEPA group. Usually a part-time assignment, the person participates in staff meetings, makes presentations, and attends training and briefing sessions. EPA regional staff is sometimes assigned to work either full-time or part-time with another agency's staff. Such interactions allow cross education and team building.

Another method for addressing differences is to agree, at the beginning of the process for an individual proposed action, that the process should not move forward until differences are recognized and addressed through the agreed upon methodology. Agencies must accept that sometimes participants will have fundamental differences in missions or statutory requirements. When this occurs, the task force believes that early recognition and a decision to either focus on existing collaborative possibilities or ending involvement is necessary.

[38] 40 C.F.R. §§ 1508.15, 1508.26.

[39] A Federal agency with jurisdiction by law shall, upon the request of the lead agency, be a cooperating agency. A State or local agency or Tribe with jurisdiction by law and all agencies or governmental entities with special expertise may, upon the request of the lead agency, be a cooperating agency. 40 C.F.R. §§ 1501.6, 1508.5.

To clarify outcome expectations, the lead agency should define needs and be willing to listen to alternative suggestions especially when outcomes rely on another agency's expertise. Additionally, many States have their own NEPA-like statutes and other environmental requirements that they must address. Conducting analyzes and creating documents that address multiple stakeholders' needs is an important aspect of a collaborative effort, but it requires additional work to ensure that information needs are addressed by mutually acceptable data and methodologies. The task force learned that sometimes non-Federal stakeholders are frustrated with Federal NEPA requirements that cannot be addressed through a State's NEPA-like process, or that do not allow the State's needs to be incorporated into the Federal process. Lead agencies should look for opportunities to share expertise to fulfill data and information requirements. Forging such commitments early and objectively might minimize disputes about conflicting expertise, information, and data if a controversial decision results.

It is imperative that all parties commit to the process and to the expected products. The person responsible for making the commitment should have the authority to commit resources early in the project-planning cycle and to complete the effort. To solidify commitments, agencies should consider making greater use of formal joint lead and cooperating agency arrangements with Federal, State, and local agencies and Tribes to add structure and definition and to dedicate resources to the collaborative effort.

Using trained facilitators helps the collaborative process take shape and stay focused, while increasing trust in the lead agency's desire to conduct an unbiased process. It is important to understand that a professional facilitator and those with only facilitation training have different skill levels. Agencies can improve their credibility with their partners by investing in a professional facilitator, especially when the NEPA process is likely to be controversial, scientifically challenging, expensive, or time consuming.

One example of a facilitated process involves the complex work being done in the Everglades. The Army Corps of Engineers conducts the NEPA analysis for the Modified Water Deliveries and the C-111 Canal, two Corps-sponsored Everglades restoration projects. The purposes of the projects are to improve water deliveries to Everglades National Park and restore natural hydrologic conditions to the Park, while maintaining existing flood protection to adjacent agricultural areas. To facilitate cooperation among the Corps, National Park Service, South Florida Water Management District, and the U.S. Fish and Wildlife Service, the Corps asked the U.S. Institute for Environmental Conflict Resolution to facilitate negotiation of a memorandum of understanding. The purpose of the memorandum is to clarify roles and responsibilities and to outline the shared decisionmaking process to be followed in collaboratively developing the environmental impact statement. In signing the memorandum, the four agencies have formally committed to work together on the NEPA analysis and to jointly sponsor a multi-stakeholder involvement process.

2.1.2. Trust

Lack of trust can be a significant barrier to any collaborative effort. Although disagreements might be resolved, it is difficult to overcome an initial lack of trust or

breakdown in trust among parties who have agreed to collaborate. Statements regarding distrust of the lead agency by the cooperating agencies, of the cooperating agencies by the lead agency, and of the Federal agencies by State and local governments and by private citizens were expressed in numerous comments and interviews.

Several respondents felt that often the cooperating agencies did not respect the mission and role of the lead agency; instead, the cooperating agencies viewed their role as equal to the lead agency role. Others described situations where they felt that the lead agency had preconceived ideas, failed to listen to the cooperating agencies, did not consider the cooperating agency's expertise, neglected to respond fully to the information or comments provided, did not sincerely exhibit a desire to partner, and thought that environmental requirements were hurdles to overcome.

Several State agencies commented that State expertise is sometimes ignored by Federal lead agencies, and that State data and information were not adequately used in the NEPA analysis. Although some comments were grounded in a desire to play a larger role in the decisionmaking process, most respondents were merely interested in providing valuable information to the Federal decisionmaker. In a successful collaborative NEPA process, it is essential that partners trust that the Federal agency will consider all the relevant data, and that tribal, State, and local partners will produce relevant, quality data.

Lead agencies must consider how to develop and maintain trust when establishing collaborative relationships. Additionally, all parties must recognize and respect each other's missions, responsibilities, authorities, and expertise, and understand how differences can be accommodated. Collaboration is hindered when there is a lack of trust, understanding, leadership, and willingness to share resources and information.

To eliminate organizational barriers and develop trust among Federal agencies, the Federal Highway Administration and the Federal Transit Administration established an interagency working group comprised of seven Federal agencies shortly after passage of the Transportation Equity Act for the 21st Century.[40] The goal of the group is to promote streamlining of transportation projects, while maintaining environmental protection. The group works together to facilitate joint meetings and training for field staff, leverage interagency resources, and share briefing materials for upper management. The premise is that working collaboratively at all organizational levels fosters greater efficiencies in project delivery and environmental protection. The goals and work of that group are being furthered and enhanced by the Transportation Infrastructure Streamlining Task Force, formed by Executive Order No. 13274.[41]

[40] Transportation Equity Act of the 21st Century, Pub. L. No. 105-178, as amended by title IX of Pub. L. No. 105-206, codified at 23 U.S.C. § 101 *et seq.* (2000).

[41] Exec. Order No. 13,274, "Environmental Stewardship and Transportation Infrastructure Project Reviews," 67 Fed. Reg. 59,449 (Sept. 18, 2002), 3 C.F.R. 250 (2003), *available at* http://ceq.eh.doe.gov/nepa/regs/executiveorders.htm.

CEQ is in a unique position to advance trust and cooperation among all agencies and should continue to play that role. However, agencies should not expect nor wait for CEQ intervention to develop better working relationships with their partners.

2.1.3. Communication

Early and open communication, like a shared vision and mutual trust, is integral to the success of any collaborative effort. Communication must be ongoing and have an established feedback mechanism. The task force received comments suggesting that collaborative processes can be hindered by failure to share information, define common terms, and provide the appropriate feedback. Underlying reasons for this were unclear but might be linked to lack of trust, poorly established processes, and a need for better training.

Based on the comments that the task force received, an increasing number of members of the public and partnering agencies want access to the lead agency's information and the ability to establish a dialogue about the information. Additionally, members of the public expressed a desire for agencies to post information about planned environmental impact analyzes to the Internet as early as possible in the planning process. Although technology cannot address lack of trust or poor communication, it can efficiently help develop and maintain communication channels (see the Technology and Information Management and Security chapter of this report).

The failure of the lead agency to listen to the local population was a common complaint heard by the task force. Many citizens feel left out of the process and unheard. Similar comments were also received from representatives of local government. The task force recognizes that whenever a Federal agency makes a decision that affects people's lives, some will agree with the decision and some will not. The tone of the comments indicated that agencies have not done enough to explain proposals or why the proposals are needed, and they have not provided training opportunities to help the public better contribute to the NEPA process.

The Bonneville Power Administration (BPA) establishes cooperative agreements with Federal and State agencies and Tribes at project inception to foster collaboration before scoping. BPA also establishes advisory and working groups during project development to resolve issues early, or to at least acknowledge them. To encourage public involvement, BPA provides information and receives feedback about the proposed action in multiple formats, including public meetings, one-on-one note takers, prepaid and other comment forms, electronic comments, and toll-free telephone numbers. Citizens are encouraged to form teams to help shape analyzes, work on modeling, and develop alternatives.

The Nuclear Regulatory Commission (NRC) uses an employee as their facilitator to create and channel interest in participating in the NEPA process for nuclear reactor license renewals. When a license renewal application is received, the facilitator travels to the site location, talks to the local library, meets with the mayor and/or city administrator, determines locations for a public meeting, and distributes posters to advertise the public meeting. From the office, the facilitator contacts local tribal

authorities soliciting their participation, and Tribal councils to help determine which Tribes outside the project area should be contacted. The NRC also uses a Web-based system to disseminate information and a States-only server to facilitate State interaction. NRC's communication goal is to increase public confidence in their efforts.

2.2. When and How to Create Collaborative Agreements

Federal agencies, and their responsibilities as lead agencies, were discussed during the interviews with Federal agency staff. The task force asked when, in their planning or project development process, agency staff seek collaborative working relationships, including establishing formal cooperating agency agreements in accordance with the CEQ guidance. Some comments received on the Federal Register (Appendix D) notice also addressed this question.

Everyone that we interviewed thought that collaborative agreements, including informal and formal cooperating agency agreements, work best when they:

- Are established early;
- Designate a lead agency with well-defined roles and responsibilities; and
- Use terms and conditions understood by everyone involved.

However, collaboration at any point in the process is beneficial.

Besides determining if a collaborative agreement would be helpful, agencies must decide if a group of non-Federal advisors would be useful. Interviews with Federal agency staff and comments received from the public showed some confusion about the intent of the Federal Advisory Committee Act (FACA).[42] A misperception exists among some that FACA only permits nongovernmental participation in open public meetings. Additionally, both agency staff and the public believe that establishing a FACA committee is a difficult process. Several agency staff asked that CEQ clarify what is allowed under FACA, with respect to the NEPA process (see the Hold Annual Legal Forum section of the Additional Areas of Consideration chapter of this report).

Collaborative agreements need not be limited to single projects or issues. The Federal Highway Administration has had success with comprehensive collaborative agreements. In the mid-Atlantic and other regions of the country, Federal Highway Administration staff has met with their Federal and State counterparts to establish interagency working agreements. The agreements typically address how to integrate the requirements of NEPA and Section 404 of the Federal Water Pollution Control Act, commonly known as the Clean Water Act of 1972,[43] and they describe agency roles, the collaborative process, and dispute elevation mechanisms. While initially challenging and time consuming, once established the agreements can serve all projects in a

[42] 5 U.S.C. app. 2 § 1.

[43] 33 U.S.C. § 1251 *et seq*.

particular geographic area. Additionally, individual agreements between State transportation agencies and Federal and State environmental agencies regarding resource sharing sometimes exist.

Respondents to the Federal Register notice (Appendix D) suggested that future misunderstandings might be avoided if the negotiators and staff implementing the agreement were the same people. The task force agrees with this point adding that, at a minimum, the staff working under the agreement should have access to the negotiators. Additionally, upper management's lack of support for the process and/or the agreements regarding the process can undermine the collaborative process when disagreements arise. Outlining a dispute elevation process is helpful for formal agreements, particularly if trained facilitators are not used.

The task force considered Federal agencies' use of mediation or Alternative Dispute Resolution (ADR) techniques to resolve differences with cooperating or joint lead agencies. While agencies liked the idea of using facilitators, most thought that resorting to ADR or mediation meant that the collaborative effort had failed. Several pointed out that ADR assumes that the dispute is resolvable when sometimes it is not.[44]

Some Federal agency staff saw collaboration as integral to the success of the planning process, which usually begins before formal announcement of a project subject to an EA or EIS. They believed that their agencies would be served better if the collaboration process began during the early planning stages before the formal NEPA process begins. The Federal Transit Administration is an example of an agency that works with local transit boards when the board identifies a transit system need. When the Federal Transit Administration reaches the formal NEPA analysis stage for a specific transit project, many issues and information needs have already been identified collaboratively.

Cooperative agreements can range in formality from unwritten to written and signed documents depending upon preferences, institutional circumstances, the complexity of the project and issues involved, and the trust among those involved. A strong working relationship diminishes the need for formal memorandums of understanding. Multiple layers of management and lengthy review, revision, and signature processes often discourage written agreements. The task force believes that agencies have and should retain the flexibility to decide whether agreements should be in writing.

If an agency determines that the agreement should be in writing, including a termination clause is common. Agency staff commented that using templates for either the agreement or the termination clause is not routine, but that considering other agency documents for similar activities when drafting agreements might be useful.

[44] Although ADR techniques are useful tools that can be used from the time a proposal is conceived, most interviewees viewed ADR as a technique or techniques to be employed after a dispute has arisen. While ADR is often thought of as being synonymous with mediation, it actually includes a broad spectrum of voluntary and flexible techniques, including facilitation, mediation and fact-finding that involve the use of a neutral third party to assist participants in decision making processes, and arbitration where the parties choose their own decision-maker. Assisted consensus-building and collaborative processes can be very helpful in mitigating potential conflicts that may arise and ADR can be and is being used at the very start of the NEPA process.

The Department of Energy provides agreements developed for one State office to other State or regional offices. CEQ should continue to provide and update examples of agreements that establish collaborative relationships and present sample elevation language for dispute resolution, termination clauses, and FACA requirements.

2.3. Collaboration Training

The task force found that, overall, agencies have not implemented training programs to teach collaborative practices. At a minimum, agencies undertaking long term or complex collaborative efforts should ensure that all those participating have sufficient training to understand both the NEPA process and the partner agencies' needs, expectations, and responsibilities. In particular, while agency staff might understand relevant regulatory agency requirements, it is not clear whether agency staff have had sufficient training about how to integrate the requirements into their own planning and NEPA processes. If agencies collaborate with regulatory agencies to define and develop the information and data needed to address the regulatory agencies' requirements during the NEPA process, time might be saved in project delivery and the public might benefit from a comprehensive disclosure. For example, the Advisory Council on Historic Preservation specifically allows agencies to combine the requirements of Section 106 of the National Historic Preservation Act[45] with their NEPA process if doing so would be beneficial.

Collaboration training should be designed to:

- Prepare agency personnel to work in a team setting;
- Negotiate agency positions;
- Resolve differences; and
- Recognize situations where a successful collaborative effort is unlikely.

The Bureau of Land Management has developed classes for their staff and partners that address aspects of collaboration, including partnering and citizen involvement.[46]

Several respondents commented that there is a lack of training for citizens and local representatives about how to participate in Federal agency NEPA processes. It was also noted that local representatives often serve in a part-time or voluntary capacity and therefore, are unable to attend multiday training courses. Other respondents suggested that there are no readily available materials in print or on the Web outlining the NEPA process. Some agencies have information tailored to their needs, but CEQ does not have such general information available for the public.

[45] 16 U.S.C. § 470 *et seq.* (2000).

[46] More information, including sample syllabi, is available at www.ntc.blm.gov.

2.4. Issues and Recommendations

Throughout this chapter, the task force has discussed issues and recommendations that it believes CEQ should consider regarding guidance or changes to the regulations implementing NEPA. All the issues and recommendations are presented in this section.

To continue to build better collaborative relationships among agencies and between agencies and the public, CEQ should form a FACA committee of diverse individuals, with a variety of experiences in the NEPA process and a non-Federal perspective, which can contribute to the development of collaborative guidance and training. The committee should advise CEQ on:

- Focusing on better collaboration among agencies by identifying, developing, and sharing methods of engaging tribal, State, and local partners in training designed to educate them about the principles of NEPA, partner agencies' missions, communication skills, and public involvement skills.
- Developing guidance addressing the components of successful collaborative agreements and providing templates for memoranda of understanding applicable to various situations and stages in the NEPA process. The guidance should provide the foundation for successful agreements and provide the templates as examples, but it would not dictate the exact construction of the agreements. The templates should include sample language for dispute resolution and termination clauses.
- Examining lessons learned by others through CEQ-sponsored meetings, workshops, and training.
- Developing training that uses traditional and non-classroom methods, such as videos or Web-based training, to enhance agencies' work with the public. Some topics include:
  - The requirements of NEPA and explanations of the different NEPA processes, including categorical exclusions, EAs, EISs, and programmatic NEPA analyzes;
  - How to become involved early and effectively contribute to the NEPA process;
  - Individual and generic agency needs and requirements, including what agencies look for when soliciting comments, and effective ways to provide comment; and
  - How to identify and determine if and how barriers to collaboration can be eliminated.
- Developing a "Citizen's Guide to NEPA" to explain basic NEPA requirements, dispel common misinterpretations, and provide helpful tips about how to participate in the NEPA process. The publication should be posted to the Web and traditionally published.

Lastly, CEQ should periodically sponsor forums designed to address topics such as creating documents that satisfy both Federal and State NEPA requirements and how agencies can better integrate the needs of regulatory agencies into their NEPA processes (see the Additional Areas of Consideration chapter of this report).

2.5. Summary of Recommendations

The task force recommends that CEQ form a Federal Advisory Committee to provide advice to CEQ on:

- Identifying, developing, and sharing methods of engaging Federal, State, local, and tribal partners in training designed to educate them about the principles of NEPA, agencies' missions, and collaboration skills.
- Developing guidance addressing the components of successful collaborative agreements and provide templates applicable to various situations and stages of the NEPA process.
- Developing training for the public on NEPA requirements and effective public involvement.
- Developing a "Citizen's Guide to NEPA."

The task force further recommends that CEQ periodically sponsor forums to address integrating Federal and State NEPA requirements and integrating the needs of regulatory agencies into the NEPA process.

Chapter 3

Programmatic analyzes and Tiering

Programmatic NEPA analyzes[47] and tiering[48] can reduce or eliminate redundant and duplicative analyzes and effectively address cumulative effects. Federal agencies have used programmatic analyzes for broad categories of activities ranging from facilities and land use planning to sequencing multistage actions. Some actions were successful and some were not.

Programmatic NEPA analyzes and documents are valuable decisionmaking tools. Some agencies use programmatic analyzes to evaluate cumulative effects effectively and to formulate mitigation efforts comprehensively, while others struggle with how best to use this analytical tool. Still other agencies use programmatic analyzes to address mitigation parameters at the broad landscape, ecosystem or regional level, thereby reducing the need to re-address these measures at the site-specific level.

Agencies and interest groups who are most dissatisfied with programmatic NEPA analyzes and tiered documents proposed alternative approaches to programmatic decisionmaking including:

- Focusing programmatic documents on outcomes and adaptive management principles, without additional NEPA analyzes at the project level or
- Not doing NEPA analyzes at the programmatic level, thus allowing project-level analyzes and documents to meet all NEPA requirements to support the decisions.

The above contrasting alternatives indicate that programmatic documents are not meeting agency and stakeholder needs. Most agencies and stakeholders agree that

[47] For this discussion, programmatic analysis is any type of analysis and documentation from which subsequent NEPA documents are tiered, while the word program describes a specific type of programmatic document.

[48] The coverage of general matters in broader EISs, with subsequent narrower tiered statements or environmental analyzes, incorporating, by reference, general discussions and concentrating solely on the issues specific to the statement subsequently prepared. 40 C.F.R. § 1508.28.

programmatic analyzes are not being fully used for their intended purposes. A better understanding of how to provide an analysis in a programmatic NEPA document to support the broad decision being made and a strong commitment to tier site-specific analyzes that will be subject to public review is needed.

In discussions with the task force, many issues were raised by the public and Federal agencies concerning programmatic analyzes and tiering. This chapter is divided into the following five sections:

- Types of programmatic documents;
- Scope of programmatic analyzes;
- Content of programmatic documents;
- Longevity of programmatic documents; and
- Links to adaptive management and environmental management systems.

The above organization is essential to address the following questions:

- How to define programmatic and program analysis?
- How can this type of analysis be effectively used?
- What should the NEPA documents derived from these analyzes contain?
- What is the life expectancy of these documents?
- Are adaptive management and environmental management systems applicable to programmatic NEPA analyzes?

3.1. Types of Programmatic NEPA Documents

The public and Federal agencies gave the task force information about the various ways that the terms programmatic and program analyzes are defined and used. We also discovered that agencies have used the term programmatic analyzes to address a range of issues and uses, and that most of the analyzes result in subsequent tiered documents. Agency definitions are strongly oriented toward their mission and/or culture. Differing definitions are one reason for the lack of consistency and uniformity when using programmatic NEPA analyzes.

The task force believes that a distinction exists between programmatic analyzes that result in NEPA documents and support a decision, and those that do not involve a decision. Some Federal agencies use the term programmatic analysis to describe analyzes that directly support decisionmaking; these are programmatic NEPA analyzes and documents. Others use the term for data gathering and analyzes covering a vast area where no decisions to take or change agency actions are being made. Similarly, some agencies use the term to describe baseline and cause-effect analyzes of physical, biological, social, and economic components of the human environment. Such analyzes are used for a variety of purposes, such as setting priorities for solving problems, establishing trends in environmental degradation or improvement, and updating cumulative effects analyzes. Some of these assessments are eventually used in support

of a decisionmaking process. This chapter focuses on programmatic NEPA analyzes and documents that are developed to support a decision.

Both the public and Federal agencies interviewed by the task force indicated that programmatic NEPA analyzes were appropriate for a variety of decisions and could be used in a number of ways (e.g., analysis of a program, analysis of similar activities in an area). Regardless of how they are used, expectations about what should be addressed at the programmatic level must be understood and agreed upon. The purpose and use of programmatic documents and the related analytical requirements should be explained in the NEPA document to establish an understanding of what the programmatic document will contain and what level of analysis is appropriate.

CEQ regulations indicate that programmatic analyzes can be used in a variety of ways.[49] Table 1 summarizes the task force's characterization of the actions addressed in

Category of Action	Description	Example	Additional Information
Policy and/or strategy	National or regional integrated multiple program analyzes that establish program goals and objectives.	**APHIS**—"Proposed Rule for the Importation of Unmanufactured Wood Articles from Mexico—with Consideration for Cumulative Impact of Methyl Bromide Use"	http://www.aphis.usda.gov/ppd/es/mb.html
		TVA—"Integration of NEPA into a Comprehensive Environmental Management Systems"	**Contact Jon M. Loney** jmloney@tra.gov
		BPA—"Business Plan" and an example of use in "Longview Energy Development Plan"	http://www.efw.bpa.gov/cgi-bin/PSA/NEPA/SUMMARIES/BP_EIS0183 http://www.efw.bpa.gov/cgi-bin/PSA/NEPA/SUMMARIES/LongviewEnergy
		USCG—"Deepwater Program"	**Contact Kebby Kelly** kkelly@comdt.uscg.mil
Land Use	Integrated planning analyzes for a fixed geographical or landscape scope; might prescribe general standards and controls and procedures for project implementation.	White River National Forest Plan and EIS	http://www.fs.fed.us/r2/whiteriver/rfp/White_river.htm
		APHIS—"Bison Management Plan for Montana and Yellowstone National Parks"	http://www.aphis.usda.gov/ppd/es/vs/Bison.html
Program	Resource or program-specific focused planning analyzes that decide future priorities for development and scheduling and set controls for implementation of site-specific actions.	**APHIS**—"Rangeland Grasshopper and Mormon Cricket Suppression Program"	http://www.aphis.usda.gov/ppd/es/gh.html
		BPA—"Fish and Wildlife Improvement Plan"	http://www.efw.bpa.gov/cgi-bin/PSA/NEPA/SUMMARIES/FishWildlifeImplementation

Table 1. Summary of actions addressed in programmatic NEPA analyzes and documents.

[49] 40 C.F.R. § 1502.4(c).

programmatic documents and provides examples. The examples present a continuum of activities that have been addressed programmatically; there are no clear-cut boundaries and some activities might fit into more than one category.

Because not all programmatic documents have the same focus, they are subject to divergent decisions on the appropriate scope of alternatives and specificity of analysis. Additionally, the courts have not developed a specific test to determine the specificity required in programmatic EISs. The results often appear different because, on a case-by-case basis, the scope of the Federal project and the timing of the programmatic EIS dictate the specificity required. Programmatic EISs have been considered adequate without site-specific analyzes when the Federal action does not contain a site-specific or critical decision.[50]

The task force believes that CEQ should address the different uses of programmatic documents and the analytical requirements associated with each to foster agreement and consistency between agency decisions and public expectations. Additionally, we believe that CEQ should validate the different uses of programmatic analyzes and examine whether the NEPA analyzes and documents within each category have similar scope, range of alternatives, and specificity of environmental analysis.

3.2. Scope of Programmatic analyzes

Agencies rely on programmatic or broad-scale analyzes to focus the scope of alternatives, environmental effects analyzes, and mitigation in subsequent tiered levels of documentation. When agencies fail to resolve issues of scope, content, and purpose at the start of a programmatic NEPA analysis, citizens, stakeholders, and cooperators are usually dissatisfied, which results in higher costs, inefficiencies, and unmet expectations. Some agencies and respondents have abandoned the concept of tiering concluding that it is ineffective and inefficient.

The public is concerned that when tiering occurs the issues are vaguely described at the programmatic level and then not fully explored or refined at the site-specific level. Because of concerns that the site-specific analysis will either not be done or not involve the public (e.g., tiering to an EA with little or no public involvement), the public is pressuring Federal agencies to include site-specific analyzes and decisions in programmatic analyzes and documentation. Combining different levels of site-specific and programmatic analyzes leads to confusion about the purpose, scope, and adequacy of the analysis in the programmatic NEPA document. Other agency practitioners have embraced the concept of tiering believing that programmatic NEPA analyzes can focus the scope of subsequent tiered project-level analyzes.

The use of programmatic analyzes is increasing at most government levels, and coordination of analyzes at broad levels is improving. Most of the Federal agencies that the task force spoke with view programmatic analyzes and decisionmaking processes positively (e.g., protection of threatened and endangered species habitat, river basin cumulative effects analysis, and other broad policies that might not be considered in site-specific NEPA analyzes).

[50] For example, see *Northern Alaska Environmental Center v. Lujan*, 961 F.2d 886, 891 (9th Cir. 1992).

The task force believes that CEQ should emphasize the importance of collaboration as agencies expand the use and scope of programmatic NEPA analyzes. Collaboration among Federal, State, and local agencies and Tribes is necessary as jurisdictional boundary issues are more common in programmatic than in site-specific analyzes. Agencies might require different spatial and temporal scales of analyzes to address resources adequately and satisfy agency-specific legal and regulatory requirements. Overlapping authorities between agencies with different missions must be considered in programmatic analyzes that address resources or actions across jurisdictional boundaries. The importance of collaboration is magnified substantially as the geographical scope of analysis expands (see the Federal and Intergovernmental Collaboration chapter of this report).

When the geographical scope expands, cumulative effects become more complex, solutions to problems affect multiple agencies, and information sharing becomes essential. Training should be developed to help practitioners prepare programmatic NEPA analyzes and documents, and to communicate the nature of the programmatic analyzes to the public.

The task force also believes that CEQ should evaluate the depth and breadth of the analysis and documentation associated with the different uses of programmatic documents identified in Table 1. Agencies, stakeholders, and the public must understand the analytical requirements for programmatic documents. A better understanding of the different uses and purposes of programmatic NEPA analyzes and documents will foster focused and effective communication and clearer expectations. CEQ should convene a Federal Advisory Committee to further a better understanding of the uses and purposes of programmatic NEPA analyzes and documents to foster more effective communication.

The task force believes that using a Federal Advisory Committee to provide CEQ advice on guidance or changes to the regulations implementing NEPA would mitigate stakeholder and public concern that Federal agencies are biased when completing NEPA analyzes and studies. Committee members should represent Federal, State, local, and regulatory agencies, Tribes, industry, and environmental groups concerned with natural resources, transportation, energy, and other special issues. A diverse membership would foster a nonfederal perspective and encourage public trust. The Federal Advisory Committee should also include an attorney with NEPA-process litigation experience and a member of academia with a NEPA-related research focus.

Reliance on programmatic NEPA documents has resulted in public and regulatory agency concern that programmatic NEPA documents often play a “shell game” of when and where deferred issues will be addressed, undermining agency credibility and public trust. If programmatic NEPA documents are focused, some respondents fear that some issues and analyzes will be deferred and, ultimately, never addressed. The task force believes that CEQ should require that programmatic documents provide a roadmap, explaining where and when deferred issues raised by the public and/or regulatory agencies will be addressed.

3.3. Content of Programmatic Documents

Agencies and the public believe that programmatic NEPA documents should be concise and clear and provide vision and goals for the next level of decisionmaking. At a minimum, agencies should state the significant issues and clarify what the purpose of the first tier document is in relationship to subsequent levels of analyzes and documentation. Many respondents expressed frustration that the contents of programmatic documents do not fulfill expectations for scope of alternatives and scope and specificity of effects analysis.

Little formal guidance exists to distinguish the content requirements of a programmatic analysis and that of a site-specific analysis. The specificity of analysis can vary from document to document and agency to agency. As indicated, much of the variance is due to the different applications of programmatic NEPA documents.

Stakeholders often ask for a greater level of specificity of the environmental effects analysis at the programmatic level than agencies believe is necessary or even possible. Agencies that explain how specific, outstanding, or future actions will be addressed in subsequent tiered documents, and how the analyzes will be vetted publicly, successfully complete and use programmatic documents.

The task force believes that guidance describing the content of programmatic documents should distinguish among the various uses (Table 1). Such guidance would help documentation become more comparable among agencies, provide better standards to evaluate requirements for the different uses of programmatic documents, help define public expectations, and increase public review and comment on programmatic NEPA documents.

3.4. Longevity of Programmatic Documents

A number of agencies and the public expressed frustration with uncertainties regarding the useful life of programmatic NEPA documents. Concerns were expressed that programmatic documents become quickly outdated depending on specificity and analysis. Several interests expressed concern that some programmatic documents have been used for tiering long after the environmental effects analysis has any relevancy. As a result, some interests would like to see CEQ establish a time frame for use of programmatic documents while others suggest imposing a time frame during which programmatic-level documents are viable and could not be challenged as outdated.

Most Federal agencies do not have a formal process or clearly defined time frames for the periodic reevaluation of programmatic documents. Currently, agencies that do evaluate the longevity of programmatic documents do so on as long as a 5- to a 15-year cycle. The task force found that agencies that have the greatest level of specificity in programmatic documents have the greatest difficulty in maintaining the viability and durability of these documents. Most agencies indicated that they oppose CEQ stipulating a time frame for reevaluating programmatic NEPA documents.

The difficulties associated with maintaining document relevance have led some agencies and members of the public to conclude that preparing programmatic NEPA

documents is not cost effective. However, supplemental NEPA analyzes are effectively used to keep programmatic documents current. Documents that are in need of more extensive changes are entirely rewritten and distributed for comment as DEISs. Supplemental NEPA analyzes should also mitigate concerns that site-specific actions tiered to older programmatic documents are at increased risk of legal challenge.

The task force believes that questions about the relevance of a programmatic document should be addressed by CEQ in greater detail than currently exists in the Forty Most Asked Questions Concerning CEQ's NEPA Regulations.[51] CEQ should develop criteria for agencies to use when evaluating whether a programmatic document has become outdated and should articulate a general life expectancy for different programmatic documents. CEQ could develop the necessary guidance by using a work group or by obtaining advice from the Federal Advisory Committee recommended previously.

3.5. Links to Adaptive Management and Environmental Management Systems

Adaptive management is in an early stage of application in programmatic NEPA analyzes. The "predict, mitigate, implement, monitor, and adapt" model of adaptive management is rarely fully incorporated at the programmatic NEPA level. When adaptive management is being used at the programmatic level, it assumes varied applications. Several agencies use the programmatic analysis to "predict, mitigate and implement," and then they use research and monitoring to better understand ecosystem functions and linkages and adapt their actions and mitigation measures. These subsequent adaptive actions are modified or adapted based on the information gathered, and they typically require NEPA analysis and documentation. The task force agrees with many commentators who believe that adaptive management principles have great potential for programmatic NEPA analyzes. Although the Adaptive Management and Monitoring chapter of this report does not distinguish programmatic from other NEPA analyzes, the discussion is applicable to all programmatic analyzes.

Additionally, the broad approach of some programmatic NEPA reviews and the holistic systems approach of environmental management systems are similar (e.g., facility-based reviews with a potential application of environmental management systems to land management facilities). Both environmental management systems and NEPA processes involve a review of activities to identify those with potentially significant environmental impacts and to implement measures to avoid, minimize, or eliminate the causes of adverse environmental impacts. Because of these and other similarities, the integration of environmental management systems and NEPA processes seems logical (see the Adaptive Management and Monitoring chapter of this report). However, the task force was unable find many examples where environmental management systems are integrated with NEPA analyzes, or where they are clearly understood by Federal agency NEPA practitioners.

[51] Council on Environmental Quality, "Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations," 46 Fed. Reg. 18,026 (Mar. 23, 1981), *available at* http://ceq.eh.doe.gov/nepa/regs/40/40P1.htm.

We encourage future interaction among NEPA practitioners and those charged with the development and implementation of agency environmental management systems. Integrating the NEPA process into agency environmental management systems appears to offer an opportunity to improve the development of environmental management systems and to further the environmental sustainability and enhancement policies contained in Section 101 of NEPA.[52]

3.6. Issues and Recommendations

Throughout this chapter, the task force has discussed issues and recommendations that it believes CEQ should consider regarding guidance or changes to the regulations implementing NEPA. All the issues and recommendations are presented in this section.

To promote consistent, clear, cost-effective programmatic NEPA analyzes, documents, and tiering that meet agency and stakeholder needs, the task force recommends that CEQ provide guidance to:

- Emphasize the importance of collaboration as agencies expand the use and scope of programmatic NEPA analyzes.
- Include a section in the first tier document that explains the relationship between the programmatic analysis and document and future tiered analyzes and documents, and describes how stakeholders will be involved.
- Emphasize that programmatic documents should explain where and when deferred issues that were raised by the public and/or regulatory agencies will be addressed, and describe the proposed temporal and spatial scales that will be used when analyzing those issues.
- Develop criteria for agencies to use when evaluating whether a programmatic document has become outdated, and articulate a general life expectancy for the different programmatic documents.

To assist in developing this guidance, CEQ could form a Federal Advisory Committee to provide advice or form a CEQ chartered work group.

The task force also recommends that CEQ convene a Federal Advisory Committee to aid in evaluating and improving understanding of the uses and purposes of programmatic NEPA analyzes and documents by providing advice on:

- Validating the different uses of programmatic analyzes.
- Examining whether programmatic NEPA analyzes and documents for the different uses have similar scope, range of alternatives, and specificity of environmental analysis.

[52] 42 U.S.C. § 4331.

- Evaluating the depth and breadth of the analyzes and documentation associated with the different uses of programmatic documents.
- Proposing guidance or regulatory changes to clearly define the uses and appropriate scope, range of issues, depth of analyzes, and the level of description required in NEPA analyzes and documents.

3.7. Summary of Recommendations

The task force recommends that CEQ convene a Federal Advisory Committee to provide advice on the different uses of programmatic analyzes, tiering, and associated documentation; and, where necessary, provide advice on guidance or regulatory change to clearly define the uses and appropriate scope, range of issues, depth of analyzes, and the level of description required in NEPA documentation.

The task force also recommends that CEQ provide guidance to agencies about the importance of including future partners, stakeholders, and cooperating agencies in discussions early in the programmatic NEPA analysis process, so that concerns can be effectively and efficiently addressed in the subsequent tiered NEPA documents. CEQ should further clarify in guidance that programmatic NEPA documents should include a section that explains the relationship between the programmatic document and future tiered documents, including who will be involved in subsequent tiering, how and when they will be involved, how and where potential issues will be addressed, and the proposed temporal and spatial scales that will be used when analyzing those issues.

Lastly, the task force recommends that CEQ provide guidance about criteria for agencies to use to determine when an old programmatic NEPA analysis and document requires supplementation.

Chapter 4

Adaptive Management and Monitoring

CEQ addressed the potential for using adaptive management in the NEPA process in the "The National Environmental Policy Act: A Study of its Effectiveness After Twenty-five Years" (CEQ 1997c). The term "adaptive management" has been used since the late 1970s to describe certain ecosystem management approaches. An example of adaptive management at the program level occurred in 1994 when 10 adaptive management areas were established to test approaches to land management under the Northwest Forest Plan (USDA Forest Service, Pacific Northwest Region 1998).[53]

In the 1997 study, CEQ recognized that the environmental protection afforded by the traditional environmental management model, "predict, mitigate and implement," depends on the accuracy of the predicted impacts and expected results of any mitigation. The study concluded that a "major difficulty with the traditional environmental impact analysis process is that it is a one-time event; i.e., results from intensive research, modeling, and other computations or expert opinions are analyzed, the analysis of potential environmental impacts is prepared, mitigation measures are identified, and a document is released for public review."[54] Unfortunately, this process does not account for unanticipated changes in environmental conditions, inaccurate predictions, or subsequent information that might affect the original environmental protections. The adaptive management model, by adding "monitor and adapt," was seen as a significant improvement.

[53] Forest Service, Pacific Northwest Region, "Northwest Forest Plan Record of Decision" (1994), *available at* http://www.reo.gov/general/aboutNFP.htm.

[54] Council on Environmental Quality, "The National Environmental Policy Act: A Study of its Effectiveness After Twenty-five Years," p.32 (Jan. 1997), *available at* http://ceq.eh.doe.gov/nepa/nepa25fn.pdf.

4.1. NEPA Adaptive Management Model

The 1997 study recognized the value of incorporating the adaptive management model into the NEPA process. This means developing an adaptive NEPA process as an implementation tool that goes beyond the traditional "predict-mitigate-implement" model and incorporates the "predict-mitigate-implement-monitor-adapt" adaptive management model. Although not all Federal actions lend themselves to incorporating adaptive management into the NEPA process, nor do they require the monitoring[55] and evaluation necessary for such an approach, the task force focused on certain actions where adaptive management would be an appropriate model for the NEPA process to provide agencies with another tool to improve their NEPA implementation.

The task force initiated agency interviews and review of public comments anticipating that CEQ's 1997 NEPA effectiveness study had fostered an understanding of the value of integrating adaptive management into the NEPA process. However, we discovered that incorporating adaptive management into the NEPA process was a relatively new concept for many NEPA practitioners.

Some agencies have used the term adaptive management to describe programmatic actions that do not integrate the "monitor and adapt" components into a programmatic NEPA process. Such a programmatic NEPA process calls for research and monitoring to help understand ecosystem functions and linkages, and to then take an adaptive action. Under this programmatic NEPA approach, the adaptive action generally requires additional sequential NEPA review because the adaptive measures, and their effects, are not fully considered in the original programmatic NEPA analysis. This approach results in a series of NEPA analyzes that incorporate the "predict, mitigate, and implement" environmental management model.

To successfully implement adaptive management, monitoring must occur for long enough to determine if the predicted effects were achieved. As CEQ noted in 1997 and the task force confirmed, agencies do not typically collect long-term data on the environmental impacts of actions. Consequently, for agencies to have the option of using adaptive management as an additional tool for NEPA implementation, there is a need to incorporate the "predict, mitigate, implement, monitor, and adapt" model into the NEPA process. This requires monitoring and considers the effects of potential adaptive measures to allow for mid-course corrections, without requiring new or supplemental NEPA review.[56]

4.1.1. Convening an Adaptive Management Work Group

Almost all the agencies that we spoke with were concerned that there was insufficient existing guidance about how to integrate adaptive management into the NEPA process. Some agencies were also concerned that using the "predict, mitigate, implement,

[55] For this discussion, monitoring is anything necessary and appropriate to determine the accuracy of the impact predictions and the effectiveness of the mitigation measures.

[56] The requirement to prepare a supplemental analysis would continue to apply when the adapting responses, and their effects, exceed the scope of the NEPA analysis.

monitor and adapt" model would initiate litigation because CEQ implementing regulations do not specifically provide for use of adaptive management. In response, the task force believes that CEQ should convene an adaptive management work group to consider revising existing regulations or establishing new guidance to facilitate agencies' ability to exercise the option of incorporating adaptive management into their NEPA process.

The work group should consider:

- Establishing a definition for adaptive management in the NEPA process (see 40 C.F.R. part 1508);
- Using adaptive management measures where alternatives involve uncertainty in the ability to predict the significance of impacts, and the need for alternatives to address the scope of adaptive management measures (see 40 C.F.R. §§ 1502.14, 1505.1(e));
- The relationship between adaptive management and the impacts identified (see 40 C.F.R. § 1502.16);
- Whether adaptive management can be used instead of some or all of the agency's evaluation of significant adverse impacts using theoretical approaches or research methods when the means to obtain the data for such evaluation are not known (see 40 C.F.R. § 1502.22);
- The use of adaptive management for a mitigation monitoring and enforcement program (see 40 C.F.R. § 1505.2(c)); and
- The applicability of adaptive management to EAs, particularly when a finding of no significant impact (FONSI) depends on mitigation in an adaptive management approach.

CEQ should also compile all guidance and regulations pertaining to adaptive management in a handbook (see the Additional Areas of Consideration chapter of this report).

4.2. Using Adaptive Management

Integrating adaptive management and the NEPA process gives agencies a tool that provides them with the flexibility to address unanticipated results of project implementation and to adjust decisions for practical reasons. When agencies decide if an adaptive management approach is appropriate for a particular NEPA action, practitioners should consider the:

- Ability to clearly define the intended outcome;
- Magnitude of the potential environmental impacts of the proposed action;
- Ability to measure outcome attainment (e.g., impact thresholds/performance measures);

- Monitoring requirements;
- Cost of implementing post-decision monitoring and corrective actions;
- Commitment of the agency to fund monitoring and follow through on the adaptive measures;
- Need for management or response flexibility; and
- Acceptability by and commitment of regulators and stakeholders to the adaptive management approach.

Practitioners should consider the above factors, and others that might be specific to the action being proposed, before deciding to implement an adaptive management approach.

4.2.1. Adaptive Management Benefits

Agencies must understand the benefits of adaptive management to encourage practitioners to use it during the NEPA process. Adaptive management can help determine whether mitigation measures are cost effective and if the predicted impacts occurred. If the actual impacts are not what were predicted, adaptive management can help determine actions to take to avoid the costs associated with unexpected environmental damage. It might also be possible to provide managers with the flexibility to adjust the proposed action based on the original NEPA review, without needing new or supplemental NEPA analyzes.

Using adaptive management, agencies might be able to enhance environmental protection and make cost saving adjustments when they implement proposed actions and mitigation strategies. For example, costs can be saved or reapplied when a mitigation measure either fails to accomplish or far exceeds what is necessary to protect the resource. Additionally, the ability to adjust provides management flexibility when unforeseen opportunities occur. Adaptive management can be used to revise the:

- Method of implementing the proposal;
- Scope of implementing the proposal;
- Timing of implementing the proposal; and
- Implementing associated mitigation.

Additionally, the traditional "predict, mitigate, implement" environmental management model implies a high degree of certainty in the accuracy of the prediction step that often does not exist. The biological, physical, and social systems analyzed in the NEPA process are complex, which makes it difficult to calculate the potential impacts of an action with absolute certainty. However, agencies are generally reluctant to admit that they cannot be sure of the impact of their proposed action. An adaptive management approach to the NEPA process helps to address this uncertainty and to manage any associated environmental risk.

Adaptive management might also be useful when practitioners have incomplete information or when the information needed to make accurate predictions is unavailable. CEQ regulations at 40 CFR § 1502.22 address the analysis of reasonably foreseeable significant adverse impacts when information is either incomplete or unavailable. The goals of the section are to disclose that the evaluation of reasonably foreseeable significant adverse impacts was performed without all relevant information and to address information gaps. Agencies could use adaptive management to compensate for incomplete or unavailable information and, when similar projects arise, they can use the monitoring results to more accurately predict and mitigate potentially adverse impacts.

A greater recognition of the value of the adaptive management approach is needed at all levels of the NEPA process. For example, adaptive management might be appropriate when adaptive mitigation measures are the basis for a FONSI, and a mechanism is needed to ensure that the mitigation measures work as predicted. If mitigation without an adaptive approach does not prevent impacts from exceeding relevant significance thresholds, the appropriate NEPA review process should probably have been an EIS. Therefore, an adaptive management approach could provide a valuable tool for addressing unanticipated impacts through mitigated FONSIs.

4.2.2. Adaptive Management Concerns

Several comments received by the task force expressed concern that Federal agencies might use adaptive management to avoid careful consideration of the potential impacts of the proposed action. As mentioned, adaptive management will give agencies the flexibility to address unanticipated results of project implementation and to adjust decisions for practical reasons. To successfully use the "predict, mitigate, implement, monitor, and adapt" model in the NEPA process, the potential impacts of the proposed adaptive actions must be considered before implementation. Therefore, the "predict" step of the model must include an analysis of the potential impacts of the proposed adaptive actions. When the actions or new conditions exceed the scope of the original analysis, new or supplemental NEPA review is necessary.

The task force also received comments noting the potential additional expense associated with the monitoring necessary to successfully implement adaptive management in the NEPA process. Funding to implement the adaptive management approach and the commitment to specific responses is critical. We believe that the NEPA process should identify the additional expenses associated with the adaptive management approach to ensure that funding needs for monitoring as well as for any adaptive measures are considered and reflected in the decision documents.

The potential for expanded judicial review due to adaptive management actions was another concern brought to the task force's attention. If NEPA-related adaptive management actions can occur at any time throughout a project, does the NEPA process for the proposed action originally reviewed remain active? Similarly, do the activities associated with the adaptive management measures remain subject to litigation? Agencies would prefer that their procedural responsibilities for all proposed actions reviewed during the NEPA process not continue indefinitely. The task force

believes it is possible to clearly demarcate the procedural responsibilities of NEPA, and subsequent adaptive management actions. This approach is described in the environmental management system[57] (EMS) discussion later in this chapter. However, the issue requires additional study by the proposed work group, which should receive input from legal counsel.

4.2.3. Adaptive Management Pilot Study

The task force recommends initiation of a pilot study to identify the types of actions best suited for integrating adaptive management into the NEPA process. The pilot program should, in addition to considering ongoing efforts, include several diverse actions including those that could be integrated into an existing EMS (as discussed in the Environmental Management Systems section of this chapter), and that could involve a high degree of uncertainty or highly variable potential impacts being reviewed under a NEPA process. Actions that can include enforceable mitigation (e.g., conditions of a grant, permit, license, or approval) or involve duplicate Federal, State, or local environmental reviews should also be included in the pilot program. The study should identify the appropriate assessment strategies and documentation needed to incorporate adaptive management into the NEPA process and to identify issues requiring CEQ guidance or regulatory action.

4.3. Planning Adaptive Management

Planning a successful adaptive management approach to the NEPA process requires:

- A monitoring scheme that examines the environmental effects of the action allowing practitioners to determine whether adjustments are necessary to avoid unpredicted effects;
- Including adaptive measures that could be used within the range of alternatives whose impacts were analyzed, or specifically identifying and analyzing each of the adaptive measures as an alternative or part of an alternative;
- Technically and scientifically credible performance measures or thresholds used to assess progress and effects, and quality control measures that ensure the integrity and appropriateness of the adaptive management approach; and
- Adequate public involvement mechanisms.

Monitoring can be performed in a variety of ways. Sometimes observation of conditions that are readily identifiable without the aid of special equipment is sufficient. Other times, monitoring might involve detailed sampling

[57] An EMS is that part of an organization's overall management system that includes the organizational structure, planning elements, procedures, processes and resources for developing, implementing, accomplishing, reviewing, and continually improving the processes and actions an organization undertakes to meet its business and environmental goals.

and analysis using sophisticated techniques and equipment. Between these two extremes are many degrees of observation and sampling. As mentioned, for this discussion, monitoring is anything necessary and appropriate to determine the accuracy of the impact predictions and the effectiveness of the mitigation measures.

4.3.1. Key Factors and Approaches to Adaptive Management

The effectiveness of adaptive management monitoring in the NEPA process depends on a variety of factors that should be considered when developing the monitoring scheme. Factors identified by the task force to focus on issues that may warrant an adaptive change include:

- The ability to establish clear monitoring objectives;
- Agreement on the impact thresholds being monitored;
- The existence of a baseline or the ability to develop a baseline for the resources being monitored;
- The ability to see the effects within an appropriate time frame after the action is taken;
- The technical capabilities of the procedures and equipment used to identify and measure changes in the affected resources and the ability to analyze the changes; and
- The resources needed to perform the monitoring and respond to the results.

Two approaches to the NEPA process have been used to analyze the environmental effects of adaptive management changes without requiring a new or supplemental NEPA review. One approach focuses on the range of impacts of the adaptive management measures. Using this approach, the effects on a particular resource are assessed by analyzing the adaptive management measures that are the most and least intrusive. All other potential adaptive management measures fall within the range analyzed.

The other approach analyzes the potential effects of a broad array of alternatives that include reasonably foreseeable potential adaptive measures. That is, the effects of the adaptive measures that could be implemented are individually analyzed as either an alternative or part of an alternative. This approach works best when only a few potential adaptive management measures exist.

When using either approach, any adaptive measures that exceed the limits of the original analysis would trigger the supplemental statement requirement of the CEQ regulations[58] and require additional NEPA review. The goal is to perform sufficient analysis of the impacts of the various potential adaptive management measures so that maximum flexibility in selecting the appropriate response is maintained without triggering the requirement for a new or supplemental NEPA review.

[58] 40 C.F.R. § 1502.9(c).

4.3.2. Oversight and Public Involvement in Adaptive Management

The task force received comments indicating that a successful adaptive management approach to the NEPA process must include appropriate oversight and interaction with regulators and the affected public. We believe that sufficient oversight provides quality control of the adaptive management process and could involve the project management team, an oversight committee, or an advisory group. Additionally, oversight ensures that the appropriate parameters are being monitored for the desired outcome and allows for performance tracking, which is necessary to ensure adaptive management success.

The task force also believes that the timely availability of monitoring data to all affected agencies and stakeholders is important, and this is supported by CEQ implementing regulations.[59] The Internet facilitates this effort (see the Technology and Information Management and Security chapter of this report).

Planning and preparing a successful adaptive management approach could be jeopardized if the involvement of affected agencies, regulators, and stakeholders is not considered. Informing the public of decisions regarding adaptive management actions builds trust and ensures support. Public notice might suffice or be unnecessary for minor adaptive management adjustments, while extensive public involvement might be required for major course corrections or use of technology not previously described.

A collaborative adaptive management process is particularly important when complex processes are involved, or the potential magnitude of the impacts is large. The task force believes that the proposed adaptive management work group should consider the extent of public involvement required when a FONSI depends on mitigation in an adaptive management approach. The fundamentals of collaborative processes involving affected agencies and stakeholders are described in the Federal and Intergovernmental Collaboration chapter of this report.

4.4. Documenting Adaptive Management

The extent of the discussion of adaptive management in a NEPA document depends on its importance to the proposed action and the impacts being considered. The extent and detail of an adaptive management action would likely be extensive when it is being used to:

- Provide maximum flexibility to adjust to unanticipated impacts of project implementation;
- Revise the implementation of actions to save costs; or
- Alter the mitigation to improve effectiveness.

[59] 40 C.F.R. § 1505.3(d).

Generally, the NEPA document should describe:

- The proposed adaptive management approach;
- How the approach is reflected in the alternatives being considered;
- The monitoring protocol;
- The desired outcome;
- The performance measures that will determine whether the desired outcome is being achieved or an adaptive action is needed; and
- The factors for determining whether additional NEPA review is needed.

4.4.1. Cumulative Effects of Adaptive Management

Concern about how to effectively analyze and document adaptive management when considering cumulative effects was brought to the task force's attention. CEQ acknowledged this challenge in "Considering Cumulative Effects Under the National Environmental Policy Act" stating:

> [T]he consequences of human activities will vary from those that were predicted and mitigated. This will be even more problematic because of cumulative effects; therefore, monitoring and accuracy of predictions and the success of mitigation measures is critical. Adaptive management provides the opportunity to combine monitoring and decision making in a way that will better ensure protection of the environment and attainment of societal goals.[60]

However, the 1997 guidance provided few specifics for addressing an action's contribution to cumulative effects through adaptive management response actions. The task force believes that the proposed adaptive management work group should provide guidance for cumulative effects analysis. Specifically, direction is needed regarding:

- How to determine when adaptive management actions are reasonably foreseeable;
- Whether to address the impacts of adaptive management actions incrementally or collectively; and
- How to define the boundaries[61] of the analysis when a series of adaptive management responses is likely.

[60] Council on Environmental Quality, "Considering Cumulative Effects Under the National Environmental Policy" (Jan. 1997), *available at* http://ceq.eh.doe.gov/nepa/ccenepa/ccenepa.htm.

[61] Both spatial and temporal boundaries are important in cumulative effects analysis. However, temporal boundaries merit special attention because they can be affected by the timing and duration of adaptive management actions. A spatial boundary would likely change only if the boundary was originally scoped too narrowly to account for all potentially significant effects on the resource of concern.

When adaptive management is important in the effects analysis and in the selection of alternatives for implementation, a mechanism should exist to ensure that all elements of the adaptive management approach, including monitoring and any necessary response actions, are conducted. CEQ regulations state that mitigation, and other conditions established in the analysis and committed to in the decision, must be included in any associated grant, permit, or other approval, and that mitigation must be a condition of funding the actions.[62] Consequently, ensuring a commitment to adaptive management measures would be consistent with existing regulations. The difference in committing to adaptive management measures versus action-specific mitigation is that the adaptive management measures might include alternative measures that would not be implemented unless needed.

4.5. Implementing Adaptive Management

How to implement monitoring and adapt actions is determined by internal agency commitments to pursue the process, commitments made to stakeholders, and what, if any, enforceable conditions are attached to agency approvals, such as grants, permits, or licenses. The process of monitoring and adapting could continue as long as the project or facility exists.

An observation echoed by several State and local government organizations was that monitoring programs required by Federal agencies often overlap or duplicate those required by a State. The organizations suggested that when a State program enforces monitoring of Federal-project implementation, the Federal agencies should use the State environmental review of the mitigation and monitoring activities to satisfy any Federal review requirements. This concept appears consistent with CEQ regulations that address eliminating duplication with State and local procedures.[63]

Although the task force agrees that duplicate processes can be inefficient and should be avoided when possible, concerns related to oversight and the sufficiency of using State processes to fulfill Federal requirements exist. Consequently, the task force believes that the proposed adaptive management work group should investigate the potential for using State or local processes instead of Federal review and/or monitoring processes to assess the potential impacts of adaptive management actions. The work group should also address enforcement mechanisms and the need for Federal oversight.

4.6. Environmental Management Systems

The International Organization for Standardization (1996) established an environmental management system standard called ISO 14001.[64] Executive Order No. 13,148[65] calls upon Federal agencies to implement EMSs at all appropriate agency facilities by the end of December 2005.

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[62] 40 C.F.R. §1505.3(a)-(b).

[63] 40 C.F.R. § 1506.2.

[64] International Organization for Standardization, "ISO 14001: Environmental Management Systems—Specification with Guidance for Use" (1996), *available via* http://www.iso.ch/iso/en/commcentre/news/2001/imslaunch.html.

[65] Exec. Order No. 13,148, "Greening the Government Through Leadership in Environmental Management," 65 Fed. Reg. 24,593 (Apr. 26, 2000), 3 C.F.R. 241 (2001), *available at* http://ceq.eh.doe.gov/nepa/regs/executiveorders.htm.

Although other EMS models are available, most agencies are designing their models to follow the ISO 14001 standard, which has the following five components.

- 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.
- Management reviews to ensure that the EMS is suited to changing conditions and information.

4.6.1. Integrating Adaptive Management and EMS

In reviewing the ISO 14001 standard, the task force noted that whether an organization was using an EMS or an adaptive management approach, similarities in desired outcomes and process exist. The task force expected that Federal agencies, having made the connection between EMS and adaptive management, would be integrating NEPA-related adaptive management actions into their developing EMSs. However, we discovered that both EMS development and adaptive management approaches during the NEPA process are in their infancy, and that few agencies fully understand the relationship between the NEPA process and EMSs.

The task force believes that:

- Agencies should consider integrating adaptive management responses associated with proposed actions analyzed during the NEPA process into the checking and corrective components of an EMS, thus monitoring and adjusting procedures to meet EMS performance targets. This action would help identify when monitoring and adaptive responses move from the NEPA process and become a function of agency EMS procedures. Also, when the EMS infrastructure is available to monitor and measure performance, the incremental cost for implementing adaptive management could be substantially reduced.

- CEQ should continue to promote integrating the NEPA process and EMSs. Additionally, the proposed work group should consider whether a federally-recognized or independently certified EMS that considers a proposed action and adaptive management measures described in an EIS can satisfy the mitigation and monitoring enforcement provisions in CEQ's regulations.[66]

[66] 40 C.F.R. § 1505.2(c).

- The work group should consider whether an EMS could serve as the mitigation-implementation vehicle when a FONSI depends on adaptive management measures, thereby allowing the NEPA process to end.
- Integrating the NEPA process and EMSs provides a synergy that can encourage a robust analysis when the EMS information is extensive, current, and available for use in the NEPA analyzes. In addition, such integration might more effectively prevent environmental degradation, promote sustainability, and further the policy goals contained in Section 101 of NEPA.
- The NEPA processes included in the proposed pilot program should include a proposal involving an adaptive management approach at a facility where the environmental aspects and impacts are considered in an EMS.

4.7. Issues and Recommendations

Throughout this chapter, the task force has discussed issues and recommendations that it believes a work group should consider regarding guidance or changes to the regulations implementing NEPA that would allow agencies to incorporate adaptive management into their NEPA process for proposals that would benefit from adaptive management. All the issues and recommendations are presented in this section.

The task force recommends that CEQ convene an adaptive management work group to consider:

- Establishing a definition for adaptive management in the NEPA process (see 40 C.F.R. part 1508).
- Describing how adaptive management measures, or the range of such measures, can be included in alternatives, and how to use adaptive management when the alternatives involve uncertainty or variability affecting the ability to predict the significance of impacts (see 40 C.F.R. §§ 1502.14, 1505.1(e)).
- Using adaptive management instead of some or all of the agency's evaluation of significant adverse impacts using theoretical approaches or research methods to address incomplete or unavailable information when the means to obtain the data for such evaluation are not known (see 40 C.F.R. § 1502.22(b)).
- Using adaptive management for a mitigation monitoring and enforcement program (see 40 C.F.R. § 1502.2(c)).
- Integrating adaptive management into EAs, especially when a mitigated finding of no significant impact (FONSI) is required to prevent potential impacts from being significant.
- Determining when adaptive management actions are reasonably foreseeable and how they can be considered in cumulative effects

analyzes, including when the impacts should be addressed incrementally or collectively and how to establish the boundaries of the analysis when a series of adaptive management responses is likely.

- Using required State or local processes instead of Federal review and/or monitoring processes to assess the potential impacts of adaptive management approaches.
- Identifying mechanisms for oversight and enforcement of adaptive management commitments.
- Using a federally-recognized or independently certified EMS that considers a proposed action and adaptive management measures described in an EIS to satisfy the mitigation and monitoring enforcement provisions in CEQ's regulations.
- Using a recognized EMS to serve as the mitigation implementation vehicle when a FONSI depends on adaptive management measures.

If the work group determines that new guidance or regulatory revisions are needed, the work group should assist CEQ in preparing and issuing such guidance or revisions. The work group should also gather all NEPA guidance on adaptive management for inclusion in a CEQ reference handbook (see the Additional Areas of Consideration chapter of this report).

We further recommend that the work group initiate a pilot study to identify the types of actions best suited for integrating adaptive management into the NEPA process. The pilot program should include several diverse actions, including those that could be integrated into an existing EMS, involve a high degree of uncertainty, or contain highly variable potential impacts. Actions associated with enforceable mitigation (e.g., conditions of a grant, permit, license, or approval) or when there might be duplicate Federal, State, or local environmental reviews should also be included in the pilot program. The study should identify the appropriate assessment strategies and documentation for incorporating adaptive management into the NEPA process and identify issues requiring CEQ guidance.

4.8. Summary of Recommendations

The task force recommends that CEQ convene an adaptive management work group to assess the applicability of NEPA guidance and regulations related to adaptive management and to consider integrating the NEPA process with environmental management systems. The proposed work group should prepare the appropriate adaptive management guidance or regulatory changes. Further, we recommend that the work group initiate a pilot study to identify, implement, and document representative actions using an adaptive management approach during the NEPA process and work collaboratively with CEQ to identify aspects of the analyzes and documentation requiring CEQ guidance or regulatory action.

Chapter 5

Categorical Exclusions

To assess the basis and process for establishing categorical exclusions,[67] the task force interviewed many Federal agencies and reviewed public comments. Additionally, CEQ was interviewed to gain their perspective regarding the process used to approve new categorical exclusions. Based on information received, the task force focused its efforts on three areas:

- Documenting categorical exclusions;
- Categorical exclusion development and revision; and
- Categorical exclusion approval process.

Improving and modernizing categorical exclusions should be addressed through both immediate and long-term actions. Immediate actions include CEQ issuing categorical exclusion guidance to clarify and provide direction regarding existing regulations and guidance. The task force believes that the new guidance should be included in a CEQ handbook. Development of a handbook is a long-term action that should not delay issuance of clarifying guidance by CEQ. While the task force believes that none of its categorical exclusions recommendations should require changes to existing CEQ regulations, if regulation revision is necessary, a categorical exclusion work group led by CEQ and including NEPA practitioners and legal counsel should be formed. Revisions resulting from the work group's efforts should be incorporated into the proposed handbook.

5.1. Documenting Categorical Exclusions

The agencies interviewed indicated some confusion about the level of analysis and documentation required to use an approved categorical exclusion, although CEQ

[67] A category of actions that do not individually or cumulatively have a significant effect on the human environment and, therefore, preparing an EA or an EIS is not required unless extraordinary circumstances indicate otherwise. 40 C.F.R. § 1508.4.

consistently has stated that categorical exclusions should have minimal, if any, documentation developed at the time of the specific action application. Additionally, CEQ strongly discourages procedures that require additional paperwork to document that an activity has been categorically excluded.[68] In their interview with the task force, CEQ stated that only documentation used to establish the categorical exclusion is required. However, some courts have found the need for some documentation at the time a specific categorical exclusion is used that explains that the proposed action fits the category relied upon in the agency's NEPA procedures and that there are no extraordinary circumstances in which such a normally excluded action may have a significant environmental effect.[69] Many agencies interviewed stated that their own internal procedures require documentation of project-specific categorical exclusions partly due to concern about potential litigation.

Another issue affecting the efficient use of categorical exclusions is agency perception that they are difficult to develop and/or revise. As a result, some agencies choose to continue to prepare EAs when a categorical exclusion would suffice. One agency representative noted that a perception exists that producing a short EA to document an action once is easier than documenting the development of a new categorical exclusion and then documenting the use of the categorical exclusion. Additionally, agencies sometimes think that documentation is needed when it might not be entirely clear why the proposed action is consistent with an existing categorical exclusion. When this occurs, the perception might be that the agency is "stretching" an existing categorical exclusion. In these situations, CEQ should support agency efforts to efficiently establish new categorical exclusions that clearly describe the category of actions and will not require such additional documentation.

Some agencies expressed an interest in using other agencies' existing categorical exclusions. CEQ categorical exclusion approvals are predicated on the agency's mission, assumptions, and past experiences; the agency must make its own determination that a particular category of actions does not have significant impacts. However, one agency might use another's experiences and documentation as a benchmark to establish their own categorical exclusion.

5.2. Categorical Exclusion Development and Revision

Developing and updating categorical exclusions occurs infrequently, and the process varies from agency to agency. Most agencies have lists of categorical exclusions that were approved 10 or more years ago. Several Federal agencies have recently updated their categorical exclusion lists and others are considering doing so.

Developing and updating categorical exclusion lists is generally a headquarters-based initiative that relies heavily on field input. The updating process usually begins with a data request from headquarters to the field offices. The data gathered and submitted are used to develop the proposal for new and revised categorical exclusions. For

68 Council on Environmental Quality, "Guidance Regarding NEPA Regulations," 48 Fed. Reg. 34,263 (July 28, 1983), *available at* http://ceq.eh.doe.gov/nepa/regs/1983/1983guid.htm.

69 *California v. Norton*, 311 F.3d 1162, 1175-78 (9th Cir. 2002).

existing categorical exclusions, it is often difficult to locate or reconstruct the administrative record. For new categorical exclusions, field offices often consider gathering data and developing proposals exhaustive processes that interfere with other workload priorities.

5.2.1. Supporting a Determination of No Significance

When developing new or broadening existing categorical exclusions, a key issue confronting most agencies is how to evaluate whether a proposed categorical exclusion is appropriate and how to support the determination that it describes a category of actions that do not individually or cumulatively have a significant effect on the human environment. A second important issue is improving agency consultation with CEQ, and ensuring that it occurs in a timely fashion.

In developing categorical exclusions, most agencies use information from past actions to establish the basis for the no significant effect determination. That is, agencies evaluate past actions that occurred during a particular period and determine how often the NEPA analyzes resulted in FONSIs for the category of actions being considered. Most agencies conclude that an adequate basis for developing and establishing new categorical exclusions exists if all the evaluated past actions resulted in FONSIs.

Few agencies have used post-implementation monitoring to validate an EA's predictive analysis. Although some agencies indicated that such monitoring is valuable, available NEPA-process resources limit their ability to perform such analyzes. Conducting post-implementation monitoring might increase the public's trust of agency NEPA compliance and environmental stewardship. Additionally, post-implementation studies that validate the environmental effects predicted in EA/FONSIs provide strong support for any proposed categorical exclusion (see the Adaptive Management and Monitoring chapter of this report).

5.2.2. Importance of the Administrative Record

Recently, interest groups and CEQ have expressed an increased interest in categorical exclusion development. The heightened attention has largely been focused on ensuring that the administrative record supports the determination that the category of actions does not individually or cumulatively result in a significant effect on the human environment.

In the absence of environmental effects monitoring, or in addition to such monitoring, an agency can provide or develop other information for its administrative record to support the analysis for categorical exclusions, including documentation of:

- Professional staff and expert opinions;
- Research study results;
- Past NEPA action records; and
- Similar categorical exclusion actions by other agencies.

CEQ is interested in understanding the entire body of knowledge associated with an agency's proposed categorical exclusion. A comprehensive and complete administrative record facilitates consultation with CEQ and provides support for the new or revised category of actions.[70].

It is often difficult to locate or reconstruct the administrative record for agencies with dated categorical exclusion lists. CEQ suggested to the task force that agencies conduct periodic reviews of how existing categorical exclusions are used, how frequently EAs for repetitive actions result in FONSIs, and then establish comprehensive databases, preferably electronic. While the criteria for identifying new categorical exclusions might vary from agency to agency, some candidates for categorical exclusions include repetitive actions that do not individually or cumulatively have significant effects on the human environment, those that generally require limited environmental review, and those that are noncontroversial.[71] The task force believes that CEQ should work with agencies to clarify appropriate criteria for categorical exclusions, and encourage agencies to identify additional categories that meet the criteria.

5.2.3. Benchmarking Categorical Exclusions

A few agencies benchmark their proposed categorical exclusions with the same or similar categorical exclusions already established by other agencies. This benchmarking serves as a basis to establish their administrative record to support their no significant effects determination. Some criteria that might be applied to benchmarking, and should be considered by CEQ during consultation, include a comparison of:

- Agency missions;
- Actions implemented to conduct the missions;
- Environmental conditions of the actions; and
- Conditions, including environmental, under which the actions are typically taken.

5.2.4. Regional Categorical Exclusions

The task force asked agencies if they thought that categorical exclusions developed for application only in specified regions would be useful. While a few agencies thought that regional categorical exclusions might be valuable when specific actions are only conducted in a particular area, most agencies indicated that developing them would be an inefficient use of their time. Many of agencies thought that the process of establishing categorical exclusions is too labor and time intensive to warrant establishing categorical exclusions that have only limited application. Instead, most agencies believe that categorical exclusions should be applied to as wide a geographic area as possible to be the most effective.

[70] 40 C.F.R. § 1507.3.

[71] For example, when there are no successful administrative appeals or litigation or letters opposing the action based on environmental issues.

5.3. Categorical Exclusion Approval Process

Most of the Federal agencies that the task force interviewed indicated that the categorical exclusion approval process is cumbersome and ill defined. They believe that it takes too long to develop new categories of actions, citing lengthy agency approval processes and a prolonged CEQ review period. However, when probed, the agencies revealed that revisions to agency NEPA implementing procedures established simultaneously with new categorical exclusions are prompting lengthy internal and CEQ reviews. Several agencies also acknowledged that their review is often the most time consuming part of the categorical exclusion development and approval process.

5.3.1. Informal CEQ Consultation

Some agencies are consulting with CEQ to obtain concurrence on revisions to all of their procedures implementing NEPA, including categorical exclusions, while others are focusing on revising their categorical exclusions. Most Federal agencies interviewed admitted that they are unclear about CEQ's categorical exclusion review process. As a result, many agencies avoid the task, preferring to "make do" with the categorical exclusion that they have.

Agencies can informally consult with CEQ at any time when developing a proposal to establish or revise a categorical exclusion. Once a categorical exclusion proposal is developed, most agencies consult with CEQ before publication in the Federal Register. Sometimes, agencies do not ask for CEQ input until the Federal Register notice is released. CEQ strongly recommends early consultation to ensure that agency efforts are focused, and that CEQ advice is considered when the proposal is developed.

5.3.2. Formal CEQ Review

When CEQ receives a proposed categorical exclusion for review, it discusses the general nature of the supporting evidence with the agency. When the proposed categorical exclusions are unique, precedent setting, or heightened public interest is likely, CEQ might request review of the administrative record; this is not usually anticipated by the agencies. CEQ's comments at this stage might be lengthy, result in revision, and require a second review before publication in the Federal Register. CEQ commented to the task force that a significant period of time may pass before the agency responds to CEQ regarding questions and revisions.

Following receipt of public comments to the Federal Register notice, a proposed categorical exclusion is modified and agencies usually submit a memo or letter to CEQ discussing the substantive comments received, and indicating how they were addressed. CEQ then reviews the proposed categorical exclusion for conformity with NEPA and the CEQ implementing regulations and when appropriate provides a letter of conformity. The regulations provide CEQ with 30 days to review the proposed

[72] 40 C.F.R. § 1507.3.

categorical exclusion and determine conformity.[72] The process concludes when an agency publishes a notice of its final action on the categorical exclusion in the Federal Register.

5.3.3. Public Involvement

CEQ regulations require that agencies make diligent efforts to involve the public in preparing their NEPA procedures.[73] Some comments received by the task force indicated that the public is generally neither aware of nor involved in the categorical exclusion approval process. Most of the agencies interviewed indicated that their public involvement was limited to the required Federal Register notice and comment period; most agencies use a 30- or 45-day public comment period. Factors that influence the length of the comment period include whether agency NEPA procedures are codified, and the level of public interest in the agency mission and actions.

The task force believes that agencies should consider involving the public in preparing major changes to categorical exclusions, and that CEQ should help agencies improve their public outreach. CEQ should encourage agencies, through clarifying guidance, to scale public outreach to the extent of the proposed changes to the categorical exclusion. Depending on the category of action proposed for approval or revision, public and stakeholder meetings might be appropriate. Improved public involvement would likely save agency time and money by avoiding controversy and potential legal challenges when a new categorical exclusion is proposed, and when it is used.

5.4. Resource Constraints

Most agencies conduct the NEPA process under constrained resources; available resources are generally dedicated to accomplishing the many activities associated with their primary missions. Limited resources require agencies to focus on urgent NEPA actions, which are usually those that provide short-term benefits, such as preparing a specific EA rather than actions that would provide more long-term benefits, such as establishing new categorical exclusions. Because CEQ is also resource constrained, review timelines can vary greatly and are usually determined by the quality of the administrative record and an agency's responsiveness. CEQ strives to provide comments within a 30-day time frame; however, this is often difficult to achieve particularly for complex or controversial proposals.

Resource constraints and lack of clear guidance are reasons given by many agencies for the delay in the categorical exclusion approval process. The task force believes that agency funds could be more effectively used if categorical exclusion development and use were more widely encouraged and conducted, and if the resources that are currently dedicated to EA development were available for other types of agency environmental analyzes and actions.

[73] 40 C.F.R. § 1506.6.

5.5. Issues and Recommendations

Throughout this chapter, the task force has discussed issues and recommendations that it believes CEQ should consider and address to reduce delays and clarify the process for establishing and using categorical exclusions. All the issues and recommendations are presented in this section.

To promote consistent categorical exclusion development and use, the task force recommends CEQ should expeditiously issue clarifying guidance to:

- Address the documentation prepared at the time a categorical exclusion is used.[74] CEQ should consult with department and agency counsel and the Department of Justice when developing this guidance.
- Suggest methods and information, such as post-implementation monitoring and effects analyzes and studies, categorical exclusion benchmarking studies, and statements of agency professionals, which agencies can use to determine whether a category of activity does not individually or cumulatively have a significant effect on the human environment.
- Encourage agencies to develop categorical exclusions, where appropriate, based on broadly defined criteria that will provide the agency with sufficient flexibility, and encourage the agency to offer several examples of activities frequently conducted that would usually fall within the categories.
- Emphasize that agencies should periodically review and update their categorical exclusions, and their procedures for adding, revising, or deleting categorical exclusions. The guidance should also encourage agencies to establish a mechanism to track suggestions from their field offices for developing or revising their categorical exclusions. The guidance should emphasize the benefits of having such information for purposes of establishing categorical exclusions.
- Clarify the CEQ review process and provide a renewed commitment to meeting the CEQ 30-day period for reviewing proposed categorical exclusions.
- Encourage agencies to expand public outreach beyond the Federal Register notice and comment period to facilitate more public involvement in changing their categorical exclusions and to scale outreach to the extent of the proposed changes to the categorical exclusions.

5.6. Summary of Recommendations

The task force recommends that CEQ issue guidance to clarify and promote consistent practices for the development, documentation, public review, approval, and use of categorical exclusions by Federal agencies.

[74] Council on Environmental Quality, "Guidance Regarding NEPA Regulations," 48 Fed. Reg. 34,263 (July 28, 1983), available at http://ceq.eh.doe.gov/nepa/regs/1983/1983guid.htm

Chapter 6

Environmental Assessments

The task force considered the appropriate use and structure of EAs,[75] and we identified the following four areas of interest:

- EA and FONSI use;
- Mitigated EAs and FONSIs;
- EA alternatives analysis; and
- EA public involvement.

Improving and modernizing EAs requires short- and long-term actions. In the short term, CEQ should issue clarifying guidance to improve EA efficiency and effectiveness. CEQ should request that one or two Federal agency representatives participate in drafting the guidance memorandum. The guidance should highlight existing CEQ regulations and outcomes from EA-related case law, and identify and explain minimum requirements for short and long EAs, including the:

- Range of reasonable alternatives;
- No action alternative; and
- Public involvement.

A CEQ work group should develop a handbook to improve EA long-term efficiency and effectiveness. The handbook should provide a compilation of specific guidance that can be easily found, updated, and made available via CEQ's Website. The guidance should address the minimal requirements in the above areas, and additional

[75] An Environmental Assessment is a concise public document that provides evidence and analysis for determining whether to prepare an EIS or a FONSI, aids in compliance with NEPA when no EIS is required, and facilitates preparation of an EIS when one is necessary. 40 CFR1508.9 (a).

concerns as expressed to the task force and discussed in this chapter. The handbook and Website should also include a continually updated list of useful practices.

6.1. EA and FONSI Use

Initially, EAs were typically internal agency documents used to determine the significance of a proposed action on the human environment.[76] Currently, EAs are used for internal and external purposes, and although they are still used to determine the significance of a proposed action, EAs are also frequently used as an agency's decision document and might be used to facilitate public involvement, evaluate alternatives, and address mitigation requirements.

The organization, analysis, content, and length of EAs vary due to differences in the actions being analyzed, and whether the agency uses the EA as a decision document. Although variations in EA application are confusing to the public and other agencies, they frequently reflect the proposed action's complexity, scope, and level of public interest. The variation is also due to inconsistent application of the NEPA process due to lack of EA guidance. CEQ EA clarifying guidance should recognize and distinguish the range of EA types.

6.1.1. Small and Large EAs

Every agency that the task force interviewed develops EAs ranging in size from small to large. Small EAs are concise public documents that meet CEQ's existing minimum EA requirements. Specifically, they address the statement of need, alternatives (if required by NEPA, environmental impacts, and list of agencies and persons consulted. Small EAs typically:

- Range from 10 to 30 pages in length;
- Are developed by one author;
- Require from 2 weeks to 2 months to complete; and
- Cost between $5,000 and $20,000.

Large EAs are associated with more controversial or high profile projects, and are similar to an EIS in analysis, content, and format. Mitigated FONSIs are usually associated with large EAs. Large EAs usually incorporate other internal agency planning and decisionmaking requirements that are not inconsistent with, but not required by, CEQ regulations. Large EAs typically:

- Range from 50 to more than 200 pages in length;
- Are developed by an interdisciplinary team;
- Require from 9 to 18 months to complete; and
- Cost between $50,000 and $200,000.

[76] The term "human environment" is interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment. 40 C.F.R. § 1508.14.

In comparison, EISs typically:

- Range from 200 to more than 2,000 pages in length;
- Are developed by an interdisciplinary team;
- Require from 1 to more than 6 years to complete; and
- Cost between $250,000 to $2,000,000.

CEQ regulations are usually not the cause of EA delays and additional cost. Instead, compliance with an agency's internal NEPA or other environmental guidance requires additional time and expense. CEQ guidance should emphasize that their minimum requirements should be distinguished from agency requirements to help correctly determine the extra time and costs associated with producing large EAs.

Few agencies take the minimum approach described in existing CEQ regulations; instead they produce EAs that are much longer than suggested.[77] Some agencies that the task force interviewed and public comments received stated that EAs are similar to EISs in size, cost, and scope. Further, some public respondents believe that agencies predetermine whether a NEPA document will be an EA or an EIS, and that agencies treat EAs as mini EISs rather than objectively determining if the proposed action would likely result in significant impacts. There is sometimes overlap between large EAs and EISs, such as when an agency has integrated NEPA requirements with other internal planning processes and documents. However, sometimes EAs are excessively long such as when they are used to:

- Include supplemental information required by agency Offices of General Counsel instead of incorporating the information by reference;
- Support the defense of the FONSI in potential future litigation;
- Use the EIS format to evaluate standard issues or resources that might not be significantly affected or a public concern; and
- Include an alternatives analysis when any conflict of available resources has not been resolved.

6.1.2. Judicial Review

Many agencies are concerned that the judicial system does not acknowledge the distinction between EAs and EISs. Additionally, several thought that the courts defer to projects supported by EIS rather than EA analyzes, which might be due to a lack of specific EA guidance.

Courts have established that an agency's FONSI, and the consequent decision not to prepare an EIS, can only be overturned if the decision was arbitrary, capricious, or an abuse of discretion. In the judicial review of an agency's FONSI, the court must

[77] CEQ has generally advised agencies to keep the length of EAs to not more than approximately 10-15 pages. Council on Environmental Quality, "Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations," 46 Fed. Reg. 18,026 (Mar. 23, 1981), Question 36, *available at* http://ceq.eh.doe.gov/nepa/regs/40/40P1.htm.

ensure that the agency took a "hard look" at the environmental consequences of its decision. Courts scrutinize an agency's FONSI by determining whether the agency:

- Identified the relevant areas of environmental concern;
- Made a convincing case that the impact was insignificant; and
- Convincingly established that changes in the project sufficiently reduced the significance of any impact to a minimum.[78]

While some agencies recognize that additional CEQ guidance regarding EA analysis, content, and format would help support agencies in court, others are concerned that additional guidance would limit agency flexibility. Most agencies thought that flexibility regarding EA format should be maintained. Some agencies believe that CEQ should issue an EA template to clarify the requirements for analyzing and documenting the level of significance, consistent with 40 C.F.R. §§ 1508.9 and 1508.13, to help manage the burden of proof and support agencies in court. Although some public respondents thought that additional EA guidance would improve EA efficiency and effectiveness, there was no agreement on specific guidance regarding analysis, content, and format. Some public respondents thought that EA and EIS analysis, content, and format should be similar, while others thought that EA guidance should be less than that required for EISs.

A useful EA template could specify EA content requirements to promote consistency without limiting flexibility by prescribing a format, particularly if it has been designed to address a similar set of actions. For example, on December 9, 2002, CEQ issued a memorandum to the Secretaries of Agriculture and Interior, "Guidance for Environmental Assessments of Forest Health Projects," that provided an EA outline for forest health projects.[79]

6.1.3. EA Checklists and Forms

Many agencies use EA checklists as a quality control tool to help develop and review EAs, and to determine if a critical element exists that requires detailed analysis. However, the agencies and the task force agree that using checklists as EAs does not meet the plain language requirements of NEPA and does not provide a clear description of impacts or discussion of mitigation measures, significance, or alternatives. According to the agency staff that we spoke with, EA checklists do not fulfill the public's need to understand the rationale for an agency's decision, and they are inconsistent with many agencies' implementing guidance.

Some agencies use an EA standardized analysis form for projects with minor environmental impacts, particularly noncontroversial projects, and when conflicts in alternative uses of available resources have been resolved. The form requires that the analyst explain the effects finding for each issue evaluated. However, EA standardized

[78] *Sierra Club v. Peterson*, 230 U.S. App. D.C. 352, 717 F.2d 1409 (D.C.Cir. 1983).

[79] Connaughton, James L., "Guidance for Environmental Assessments of Forest Health Projects" (Dec. 9, 2002), *available at* http://www.fs.fed.us/projects/hfi/2002/dec/guidance-for-environmental-assessments.pdf.

analysis forms are inappropriate when conflicts of alternative uses of available resources remain, when mitigation is proposed to reduce the project's adverse environmental effects below the significance threshold, or when the project is controversial or high profile. CEQ should support and promote this approach through clarifying guidance, and highlight when using EA standardized analysis forms is appropriate.

6.1.4. When to Complete an EA

Most agencies develop an EIS when potentially significant impacts might exist, or when the project is controversial or high profile. Agencies cited both situations as key considerations when deciding whether to develop an EA or EIS. The majority of agencies interviewed use internal agency guidance for EA development.

Most agencies that the task force interviewed stated that if the proposed action has not been implemented in 5 years from the date that the FONSI was signed, a reevaluation of the project is necessary to ensure that no significant changes have occurred in the:

- Environment;
- Original proposed action;
- Level of public controversy; and
- State of science and technology.

Additionally, agencies evaluate whether new environmental circumstances or information are relevant to the proposed action and its impacts; if so, a supplemental EA is completed. Courts have required preparation of a supplemental EA under the same circumstances as those required for a supplemental EIS.[80] CEQ guidance should clarify when it is appropriate to complete an EA and when a supplemental EA is necessary.

A few agencies stated that it would be helpful for CEQ to issue guidance regarding adoption of State or local EAs or environmental documents as Federal EAs and FONSIs. Other agencies did not think that the situation was a concern since such documents can be incorporated by reference. A few agencies thought that problems could result if document adoption occurred because State and local actions are not usually the same as Federal actions, or issues might not be adequately documented to meet Federal agency requirements.

Many agencies interviewed indicated that the time and resources required to develop or update categorical exclusions were substantial and, as a result, EAs continue to be produced for actions that could be categorically excluded. The finding and guidance needs for categorical exclusions are discussed in the Categorical Exclusions chapter of this report.

[80] 40 C.F.R. § 1502.9.

6.2. Mitigated EAs and FONSIs

Mitigated FONSIs are used by many agencies, although their purpose and use are inconsistent, and most agencies do not call them mitigated FONSIs. Additionally, a consistent and well-understood definition of mitigated FONSI does not exist. Many agencies reduce a project's adverse environmental effects early in the planning process using environmental enhancements or features as integral project components before making a significance determination. Agencies believe that reducing a project's adverse environmental effects below the significance threshold is good project planning, not mitigation; therefore, the FONSI is not called a mitigated FONSI. CEQ supports use of mitigated FONSIs to reduce project impacts below the significance threshold. Courts also support agency decisions not to prepare an EIS upon adoption of mitigation measures [81]

CEQ acknowledges that the approach discussed in Question 40 of the Forty Most Asked Questions Concerning CEQ's NEPA Regulations [82] is obsolete, and they are committed to revising it. NEPA practitioners should not apply Question 40, as it currently reads. A priority CEQ action should be to revise Question 40, and provide EA clarifying guidance on mitigated EAs and FONSIs.

In any NEPA document, including a mitigated EA/FONSI, the courts have indicated that to comply with NEPA an agency must take a "hard look" at the potential environmental consequences of the proposed action before taking any action.[83] As a result, agencies must demonstrate that their decision was not arbitrary and capricious by documenting their analysis and decision in their NEPA document.

Agencies can prepare FONSIs that either includes the EA or that provide a summary of the EA.[84] When the FONSI does not include the EA, agencies must ensure that they adequately incorporate the EA analysis into the FONSI. Most agencies describe the environmental enhancements or enhancement features in the EA, while others include them in both the EA and FONSI to increase agency follow through. Some agencies identify mitigation requirements in either the project description and/or the alternatives section of the EA and FONSI. CEQ guidance should emphasize that the EA/FONSI clearly identify mitigation measures. In addition, monitoring and enforcement of mitigation for EAs should be addressed.[85]

CEQ guidance is needed to clarify the ability of a FONSI to serve as a legally binding mechanism to enforce mitigation when dealing with agency actions. A FONSI is not a decision document, unless an agency has made it such in their NEPA procedures; therefore, a mitigation commitment within a FONSI that is not a decision document is not binding and should not be relied upon. When using a mitigated FONSI that is not a decision document, the binding commitment must come from a statute other than NEPA and should be incorporated in an agency's decision document. Agencies that

81 *City of Auburn v. United States*, 154 F.3d 1025, 1033 (9th Cir. 1998).

82 Council on Environmental Quality, "Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations," 46 Fed. Reg. 18,026 (Mar. 23, 1981), *available at* http://ceq.eh.doe.gov/nepa/regs/40/40P1.htm.

83 *Baltimore Gas & Electric Company v. Natural Resources Defense Council*, 462 U.S. 87, 97, 103 S.Ct. 2246, 2252 (1983).

84 40 C.F.R. § 1508.13.

85 When an EIS is prepared, monitoring and enforcement programs for any mitigation are adopted in Records of Decision, where applicable. 40 C.F.R. § 1505.2.

have combined their decisionmaking processes and documents with EAs and FONSIs can apply the mitigation as a binding commitment through their decision document and implementing statute. Alternatively, a binding mitigation commitment could be made by preparing an EIS and a Record of Decision. The guidance should also address situations where an applicant, rather than the agency, implements the action and the commitment should be included in the permit, license, or other entitlement.

One public respondent expressed concern that use of mitigated FONSIs often results in more mitigation than what is needed to reduce the adverse environmental impacts below the significance threshold. The individual thought that the situation was partly due to a lack of CEQ guidelines and an attempt to avoid EIS development. An agency that the task force interviewed thought that CEQ should issue guidance on mitigated FONSIs to ensure that excessive mitigation is not routinely accomplished.

Any EA clarifying guidance should support an adaptive management approach to mitigated EAs and FONSIs, when there is a high degree of confidence that the mitigation would effectively compensate and reduce the adverse environmental effects below the significance threshold. If mitigation does not prevent impacts from exceeding significance thresholds, then the action should be evaluated and documented in an EIS and Record of Decision, instead of an EA and FONSI. Further details related to the task force's findings and guidance needs for adaptive management are in the Adaptive Monitoring and Management chapter of this report.

6.3. EA Alternatives Analysis

Many agencies indicated that they analyze and document multiple alternatives, including the no action and proposed alternative, in most EAs. Additionally, the agencies stated that the number of alternatives does not substantially vary between EAs and EISs. Eliminated alternatives are generally documented in a separate section at the beginning of an EA. Commonly applied screening criteria, used to determine if alternatives are reasonable, include cost, technology, logistics, and environmental, historical, and socioeconomic impacts. A few agencies indicated that they limit the number of alternatives by refining the proposed action's purpose and need statement early in the EA process, instead of eliminating alternatives.

Sometimes, the EA alternatives analysis is more than is necessary to comply with CEQ regulations. Additionally, some large EAs contain an alternative analysis that would be more appropriate in an EIS, considering the magnitude and complexity of the environmental impacts, the project scope, and public concerns. Many agencies consider alternatives that are beyond the proposed action, although the proposed project does not conflict with alternative uses of the available resources.[86] Additionally, many agencies noted that the meaning of "unresolved conflict concerning the alternative uses of available resources"[87] is unclear, and that CEQ regulations do not provide any

[86] 40 C.F.R. § 1508.9(b).

[87] 42 U.S.C. § 4332(2)(E).

clarification, which might encourage expanded alternatives analyzes. CEQ maintains that alternatives, other than the preferred alternative and no-action alternative, do not require analysis and documentation in an EA unless an unresolved conflict concerning available resources, consistent with NEPA Section 102(2)(E) and 40 CFR 1501.2(c), exists. Consequently, the range of alternatives should be addressed in CEQ guidance.

Although the no action alternative is clearly described in the answer to Question 3 of the Forty Most Asked Questions Concerning CEQ's NEPA Regulations, inconsistent application of the definition of the no action alternative was a concern noted by the public. The definition of the no action alternative should be clarified and highlighted in CEQ's EA guidance.

CEQ should clarify if all agencies can address the no action alternative in the manner described in guidance recently issued by CEQ.[88] CEQ's guidance memorandum on EAs for forest health projects advised the Department of Agriculture and the Department of Interior that the impacts of a proposed action and alternatives may be contrasted with the current condition and future condition in the absence of the project, and that doing so constitutes consideration of the no action alternative. New CEQ guidance should also clarify if this description of the analysis of the no-action alternative is appropriate regardless of whether there are unresolved conflicts concerning alternative uses of available resources.

6.4. EA Public Involvement

CEQ regulations require public involvement for EAs and FONSIs to include, at a minimum, reasonable public notice of the availability of the EA and FONSI.[89] EA public involvement activity ranges from none to formal scoping for the agencies that the task force interviewed. However, many agencies' draft EAs and FONSIs are made available to the public. While not required by CEQ regulations, internal agency guidance for some agencies interviewed requires scoping for complicated and/or controversial actions. Apparently, when scoping is accomplished, it is used as a screening mechanism to identify issues to determine significance and to decide whether to prepare an EIS. The task force believes that EA public involvement activities should be appropriate to the level of impacts, public interest, and project complexity and controversy.

Most of the agencies interviewed make EAs available for 30 days, and they provide for public review of the draft EA and FONSI. Some public comments that the task force received suggested that a 90- rather than a 30-day comment period was more appropriate. Conversely, several agencies that we spoke with believe that public involvement in the NEPA process is used to delay decisionmaking. Many agencies believe that lengthy public comment periods might unnecessarily delay implementing a proposed action. To be responsive to the publics' interest in EAs, and the agencies

[88] Connaughton, James L., "Guidance for Environmental Assessments of Forest Health Projects" (Dec. 9, 2002), *available at* http://www.fs.fed.us/projects/hfi/2002/dec/guidance-for-environmental-assessments.pdf

[89] 40 C.F.R. § 1506.6(b) (2003); and Council on Environmental Quality, "Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations," 46 Fed. Reg. 18,026 (Mar. 23, 1981), Question 38, *available at* http://ceq.eh.doe.gov/nepa/regs/40/40P1.htm.

need to conduct proposed activities, CEQ should encourage improvement to EA public involvement processes. For example, using the Internet, in addition to traditional distribution methods, to post EA data and analytical information and documents would improve the effectiveness and efficiency of public participation.

6.5. Issues and Recommendations

Throughout this chapter, the task force has discussed issues and recommendations that it believes CEQ should consider regarding guidance or changes to the regulations implementing NEPA. All the issues and recommendations are presented in this section.

To consider the appropriate use and structure of EA documents that meet agency and stakeholder needs, new CEQ guidance is needed to:

- Specify existing minimum EA requirements for all EAs in one guidance document. This guidance also should explain:
  - Appropriate analysis of alternatives, including the no action alternative;
  - When mitigation measures must be considered;
  - Appropriate public involvement; and
  - Suitable use of an EA standardized analysis form.
- Address what should be included in an EA and FONSI to demonstrate that agencies have comprehensively considered the potential environmental consequences of the proposed action before taking the action (i.e., taken a "hard look").
- Emphasize that EAs and FONSIs should focus on the issues or resources that might be significantly affected or are a public concern, consistent with 40 C.F.R. § 1500.1(b). Specifically, the guidance should:
  - Emphasize that agencies should address proposed alternative effects and provide sufficient evidence and analysis about whether to prepare an EIS;[90]
  - Emphasize that agencies should provide and explain effects determinations for each issue of interest to the public and of potential significance;
  - State that following the CEQ EIS format to prepare an EA is unnecessary even though the issues might be similar to those addressed in an EIS;

[90] 40 CFR 1508.9(a); and Council on Environmental Quality, "Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations," 46 Fed. Reg. 18,026 (Mar. 23, 1981), Question 36, *available at* http://ceq.eh.doe.gov/nepa/regs/40/40P1.htm.

— Clarify that the impact discussion requirements within an EA and FONSI should be proportional to their significance[91] and level of public concern;

— Support and identify the methods to incorporate documents by reference;[92]

— Recommend that an EA should be attached to a FONSI or incorporated by reference; and

— Emphasize that agencies must ensure the professional integrity and high quality of the environmental information within EAs.[93]

❖ Provide an easily understood and applied definition of mitigated FONSI, and clarify that a mitigated FONSI is approved based on the mitigation measures and therefore, an EIS is not required (i.e., without the mitigation measures, the FONSI would not be issued). Specifically, the guidance should:

— Address mitigated FONSI requirements, including whether post-project monitoring and enforcement are required;

— Describe when a monitoring and enforcement program should be adopted consistent with 40 C.F.R. § 1505.2, including factors that should be considered in this determination; and

— Discuss how mitigation will be conducted and enforced, the length of the mitigation period, how mitigation success will be measured, and monitoring and adaptive management approaches.

❖ Address the ability of a FONSI to serve as a legally binding mechanism to enforce mitigation particularly when mitigation measures must be considered and adopted (e.g., for any project impacts, only when significant adverse impacts exist, for an entire project, only where feasible).

❖ Discuss how to adequately incorporate the EA analysis into FONSIs.

❖ Address unresolved conflicts concerning alternative uses of available resources to clarify to the public the agencies' rationale for presenting alternatives within an EA. Specifically, the guidance should:

— Define the meaning of "unresolved conflict concerning the alternative uses of available resources";[94]

— Identify the core elements of an EA when unresolved conflicts concerning alternative uses of available resources are either present or not;

[91] 40 C.F.R. § 1502.2(b).

[92] 40 C.F.R. § 1502.21.

[93] 40 C.F.R. §§ 1500.1(b), 1502.24.

[94] 42 U.S.C. § 4332(2)(E).

— Clarify that alternatives must be evaluated and documented within the EA when unresolved conflicts concerning alternative uses of available resources exist; and

— Specify that each EA should contain a discussion of unresolved conflicts concerning alternative uses of available resources when alternatives beyond the preferred and no-action alternative are being considered.

- ❖ Support documenting eliminated alternatives in a separate section at the beginning of EAs, where appropriate, and identify criteria that agencies can apply to eliminate alternatives including cost, logistics, technology, and greater adverse environmental effects.
- ❖ Provide agencies with guidance to address the no action alternative when lack of action is not a reasonable alternative, consistent with guidance issued by CEQ,[95] and clarify whether this approach can be used when there are unresolved conflicts concerning alternative uses of available resources.
- ❖ Clarify and highlight the definition of the no action alternative to foster consistent application.
- ❖ Explain that public involvement requirements in an EA should be commensurate with project scale and complexity, required mitigation, and public interest, consistent with 40 C.F.R. § 1506.6(a)-(b). Specifically, the guidance should:

— Reemphasize that public availability of EAs and FONSIs is a requirement consistent with 40 C.F.R. § 1506.6 and Question 38 of the Forty Most Asked Question Concerning CEQ's NEPA Regulation;

— Emphasize and clarify special cases where a FONSI must be available for public review for 30 days consistent with 40 C.F.R. § 1501.4(e)(2) and Question 37(b);

— Identify the level of public involvement for EAs that either do or do not have a remaining unresolved conflict in alternative uses of available resources and/or that have been mitigated below the threshold of significance that would usually require an EIS; and

— Encourage agencies to electronically establish and maintain NEPA information and documents, provide nonsensitive information to the public via agency Websites, and develop and maintain links to other agencies' NEPA Websites, where ongoing and proposed NEPA work would be advertised, to facilitate EA public interaction. CEQ should provide links to these sites on its NEPAnet Website.

[95] CEQ advised the Departments of Agriculture and Interior that the impacts of a proposed action and alternatives might be contrasted with the "current condition and future condition in the absence of the project," and that this constitutes consideration of the no action alternative. Connaughton, James L., "Guidance for Environmental Assessments of Forest Health Projects" (Dec. 9, 2002), *available at* http://www.fs.fed.us/projects/hfi/2002/dec/guidance-for-environmental-assessments.pdf.

6.6. Summary of Recommendations

The task force recommends that CEQ issue guidance to:

- Recognize the broad range in size of EAs;
- Clarify that the size of environmental assessments should be commensurate with the magnitude and complexity of environmental issues, public concerns, and project scope;
- Describe the minimum requirements for short environmental assessments; and
- Clarify the requirements for public involvement, alternatives, and mitigation for actions that warrant longer environmental assessments including those with mitigated findings of no significant impact.

In the near term, CEQ should issue a clarifying memo reiterating the minimum statutory and regulatory requirements for EAs when a short EA is warranted.

Chapter 7

Additional Areas of Consideration

Several issues were raised in public comment and during interviews with Federal agencies concerning procedural aspects of the NEPA process that were not directly related to the focus areas[96] evaluated by the task force. Suggestions included a proposal that the Environmental Protection Agency oversee the NEPA process, strict enforcement of page limits for EAs and EISs, and a requirement that agencies submit annual progress reports about their ability to achieve NEPA-process improvements.[97]

7.1. Additional Topics Raised

Several observations and additional topics were presented to the task force warrant recognition and are discussed below.

7.1.1. Public Opinion

Diverse and strongly held opinions about possible revisions to NEPA or the CEQ regulations or guidance exist. Views varied from suggestions to eliminate NEPA and the CEQ implementing regulations to leaving the law and CEQ regulations and guidance intact.

The broad and often conflicting range of views made the task force's work challenging. We concluded that few universally held descriptions of problems or solutions exist, and that periodic review of discreet NEPA implementation issues would be beneficial.

[96] Technology and information management and security; Federal and intergovernmental collaboration; programmatic analyzes and tiered documents; adaptive management and monitoring; categorical exclusions; and environmental assessments.

[97] Content Analysis Team, Forest Service, "Summary of Public Comment—NEPA Task Force" (Dec. 20, 2002), *available at* http://ceq.eh.doe.gov/ntf/comments/comments.html.

7.1.2. Agency Critiques

Concerns were raised in comments and discussions with Federal agencies regarding a specific agency or activity. Some critiques explained a comment or supported a recommendation, however, many attempted to secure task force intervention to address an issue on a specific project or redress an agency's conduct in implementing NEPA procedures.

The task force was not designed to intercede in individual cases and each situation involves unique circumstances that the task force did not address beyond their applicability to broad recommendations. We invite Federal agencies to review the public comments and consider agency-specific comments posted on the task force Website at <http://ceq.eh.doe.gov/ntf/comments/comments.html>.

7.1.3. Agency Trust and Credibility

Besides individual agency critiques, many comments addressed agency credibility in implementing NEPA. Some respondents believe that agencies pre-decide projects, misinterpret or misrepresent environmental effects information, and do not conduct quality analyzes. Agencies expressed frustration with one another and the public about insensitivity to agency goals and responsibilities, lack of responsiveness or late participation in the NEPA process, and emphasis on short-term impacts rather than long-term goals.

The perspectives suggest the need to continue efforts to strengthen trust and credibility. Trust and credibility are discussed in other chapters of this report, and several task force recommendations are designed to improve participation in the NEPA process.

7.1.4. Resource Allocation

The public and agencies are concerned about the availability of dollars and skills to prepare quality environmental analyzes and documents.[98] Comments suggested that CEQ should investigate the time and dollars being used to conduct NEPA processes. It was also suggested that CEQ support agency-specific requests for greater funding of environmental analyzes, and encourage agencies to institute performance-based rewards systems for NEPA work.

The task force recognizes that each agency has budget protocols and management systems that establish priorities to fund environmental needs. Additionally, CEQ is available to consult on fiscal and personnel matters and might need to take a more active role if the increasing number of experienced NEPA practitioners and environmental and natural resource specialists that are retiring are not replaced.

7.1.5. Definitions

CEQ regulations implementing NEPA contain many terms that the courts have helped to interpret. The definitions of terms such as "human environment," "major federal

[98] For further discussion of resource needs, see Smythe, Robert and Isber, Caroline, "NEPA in the Agencies—2002, A Report to the Natural Resources Council of America" (Oct. 2002), *available at* http://www.naturalresourcescouncil.org.

action," and "significantly" have been debated for years, and forums have been convened to discuss and propose changes.[99] Some have argued that the current definitions are too inclusive, while others believe that they are too narrow.

Considering the length of time that the terms have been used in the NEPA process, defined through case law, and debated, the task force felt that a consensus for new definitions would probably not be reached. CEQ counsel should convene periodic meetings with agency counsel to discuss current case law regarding NEPA practices and terminology, as discussed later in this chapter.

7.1.6. Legal Standards of Review

Several respondents commented that adjusting the legal standards of NEPA review, setting bond requirements before litigation, and amending statutes that govern legal actions under NEPA could increase the efficiency of the NEPA process. Specifically, recommendations were offered to adjust the legal standards of review, limit reviews to administrative forums under the Act of September 6, 1966, commonly called the Administrative Procedure Act[100], or modify payment requirements under the Equal Access to Justice Act.[101]

The task force believes that these laws relate to broad legal and administrative requirements that have applicability beyond NEPA. It may be advantageous for CEQ to organize workshops and meetings among agency counsel to discuss judicial review standards under the Administrative Procedures Act and issues associated with the Equal Access to Justice Act, as discussed later in this chapter.

7.1.7. Process Management

A generic term, "analysis paralysis," was used to express frustration with what are perceived by some as inordinate and excessive procedural requirements imposed under NEPA. Respondents also thought that using NEPA as the vehicle to integrate the many laws that affect agency decisionmaking is difficult. The term "analysis paralysis" is used to address a broad range of concerns about inefficiencies such as agency specific procedural requirements, project priority setting, project management, and Federal consultation and coordination requirements. Many respondents are concerned that the development of these analyzes and documents takes too long and results in documentation that is excessive in light of the significance of the actions evaluated.

Although there is not agreement on the causes of lengthy and excessive analyzes and documentation, there is a consensus that various aspects of the NEPA process could be improved. The NEPA process needs to be done well and done efficiently, and that is the goal of the recommendations made by the task force.

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[99] For example, in 1996 the Senate Energy and Natural Resources Committee explored changes to NEPA and CEQ implementing regulations.

[100] 5 U.S.C. § 551 *et seq.*

[101] 5 U.S.C. § 504 *et seq.*

7.1.8. Effects Analysis

Many comments concerned the depth and breadth of environmental effects analysis; direct, indirect, and cumulative. Some issues were due to confusion about the scope of the analysis associated with programmatic-level documents. Other comments were project specific and require attention that cannot be easily translated into CEQ guidance. Agencies also expressed concern about the level of specificity required for project analyzes. CEQ has issued a handbook on cumulative effects analysis,[102] and several training courses are available to Federal agencies on cumulative effects analysis.

The task force believes that many problems associated with effects analyzes are project specific and thus, can be addressed through additional training and consultations with CEQ. An exception would be when CEQ has not provided guidance, specifically concerning social, cultural, and economic analyzes, as discussed later in this chapter.

7.1.9. Supplemental Reviews

Several agencies expressed dissatisfaction with the need to evaluate new information or changed circumstances for ongoing actions after the NEPA analysis and decision are completed.[103] This requirement is especially relevant for programmatic analyzes that support multiple projects that will be approved during a period of years or for projects that require years to complete. Question 32 of the Forty Most Asked Questions[104] reiterates the obligation of agencies to evaluate ongoing or incomplete projects and suggests a 5-year period for such evaluations. Agencies are finding that new information and changed circumstances can occur relatively quickly, and that analyzes are required to determine if the information or changed circumstance is pertinent to the NEPA analysis or could result in changes to the proposal.

The process, thresholds, and documentation requirements for new information and changed circumstances, especially for programmatic documents, are often specific to the proposed action and agencies should continue to informally consult with CEQ on these issues. Efforts to make the NEPA process more efficient should help alleviate this problem by allowing agencies to make more timely decisions and also by providing opportunities for more flexibility to respond to emerging issues (see the Adaptive Management and Monitoring chapter of this report).

7.1.10 Delegation of NEPA Responsibilities

In a number of situations, State agencies develop NEPA analyzes and documentation for Federal agencies. Additionally, several States have environmental analysis statutes similar to NEPA.[105] When an action is subject to both NEPA and State environmental analysis requirements, the Federal and State processes are often integrated and one document is produced. Such an approach can satisfy both Federal and State

[102] Council on Environmental Quality, "Considering Cumulative Effects Under the National Environmental Policy" (Jan. 1997), available at http://ceq.eh.doe.gov/nepa/ccenepa/ccenepa.htm.

[103] 40 C.F.R. § 1502.9(c)(ii).

[104] Council on Environmental Quality, "Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations," 46 Fed. Reg. 18,026 (Mar. 23, 1981), *available at* http://ceq.eh.doe.gov/nepa/regs/40/40P1.htm.

[105] Currently, at least 17 states have statutes that are similar to NEPA. For more information visit http://ceq.eh.doe.gov/nepa/states.html.

requirements; however, it is not always efficient because Federal and State requirements for disclosure, public involvement, and analysis might be different. A number of State agencies and individuals commented that to avoid duplication of analysis and documentation, CEQ should specify that State environmental statutes should satisfy NEPA when they are similar to NEPA. A second, but related issue involves the delegation of NEPA responsibilities to State and local agencies and Tribes. Some State agencies have suggested that States be delegated the responsibilities for Federal NEPA analyzes and documentation, especially where the Federal agency role is limited to approving funding.

The task force notes that State laws vary considerably and are not identical to NEPA. Delegation of the NEPA process to State and local agencies and Tribes would not alter the existing decisionmaking responsibilities of Federal agencies, which are derived from other statues. NEPA responsibilities have been delegated by statute when a local or tribal government is the decisionmaker such as the release of Community Development Block Grant and Home funds under Title I of the Housing and Community Development Act of 1974[106] and the release of funds under the Native American Housing Assistance and Self-Determination Act of 1996.[107] State or local agencies cannot be delegated the responsibility for Federal decisions without changes in Federal and, possibly, State law.

CEQ should continue to support efforts to merge or synchronize Federal, State, local, and Tribal NEPA processes (see the Federal and Intergovernmental Collaboration chapter of this report). When legal issues arise they might be project- or agency-specific and should be addressed in the context in which they arise. Establishing legal forums, as discussed later in this chapter, provides a mechanism to identify issues that merit broad attention.

7.2. Four Additional Issues and Recommendations

Based on comments and input received, the task force developed specific recommendations for four additional areas that were considered: coordinating compliance with other laws; alternatives; social, cultural and economic effects analyzes; and disputes and post-decisional reviews. The discussion and recommendations are provided in the following four sections.

7.2.1. Coordinating Compliance with Other Laws

Public comment and agency interviews identified several laws that are closely associated with environmental analysis under NEPA and, therefore, obligate agencies to comply with them as an integral part of the NEPA process. The need to synchronize the analyzes is important for the NEPA process to be an effective tool. The most common laws cited were the Endangered Species Act[108], the National Historic Preservation Act,[109] the Federal Water Pollution Control Act commonly called the

[106] 42 U.S.C. § 5301 *et seq.*

[107] 25 U.S.C. § 4101 *et seq.*

[108] 16 U.S.C. § 1531 *et seq.*

[109] 16 U.S.C. § 470 *et seq.*

Clean Water Act[110], and the Clean Air Act.[111] Agencies attempt to conduct compliance analyzes concurrently, but they often perform them sequentially.

For example, integrating the NEPA process with Section 7 of the Endangered Species Act, which requires consultation with the U.S. Fish and Wildlife Service and/or The National Marine Fisheries Service (NOAA Fisheries), is a long-standing concern. CEQ and various agencies have worked with the Fish and Wildlife Service and NOAA Fisheries to better integrate the requirements of Section 7 consultation into NEPA requirements. The efforts focus on addressing Endangered Species Act requirements earlier in the NEPA process, which can expedite informal and formal consultation which typically occurs toward the end of the NEPA process.

Despite these laudable efforts, Federal agencies still perceive the Section 7 consultation as a major challenge for efficient analyzes. Respondents suggested two specific and very different approaches. One suggestion was that CEQ should work with the Fish and Wildlife Service and NOAA Fisheries to change the Section 7 consultation process and allow agencies greater flexibility in deciding when formal consultation is required. The other approach was to address Section 7 requirements separately from the NEPA process as a part of project implementation. Agencies that routinely accomplish Section 7 consultation understand how and when to efficiently align it with the NEPA process, however, limited resources and changing priorities often preclude efficient integration. Implementing solutions for greater efficiency in consultation will continue to be challenging and continue to be addressed by the regulatory agencies.

Consultation with State Historic Preservation Officers under Section 106 of the National Historic Preservation Act has received more attention from the Federal agencies because of recent changes in the Section 106 procedures. The new procedures allow Federal agencies to comply with the Section 106 requirements through the NEPA process[112] CEQ should work with the Advisory Council on Historic Preservation and Federal agencies to develop guidance on how to implement such a consolidated process.

Addressing conformity requirements in the Clean Air Act and total maximum daily loads and 404 permitting requirements in the Clear Water Act during the NEPA process usually present project-specific challenges and change from State-to-State and area-to-area because of the varied and complex issues that can arise. The task force believes that to coordinate these laws with the NEPA process, Federal, State, local, and tribal regulatory agencies should develop specific memoranda of agreement. These agreements would be tailored to agency mission, project scope, and the potential impacts to air and water resources.

Many agencies could benefit from CEQ guidance that outlines efficient measures and timing for integrating various environmental requirements with all NEPA processes,

[110] 33 U.S.C. § 1251 *et seq.*

[111] 42 U.S.C. § 7401 *et seq.*

[112] Advisory Council on Historic Preservation, "Coordination with the National Environmental Policy Act," 36 C.F.R. § 800.8 (2003).

including programmatic analyzes and documents. The guidance should address the requirements for aligning the requirements for: Section 7 of the Endangered Species Act; Section 106 of the National Historic Preservation Act; conformity analyzes under the Clean Air Act; and the total maximum daily load and Section 404 requirements of the Clean Water Act. A template for such guidance could be the Department of Transportation's Red Book, Applying the Section 404 Permit Process to Federal-aid Highway Projects (FHWA 1988),[113] which was developed by the Federal Highway Administration, U.S. Army Corps of Engineers, EPA, Fish and Wildlife Service, and National Marine Fisheries Service. Whenever possible, CEQ should coordinate its efforts with existing initiatives addressing the integration of environmental requirements.

The task force recommends that CEQ, in consultation with the Environmental Protection Agency, Advisory Council on Historic Preservation, Fish and Wildlife Service, NOAA Fisheries and other agencies with experience in complying with ESA, NHPA, CAA and CWA, develop a CEQ handbook on effectively integrating ESA Section 7 consultation, NHPA Section 106 coordination, CAA conformity requirements, and CWA total maximum daily loads and Section 404 requirements with the NEPA process.

7.2.2. Alternatives

Comments submitted to the task force identified several issues connected with alternatives. Concerns exist over the definition of the no-action alternative, criteria and methods for identifying alternatives, and how collaborative planning influences the range of alternatives.

Interviews with agencies elicited issues concerning the definition of the no-action alternative as it relates to environmental assessments. CEQ defined the no-action alternative,[114] and the task force believes further clarification is unnecessary. Most agencies indicated that they did not have problems associated with generating alternatives. Concerns were expressed about how to decide which alternatives to consider in detail and which to eliminate from detailed evaluation. The task force believes that this is determination best left to individual agencies to address on a project-by-project basis.

As agencies gain success using collaborative planning and decisionmaking models, the agencies suggest focusing on a few good alternatives rather than a large number of alternatives. Agencies believe that collaborative efforts will likely result in a narrow set of refined, agreed upon alternatives, while other alternatives will be

[113] Federal Highway Administration, "Applying the Section 404 Permit Process to Federal-Aid Highway Projects" (Sept. 1998), *available at* http://nepa.fhwa.dot.gov/ReNepa/ReNepa.nsf/aa5aec9f63be385c852568cc0055ea16/6f708d283ad7a7c485256d63000b6ce5?OpenDocument.

[114] The no action alternative is interpreted to accommodate proposals for projects where no action means the proposed activity does not take place and to accommodate proposals that involve ongoing programs, such as updating a land management plan where no action means no change from the current management plan. Council on Environmental Quality, "Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations," 46 Fed. Reg. 18,026 (Mar. 23, 1981), Question 3, *available at* http://ceq.eh.doe.gov/nepa/regs/40/40P1.htm.

eliminated early in the analysis process. A challenge to the success of this approach is to include potentially interested parties early to ensure that relevant alternatives are not prematurely eliminated. However, the task force believes that it would be reasonable for CEQ to explore this approach.

The task force recommends that CEQ explore the use of collaboration to develop and refine alternatives by working with a facilitator, such as the US Institute for Environmental Conflict Resolution, and then provide guidance that outlines how agencies can document the process of refining a proposal and conform to the regulations requiring the rigorous and objective evaluation of reasonable alternatives.[115]

7.2.3. Social, Cultural, and Economic analyzes

Concerns continue to be voiced that agencies do not adequately address social, cultural, and economic effects, nor do they consider the whole of the "human environment"[116] Section 102(2)(B) of NEPA requires that unquantified environmental amenities and values be considered along with economic and technical considerations. Additionally, CEQ regulations include historic, cultural, economic, and social impacts in the definition of effects[117] Although social and economic effects alone might not require an agency to develop an EIS, the effects must be addressed as part of the NEPA process.

CEQ has not provided guidance to Federal agencies about how to develop and integrate social, cultural, and economic analyzes into the NEPA process. The responsibility for developing and implementing such technical procedures has remained with individual agencies. CEQ has provided guidance for environmental justice as a special case of social analysis.[118]

When CEQ recognized that cumulative effects analysis was problematic for many agencies, a cumulative effects publication was developed (CEQ 1997b). The task force believes that CEQ guidance on social, cultural, and economic analyzes would also be beneficial as agencies respond to greater inquiries regarding such analyzes. Agencies commented that the existing guidance on environmental justice has been helpful in addressing this specific aspect of social and economic analysis. The task force reasons that similar guidance on social, cultural and economic analyzes would improve the quality and efficiency of this aspect of the NEPA process.

The task force recommends that CEQ develop a handbook on social, cultural, and economic analysis similar to the cumulative effects publication.

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115 40 C.F.R. § 1502.14.

116 Content Analysis Team, Forest Service, "Summary of Public Comment—NEPA Task Force" (Dec. 20, 2002), *available at* http://ceq.eh.doe.gov/ntf/comments/comments.html.

117 40 C.F.R. § 1508.8 (2003).

118 Council on Environmental Quality, "Environmental Justice—Guidance Under the National Environmental Policy Act" (Dec. 1997), *available at* http://ceq.eh.doe.gov/nepa/regs/ej/justice.pdf.

7.2.4. Disputes and Post-decisional Reviews

The topic of post-decisional administrative reviews received many comments both in favor of and opposed to these administrative processes[119] Concerns centered on whether agencies were implementing the project and mitigation measures either as described in the NEPA documents or in the most efficient manner possible. NEPA and the CEQ regulations focus on the pre-decisional aspects of integrating environmental considerations into decisionmaking and do not address post-decisional administrative processes for appeal by the public regarding decisions subject to NEPA. In certain cases, Congress has imposed post-decisional requirements on agencies.[120]

The task force is not suggesting that CEQ prescribe post-decisional processes. Rather, the task force recommends that CEQ study the effectiveness of alternatives for resolving disputes, including those over environmental mitigation and the most efficient implementation methods, both during and after the NEPA process. Such a study could be done through the US Institute for Environmental Conflict Resolution or another organization that specializes in conflict resolution. Results of such studies could be used to further improve the efficiency and effectiveness of the NEPA process.

The task force recommends that CEQ study the effectiveness of alternatives for resolving disputes, including those concerning environmental mitigation and improving project implementation, both during and after the NEPA process.

7.3. Three General Recommendations

The task force developed three recommendations for CEQ action that will facilitate efforts to address any and all of the issues and specific recommendations made throughout this report, and they should be implemented as soon as possible. These recommendations will provide tools to CEQ and NEPA practitioners that will improve the NEPA process.

7.3.1. Increase Staff

CEQ provides advice and counsel to agencies on priority projects and situations important to the Administration, and on projects that could establish a NEPA precedent. These consultations were considered valuable to the agencies involved. The task force recognizes that CEQ is not sufficiently staffed to provide all the services and consultation demanded. Especially lacking is the capacity to provide hands-on consultation with agencies to improve NEPA implementation and environmental analysis. Additional staff would also enhance CEQ's ability to implement task force recommendations.

The task force recommends that CEQ establish an additional professional position, or positions, to provide technical NEPA process consultation and better coordinate advice and guidance to agencies about improving NEPA implementation and environmental analysis.

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[119] Content Analysis Team, Forest Service, "Summary of Public Comment—NEPA Task Force" (Dec. 20, 2002), *available at* http://ceq.eh.doe.gov/ntf/comments/comments.html.

[120] The Forest Service's administrative appeal process was mandated by Congress in 1992 (P.L. 102–381) and is codified at 36 C.F.R. Pt. 215 (1993).

7.3.2. Annual Legal Forums

The discussion of definitions and legal standards of review further highlighted the need raised during several discussions of the focus areas, to more actively engage agency counsel with NEPA practitioners to discuss issues that are raised in litigation. CEQ should conduct annual NEPA Legal Forums to discuss important NEPA legal developments. Legal conferences held by agencies and other organizations could identify issues in areas of interest to practitioners that could benefit from CEQ guidance or clarification. An annual NEPA Legal Forum could provide a NEPA-legal-lessons-learned mechanism, identify the need for new CEQ guidance, and facilitate a consensus on NEPA legal issues. The proceedings of the forum should be prepared and made available to all NEPA practitioners.

The Task Force recommends CEQ hold annual NEPA Legal Forums to discuss important NEPA legal developments; discuss and recommend any CEQ guidance that might need to be clarified as a result of this case law; discuss NEPA issues of interest to the NEPA community; and facilitate consensus on addressing legal issues whenever possible.

7.3.3. Develop Handbook

As the task force discussed various issues, it became clear that the lack of a central repository of guidance organized by specific topics often results in unintentional neglect of existing guidance. Although NEPA practitioners are familiar with the Forty Most Asked Questions Concerning CEQ's NEPA Regulations, they are less familiar with other valuable CEQ guidance. Existing reference and guidance materials should be compiled and available by topic headings to facilitate access by all members of the NEPA community.

The task force recommends that CEQ develop a handbook that provides existing guidance identified by topic areas and is supplemented as new guidance is issued. The guidebook should be published on the Web, with updates published periodically in hardcopy to ensure accessibility.

7.4. Summary of Additional Recommendations

The task force developed additional specific recommendations described above. Four of those address several additional issues of concern. The last three facilitate efforts to address all areas of consideration and should be implemented as soon as possible. The task force recommends that CEQ:

- Develop a handbook to effectively integrate the NEPA process with Endangered Species Act Section 7 consultation, National Historic Preservation Act Section 106 coordination, Clean Air Act conformity requirements, and Clean Water Act total maximum daily load and Section 404 requirements in consultation with the Environmental Protection Agency, Advisory Council on Historic Preservation, Fish and Wildlife Service, NOAA Fisheries and other agencies, as appropriate.

- Explore the use of collaboration to develop and refine alternatives by working with a facilitator, and then provide guidance that outlines how agencies can document the process of refining a proposal and conforming to the CEQ regulations requiring the rigorous and objective evaluation of all reasonable alternatives.
- Develop a handbook on social, cultural and economic analysis similar to the cumulative effects and environmental justice publications.
- Study the effectiveness of alternatives for resolving disputes, including those about environmental mitigation and project implementation, both during and after the NEPA process.
- Establish a professional position, or positions, to provide technical NEPA process consultation and better coordinate advice and guidance to agencies about improving NEPA implementation and environmental analysis.
- Convene an annual NEPA legal forum to discuss important NEPA case law from that year, recommend any CEQ guidance needing clarification as a result of the case law, discuss other NEPA issues of interest, and facilitate a consensus on addressing legal issues.
- Develop a handbook that provides existing guidance identified by topic areas, is supplemented as new guidance is issued, and is published on the NEPAnet Website and in hardcopy.

Conclusion

The recommendations were crafted by individual task force teams and adopted by the entire task force. The recommendations are presented in the various chapters. The text of this report fully describes the recommendations, providing both context and additional task force insight on their implementation.

Three General Recommendations

The task force concluded that there are three general crosscutting recommendations for CEQ action that will facilitate efforts to make the NEPA process more effective and efficient. We believe that implementation of these general recommendations would also enhance action on specific task force recommendations, and therefore, they should be implemented as soon as possible.

The task force recommends that CEQ:

1. Establish an additional professional position, or positions, to provide technical NEPA process consultation and better coordinate advice and guidance to agencies about improving NEPA implementation and environmental analysis.
2. Conduct annual NEPA Legal Forums to discuss important NEPA legal developments; recommend and discuss any CEQ guidance that might need to be clarified as a result of this case law; discuss NEPA issues of high interest to the NEPA community; and facilitate consensus on addressing legal issues whenever possible.
3. Develop a CEQ develop a handbook that provides existing guidance identified by topic areas and is supplemented as new guidance is issued. The guidebook should be published on the Web, with updates published periodically in hardcopy.

Priority Recommendations

Recognizing that priorities must be set and understanding that action on the remaining recommendations should also be taken, the task force recommends that CEQ initially focus on the following five recommendations regarding categorical exclusions, environmental assessments, federal and interagency collaboration, programmatic analyzes and tiering, and adaptive management and monitoring.

1.Categorical Exclusions

The task force recommends that CEQ issue guidance to clarify and promote consistent practices for the development, documentation, public review, approval, and use of categorical exclusions by Federal agencies.

2. Environmental Assessments

The task force recommends that CEQ issue guidance to:

- Recognize the broad range in size of EAs;
- Clarify that the size of environmental assessments should be commensurate with the magnitude and complexity of environmental issues, public concerns, and project scope;
- Describe the minimum requirements for short environmental assessments; and
- Clarify the requirements for public involvement, alternatives, and mitigation for actions that warrant longer environmental assessments including those with mitigated findings of no significant impact.

In the near term, CEQ should issue a clarifying memo reiterating the minimum statutory and regulatory requirements for EAs when a short EA is warranted.

3. Federal and Interagency Collaboration

The task force recommends that CEQ form a Federal Advisory Committee to provide advice to CEQ on:

- Identifying, developing, and sharing methods of engaging Federal, State, local, and tribal partners in training designed to educate them about the principles of NEPA, agencies' missions, and collaboration skills.

- Developing guidance addressing the components of successful collaborative agreements and providing templates applicable to various situations and stages of the NEPA process.
- Developing training for the public on NEPA requirements and effective public involvement.
- Developing a "Citizen's Guide to NEPA."

4. Programmatic analyzes and Tiering

The task force recommends that CEQ convene a Federal Advisory Committee to provide advice to CEQ on the different uses of programmatic analyzes, tiering, and associated documentation; and, where necessary, provide advice on guidance or regulatory change to clearly define the uses and appropriate scope, range of issues, depth of analyzes, and the level of description required in NEPA documentation.

5. Adaptive Management and Monitoring

The task force recommends that CEQ convene an adaptive management work group to assess the applicability of NEPA guidance and regulations related to adaptive management and to consider integrating the NEPA process with environmental management systems. The proposed work group should prepare the appropriate adaptive management guidance or regulatory changes. Further, we recommend that the work group initiate a pilot study to identify, implement, and document representative actions using an adaptive management approach during the NEPA process and work collaboratively with CEQ to identify aspects of the analyzes and documentation requiring CEQ guidance or regulatory action.

The Role of Technology

CEQ can also facilitate and enhance NEPA improvement by acting on the recommendations in the Technology and Information Management and Security chapter. Agencies will continue, with or without CEQ, to develop information technologies and systems and improve information management to improve their NEPA processes. The task force believes that CEQ leadership, especially in a coordinating role, to encourage and facilitate the exchange of information among agencies and between the NEPA and information technology /information management communities has the potential to greatly enhance that progress.

Future Steps

The task force identified as priority recommendations those whose implementation we felt would best help NEPA practitioners improve the efficiency and effectiveness of the NEPA process. The recommendations presented in the Conclusion merit immediate attention and the remaining recommendations presented in the body of this report should be implemented in the future.

The task force included the mechanism for implementing the recommendations (e.g., FACA committee, working group) and we recognize that in some cases a different mechanism may ultimately be used. Making progress on implementing the recommendations to improve and modernize the NEPA process is what matters most.

This task force report will be published in hardcopy and electronic form. The report will be distributed using established distribution lists as well as by posting on the task force web page. After publishing and considering the report, CEQ will then inform the public and other agencies how it will address these recommendations.

We hope that our efforts provide the groundwork for a renewed and dynamic process to improve and modernize NEPA implementation.

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Appendix A

Appendix B

Appendix C

Appendix D

Appendix E