

# **NEPA for the 21<sup>st</sup> Century: A Comparative Analysis of Other Organizations' Environmental Review Structures**

**Final Report**

Submitted by

Lisa Gaines, Ph.D., Associate Director  
Sue Lurie, Ph.D., Consultant

Institute for Natural Resources  
Oregon State University  
210 Strand Agriculture Hall  
Corvallis, OR 97331

for

David Seesholtz  
U. S. Forest Service  
NEPA Initiative

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### **Disclaimer**

The authors are responsible for any mistakes or errors in interpretation within this report that might have arisen from the interviews.



# Executive Summary

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Since the National Environmental Policy Act of 1969 (NEPA) was enacted, agencies must consider the potential impacts of contemplated activities that have the potential to affect environmental resources. NEPA is among the most influential of agencies' required environmental decision making processes. The intended effect of the act has been for federal agencies to incorporate environmental considerations into their planning, taking an interdisciplinary, future-oriented view of how prospective actions might affect the environment and considering alternatives to those actions in a transparent, publicly accessible manner. Consequences have also included increasing commitment of budget and human resources to comply with the act's requirements as well as increased legal costs.

The Forest Service developed a collaborative research agenda, *NEPA in the 21st Century*, to help improve NEPA decision-making efficiency. *The Process Predicament* (USDA Forest Service, 2002) highlighted three specific problem areas – excessive analysis, ineffective public involvement, and management inefficiencies. The Institute for Natural Resources, at Oregon State University focused on these three problem areas in designing its study.

This report comprises an examination of how six different federal and state agencies carry out their environmental review and decision-making under NEPA or comparable laws at the overall program structure level. The research is exploratory; it identifies and investigates aspects of process efficiencies and innovations in various organizations performing the same functional activities—in this case, NEPA or NEPA-like processes.

The report does not recommend a structure or process as a 'best practice.' It does not attempt to evaluate the comparative efficiency of particular efforts or reforms that the studied organizations have implemented regarding their NEPA or equivalent processes, nor does it attempt to weigh the impact of the NEPA process on the quality of any organization's broader decision-making process or structure. The purpose of the report is to examine how other agencies manage their legally mandated environmental review and analysis processes at the program-wide level in order to provide the Forest Service with examples of alternative structures and policies that the agency may want to further investigate and potentially adapt to its own organizational structure and operations to increase NEPA process efficiency.

Patterns that emerged from interviews suggest that management is the linchpin, affecting other aspects of environmental decision-making in turn. Data suggest that the following five areas are important to NEPA efficiency:

**Commitment to change from top-level leaders.** When top management leads the way with a combination of vision, expectations, and concrete plans and systems to ensure accountability, those attributes appear to be vital to innovations and improvements in NEPA implementation.

**Performance measures, tracking and analysis systems for the environmental decision making process.** Well-constructed tracking and evaluation systems and performance measures can provide agencies with greater potential to increase efficiency and effectiveness. Developing such systems can help agencies define problems, focus on what matters in terms of performance, establish baselines, and determine trends and identify problem areas in order to take appropriate corrective actions.

**Open and accessible forums for providing and exchanging information.** Good communication systems for environmental decision-making processes that are highly accessible beyond organizational boundaries can help insure even, timely information dissemination to agency partners, public officials and the general public. It has the potential to establish and maintain process legitimacy and can help build trust by conveying openness, inclusiveness and transparency.

**Systems for quality control, consistency and competency.** Various strategies to standardize environmental decision-making processes can help increase efficiency. Approaches cited in this report include quality assurance plans, centralizing management structures, standardizing and frontloading scope of analysis, writing detailed scopes of work for consultants, utilizing style guides for user-friendly environmental documents, and building the competency of agency NEPA practitioners.

**Cultivating and maintaining interagency relationships.** A critical aspect of NEPA efficiency involves instituting interagency collaboration that effectively supports information exchange, mutual understanding, and negotiation. At a time of shrinking financial and human resources, no single agency has adequate information, finances or human resources to carry out environmental decision-making processes on its own. Establishing and maintaining good interagency therefore becomes crucial to environmental decision-making efficiency.

Choosing certain policies over others typically involves tradeoffs. It is therefore essential to have a clear understanding of the problem new strategies are designed to manage. Commitment of top-level management to translating recommendations from a combination of internal and external evaluations into environmental decision-making improvement activities appears to generate most innovative and effective process improvements. This underscores the need for management to take the lead in putting together and monitoring improvement activities.

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# List of Acronyms and Terms

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APS	Annual Planning Summary
CDF	California Department of Forestry and Fire Protection
CE	Categorical Exclusion
CEQA	California Environmental Quality Act
DOE	Department of Energy
DOT	Department of Transportation
EA	Environmental Assessment
ECB	Environmental Competency Building
EIS	Environmental Impact Statement
FHWA	Federal Highway Administration
FONSI	Findings of No Significant Impact
LLQR	Lessons Learned Quarterly Report
MDNR	Minnesota Department of Natural Resources
MOU	Memorandum of Understanding
NAEP	National Association of Environmental Professionals
NEPA	National Environmental Policy Act
NCO	NEPA Compliance Officer
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
ODOT	Oregon Department of Transportation

RFP	Request for Proposal
ROD	Record of Decision
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
TEA-21	Transportation Equity Act for the 21 <sup>st</sup> Century



# 1.0 Introduction

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Since the National Environmental Policy Act of 1969 (NEPA) was enacted and the Council on Environmental Quality (CEQ) was established, agencies are to consider the potential impacts of contemplated activities that have the potential to affect environmental resources. NEPA and its state equivalents are among the most influential of agencies' required environmental decision-making processes. The intended effect of the act has been for federal agencies to incorporate environmental considerations into their planning, taking an interdisciplinary, future-oriented view of how prospective actions might affect the environment and considering alternatives to those actions in a transparent, publicly accessible manner. Consequences have also included increasing commitment of budget and human resources to comply with the act's requirements as well as increased legal costs (Caldwell, 1998; Eccleston, 2001).

In its 2002 white paper, *The Process Predicament*, the Forest Service examined the problem of detailed environmental document preparation and estimated that planning and assessment accounts for 40 percent of its total direct work—an annual sum of approximately \$250 million. NEPA requirements play a large part in planning and assessment. To that end, the agency created a research agenda to improve the efficiency of its NEPA process.

The Forest Service developed a collaborative research agenda, *NEPA in the 21st Century*, to help improve NEPA decision-making efficiency. *The Process Predicament* highlighted three specific problem areas – excessive analysis, ineffective public involvement, and management inefficiencies. The Institute for Natural Resources, at Oregon State University, focused on these three problem areas, examining how other federal and state agencies organize and implement their NEPA or state equivalent processes.

The research is not a comparative study; rather, it is exploratory research. It identifies and investigates aspects of process efficiencies and innovations in other organizations performing the same functional activities—in this case, NEPA or NEPA-like environmental decision-making.

There are many factors that can shape an agency's environmental decision-making process, including its institutional, cultural, and sociopolitical environment. As a result of interlinked laws and regulations, court decisions, public expectations and perceptions, and political attention and oversight, agencies interpret and carry out those processes in different ways.

# 2.0 The Study

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## 2.1 Background and Purpose

The Forest Service developed a collaborative research agenda, *NEPA in the 21<sup>st</sup> Century*, to help improve NEPA decision-making efficiency. *The Process Predicament* highlighted three specific problem areas – excessive analysis, ineffective public involvement, and management inefficiencies. The Institute for Natural Resources, at Oregon State University, focused on these three problem areas, examining how other federal and state agencies organize and implement their NEPA or state equivalent processes.

It should be noted that efficiency has not been defined in the many references to it by different agencies. Based on interview responses, we use the term in this report to signify activities that minimize an organization’s resource expenditures in the appropriate execution of environmental decision-making.

The research is not a comparative study; rather, it is exploratory research. It identifies and investigates aspects of process efficiencies and innovations in other organizations performing the same functional activities—in this case, NEPA or NEPA-like environmental decision making.

The purpose of the report is to examine how other agencies manage their legally mandated environmental review and analysis processes at the program-wide level in order to provide the Forest Service with examples of alternative structures and policies that the agency may want to adapt to its own organizational structure and operations to increase NEPA process efficiency. To that end, the report does not attempt to evaluate the comparative efficiency of particular efforts or reforms that the studied organizations have implemented regarding their NEPA or equivalent processes, nor does it recommend a structure or process as a ‘best practice.’ It does not attempt to weigh the impact of the NEPA process on the quality of any organization’s broader decision-making process or structure. Such an analysis would require a much more detailed study.

## 2.2 Methodology

The report comprises an examination of how six different federal and state agencies carry out their environmental review and decision-making under NEPA or comparable laws at the overall program structure level. The original design contemplated including organizations from the non-governmental and private sector as well as government agencies. Informal conversations with environmental consultants and staff at various agencies clearly indicated that focusing on federal and state agencies would be more appropriate and relevant since two critical factors influencing efficiency—the legal and political contexts—were most similar among state and federal agencies.

The study includes three federal agencies and three state agencies. Criteria for choosing the organizations included any or a combination of the following: significant NEPA or

equivalent document preparation requirements in conjunction with agency activities;<sup>1</sup> innovations in environmental decision-making processes and structures; a high-visibility, contentious decision-making environment; and/or, a natural resource management component to agency responsibilities. Agencies were also investigated based on expressed interest by Forest Service personnel involved the *NEPA for the 21<sup>st</sup> Century* research agenda.

The agencies include:

- | <b>Federal</b>                      | <b>State</b>  |
|-------------------------------------|---|
| - Department of Energy              | - Minnesota Department of Natural Resources             |
| - Federal Highway Administration    | - Oregon Department of Transportation                   |
| - National Marine Fisheries Service | - California Department of Forestry and Fire Protection |

Prior to conducting interviews, the researchers reviewed academic and gray literature as well as information available on websites associated with the selected organizations. Interviewees comprised a purposive sample of 11 agency staff involved in NEPA or equivalent process management and oversight. In addition, the researchers had numerous informal conversations with various agency staff to clarify or verify information.

Primary data gathering consisted of semi-structured interviews—guided conversations within broad topic areas that allowed for additional, more focused questions to emerge from responses. Questions involved a combination of perceptions about matters such as analysis, document preparation, and public involvement in the environmental decision-making process as well as technical questions regarding program structure, staff skills and training, etc. Interviews, which were tape-recorded, lasted from one hour to 90 minutes and were then transcribed verbatim.

Confidentiality is essential to this type of research to ensure that interviewees freely express opinions and observations. Interview participants are therefore not identified by name or job title. Where direct quotes are used, any language that might identify the individual making the statement has been removed.

Transcripts were reviewed both for technical information and for patterns in responses that indicated critical factors influencing NEPA efficiency. As interviews progressed, the open-ended questions were refined to focus on those areas that appeared to be of greatest importance.

Two limitations must be noted with regard to the research design and methodology. First, it was important that interviewees have both broad and deep knowledge of the environmental review process for their particular agency. The sample was therefore

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<sup>1</sup> For instance, Luther (2007) noted that, in 1999, only six agencies filed more than 20 draft or final EISs. Along with the Forest Service, DOE and FHWA—two of the agencies examined—were among the top six.

purposive rather than random. As a result, interviewees were not neutral observers regarding agency performance. Bias beyond responses to questions about technical procedures likely exists. Second, the results are not generalizable. Generalizability, however, is not the objective of qualitative research; rather, such research provides the potential to extrapolate results, in whole or in part, to similar contexts. This is precisely the objective of this report: to present information on procedures and structures the Forest Service can utilize, modifying them as needed, for its unique organizational requirements.

## 3.0 Participating Agencies

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Early in the data-gathering stage, the researchers had several informal conversations with NEPA consultants and NEPA staff from different agencies to develop a list of possible private- as well as public-sector organizations to explore. It was the consensus of those being asked, when provided with information on the research background and design, that there was no real equivalent in the private sector or among non-profit organizations due to government agencies' distinct task environment. The task environment comprises the features of an organization's operating environment that may influence its ability to set and achieve goals (Scott, 2003).

While private-sector organizations occupy a predominately technical, market-oriented environment that rewards cost-benefit efficiency, government agencies exist in an institutional environment where external actors confer legitimacy based on compliance to socially derived rules, procedures, and requirements. Government entities must comply with two conflicting sets of demands: cost-benefit efficiency on the one hand, and representativeness and responsiveness on the other (Meyer and Scott, 1992; Powell and DiMaggio, 1992).

New laws such as NEPA, passed to reflect changing societal values, have often placed agencies in a difficult position between core missions and technologies reflecting their time of formation and new demands characterizing the contemporary institutional environment. As a result of diverse missions and objectives, oversight, legal decisions and changes in administrative regulations, agencies have developed different guidelines and structures for environmental decision-making to comply with NEPA or state-equivalent laws. It is therefore important to keep in mind the different contexts of the agencies studied when considering environmental decision-making structures and processes.

Investigation was exploratory—little was known or assumed at the outset about whether agencies at different government levels might have environmental decision-making policies, structures, or programs the Forest Service might be able to adapt or replicate. After analyzing the data, there appeared to be significantly higher relevance between the Forest Service context and that of the federal agencies than between the Forest Service and state agencies. As a result, examples and narrative is heavily weighted toward the federal agency research participants.

Some of the agencies selected have regulatory authorities, and some have a combination of regulatory and management responsibilities. Agencies were chosen primarily because of their *functional* similarities—the requirement to prepare environmental documentation justifying various projects under NEPA or state equivalent laws. It was determined that sampling agencies with missions beyond land management might provide information on innovations useful to the Forest Service for the purpose of developing its own agency

improvements with respect to environmental decision making. Table 1 displays the missions of the agencies selected for this report.

<b>Table 3.1: Missions of Studied Organizations</b>	
<b>Organization</b>	<b>Mission</b>
<b>U.S. Department of Energy (DOE)</b>	To advance the national, economic, and energy security of the United States; to promote scientific and technological innovation in support of that mission; and to ensure the environmental cleanup of the national nuclear weapons complex.
<b>National Marine Fisheries Service (NMFS)</b>	Stewardship of living marine resources through science-based conservation and management and the promotion of healthy ecosystems.
<b>Federal Highway Administration (FHWA)</b>	Improve mobility on our nation's highways through national leadership, innovation, and program delivery.
<b>Oregon Department of Transportation (ODOT)</b>	To provide a safe, efficient transportation system that supports economic opportunity and livable communities for Oregonians.
<b>Minnesota Department of Natural Resources (MDNR)</b>	Work with citizens to conserve and manage the state's natural resources, to provide outdoor recreation opportunities, and to provide for commercial uses of natural resources in a way that creates a sustainable quality of life.
<b>California Department of Forestry and Fire (CDF); Resource Management and Forestry Program</b>	(CDF) Protects the people of California from fires, responds to emergencies, and protects and enhances forest, range and watershed values providing social, economic and environmental benefits to rural and urban citizens.

The agencies have various structures and responsibilities, described as follows. These are not comprehensive descriptions; rather, they provide limited, basic information on agency responsibilities and structures the Forest Service may wish to utilize as a basis of comparison to its elemental responsibilities and structures.

***U.S. Department of Energy***

The Department of Energy (DOE) has gone through multiple changes in mission and authority since its inception in 1946 as the Atomic Energy Commission, created to maintain control over atomic research and development. The current DOE has multiple missions handled by different program offices. Among its programs are oversight of the nation’s nuclear weapons stockpile, environmental cleanup of the country’s weapons complex, research, and power marketing. In addition to program offices, the agency

maintains field offices within various programs. It has a mix of regulatory and management authorities. Because of its involvement in nuclear materials oversight and facilities siting, its environmental decision-making can be highly contentious.

### ***National Marine Fisheries Service***

The National Marine Fisheries Service (NMFS) started out as the nation's first conservation agency in 1871 with creation of the U.S. Commission of Fish and Fisheries. The agency has gone through a number of changes and exists today as part of the National Oceanic and Atmospheric Administration within the Department of Commerce. NMFS manages, conserves, and protects living marine resources within the United States' Exclusive Economic Zone, comprising water three to 200 miles offshore, by, among other things, promoting sustainable fisheries. NMFS maintains six regional offices. It also works with eight fisheries management councils comprising federal and state agencies and the public responsible for developing fisheries management plans. NMFS enforces the Marine Mammal Protection Act and the Endangered Species Act (ESA) (National Marine Fisheries Service, Undated). Based on NMFS objectives to support both commercial fishing and sustain fish stocks, several of which are now listed under ESA, its environmental decision-making has become increasingly conflict prone over the last several years.

### ***Federal Highway Administration***

As with the other cited federal agencies, the Federal Highway Administration (FHWA) evolved since its origin—in this case, the Office of Road Inquiry in the Department of Agriculture in 1893. It is currently housed in the Department of Transportation. The FHWA is essentially a pass-through funding grant agency carrying out a variety of surface transportation programs. It supports state and local transportation planning and projects, as well as projects on various lands under federal and tribal ownership, through a combination of technical and financial assistance and oversight as well as training in transportation related fields. Along with its headquarters in Washington, D.C., the FHWA maintains division offices in all 50 states, along with other locations, and works closely with states' departments of transportation. FHWA is a management agency with significant support functions. As transportation projects can often involve sensitive and ESA-listed habitats and species, the potential for conflict with respect to decision-making can be considerable.

### ***Oregon Department of Transportation***

The Oregon Department of Transportation (ODOT) began in 1913 with creation of the State Highway Department. Legislation in 1969 created Oregon's Department of Transportation. ODOT oversees a range of state transportation programs through various division offices and five regional offices. The five-member Oregon Transportation Commission oversees department policy, planning and management. In 1971, ODOT's Environmental Unit was created within its Highway Division to prepare environmental impact statements for projects using federal funds. ODOT has management responsibilities dealing mostly with state surface transportation infrastructure project design and implementation as well as infrastructure maintenance. According to interviews, ODOT has not been the object of conflict and lawsuits with respect to

environmental decision-making. That is not to say the agency does not encounter resistance; however, it may be that the nature of their projects may not be as controversial as those dealing with public land and natural resource management. Furthermore, it may be that, because of the agency's relationship with FHWA, the federal agency buffers ODOT's perceived responsibility somewhat when it comes to NEPA-related decisions.

### ***Minnesota Department of Natural Resources***

The Minnesota Department of Natural Resources was established in 1931 as the state Department of Conservation, combining four state government departments: forestry, game and fish, drainage and waters, and lands and timber. The agency became the Department of Natural Resources in 1971. It oversees programs for, among other things, hunting and fishing, recreation, species and habitat protection and improvement, fire management, minerals management, and public lands and waters management through eight divisional and four regional offices. Following passage of NEPA, Minnesota passed its state environmental policy act (MEPA) in 1973. The state Environmental Quality Board establishes the rules for conducting environmental reviews, similar to the federal CEQ.

### ***California Department of Forestry and Fire Protection***

The California Department of Forestry and Fire Protection (CDF) has two main programs, fire protection and resource management, with each program having several subprograms. It is divided into north and south regions along with 21 ranger units. Many subprograms, such as Environmental Protection, span regions and programs. Research for this report is focused on the Resource Management and Forestry Program and, in particular, the Environmental Protection Program.

The Resource Management and Forestry Program goal of achieving forest sustainability involves, among other things, enforcing the California Forest Practices Act. Under provisions of the act, private landowners wishing to harvest timber must develop a Timber Harvest Plan (THP), subject to public review and comment and approved by CDF. The California Environmental Quality Act (CEQA) would further require an environmental impact report (EIR); however, the legislature amended CEQA in 1975 to allow THPs to be developed through a "function equivalent process." Infrastructure projects or timberland conversion falls outside of THP functional equivalent processes and must undergo a CEQA process. In addition to several other programs, Resource Management and Forestry also manages eight state demonstration forests totaling 71,000 acres and coordinates fuel reduction activities. Policy is set by the state Board of Forestry and Fire Protection.

The agency encounters considerable conflict regarding its commercial timber harvesting oversight and permitting. Those being interviewed reported that resource management controversy tended to be higher in the coastal forest areas due to more listed species and higher human populations generally more attentive to endangered species issues.

## 4.0 Factors Influencing Performance Efficiency

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Since NEPA's passage more than 35 years ago, a considerable body of literature has developed regarding its controversy, prescriptive recommendations for better implementation, and technical guidance. Less has been written about the perceptions and practical challenges experienced by federal agencies responsible for its implementation. Two studies are particularly instructive.

In 1997, the Council for Environmental Quality (CEQ) published *The National Environmental Policy Act: A Study of Its Effectiveness after Twenty-Five Years* examining NEPA's effectiveness and features important to successful NEPA processes. The study included a broad range of participants in the public, non-governmental, and private sector. Participants' responses clustered around four significant issues (Council on Environmental Quality, 1997:7):

- NEPA processes frequently took too long and cost too much;
- Agencies made decisions before hearing from the public;
- Documents were too long and technical for many people to use; and,
- Training for agency officials, particularly senior leadership, was inadequate.

A comparative study of 12 federal agencies' NEPA process implementation found that although there was considerable variation in the authority of responsible NEPA officials and the scope of their duties, there were several common themes (Smythe and Isber, 2003:290):

- Agency NEPA officials face increasing workloads;
- Most agency headquarters NEPA offices lack a national tracking system to monitor the number and types of NEPA documents that their agencies produce;
- In none of the agencies studied did NEPA emerge as the principal cause of excessive delays or costs;
- NEPA compliance officers frequently cited needs for additional guidance and training in the analysis of cumulative and indirect effects and for more specific guidance on the appropriate level of analysis; and,
- Several agencies have developed elements of what could be called "NEPA Best Practices" but no formal process exists for sharing these practices with other federal agencies.

The findings in this report echo some of the findings from the above research. Patterns that emerged from interviews suggest that management is the linchpin, affecting other aspects of environmental decision-making in turn. Data suggest that the following five areas are important to NEPA efficiency:

- Commitment to change from top-level leaders;
- Performance measures, tracking and analysis systems for the environmental decision making process;
- Open and accessible forums for providing and exchanging information;
- Systems for quality control, consistency and competency; and,
- Cultivating and maintaining interagency relationships.

The following sections provide examples of programs, policies, and strategies illustrating the foregoing points. Implementing NEPA is a complex, continually changing process. Similarly, agency formal and informal responses are dynamic and the amount of potentially useful information available is vast, thus a comprehensive examination of the information is beyond the scope of this research; however, Appendix A includes a list of websites for additional information on concepts, programs, and the like presented in this report.

#### **4.1 Commitment to Change from Top-Level Leaders**

Research for this report indicates that, when top management leads the way with a combination of vision, expectations, and concrete plans and systems to ensure accountability, those attributes appear to be vital to innovations and improvements in NEPA implementation. The following experiences illustrate the extent to which strong leadership coupled with objective problem definition led to significant NEPA process improvements.

The Department of Energy (DOE) underwent significant changes in its structure and process for environmental decision-making beginning in 1989. Energy Secretary James Watkins instituted an overhaul of the structure for NEPA review and approval based on repeated criticisms of the agency's NEPA compliance and increasing legal actions. Further changes took place under Watkins' successor, Hazel O'Leary. Leadership directives were aimed at streamlining the agency's NEPA process and minimizing preparation and review time and cost. In addition, leadership, direction, and commitment at the top of the Department formed the basis for more comprehensive NEPA training, more robust public involvement, and better public accessibility regarding its NEPA program. The policies put in place by DOE leadership were for the purpose of making the process and documents more transparent and useful for both agency decision-makers and the public as part of DOE's effort to reduce the median time for environmental impact statement (EIS) completion (National Academy of Public Administration, 1998).

Similar to what other agencies experienced since NEPA was passed, the Federal Highway Administration (FHWA) found its average time and cost for projects had substantially increased. Stakeholder perceptions regarding ineffective interagency cooperation on FHWA projects led to legislation requiring environmental streamlining through the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21), enacted in 1998. There have been additional legislative and agency directives that refine and strengthen the intent and provisions of TEA-21.

In 2002, as part of FHWA's response to Executive Order 13274 linking timely delivery of transportation projects with environmental protection, Administrator Mary Peters issued a department memorandum emphasizing commitment to environmental streamlining and stewardship. FHWA developed a department-wide plan that included, among other things, national priority areas known as Vital Few Goals, which include expectations, measures, and methods for increasing the efficiency and timeliness of environmental review coupled with environmental stewardship objectives.

The FHWA has developed, and continues to add to, its Environmental Toolkit website to further the agency's commitment to continual improvement in its environmental decision making processes.<sup>2</sup> The FHWA has put a good deal of emphasis on enhancing interagency partnerships as part of its environmental streamlining efforts, including the creation of an executive level interagency task force and implementation of an interagency dispute resolution system. Along with studies regarding the timeliness of Department EISs since NEPA enactment, FHWA created an automated data system to track timeframes for EISs and EAs. This is only a partial list of the actions FHWA has taken to increase its NEPA efficiency.

At the turn of the 21<sup>st</sup> century, the National Marine Fisheries Service (NMFS) had reached a crisis in terms of meeting its mission and objectives. Court actions had increased ten-fold, while the agency's success rate in defending its management decisions had gone from flawless to less than 50 percent. A National Academy of Public Administration 2002 report noted a number of structural, management and funding problems fueling criticism and litigation. The report noted that NMFS was increasingly losing its cases, not on the basis of its science, but due to inadequate analytical, regulatory and managerial processes (National Academy of Public Administration, 2002). According to one interviewee, at that time, NMFS had no regional staff with NEPA expertise.

The agency underwent several internal and external reviews. Management subsequently developed several priority initiatives, including regulatory streamlining to improve NEPA compliance and reduce court losses. Elements of streamlining included, among other things, "front-loading" NEPA processes for fisheries management plan development by specifying early involvement of all key regional, Science Center, and Council staff; and hiring environmental policy coordinators for each of its regions to ensure NEPA process consistency, manage front-loading activities, and coordinate national and regional NEPA training programs (National Marine Fisheries Service, 2002). Interviews with NMFS staff indicate the agency has expanded its front-loading concepts for actions such as analysis, developing scope of work requests for proposals (RFPs), and internal scoping. Those interviewed perceive that NEPA structural and process changes have significantly increased process consistency and efficiency, improved litigation successes, and enhanced interagency relations.

The Oregon Department of Transportation's (ODOT) streamlined environmental decision-making for its bridge infrastructure was management's response to a pending

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<sup>2</sup> See at <http://www.environment.fhwa.dot.gov/index.asp>

crisis. ODOT had been aware of potential structural problems with its bridge inventory for some time. In 2000, when two bridges in different parts of the state exhibited large working shear cracks, ODOT did a full inventory, finding approximately 400 bridges in need of repair or replacement within a ten-year timeframe. Leadership at the agency developed the Oregon Bridge Delivery Program, which won multiple national streamlining and environmental awards. Among other things, the program developed “green bridge” performance standards and emphasized interagency collaboration to develop and implement programmatic permitting (Oregon Department of Transportation, 2003, Gaines and Lurie, 2007). Management is currently in the process of trying to determine how best to diffuse streamlining and other aspects of the Bridge Delivery Program into other agency programs.

## 4.2 Tracking and Performance Measures

Well-constructed tracking and evaluation systems and performance measures can provide agencies with greater potential to increase efficiency and effectiveness. Developing such systems can help agencies define problems, focus on what matters in terms of performance, establish baselines, and determine trends and identify problem areas in order to take appropriate corrective actions.

The participating agencies have various ways of tracking NEPA-related actions that can help provide an overall picture of trends such as lawsuits, timeliness for EAs and EISs, costs, project milestones, and lessons learned. Based on interviews and document reviews of the agencies studied, DOE and FHWA appear to be the only agencies which have institutionalized NEPA-related tracking programs. According to Luther (2007), only DOE and the U.S. Department of Transportation (including FHWA) routinely track and maintain information on NEPA completion times. While many federal agencies tend to track the number of federal actions requiring EISs, the FHWA tracks *all* NEPA-related projects (Luther, 2007).

DOE’s Lessons Learned Program was established as part of the agency’s 1994 secretarial directive. With the intent of fostering continuous improvement of DOE’s NEPA Compliance Program, the Lessons Learned Program tracks EA and EIS completion times, costs, and other performance measures. It also tracks the on-the-ground lessons that NEPA document team members have learned during the NEPA process on a particular project.

Reporting is through the agency’s Lessons Learned Quarterly Report (LLQR) which, among other things, also reports on NEPA developments and innovations across federal agencies. The report is accessible to anyone via the DOE website.<sup>3</sup> The program won the National Association of Environmental Professionals’ (NAEP) 2000 President’s award for its detailed self-examination of its NEPA program, information sharing, NEPA process efficiency measurement program and continuous NEPA program improvement (U.S. Department of Energy, 2000).

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<sup>3</sup> See at <http://www.eh.doe.gov/NEPA/lessons.html>.

DOE found, through a root cause analysis, that the attention of senior headquarters and field management to scope, content, and the schedule is a key to completing EISs in shorter timeframes (U.S. Department of Energy, 2003a; U.S. Department of Energy, 2006a). To improve senior management attention to early planning, resource allocation, and public involvement, DOE now requires each secretarial officer and head of field organization personnel with NEPA responsibilities to submit annual NEPA planning summaries (APS) (U.S. Department of Energy, 2003c). According to interviews and documents, the DOE NEPA community has mixed feelings about the APSs— primarily that they are time-consuming. Nonetheless, senior level management has encouraged the continued use of this tool to keep management informed and involved in the NEPA process (U.S. Department of Energy, 2005).

DOE policy requires the Office of NEPA Policy and Compliance (The NEPA Office) to obtain comments on lessons learned in the process of completing NEPA documentation and to distribute this information through its *Lessons Learned Quarterly Report (LLQR)*. The NEPA Office collects this information through questionnaires<sup>4</sup> and encourages all members of the NEPA document team (including project managers, reviewers, and contractors) to complete the questionnaire (U.S. Department of Energy, 2003b). The NEPA Office then reviews the responses, selects statements about what did and did not work, and publishes anonymous comments in the LLQR under one of eight categories, shown in Figure 2 (U. S. Department of Energy, 2003b).

<b>Figure 4.1: “What Worked and What Didn’t Work” Categories for DOE Lessons Learned Program</b>	
<ul style="list-style-type: none"> <li>- Scoping</li> <li>- Data Collection/Analysis</li> <li>- Schedule</li> <li>- Teamwork</li> </ul>	<ul style="list-style-type: none"> <li>- Process</li> <li>- Usefulness</li> <li>- Enhancement/Protection of the Environment</li> <li>- Other issues</li> </ul>

The publishing office notes that information presented in the “What Worked and What Didn’t Work in the NEPA Process” section of the LLQR reflects the personal views of individual questionnaire respondents and should not be taken as recommendations from The NEPA Office, unless otherwise indicated.

The Federal Highway Administration (FHWA) developed and implemented its environmental document tracking system (EDTS) as part of its department-wide effort to increase NEPA efficiency through its Vital Few Goals for environmental streamlining and stewardship. Objectives of the EDTS system include monitoring the progress of projects and identifying factors affecting NEPA efficiency. It tracks document timeliness

<sup>4</sup> See at <http://www.eh.doe.gov/nepa/llq/new1.cfm>

for both EAs and EISs. To identify and explain the amount of time it takes to complete the NEPA process, from notice of intent (NOI) to record of decision (ROD), FHWA provides a series of studies and data available online.<sup>5</sup>

The other participating agencies did not identify any formal tracking systems. As one interviewee noted, if there is any system at all, tracking tends to fade away when the person in charge of it leaves. Setting up and maintaining such systems require commitment of human and financial resources as up-front costs at a time when many agencies are dealing with diminishing budgets and workforce numbers. Without determining what is important to track and establishing a baseline, however, it is difficult to objectively verify what and how various factors influence NEPA process efficiency and what corrective actions might provide the most appropriate and cost-effective improvements.

Since its beginning, NEPA has attracted strong proponents and opponents. Advocates support the act's requirements to involve the public in federal agency decision-making, and to integrate environmental considerations and minimize environmental harm in agency planning processes and project implementation. NEPA critics regard the act as a perceived obstacle to maximizing economic and efficiency goals (Tripp and Alley, 2004). One area of concurrence is the belief that the NEPA process is time-consuming.

Agencies tend to focus on time and cost as measures of their NEPA process performance. Accurately tracking the length of time required to complete the NEPA process and setting realistic goals are essential for measuring and improving NEPA process performance. For example, DOE, through its 1994 secretarial directive, set a median time of 15 months as the performance measure for EIS completion. FHWA, through its Vital Few goals, set a median completion time of 36 months for EISs and 12 months for EAs (FHWA, Undated (c)). According to interviews, performance efficiency for the completion of EAs at the Minnesota Department of Natural Resources (MDNR) is four to six months.

In addition having performance measures for the time and cost to complete the NEPA process, DOE also has performance measures for quality, including EPA ratings, influence on decision making, protection of the environment, and the ability to defend EISs and EAs; and flexibility, including the number of RODs from original EISs and the supplemental analysis showing that the original EIS can be used (Department of Energy, 2003a).

In examining its own process performance, FHWA "...observed that failed processes or delayed projects could be traced to a disintegrated and disconnected approach to meeting NEPA and other requirements" (Luther, 2007:9). It has engaged in a number of activities to measure its performance, including collecting both quantitative and qualitative data on the time it takes to complete the NEPA process (Louis Berger Group, 2001), and resource agency and transportation agency perceptions of success in the project development process (Gallup Organization, 2004). The agency has also established performance

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<sup>5</sup> See at <http://www.environment.fhwa.dot.gov/strmlng/es10measures.asp>.

measures for several public involvement tools, such as project-specific open houses/workshops, comment forms, public hearings, and direct mailings.

Performance measures for completion time can be difficult to interpret. Luther (2007) notes that agencies generally measure completion timelines from the date they file a notice of intent through the date the record of decision is completed. Using this measurement without qualifying it can skew perceptions of the time needed to complete a NEPA process. Project size and complexity as well as public attention to contemplated actions have strong influences on these measures. Projects having significant environmental impacts most likely will not only have to comply with NEPA but also with other environmental laws that can affect the timeline. The NEPA process may also stop and restart due to factors such as lack of funding, changes in agency priorities, and engineering requirements or other non-NEPA obligations (Luther, 2007).

As the foregoing examples illustrate, developing appropriate, accurate measures are important in terms of being able to interpret and explain actual performance in relation to developed metrics. Having performance measures and tracking systems offer agency personnel a broad picture of how well they are meeting certain targets and may help shed light on unusual events or overall trends affecting agency ability to meet targets influenced by environmental decision making.

### **4.3 Open and Accessible Forums for Providing and Exchanging Information**

Most public-sector state and federal organizations have diverse objectives and programs with complex organizational structures. When a law such as NEPA affects multiple programs, those involved in its application will likely benefit from a communication system that keeps them informed with regard to how the law is interpreted and applied. Good communication systems for environmental decision-making processes that are highly accessible beyond organizational boundaries can help insure even, timely information dissemination to agency partners, public officials and the general public. In addition, it can produce better results as accessibility can also increase participation (National Environmental Policy Act Task Force, 2003). Doing so provides benefits beyond ensuring that all stakeholders are working with the same information and receiving it in a timely manner. Various interviewees also perceived that it establishes and maintains process legitimacy and can help build trust by conveying openness, inclusiveness and transparency.

#### **4.3.1 The Internet**

The advent of the World Wide Web has immensely increased the capacity for organizations to provide consistent guidance and forums for NEPA. All of the agencies researched provide web pages with information on document preparation. Federal agency web sites have links to NEPANet, hosted by CEQ, which can be accessed by anyone.<sup>6</sup>

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<sup>6</sup> See at <http://ceq.eh.doe.gov/nepa/nepanet.htm>

Of the agencies examined, DOE and FHWA have NEPA websites with comprehensive information that exemplify openness and accessibility.<sup>7</sup> Both are discussed in several places in this report. The only significant change in DOE's NEPA website openness is removal of certain EISs and EAs for security reasons, as a result of September 11<sup>th</sup>. DOE's Lessons Learned Quarterly Report, discussed elsewhere, is a rich source of NEPA related information and developments, not just within DOE, but across federal agencies.

FHWA has instituted a number of programs and actions aimed at information sharing in order to carry out its environmental streamlining and stewardship objectives. Among them, the agency created an environmental streamlining website that includes the agency's *Success in Stewardship* monthly electronic newsletter that showcases environmental streamlining efforts across the country. In addition, the department hosts the Re:NEPA "community of practice" linked website for exchange of NEPA questions, knowledge and ideas. The site contains a list of NEPA topic areas and is an open forum available to anyone.<sup>8</sup>

The *Successes in Stewardship* link is part of the larger FHWA highly accessible Environmental Toolkit site.<sup>9</sup> The web page is intended to be an information source for consultants as well as transportation related organizations and offices; however, it has an extensive list of documents, guidance tools and other information on a variety of environmental decision-making topics.

### **4.3.2 Public Participation**

Although NEPA calls for public information and input into the environmental decision-making, meaningful public involvement is not always achieved from either the agency or the citizen perspective. Interviewees noted the challenges of creating effective public participation policies, procedures, and practices that, in the words of one, "do not make more public participation, but better public participation."

When asked if there was anything unique regarding their public participation process that other agencies could learn from, none of interviewees mentioned any particular policies or practices as standouts. In more than one instance, however, those interviewed noted that "one-size-fits-all" does not work and that processes need to be tailored to the local context. Although no one had an ideal approach to public participation, the following elements are worth mentioning.

DOE's public participation experience indicates that reducing public participation is not productive. In several cases, where staff set up short comment periods, these shortened periods were subsequently extended and frequently exceeded the comment periods for arguably similar EISs with longer original comment periods (U.S. Department of Energy, 2003a). For about 25 percent of its draft EISs, DOE extends its public comment period, with the average extension period being 30 days (U.S. Department of Energy, 2003a).

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<sup>7</sup> See DOE site at <http://www.eh.doe.gov/nepa/>; see FHWA site at <http://www.environment.fhwa.dot.gov/projdev/index.asp>

<sup>8</sup> See at <http://nepa.fhwa.dot.gov/ReNepa/ReNepa.nsf/home>

<sup>9</sup> See at <http://www.environment.fhwa.dot.gov/index.asp>

A strategy being implemented by one of the NMFS regional offices is to complete the internal scoping with partner agencies before involving the public. The objective is to strengthen and clarify the purpose and need, and to have what NMFS refers to as “preliminary or concept alternatives” presented in the NOI. This approach is premised on the assumption that, if the public has a clearer idea of what NMFS is thinking regarding a particular project, they will respond in more specific ways. An interviewee explained the process:

We don't even flesh [the alternatives] out. We're just literally saying, “Well, ‘no action’ would mean we don't permit it—there'd be no habitat plan implemented for that.” And we might have another alternative or two that team has said, “These are logical. These are NEPA alternatives that we would want to look at as an agency anyway. And, the public may have a way to help us flesh it out, or they may have additions to that, but we probably will look at that anyway.” But, it doesn't mean that we don't want more refinements to those. And, there are no details to them, really. They're just ideas. They're concept alternatives.

In the two years that this practice has been implemented, NMFS is finding that a more specific NOI stimulates better public comments. An interviewee offered:

What we have seen is less general comments like, ‘Save fish,’ or ‘Pull all the dams out.’ We're getting more comments like, ‘Under that alternative, you need to consider ‘x’,’ or ‘We think you should also add an alternative that looks at ‘y’.’

If project design and approval is a long-term process, maintaining public participation can be difficult. These are ongoing issues for FHWA and ODOT as transportation projects are often multi-year approval processes. ODOT feels it has a fairly good record on public participation but has challenges with “public involvement fatigue” because of the number of meeting involved. As one interviewee put it:

We are asking the public to commit significant time and energy. We recognized that's a potential burden and that, if we are not respectful of their time and energy, we're not going to continue to get their involvement.

Agencies continue to struggle with engaging the public, maintaining interest in participation, and conducting processes that reduce the tendency of post-decisional appeals; however, there have been actions to limit the time for appeals. Among other things, amended Section 6002 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), establishes a 180-day statute of limitations, which starts with publication of a notice in the Federal Register, for litigating decisions regarding final permits, licenses, or approvals.<sup>10</sup>

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<sup>10</sup> For more information, see <http://www.environment.fhwa.dot.gov/strmlng/newsletters/jul06nl.asp>

None of the agencies examined have developed what they consider the ideal public participation process that can provide optimum commitment and feedback and reduce conflict regarding agency decision-making. Nevertheless, interviews and document reviews indicate that decision-making accessibility and attention to participatory needs increases trust and reduces potential for conflict without significantly affecting the time needed for environmental decision making.

## **4.4 Quality control, consistency, and competency**

Agencies are implementing several strategies to foster quality, consistency, and competency for their NEPA processes. Strategies that emerged from the interviews include the use of quality assurance plans, centralizing management structures, standardizing and frontloading scope of analysis, writing detailed scopes of work for consultants, utilizing style guides for user-friendly EISs, and building the competency of agency NEPA practitioners.

### **4.4.1 Quality Assurance Plans**

Some of the agencies interviewed have either developed, or are in the process of developing, quality control guidelines to continuously improve NEPA program efficiency and effectiveness. During the May 2006 DOE NEPA Compliance Officer (NCO) meeting, *Leading a Top-Notch NEPA Program*, the importance of quality assurance was a primary theme. Presenters reviewed how the criteria for quality assurance plans, as outlined in DOE directives, apply to NEPA documents. NCOs were in favor of having the NEPA Office develop a model DOE-wide NEPA quality assurance plan with guidelines for developing NEPA documents. NCOs further suggested that, during the next DOE-wide NEPA contracts procurement process, contractors are provided with a model quality assurance plan (U.S. Department of Energy, 2006b).

In July 2006, DOE convened a group of DOE-wide staff who volunteered to serve on a quality assurance guidance development team. The team goal is to develop a quality assurance model with a companion guidance document that “preserve[s] Program and Field Office flexibility to tailor quality assurance programs to their needs” (U.S. Department of Energy, 2006c:9). The model quality assurance plan would ideally meet the requirements of DOE’s quality assurance order, would be consistent with DOE-wide practices for quality assurance, and would incorporate the best elements of existing DOE NEPA quality assurance plans (U.S. Department of Energy 2006c:9).

As of March 2007, the NMFS policy requires designated Responsible Program Managers to develop regional Quality Assurance Plans (National Marine Fisheries Service 2007). These plans are to cover the NEPA review process, the development of a NEPA administrative record, and NEPA legal sufficiency documentation. More specifically, the Quality Assurance Plan will:

- Outline the roles and responsibilities of the participants in the NEPA review process
- Develop tracking guidelines for the review of NEPA documentation
- Outline the interactions between originating office staff, the Responsible Project Manager, and other reviewers in order to ensure frontloading of the review process and prevent review-related delays or surprises (National Marine Fisheries, 2007:13)

#### 4.4.2 Centralization

The agencies participating in this research have different structures for environmental decision making—some are more centralized than others. NEPA and analogous structures are continually evolving as program demands change.

At DOE, the Office for NEPA Policy and Compliance (The NEPA Office) is the center of NEPA expertise. Its staff works with NCOs and NEPA Document Managers across DOE programs and field offices, providing them with technical assistance to help meet their NEPA-related responsibilities. In addition to organizing an annual conference for NCOs, the NEPA Office provides numerous tools to facilitate NEPA compliance, including a variety of documents on its website. Examples include records of decision issued by the DOE since 1994 along with other full-text searchable DOE NEPA documents, status and schedules of in-progress DOE NEPA reviews, annual planning summaries (APSs), and a compilation of DOE NEPA guidance tools prepared in response to the needs identified by the agency-wide NEPA community.<sup>11</sup> The NEPA Office is the only entity within DOE with the authority to issue guidance.

Signing authority centralization began in 1989. While the move had the intended effect of improved compliance, there were complaints regarding, among other things, inefficiency in document review and preparation as well as delays in final document preparation. A 1994 secretarial policy aimed at increasing NEPA efficiency granted EA signing authority to program and field offices (National Academy of Public Administration, 1998). With few exceptions, the office of general counsel currently handles approval for EISs. Reports and interviews indicate the perception that centralized EIS approval provides a higher level of quality control and consistency regarding policy interpretation and an added level of independent, objective review.

The Federal Highway Administration's centralized NEPA-related functions are housed in its Office of Project Development and Environmental Review.<sup>12</sup> The office provides NEPA support to the state departments of transportation (DOTs), which are responsible for developing the necessary analyses. FHWA currently has a pilot program delegating NEPA signature authority to various DOTs. It is too early to determine whether signing decentralization increases NEPA process efficiency.

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<sup>11</sup> For more information, see <http://www.eh.doe.gov/nepa/>

<sup>12</sup> See at <http://www.environment.fhwa.dot.gov/strmlng/usctac.asp>

ODOT has staff with NEPA expertise in each of its five regions. In addition, the agency has a statewide coordinator to provide support and coordination for the regions. ODOT is responsible for all required NEPA analysis. It prepares a recommendation document that justifies its decision; however, FHWA reviews the NEPA documents and maintains signing authority.

The MDNR environmental decision process includes an environmental assessment worksheet (EAW), which is analogous to an EA. It comprises a six-page questionnaire covering issues such as a project environmental setting, environmental impacts, and planned mitigation measures. The department also carries out EIS processes. The EAWs are generally signed by principal project planners. The ROD is signed by the department's deputy commissioner.

As discussed elsewhere, CDF has two main programs and different regions for different functions. The environmental protection program –which carries out environmental reviews – acts as an umbrella program that spans CDF programs. CDF retains approval authority in its central office for documents prepared under the California Environmental Quality Act (CEQA). The department, under provisions in the act, is certified to develop a “functional equivalent” to the state Environmental Impact Report (EIR), similar to NEPA's EIS. The director, or a designee at the regional level, has signing authority for THPs. For CEQA documents, the deputy director or director maintains signing authority, depending on the document. The deputy director may sign exemptions or negative declarations; the director typically signs EIRs. For many years, CDF reviewed THPs at one level of the department and reviewed timberland conversion and construction projects at another level. Based on criticisms from the public and from other agencies that this was a piecemeal approach to environmental decision making, the agency instituted a new policy of concurrent review.

Reports and interviews suggest that there are tradeoffs to consider regarding centralization versus decentralization for environmental decision making oversight. Decentralization offers a level of efficiency through elimination of redundancy and concomitant time needed for review. Conversely, centralization appears to offer better document quality control and, perhaps, efficiencies over a longer time horizon based on fewer court challenges overall as well as fewer successful court challenges. It is therefore important, when determining what constitutes an appropriate structure for environmental decision-making, to establish just what problems it is designed to manage.

#### **4.4.3 Standardizing and Frontloading Scope of Analysis**

Although litigation has decreased since the 1970s, agency concerns regarding the *threat* of litigation still has an impact on the NEPA process, particularly for complex or controversial projects (Luther, 2007). This threat is frequently reflected in the agency's preparation and production of required NEPA documents, particularly EISs. The strategy often results in unnecessary data collection, over-analysis, and voluminous documents.

All interviewees agreed that this continues to be a challenge; however, some explained their approaches to minimizing the tendency to overanalyze. As one interviewee explained:

...what happens is that nobody has thought through ‘What is it we need in this document, in this review to get us to a record of decision about significance specifically connected to the action...We don’t need anything else; we just need that.’ No one is thinking through that before they start working. And, because you don’t think through that, the contractors or even your internal staff [are] just writing everything that they think is important. And most of it isn’t.

Another interviewee offered an additional perspective:

[During internal scoping] you get every agency that has an interest in the proposal that you’re suggesting, and you say, ‘What’s of interest to you? Where are your interests? What’s of concern to you? And let’s place bounds on that.’ I’m talking about methodology. Let’s come to agreement on methodology. Let’s agree on boundaries...and let’s move on...Also... in NEPA, we’re doing analysis; we’re not doing research. We’re not trying to learn everything there is to learn about a wetland system. What we’re trying to do is understand the impacts of our actions and then to avoid, minimize and mitigate that harm...[A] lot of people may misunderstand the subtle difference between research and analysis.

NMFS appears to have developed an innovative approach which has been in place the last two years and which has the potential to reduce over-analysis while providing good legal defensibility. Its policy to “frontload” environmental review processes appears to reduce over-analysis and produce a more defensible administrative record. One of its regional offices has been utilizing a new strategy, beginning with internal scoping, which it believes is the key to its NEPA efficiency. It utilizes a resource matrix review that lists all of the major resources to be analyzed under NEPA as well as under relevant state environmental laws. For any proposed action, the project team meets and discusses the potential of significant impact to each of the major resources listed in the matrix. If there is a potential impact, they estimate the level. From that exercise, the team summarizes why they think a resource should or should not be reviewed in the NEPA document. All of this information becomes part of the record. If a question arises during legal challenge, NMFS has documentation of why a resource was not analyzed.

The resource matrix helps to determine what analysis is necessary and whether or not an EA or an EIS is required. There is a tradeoff, as frontloading is initially time consuming; however, the perception is that environmental documentation has become streamlined and more focused. This may save substantial time over the long run in two significant ways. First, it reduces what one interviewee described as “analyzing the universe.” Second, it provides a more robust, defensible administrative record which may save

substantial time in terms of reducing court-ordered requirements to go back and justify analysis decisions.

It should be noted that cumulative impacts analysis was not an interview topic; however, if it came up during responses, all interviewees who mentioned it indicated that the process is an agency weak spot. It is unclear from the research whether there have been interagency forums to discuss common problems and potential solutions with regard to cumulative impacts analyses. If it has not already occurred, it might merit consideration.

#### **4.4.4 Detailing Scope of Work Requirements**

Most of those interviewed mentioned that they use consultants for various aspects of the environmental decision-making process. Interviewees also mentioned current or past problems with consultants such as running over budget or supplying inappropriate information and work products. Following are some strategies agencies have used to reduce difficulties with the agency-consultant relationship.

ODOT has found that the strategy of treating their consultants as part of the project team has helped with process efficiency. If there is an in-house environmental project managers' meeting, the on-call consultants are invited. ODOT does not pay for that time; however, the agency has found that consultants typically show up. The effect has increased the sense between consultants and agency staff that they are a unified working team. It has also likely increased time and cost efficiencies, as there are fewer misunderstandings and there is less need for the agency to call consultants after team meetings to update them on any changes in legislation, administrative directives, or other developments that might require project adjustments.

A NMFS regional office believes it has increased efficiency and improved agency-consultant relationships by developing a highly detailed request for proposal for project scopes of work as part of its overall NEPA front-loading strategy. An interviewee detailed the process:

The scope of work parallels that matrix...It identifies all of the resources that have to be analyzed and tells the contractor what resources aren't going to be analyzed... We also provide a huge list of project parameters and assumptions... We really outline all of these things that they're going to need to know to respond in terms of the bid and workload hours...[B]y doing this, every proposal we get back, we can compare apples to apples...If you don't do that, and you just say, 'We're looking for a contractor to write an EIS...then you get proposals that are everything from, 'Oh, we're going to provide legal counsel and advisors,' and 'We're going to address aesthetics this way,' all the way down to the bare minimum, where, 'We think you only need X, Y and Z; and so here's our bid.' That's ridiculous. You cannot get the right team for the job in that fashion.

The request for proposal is also highly detailed in terms of what the agency expects as far as work product—number of report copies, what products will be in color, etc. Again, this helps the agency “compare apples to apples.” As a consequence, according to the interviewee, the agency can be assured it’s “getting the A-Team” for the job. As with other front-loading strategies, there is a tradeoff as far as time needed on the front end; however, the approach may save time and money over the life of a project.

#### 4.4.5 Style Guides

All of those interviewed mentioned that they had style guides for document consistency. Each agency has its own style guide. Some interviewees, however, made reference to a recent report, *Improving the Quality of Environmental Documents* (American Association of State Highway and Transportation Officials, 2006).<sup>13</sup> The report – a joint effort by the American Association of Highway and Transportation Officials, the American Council of Engineering Companies, and the Federal Highway Administration –establishes core principles to improving the quality NEPA documents, shown in Figure 3, below; and recommends tools to address document quality and legal sufficiency.

<b>Figure 4.2: Core Principles for Quality NEPA Documents</b>
<p><b>Principle 1:</b> Tell the story of the project so that the reader can easily understand the purpose and need for the project, how each alternative would meet the project goals, and the strengths and weaknesses associated with each alternative.</p> <p><b>Principle 2:</b> Keep the document as brief as possible, using clear, concise writing; an easy-to-use format; effective graphics and visual elements; and discussion of issues and impacts in proportion to their significance.</p> <p><b>Principle 3:</b> Ensure that the document meets all legal requirements in a way that is easy to follow for regulators and technical reviewers.</p>
<i>Source:</i> American Association of Highway and Transportation Officials (2006:4)

The report emphasizes that documents must not only clearly demonstrate compliance with the appropriate regulatory and legal requirements, but must use understandable, simple, and concise writing so that the public can understand the explanations of project decisions. The report is the basis for what some agencies are now referring to as “reader friendly” writing and formatting. An interviewee talked about the change in public participation as a result of using the recommended format:

When was the last time you read an EIS? I mean, that’s guaranteed insomnia cure...[W]e just recently...did our first experiment with the user-friendly EIS, and we’re getting really good response to that kind of format.

Interview responses regarding public participation indicate all agencies are continually looking for ways to improve public participation. Writing environmental decision-making

<sup>13</sup> Accessible through <http://www.environment.fhwa.dot.gov/index.asp>

documents in ways that are less intimidating or off-putting may invite better participation and convey a more inviting relationship between the agency and the general public.

#### **4.4.6 Building Competency**

Staff competency in NEPA-related activities is a critical factor affecting environmental decision-making efficiency and effectiveness. Interviewees across the participating agencies cited development and retention of staff with the skills needed for NEPA or similar processes as an ongoing problem. It is one that significantly affects the agency's ability to develop and deliver documents that comply with regulations and can withstand legal challenge. The NEPA process is complex and demanding, and gaining a high level of competency for writing documents and managing the process can take years. Developing NEPA skills is generally not a specific area of professional training, and much of the requisite skill development comes from on-the-job training and mentoring. Mastering technical skills, however, is not enough. Several of the interviewees specifically mentioned that, to be successful, a person involved in NEPA processes needs to have a particular combination of talents: technical and writing competence, people skills, and organizational proficiency.

All agencies queried have some sort of training for staff involved in NEPA and state-equivalent processes. In some instances, outside consultants provide advanced training. In other cases, there are advanced training modules within the agency. At DOE and FHWA, at least some of the in-house NEPA training sessions require tests before certificates of completion are issued. It is unclear whether this is standard procedure for all agency NEPA or state-equivalent training programs. None of the agencies examined appeared to have any program tracking the level of training for its NEPA personnel. Furthermore, it is not clear how much formal training is required, or over what timeframe. Although higher-level personnel typically have extensive NEPA experience, interview responses indicate personnel new to lower-level positions may acquire that status by default, therefore assuming responsibilities with few well-developed NEPA process skills.

Retention of skilled staff is also a problem. Seasoned staff may find it more advantageous to leave the agency to go work for private consulting firms offering environmental process and document preparation services. Acknowledging the extent of the problem, the FHWA is taking active steps to address the issue of NEPA skills development through its Environmental Competency Building (ECB) Program. The ECB focuses on supporting the evolving competencies and professional development needs of environmental and transportation professionals. By focusing on the current and future needs, the ECB aims to maintain a level of knowledge and expertise that will enable practitioners to deliver effective environmental documents. Though the audience for this program spans the range of individuals, agencies, and organizations involved in surface transportation delivery, the program is targeted toward staff involved in the environmental review and NEPA process at FHWA Headquarters, FHWA Divisions, Resource Center and Federal Lands Highway (Federal Highway Administration, Undated). It may nevertheless serve as a template for other agencies seeking to improve skills development.

## 4.5 Dedication to Cultivating and Maintaining Interagency Relationships

Consultation among agencies and holistic planning, among other things, are aspects of NEPA and state NEPA-like processes that interconnect organizations (Gaines and Lurie, 2007). More often than not, the ad hoc and/or uncoordinated NEPA efforts that could benefit from interagency collaboration have often resulted in interagency disputes, lost efficiency opportunities, and delays. A critical aspect of NEPA efficiency involves instituting interagency collaboration that effectively supports information exchange, mutual understanding, and negotiation. At a time of shrinking financial and human resources, no single agency has adequate information, finances or human resources to carry out environmental decision-making processes on its own. Establishing and maintaining good interagency therefore becomes crucial to environmental decision-making efficiency.

For several years, Memoranda of Understanding (MOUs) have been a standard approach to collaboration. Bringing together agencies with different missions, objectives, and requirements, however, is likely to involve disputes that can impede efficiency and true partnership. Agencies are therefore developing various ways of enhancing interagency relationships by managing inevitable conflict.

The FHWA has instituted a number of programs to strengthen interagency relationships critical for environmental streamlining. It created an Executive Interagency Task Force which has expanded beyond its original task of priority project oversight to examining environmental review policies and processes and reviewing environmental streamlining opportunities. To help agency partners understand the streamlining agenda and work cohesively on related issues, the organization provides interagency environmental streamlining training, interagency conflict management guidance, and a roster of qualified neutral facilitators. Between May 2003 and March 2004, the agency, in partnership with the U. S. Institute for Environmental Resolution, conducted an interagency regional workshop series on collaborative problem solving.<sup>14</sup>

FHWA offers interagency conflict management workshops to help collaborative partners develop the skills to identify and deal with interagency disputes. As part of Section 1309 of the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) regarding environmental streamlining, FHWA, with the help of the Institute for Environmental Conflict Resolution, also instituted agency-wide conflict elevation procedures.<sup>15</sup> Though FHWA has seen the benefits of interagency partnerships, such as better mutual understanding of the extent of project problems, such partnerships have not always led to mutually agreed upon solutions that take into account the differences in participating agencies' legal

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<sup>14</sup> The report on the workshops is available through the conflict resolution link at <http://www.environment.fhwa.dot.gov/index.asp>

<sup>15</sup> Information on the workshops is available through the conflict resolution link at <http://www.environment.fhwa.dot.gov/index.asp>

authorities, missions, and resources (FHWA, 2004). This is not an unusual finding, and it indicates that collaborative problem-solving and conflict management skill building and processes are ongoing agency needs.

The Oregon Department of Transportation (ODOT) has engaged in a number of efforts to enhance interagency relations. In an effort to streamline and improve the environmental review of ODOT projects, ten federal and state agencies entered into agreement in 2001 to establish Oregon's Collaborative Environmental and Transportation Agreement for Streamlining (CETAS). Historically, partner agencies were involved late in the project development process – typically at the permitting stage. Through CETAS, members are now involved earlier in the process and can influence ODOT's decisions through collaborative problem-solving.

While CETAS is intended to make agency review efforts more efficient thus resulting in quicker permitting decisions, it is also intended to improve the environmental outcomes of transportation projects. The CETAS charter also included a conflict resolution procedure to elevate issues if staff came to an impasse. The collaborative network clearly anticipated the need for conflict resolution and made the commitment to resolve issues swiftly rather than allowing them to impede the group's work.

Among the benefits of CETAS are strong working relationships, early conflict resolution, better integration of environmental stewardship into transportation decision-making, mutual education, efficient use of time, and improve outcomes for each agency's mission (ODOT, 2006:1). CETAS does, however, face challenges that can be expected in any interagency forum that attempts to balance participant organization's missions. These challenges include the depth and dependability of the information the CETAS Team is asked to base its decisions on, the need to weigh factors that are not within their areas of expertise, and the timing of various CETAS committee's decision-making processes (ODOT, 2006:1).

Recognizing the budgetary and human resource limitations at partnering agencies, ODOT took advantage of a Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) provision allowing states to use federal highway monies to dedicate and fund staff at resource agencies to work on environmental review. As of 2005, ODOT funded 14 positions at four state and three federal agencies (CETAS Management Team, 2005).

The liaisons play a critical role in building trust and understanding and creating lines of communication between ODOT and partner agencies, and are more than interagency coordinators (Gaines and Lurie, 2007). In addition to the skill set needed by NEPA managers, liaisons must understand the task and culture of the collaborative group and be able to use that understanding to communicate with their respective agencies to gain buy-in from agency staff not directly involved in CETAS but whose knowledge and/or approval is important to moving collaborative tasks forward.

To develop a programmatic approach and secure the commitment of the partners for its Oregon Bridge Delivery Program, which was developed to replace or repair 400 within a

ten-year period, in 2002 ODOT held Bridge Strategy Workshops with state and federal agencies. The ultimate purpose of the workshops was to develop environmental streamlining strategies in order to deliver the very large number of bridge replacements and repairs in ways that would work better for everyone involved.

The workshops served as a forum to begin building improved relationships among agency partners with a history of mistrust. ODOT employed several approaches to help build common ground. Participating agency executives attended an early workshop to acknowledge they had common ground—environmental protection and stewardship in one form or another—and to support the effort in front of their staff in order to build a sense of ownership in the program and create expectations for thinking creatively. Another exercise to develop a sense of common purpose included partner agencies learning about one another’s missions and responsibilities (Gaines and Lurie, 2007).

Various studies suggest that agencies can still make significant NEPA efficiency improvements by involving partner agencies earlier in the process. As discussed elsewhere, NMFS is working toward better early agency partner involvement as part of its “front loading” activities. An interviewee spoke of how adopting a policy of early involvement builds trust because it represents a “no surprises” working relationship.

....ultimately, it’s about having those relationships so that you have a collective understanding and enough mutual trust that people know that they’re not signing away anything... have the conversations early so that you can gear your schedule as opposed to getting surprise comments, surprise input late in the process when you don’t have as much latitude and opportunity.

Most agencies have examples of interagency arrangements; however, it is clear that this is an area where ongoing attention and improvements in policies and activities for interagency collaboration can yield significant benefits.

## 5.0 Conclusions

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The Forest Service is not alone in its pursuit of more efficient NEPA process policy and management. While the language of NEPA is fairly brief by legislative standards, its implementation is complicated and dynamic. Most agencies with significant responsibilities involving NEPA are likely to have complex objectives and concomitant complex structures. NEPA therefore has the potential to affect planning and implementation actions across multiple agency programs, requiring significant commitments of agency resources. None of the agencies examined for this study indicated they have developed the ideal NEPA process model, and most are looking for ways to improve their environmental decision making efficiency.

Commitment of top-level management to translating recommendations from a combination of internal and external evaluations into environmental decision-making improvement activities appears to generate most innovative and effective process improvements. This underscores the need for management to take the lead in putting together and monitoring improvement activities.

Perhaps one of the most important ways to bring focus and knowledge regarding NEPA process improvement efforts is to develop comprehensive systems for measuring, tracking and evaluating NEPA activities. An interviewee suggested that the process of developing and implementing systems to measure performance may create a sort of Hawthorne effect—amplified attention to NEPA issues may change behaviors and performance.

Whether or not that is the case, being able to establish objective baseline process performance and being able to track and evaluate trends and identify problem areas can provide agencies with the knowledge to evaluate the cost-effectiveness of policy and management changes. This is offered with two caveats. First, developing appropriate, accurate performance measures is as much an art as a science. For a process as complex as NEPA, this can require considerable up-front resource commitment. Second, interpreting trend data can be difficult as many issues may be affected by variables beyond agency control. Well-designed and implemented systems, however, convey organizational legitimacy and commitment to improvement.

A Forest Service employee only half-jokingly referred to the organization as “the NEPA agency.” Given the magnitude of its NEPA-related activities, the Forest Service could, and perhaps should, be a leader for accurately identifying and measuring activities leading to greater NEPA efficiency.

What was not talked about much in interviews, but showed up in documents, was the reality that the Forest Service, similar to many other federal agencies, is facing declining budgets and human resources as process demands remain constant or are increasing. Under the circumstances, while the up-front costs of additional collaboration is an

additional burden in the short term, making use of what other agencies have to offer may reduce the cost of change actions in the long-term.

Based on study data, we have two suggestions for the Forest Service with respect to improving their environmental decision-making:

1. **Collaboratively develop a regular forum for information exchange and NEPA- related benchmarking.** The objective would be to bring together NEPA personnel from various agencies in a regular forum—perhaps annually—to explore common problems within the NEPA complex of issues. A face-to-face participatory environment provides opportunities for the creativity that can result from spontaneous, creative debate and idea sharing. The essence of collaboration is developing a more diverse set of issue solutions than might occur in a “monocultural” environment by bringing together people with different perspectives or experiences. Up-front costs could be spread across participating agencies. Based on comments from interviewees, there appears to be interest in such a forum. One objective for the Forest Service could be determining what issues should be the subject of functional benchmarking.<sup>16</sup>
2. **One of the first benchmarking projects should be tracking systems and performance measures.** As mentioned earlier, developing performance measures is resource intensive. Savings can be realized through utilizing a benchmarking process that identifies and works with basic performance measures agencies such as DOE and FHWA already have in place.

Any NEPA process efficiency improvement effort should include a combination of internal and external evaluators. Insiders provide important organizational perspectives; however, the high probability of internal bias can skew problem definition and solution development. External experts can provide an objective perspective; nevertheless, they lack the advantage of understanding organizational nuances that may be important to designing and implementing change.

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<sup>16</sup> There are different types of benchmarking. Functional benchmarking involves making comparisons to other organizations performing the same functional activities. Benchmarking is different than comparative analysis. In the latter case, the comparison is the output; in benchmarking, an analysis of best practice in a particular program area and a plan for incorporating best practice are the outputs (Bendell, Boulter, and Goodstadt 1998; Bruder and Gray 1994).

# References

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American Association of State Highway and Transportation Officials. 2006. *Improving the Quality of Environmental Documents: A Report of the Joint AASHO/ACEC Committee in Cooperation with the Federal Highway Administration*. Washington, D.C.: American Association of State Highway and Transportation Officials.

Baldwin, Pamela. 2005. *Overview of NEPA Requirements*. Congressional Research Service: Washington, D.C.

Bush, George W. 2002. *Environmental Stewardship and Transportation Infrastructure Project Reviews*. Executive Order 13274. September 18, 2002.  
<http://www.fhwa.dot.gov/stewardshipeo/eo13274.htm>

Caldwell, Lynton Keith, Richard A. Minard, Jr., Stephen Coye, Jennifer Thangavelu, Benita Carr. 1998. *The National Environmental Policy Act: An Agenda for the Future*. Indiana University Press: Bloomington, Indiana.

CETAS Management Team. 2005. *CETAS Progress Report - August 2004 to June 2005 and Recommended Work Plan - July 2005 through June 2006*. Technical Services Branch and CETAS Technical Advisory Team. Oregon Department of Transportation: Salem, Oregon.

Eccleston, Charles H. 1999. *The NEPA Planning Process: A Comprehensive Guide with Emphasis on Efficiency*. New York: John Wiley & Sons, Inc.

\_\_\_\_\_. 2001. *Environmental Impact Statements: A Comprehensive Guide to Project and Strategic Planning*. New York: John Wiley & Sons, Inc.

Gaines, Lisa and Sue Lurie. 2007. *Innovation in Environmental Streamlining and Project Delivery: The Oregon State Bridge Delivery Program*. Final Report SR 500-151. Oregon Department of Transportation: Salem, Oregon. January.

Gallup Organization. 2007. *Implementing Performance Measurement in Environmental Streamlining*. U.S. Department of Transportation, Federal Highway Administration 2004  
<http://www.environment.fhwa.dot.gov/strmlng/gallupFinalAbridgd.asp>.

Federal Highway Administration. 2004. *Report to Congress on Federal Highway Administration Environmental Streamlining Activities during 2003*. June.  
<http://www.environment.fhwa.dot.gov/strmlng/rtc0604rpt.asp>

\_\_\_\_\_. Undated. *Competency Building*  
<http://www.environment.fhwa.dot.gov/ecb/index.asp>

Jewett, Joan Laatz, and Jonathan Brinkman. 1998. *U.S. Proposes Protecting Pacific Northwest's Salmon, Other Fish*. Eugene Register-Guard. March 5, 1998.

Louis Berger Group. 2001. *Evaluating the Performance of Environmental Streamlining: Development of a NEPA Baseline for Measuring Continuous Performance*.  
<http://environment.fhwa.dot.gov/strmlng/baseline/index.asp>

Luther, Linda. 2007. *The National Environmental Policy Act: Streamlining NEPA*. Congressional Research Service. The Library of Congress, Washington, D.C.

National Association of Public Administration. 2002. *Courts, Congress, and Constituencies: Managing Fisheries by Default*. National Academy of Public Administration: Washington, D.C.

National Environmental Policy Act Task Force. 2003. *Modernizing NEPA Implementation: The NEPA Task Force Report to the Council on Environmental Quality*. Council on Environmental Quality: Washington, D.C.

National Marine Fisheries Service. 2002. *NOAA Fisheries 2001 Report*. Department of Commerce: Silver Spring, MD.

\_\_\_\_\_. 2007. *Delegation of Authorities for Completing NEPA Documents*. National Marine Fisheries Service Policy Directive 30-131. Administration and Management. March 5. <http://reefshark.nmfs.noaa.gov/f/pds/publicsite/documents/policies/30-131.pdf>

\_\_\_\_\_. Undated. *About National Marine Fisheries Service*.  
<http://www.nmfs.noaa.gov/aboutus.htm>.

Oregon Department of Transportation. 2006. *CETAS: Progress Report July 2005 – June 2006 and Recommended Work Plan July 2006 – June 2008*. Oregon Department of Transportation: Salem, Oregon. June 21.

Ozawa, Connie, and Jennifer Dill. 2005. *An Evaluation of the Oregon Department of Transportation's (ODOT) Environmental Streamlining Efforts: A Focus on CETAS*. Oregon Department of Transportation: Salem, Oregon.

Smythe, Robert, and Caroline Isber. 2003. NEPA in the agencies: A critique of current practices. *Environmental Practices: Journal of the National Association of Environmental Professionals* 5(4):290-297.

Tripp, James T. B., and Nathan G. Alley. 2004. Streamlining NEPA's environmental review process: Suggestions for agency reform. *N.Y.U. Environmental Law Journal* 12:74-110.

USDA Forest Service. 2002. *The Process Predicament: How Statutory, Regulatory and Administrative Factors Affect National Forest Management*. USDA Forest Service: Washington, DC.

U.S. Department of Energy. 2006a. EIS completion times need attention. *Lessons Learned Quarterly* (46):32-33. March.  
<http://www.eh.doe.gov/NEPA/process/11/March2006llqr.pdf>

\_\_\_\_\_. 2006b. Quality + Leadership = NEPA Success. *Lessons Learned Quarterly* (47):1, 4-6. June. <http://www.eh.doe.gov/NEPA/process/11/JUNE2006LLQR.pdf>

\_\_\_\_\_. 2006c. NEPA quality assurance planning progresses. *Lessons Learned Quarterly* (48):9 September. <http://www.eh.doe.gov/NEPA/process/11/sept2006LLQR.pdf>

\_\_\_\_\_. 2005. *Using the National Environmental Policy Act Process to Further Department's Mission and Goals*. Memorandum from John Spitaleri Shaw, Assistant Secretary for Environment, Safety, and Health. 16 February 2005.

\_\_\_\_\_. 2003a. Metrics show progress in meeting goals. *Lessons Learned Quarterly* (36):4-6. September. <http://www.eh.doe.gov/nepa/process/11/Sept03LLQR.pdf>

\_\_\_\_\_. 2003b. What have we learned from lessons learned. *Lessons Learned Quarterly Report* (37):1, 10-11. December.  
<http://www.eh.doe.gov/NEPA/process/11/dec03LLQRfinal.pdf>

\_\_\_\_\_. 2003c. *Annual National Environmental Policy Act (NEPA) Planning Summaries*. Office of NEPA Policy and Compliance. Memorandum dated December 19.  
[http://www.eh.doe.gov/nepa/2004APS/NEPA\\_PlanningSummaries.pdf](http://www.eh.doe.gov/nepa/2004APS/NEPA_PlanningSummaries.pdf)

\_\_\_\_\_. 2003d. *DOE-wide National Environmental Policy Act (NEPA) Contracts*. Office of NEPA Policy and Compliance. Memorandum dated May 2.  
<http://www.eh.doe.gov/nepa/contracting/BriefGuide.pdf>

\_\_\_\_\_. 2000. Metrics show progress in meeting goals. *Lessons Learned Quarterly* (24):3. September. <http://www.eh.doe.gov/nepa/process/11/2000SeptLLQR.pdf>

# Appendix A: More Information

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## California Department of Forestry and Fire Protection

CDF Resource Management and Forestry

<http://www.fire.ca.gov/rsrc-mgt.php>

CDF State Demonstration Forests

[http://www.fire.ca.gov/rsrc-mgt\\_sf.php](http://www.fire.ca.gov/rsrc-mgt_sf.php)

CEQA

<http://ceres.ca.gov/ceqa/>

Forest Practices Act

[http://www.fire.ca.gov/rsrc-mgt\\_content/downloads/2005FPRulebook.pdf](http://www.fire.ca.gov/rsrc-mgt_content/downloads/2005FPRulebook.pdf)

Timber Harvest Plan Review

[http://www.fire.ca.gov/rsrc-mgt\\_forestpractice\\_thpreviewprocess.php](http://www.fire.ca.gov/rsrc-mgt_forestpractice_thpreviewprocess.php)

## Department of Energy

Annual Planning Summaries

<http://www.eh.doe.gov/nepa/planningsummaries.html>

DOE NEPA Regulations

[http://www.eh.doe.gov/nepa/tools/REGULATE/NEPA\\_REG/1021/nepa1021\\_rev.pdf](http://www.eh.doe.gov/nepa/tools/REGULATE/NEPA_REG/1021/nepa1021_rev.pdf)

NEPA Webiste

<http://www.eh.doe.gov/nepa/>

Lessons Learned

<http://www.eh.doe.gov/nepa/lessons.html>

Lessons Learned Questionnaire

<http://www.eh.doe.gov/nepa/llq/new1.cfm>

NEPA Compliance Guide

<http://www.eh.doe.gov/nepa/guidance.html>

## **Federal Highway Administration**

Measures of Effectiveness

<http://www.environment.fhwa.dot.gov/strmlng/es10measures.asp>

Environmental Policy Statement

[http://www.fhwa.dot.gov/environment/eps\\_txt.htm](http://www.fhwa.dot.gov/environment/eps_txt.htm)

FHWA Projects by Class of Action

<http://environment.fhwa.dot.gov/strmlng/projectgraphs.htm>.

FHWA's Vital Few Goal — Environmental Stewardship and Streamlining

<http://www.environment.fhwa.dot.gov/strmlng/vfovervw.asp>

Implementation of Planning and Environment Linkages: Indicators and Available Assistance

<http://www.environment.fhwa.dot.gov/integ/implementation.pdf>

NEPA and Transportation Decision-making

<http://www.environment.fhwa.dot.gov/projdev/pd3tdm.asp>

Environment: Project Development: NEPA Implementation

<http://www.environment.fhwa.dot.gov/projdev/pd2implement.asp>

FHWA Environmental Policy Statement 1994: A Framework to Strengthen the Linkage Between Environmental And Highway Policy.

<http://www.fhwa.dot.gov/environment/epsfinal.htm>

Reasons for EIS Project Delays

<http://environment.fhwa.dot.gov/strmlng/eisdelay.htm>

Guidance: EIS Prior Concurrence Procedures

<http://www.environment.fhwa.dot.gov/guidebook/pcguidance.asp>

Information on Timeliness on Completing the NEPA Process

<http://environment.fhwa.dot.gov/strmlng/nepatimeFY02.htm>.

Guidance. Collaborative Problem Solving: Better and Streamlined Outcomes for All: Guidance on Managing Conflict and Resolving Disputes between State and Federal Agencies during the Transportation Project Development and Environmental Review Process

<http://environment.fhwa.dot.gov/strmlng/adrguide/adrtoc.htm>

Guidance. Linking the Transportation Planning and National Environmental Policy Act (NEPA) Processes

<http://www.environment.fhwa.dot.gov/guidebook/Results.asp>

Estimated Time Required to Complete the NEPA Process  
<http://environment.fhwa.dot.gov/strmlng/nepatime.asp>

Environmental Guidebook  
<http://www.environment.fhwa.dot.gov/guidebook/index.asp>

National Environmental Streamlining Initiatives: Highway and Transit Environmental Streamlining Progress Report  
<http://environment.fhwa.dot.gov/strmlng/avgtime.asp>

Re: NEPA Website  
<http://nepa.fhwa.dot.gov/ReNepa/ReNepa.nsf/home>

Reasons for EIS Project Delays  
<http://environment.fhwa.dot.gov/strmlng/eisdelay.asp>

Executive Order DOT 5611.1A. National Procedures for Elevating Highway and Transit Environmental Disputes  
[http://www.environment.fhwa.dot.gov/strmlng/DOT5611\\_order.asp](http://www.environment.fhwa.dot.gov/strmlng/DOT5611_order.asp)

### **Minnesota Department of Natural Resources**

Environmental Quality Board. 2006. *ABC's of the Environmental Review Process*. St. Paul, Minnesota.

Environmental Quality Board. 2000. *EAW Guidelines: Preparing Environmental Assessment Worksheets*. St. Paul, Minnesota.

Environmental Quality Board. 2005. *A Citizen's Guide: Introduction to Environmental Review*. St. Paul, Minnesota.

Environmental Quality Board. 2005. *Preparing EAWs: A Procedural Guide for RGUs*. St. Paul, Minnesota.

Minnesota Department of Natural Resources. 1992. *Environmental Review Procedures Manual: A Guide to Departmental Implementation of Environmental Review Program Requirements of the National Environmental Policy Act and the Minnesota Environmental Policy Act*. Office of Planning. St. Paul, Minnesota.

Minnesota Department of Natural Resources. 2006. *Guidance for Providing Comments during the Environmental Review Process*. St. Paul, Minnesota, February 6.

## **National Marine Fisheries Service**

Policy Directive 30-131, Delegation of Authorities for Completing NEPA Documents  
<http://reefshark.nmfs.noaa.gov/f/pds/publicsite/documents/policies/30-131.pdf>

NOAA Administrative Order 216-6, Environmental Review Procedures for  
Implementing the National Environmental Policy Act  
[http://www.corporateservices.noaa.gov/~ames/NAOs/Chap\\_216/naos\\_216\\_6.html](http://www.corporateservices.noaa.gov/~ames/NAOs/Chap_216/naos_216_6.html)

## **Oregon Department of Transportation**

Oregon's Process of Balancing Business Needs with Environmental Concerns  
<http://www.environment.fhwa.dot.gov/strmlng/newsletters/oct01nl.asp>

Public Involvement Policies and Procedures  
<http://www.oregon.gov/ODOT/HWY/STIP/docs/Documents/PublicInvolvementPoliciesandProcedures.pdf>

Environmental Procedures Manual  
<ftp://ftp.odot.state.or.us/techserv/Geo-Environmental/Environmental/Procedural%20Manuals/Nepa/Env%20Procedures%20Manual%20Vol%201.pdf>