Streamlining the National Environmental Policy Act reporting requirements: A hard look at the healthy forests initiative

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STREAMLINING THE NATIONAL ENVIRONMENTAL POLICY ACT REPORTING REQUIREMENTS: A HARD LOOK AT THE HEALTHY FORESTS INITIATIVE

by

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The U.S. Forest Service (USFS) has implemented the Healthy Forests Initiative (HFI) (2002), which streamlines the NEPA process for proposed forest fuel reduction projects. A key question is whether the USFS’s streamlined NEPA process produces an adequate environmental document and fulfills regulatory requirements. This thesis evaluates whether the streamlined approach practiced by the USFS under the HFI satisfies the NEPA requirements. A review of four streamlined documents assesses whether these requirements are met. The following NEPA requirements in particular are explored for each project to determine whether the NEPA requirements are met: consideration of a reasonable range of alternatives to the project, cumulative environmental impacts that may result from the project, and use of the best available data in the environmental analysis. The conclusions indicate that each streamlined document meets regulatory requirements. Failure to comply with the NEPA process under the HFI is not anticipated for future projects.
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CHAPTER 1

INTRODUCTION

The National Environmental Policy Act (NEPA) is arguably the most important environmental law in the United States (U.S.). The foundation for environmental protection and stewardship outlined in NEPA has significantly enhanced the quality of life Americans enjoy today. It has forced federal agencies to take a “hard look” at the potential environmental consequences of their actions and it has brought the public into the decision-making process (Council on Environmental Quality [CEQ] 1997). However, this particular piece of legislation has generated much criticism since its inception.

Industry, agency representatives, and private individuals argue that NEPA takes too long, it is too expensive, and is sometimes redundant with other legislation, such as the Clean Water Act, that contains similar provisions (Preister & Kent, 2001). The difficulty in interpreting the language in the law has generated extensive case law since its inception. Furthermore, there is no consistency between agencies implementing the NEPA process. Consequently, past and current administrations have made a concerted effort to streamline and improve the statute. This is evident with the introduction of the Healthy Forests Initiative (HFI) (2002) in response to catastrophic wildfires across the U.S. However, streamlining the NEPA process as required under the HFI potentially ignores certain requirements.
The HFI is intended to minimize the risk of severe wildfires in the future, while streamlining the NEPA process. The risk of wildfire is often blamed on long-term drought or expansion of the wildland urban interface (WUI) in the Western U.S. The WUI is the area where communities and the forest meet. The underlying cause of severe wildfire is the buildup of forest fuel and changes in vegetation composition over the last century (U.S. Department of Agriculture [USDA] 2004). Catastrophic wildfires originating mostly on public land have already destroyed homes and created disaster areas in California, Arizona and Oregon.

A new CEQ guidance for producing Environmental Assessment (EA) documents streamlines the NEPA process for forest thinning projects (Appendix A). The EA is required for those federal projects with unknown environmental impacts. It is important to understand whether the new streamlined EA guidance for fuel reduction projects reduces the required environmental analysis. Opponents of the HFI argue these projects normally would require more detailed environmental analyses that are not covered in the streamlined EA. A key question is whether the USFS’s streamlined NEPA process produces an adequate environmental document and fulfills regulatory requirements.

This thesis evaluates whether the streamlined approach practiced by the USFS under the HFI satisfies the NEPA requirements. A comparative review of streamlined documents and a traditional EA will assess whether these requirements are met. Four separate USFS documents implemented under the HFI are explored in this thesis to determine whether the NEPA requirements are met. The following NEPA requirements must be considered for each project: consideration of a reasonable range of alternatives to
the project, cumulative environmental impacts that may result from the project, and use of the best available data.

The USFS streamlined documents under the HFI meet regulatory requirements, but lack specific information on the surface. This does not necessarily fall short of NEPA, but requires the reader to investigate further into the reference documents. The streamlined EA document is not expected to contain the same level of data provided in a traditional document.

**Background**

Human impacts on the forests, air, soils, water, and the human environments are documented in early environmental literature. Popular literature during the latter part of the 20th Century through the 1960s provided evidence for people’s impact on the environment. Literature includes George Perkins Marsh’s *Man and Nature* (1864), Aldo Leopold’s *A Sand County Almanac* (1949) and Rachel Carson’s *Silent Spring* (1962).

Similarly, focus events like the 1969 Santa Barbara oil spill helped to shape Americas focus on protecting the environment. On the afternoon of January 29, 1969, 200,000 gallons of crude oil spilled from a rig off of the California coast, creating critically harmful environmental conditions for 33 miles of coastline (SBWCN, 2004). An estimated 3,600 birds were poisoned and killed from the disaster. As President Nixon commented on the accident, “the Santa Barbara incident has frankly touched the conscience of the American people” (SBWCN, 2004). Furthermore, during the 1960s, the number of ecological studies increased and our understanding of the effects of
carcinogens in the air, water, soil, and food provided credibility to the growing concern for human impacts on the environment (Caldwell, 1998).

By the late 1960s environmental concerns had developed into a federal legislative issue and as many as 40 separate proposals relating to environmental policy and protection were introduced. President Nixon signed the NEPA on January 1, 1970 as his first official act of the new decade. In the 91st Congress (1969), the Senate Committee Report introduced by Senator Henry Jackson and chief consultant Lynton “Keith” Caldwell captured the essence of the early environmental movement and NEPA in the 1960s. The Senate Report states, “it is the unanimous view of the members of the Interior and Insular Affairs Committee that our Nation’s present state of knowledge, our established public policies, and our existing governmental institutions are not adequate to deal with the growing environmental problems and crises the Nation faces” (Sheldon et al, 1999, p. 2).

Legislative Review

Congressman John Dingell, lead author of NEPA in the House of Representatives is also quoted, “we must consider the natural environment as a whole and assess its quality continuously” if we are to improve and preserve it (Sheldon et al, 1999, p. 4). After several committee reviews and disagreements between House and Senate legislative proposals, Public Law (P. L.) 91-190 was placed on the Senate calendar and signed into law January 1, 1970. P. L. 91-190 established a national policy for the environment, to provide for the establishment of a Council on Environmental Quality, and other purposes.
The NEPA is the first and most broad ranging environmental law of the decade. This act inspired the formation of the U.S. Environmental Protection Agency (July 1970) and future legislation such as the Clean Water Act (1972), Endangered Species Act (1973), the Resource Conservation and Recovery Act (1976), and the Comprehensive Environmental Response, Compensation and Liability Act (1980). Emerging global concerns were recognized at the United Nations Conference on the Human Environment in 1972 and again in 1992 with the United Nations Conference on Environment and Development (Caldwell, 1998).

The NEPA establishes policy, sets goals, and provides the means to prevent or eliminate damage to the environment. As it is understood in Section 101 of the NEPA, it is the continuing policy of the Federal Government, in cooperation with State local governments, and other concerned public and private organizations, to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans (NEPA, 1969).

The concept of productive harmony proposes integration or a balance between people and nature, and the benefits of the environment should be shared widely while maintaining environmental quality (Preister & Kent, 2001). Furthermore, it is not just the role of the federal government, but also citizens, which have an individual responsibility to preserve environmental quality.
Section 201 of the NEPA establishes the Council on Environmental Quality (CEQ), which advises the President on a broad range of environmental matters. The CEQ, which is a federal agency, has three members who are appointed by the president with the advice and consent of the Senate. The CEQ has three basic responsibilities: the analysis and development of national and international environmental policy; the interagency coordination of environmental quality programs; and the acquisition and assessment of environmental data (Fogleman, 1990). Section 201 of NEPA states specifically that the purpose of the CEQ is to declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation; and to establish a Council on Environmental Quality.

Even though NEPA does not specifically direct the CEQ to issue regulations, final guidelines were established in 1978 to provide uniform procedures for all federal agencies to follow (Fogleman, 1990). However, it is encouraged and later implemented that each agency adopts their own NEPA guidance or regulations based on those established by the CEQ. The mission of each agency is markedly different and is evident in the number of different implementing regulations adopted.

The CEQ adopted implanting regulations that each federal agency follows. For instance, the U.S Department of Energy NEPA regulations and guidance are outlined in 10 Code of Federal Regulation (CFR) § 1021, the USFS in *Environmental Policies and

NEPA Requirements

The following discussion explains what triggers the NEPA process and consequently the requirements. One of the leading criticisms is interpreting the language of the policy and the basis for whether NEPA applies. Section 102(2)(C) of NEPA directs federal agencies to “include in every recommendation or report on proposals for legislation and other major federal actions significantly affecting the quality of the human environment, a detailed statement” describing the environmental effects of the proposed action and alternatives to the proposed action (42 United States Code [USC] § 4332).

Once a project or proposal is determined to require NEPA documentation, a Categorical Exclusion (CX), Environmental Assessment (EA) or Environmental Impact Statement (EIS) is completed. Section 102(2)(c) of NEPA establishes the EIS requirement and is the most comprehensive and expensive of the three required NEPA documentations. The CEQ regulations established guidance on preparing an EIS (40 CFR § 1502).

The lead Federal agency proposing the project decides what document is required. Preparation of an EIS is required when significant impacts are anticipated. This process involves a collaborative, interdisciplinary effort by stakeholders who all play a role in formulating the proposed action and alternatives. Stakeholders typically include the project proponent, public agencies and officials and local communities that may reside near the proposed action. The EIS process is typically a lengthier and more involved
process than preparation of an EA, however preparation of an EA requires a similar approach.

The goal of the NEPA process is to ensure that the proposed action fits within the physical setting of the area and preserves scenic, aesthetic, historic, and environmental resources. Lack of considering environmental consequences and following the NEPA process is often the center of litigation. Perhaps process details are overlooked, due to the magnitude of some projects and the number of proposals each agency handles.

The NEPA process specifies that each project include public involvement, such as opportunity for public comment. The public involvement aspect of NEPA is truly the only enforcement mechanism of the law. Special interest groups and the general public must actively be involved in the process from the beginning. For instance, early in the NEPA process, scoping allows those interested to learn about the proposed project or program and give suggestions or alternatives that may influence the decision.

The EA and CX are typically the documentation of choice for the project proponent. An EA requires environmental analysis but not to the level of detail and public involvement that is seen with EIS documentation. A brief analysis is provided in the EA and no significant environmental impacts are expected. Furthermore, public hearings that are used during the EIS process to generate concerns and potential issues are not required for an EA. However, most agency regulations still require public involvement but not necessarily public hearings. Once an EA is finalized and approved, a Finding of No Significant Impact (FONSI) is issued allowing the project to move forward. At that point, the public or any organization still opposed to the project has a limited timeframe to contest.
Case Law

In Kleppe v. Sierra Club, 427 U.S. 390 (1976) critical components of NEPA compliance are evaluated. In this case plaintiffs claimed that federal officials could not allow further development of coal reserves on federal land without a comprehensive EIS on the entire region. The court held that there was no proposal for regional development of coal. Therefore, there was no need to prepare an EIS. The mere contemplation of a certain action is not sufficient to require an EIS. Also, the court established here the “hard look” concept for evaluating the environmental consequences of a proposed project.

In Kleppe v. Sierra Club (1976), the court adopted a four-factor balancing test for determining when during contemplation of an action; an agency must begin to prepare an EIS. The following factors have helped shape an understanding of the concept “hard look”:

- How likely is the program to come to fruition, and how soon will that occur?
- To what extent is meaningful information presently available on the effects of implementation of the program, and of alternatives and their effects?
- To what extent are irretrievable commitments being made and options precluded as refinement if the proposal progresses?
- How severe will the environmental effects be if the program is implemented?

In Natural Resources Defense Council v. Morton, 458 F.2d 827 (1972) an Environmental Impact Statement (EIS) was prepared for proposed oil and gas lease sales off the Louisiana coast and was challenged on the basis that “reasonable alternatives” were not considered. The court concluded that the EIS dealt adequ
environmental impacts of the proposed sale and did discuss modifications of the proposal (i.e. alternatives).

Also, there is litigation over the definition of “significantly” affecting the environment. In *Hanley v. Kleindienst*, 471 F.2d 823 (1972) the courts tried to explain the definition of significance when an EA was completed for the construction of a jail and other facilities in New York City. The EA concluded that the project was not an action significantly affecting the quality of the human environment. The challenge was denied on the basis that every major federal action has some adverse effect on the human environment. Congress required that adding “significantly,” the agency would find a greater adverse impact than from “any major federal action.”

The District of Columbia Circuit courts endorsed a Finding of No Significant Impact (FONSI) in *Cabinet Mountains Wilderness v. Peterson* (1982) (Sheldon *et al*, 1999). Although grizzlies were listed as a threatened species under the Endangered Species Act, the court approved the U.S. Forest Service’s (USFS) determination that mitigation measures imposed on the proposed mining operation in the Cabinet Mountains Wilderness would minimize significant impacts to the bears.

In *National Wildlife Federation v. United States Forest Service* (1984), the USFS argued that individual EAs be written for each of the proposed seventy-five timber sales in the Mapleton District. The court ruled that the requirements of NEPA could be met only after reviewing “the sufficiency of the environmental analysis as a whole” (Sheldon *et al*, 1999, p. 72). Hence, the court ruled that the EAs prepared for each of the timber sales did not comply with NEPA because they did not consider particular forms of mitigation or the cumulative impacts of all the timber sales.
Several other examples in the NEPA case law have debated what constitutes a “major federal action”. In addition, agencies implementing NEPA are required to use the best available data, which is often questioned by the public (Fogleman, 1990). Looking at the history of case law and trying to define the “nuts and bolts” of NEPA, it becomes evident that the language of NEPA is vague and difficult to interpret and implement. In addition, the documents are lengthy and the process long.

Reviewing the adequacy of NEPA documents challenge federal agencies and the courts. An important question is whether the USFS implementation of the streamlined NEPA process under the HFI meets regulatory requirements. The “hard look” concept, taken from the case law, is applied to this thesis to determine whether HFI projects successfully follow the NEPA process. This paper evaluates whether the “hard look” criteria were met by comparing the streamlined EA to what one would expect to find in a traditional EA.

A “hard look” is explored when considering a combination of NEPA regulatory requirements. In this thesis, each USFS streamlined NEPA document is evaluated to determine whether the following requirements are met. First, consideration of a reasonable range of alternatives to the project must be included. Second, an assessment of the cumulative environmental impacts that may result from the project must be documented. Third, the best available data must be used in preparation of the environmental document.

An important question is whether the USFS’s streamlined NEPA process produces an adequate environmental document and fulfills regulatory requirements. The streamlined examples explored in this thesis indicate that the USFS did follow the NEPA process and
met regulatory requirements. However, details of the environmental analysis are often left out of the environmental assessment and provided in the reference documents.
CHAPTER 2

STREAMLINING NEPA

According to Webster’s Ninth New Collegiate dictionary (1990, p. 1166), streamline is defined as “make simplified or more efficient.” Advocates of streamlining argue that it will improve the environmental assessment process by reducing unnecessary paperwork and permitting timely decisions. This stems from historical lengthy documents and litigation resulting from poor implementation of the NEPA process. This section describes the nature of purported NEPA problems; the history of streamlining, and the agencies currently implementing streamlined approaches.

NEPA Problems

According to Sharon Buccino, an attorney with the well-known environmental non-profit group Natural Resources Defense Council (NRDC), “there is certainly some room for improvement in the NEPA process.” However, this statement does not explain how to improve the process. Buccino also claims that the current administration has tried to “circumvent NEPA rather than improve its use for public participation and environmental review” (Foster, 2003, p. 46).

Foster (2003) argues that poor NEPA implementation has led to agencies spending millions of dollars for a study that is appealed, revised, and appealed again to finally produce something that has not made for better decisions. Often agencies implement the
environmental review process without considering all environmental impacts nor adequately involving the public. The process itself has become cumbersome and, expensive, and lacks clear guidelines on how agencies should produce documents (Foster, 2003). Additionally, there is no consistency in the documentation and judicial reviews (Foster, 2003). The same agency often presents documents differently between offices or districts. Each document must contain similar elements of analysis and general layout to help streamline the review process. Nevertheless, NEPA is generally considered by the Natural Resources Defense Council and similar environmental organizations to be an effective and important law in deterring future degradation of the environment (Foster, 2003).

Furthermore, the NEPA procedures are intended to ensure that information about environmental impacts is available to public officials and citizens before decisions are made that may significantly affect the quality of the environment. Larson (2003) claims decisions on a proposed project are often made well before the NEPA process starts and adequate analyses of alternative actions are not considered.

Council on Environmental Quality

The Council on Environmental Quality (CEQ) coordinates federal environmental efforts and works closely with agencies and other White House offices in the development of environmental policies and initiatives. The CEQ reports annually to the President on the state of the environment; oversees federal agency implementation of the environmental impact assessment process; and acts as a referee when agencies disagree
over the adequacy of such assessments. Congress established CEQ within the Executive Office of the President as part of the National Environmental Policy Act of 1969.

The CEQ has made a concentrated effort to streamline and improve NEPA implementation since its inception. The CEQ Regulations (40 Code of Federal Regulations [CFR] §1500-1508) took into effect in 1978 and identified early on in NEPA history the need to reduce paperwork (40 CFR § 1500.4) and reduce delay (40 CFR § 1500.5). For instance, it requires that agencies reduce the actual length of EISs by setting appropriate page limits, prepare analytic rather than encyclopedic documents, briefly discuss insignificant issues, and write in plain language. Additionally, agencies shall integrate NEPA early in the planning process, emphasize interagency cooperation early in the process, establish appropriate time limits, and combine environmental documents with other documents.

The CEQ and the NEPA Task Force have evaluated the effort to streamline the NEPA process. The CEQ created the NEPA Task Force to review the current NEPA implementing practices and procedures. Two key studies have documented these efforts, “The National Environmental Policy Act: A Study of its Effectiveness After Twenty-Five Years” (CEQ, 1997) and “Modernizing NEPA Implementation” (CEQ, 2003). The intent of these studies was to identify important aspects of the law to help improve and modernize the NEPA process. This effort involved a collaborative effort of federal, state, and local governments; Native American Tribes; public interests; literature reports; case studies; and other local interest groups.

Effective cooperation between federal, state, and local government agencies, as required under CEQ Regulations [40 CFR § 1501.6] can be challenging. Improved
collaboration, strategic planning, public involvement, interagency coordination, and science-based adaptive management practices are a few of the key elements that must be part of the NEPA process (CEQ, 1997). The streamlined approach to the NEPA process requires a public participation process; however, public involvement is perhaps less encouraged using the streamlined approach. Federal agencies and the current administration have recently made advances to streamline the environmental process on several fronts.

Federal Agencies

The U.S. Department of Transportation (USDOT), Federal Highway Administration (FHWA) and the U.S. Department of Agriculture (USDOA), U.S. Forest Service (USFS) have taken the lead on implementing a streamlined approach to the NEPA process. The FHWA has established a website dedicated to streamlining the environmental process (USDOT, 2004). For instance, they are looking to combine environmental requirement such as the Clean Water Act Section 404 Permit process, required under the Wetlands protection laws, and NEPA requirements as one package. This effort to create essentially the “one stop environmental process” would tie in other laws and required permits in an effort to avoid excessive documentation for a particular project.

The FHWA under the current administration issued the Transportation Equity Act for the 21st Century (TEA-21) mandating environmental streamlining for transportation projects, while protecting and enhancing the environment (USDOT, 2004). The objectives were to expedite project delivery while also improving NEPA decision-making. On September 18, 2002, President Bush signed Executive Order 13274, titled
Environmental Stewardship and Transportation Infrastructure Project Reviews, which emphasized the importance of expedited transportation project delivery while being good stewards of the environment.

Additional proposed legislation, such as House of Representatives Bill 5455 Expediting Project Delivery to Improve Transportation and the Environment Act (ExPDITE) would create a separate and lesser “surface transportation NEPA process” (Defender of Wildlife [DOW], 2004). The DOW claim that under ExPDITE, resource agencies are required to give transportation projects priority without adequate time for reviewing documents and assessing impacts. Therefore, it is argued that requirements to protect historical sites, parks, and wildlife refuges as under the traditional NEPA process would be weakened.

Likewise, the current administration introduced the National Energy Policy in May 2001 expediting energy exploration and production at the expense of public and environmental review (DOW, 2004; CEQ, 2004b). Essentially, the DOW argues that the streamlined NEPA approach would not require an analysis of a full range of alternatives and new technologies that could be used to mitigate adverse environmental impacts. Under Executive Order (EO) 13212 Actions to Expedite Energy-Related Projects 2001, agencies shall take appropriate actions, to the extent consistent with applicable law, to expedite projects that will increase the production, transmission, or conservation of energy. Furthermore, under EO 13212 agencies are encouraged to expedite their review of permits or take other actions as necessary to accelerate the completion of energy projects.
As part of the HFI, the USFS has introduced a streamlined guidance for EA’s, two new Categorical Exclusions, and streamlined approaches to Section 7 of the Endangered Species Act (USFS, 2004). Under Section 7(a)(2) of the Endangered Species Act, each federal agency must ensure that a proposed action will not jeopardize the continued existence of listed species or adversely modify designated habitat. Efforts to expedite the environmental process or streamline its approach are partially in response to natural disasters that threaten communities, which are arguably the result of poor management policies carried out in the past.

Proposed legislation under the current administration, such as the Healthy Forests Restoration Act (HFRA) 2003 introduced in response to wildfires, includes proposals to waive NEPA environmental reviews and appeals for a broad category of commercial logging operations (Khamsi, 2003). However, the HFRA and HFI are supposed to help the USFS and U.S. Bureau of Land Management plan and implement hazardous fuels reduction projects. Hence, the “rapid” introduction of these laws, such as those under the energy policy and the HFI, creates controversy.

An evaluation of the HFI streamlined EA guidance will determine whether this approach can be a success. The guidance states the EA should be “a concise public document of no more than 10-15 pages”, but “describe sufficient information and analyses for determining whether to prepare an EIS or Finding of No Significant Impact” (FONSI) (Appendix A, p.2). Therefore, the streamlined EA’s should contain adequate information that is understandable to the public and is defensible in court. However, if details on the environmental impact analysis and other NEPA process requirements are left out of the streamlined approach, the conclusions may be inadequate. Perhaps the
opposite is true and much of the unnecessary information is removed, allowing for better decisions and more efficient federal projects to be implemented.
CHAPTER 3

METHODS

This chapter describes the process used to evaluate whether the U.S. Forest Service (USFS) streamlined NEPA process meets regulatory requirements. The USFS is used to determine whether implementation of the streamlined Healthy Forests Initiative (HFI) NEPA process can meet regulatory requirements and satisfy essential case law standards. The memorandum issued by the CEQ on December 9, 2002 provides the regulatory guidance for implementing the streamlined EA process for forest fuel reduction projects (Appendix A).

Case study can be used as an alternative to traditional approaches in describing a situation or problem (Yin, 1993), emphasizing, in this case, the USFS’s approach to streamlining the NEPA process. Evaluating the Healthy Forests Initiative’s (HFI) streamlined NEPA process allows one to determine whether the environmental process has improved. Specifically, select EA’s that followed the streamlined guidance will be compared to a traditional EA.

Case Selection

In response to wildfire threats, the USFS has made a concerted effort to streamline the NEPA process. The introduction of a new streamlined guidance for preparing EAs is used for this analysis. Select pilot projects implemented under the HFI provide the basis
of this study. Eleven pilot projects have been completed to date. The case law indicates that different jurisdictions within the same agency may implement or interpret the NEPA process differently. This would suggest that one would find considerable variability among the 11 pilot projects.

Variability was expected between different USFS districts, therefore 4 examples were selected in this thesis from different USFS districts implementing the Healthy Forests Initiative. For instance, districts within the same federal agency often implement projects differently. The documents may vary in size and content. Additionally, the environmental conditions and communities were different for each example, perhaps influencing each project. Therefore, not all 11 pilots projects were evaluated in this thesis and the 4 selected represented an adequate cross section of available cases.

The core elements of the streamlined EA guidance state the document should be concise but contain sufficient information (Appendix A). It was anticipated that perhaps a concise document following the streamlined approach ignores important details of the environmental analysis. Therefore, the document potentially falls short of the regulatory requirements.

Content Analysis

One of the core elements of the revised guidance states that the EA should be a “concise public document” with “sufficient information and analysis for determining whether to prepare an EIS or a Finding of No Significant Impact (FONSI)” (Appendix A). This study looks at the details or specific information provided in the streamlined EA, to determine whether the document provides sufficient information. The EA should
contain enough details to support all claims made in the document. The revised guidance suggests preparing a concise document, but it must provide sufficient information to convince the reader.

Projects implementing the Healthy Forests Initiative guidance will be compared against a traditional EA. The level of detail typically provided in a traditional EA provides the baseline detail. Pertinent information for each environmental resource, such as biological, cultural, air and water resources is compared in a table to what one would typically expect to find in a traditional EA. These details may include quantitative data and specific percentages pertaining to compliance standards or regional forest plans. If there is no difference between the two, the table will indicate not applicable for that resource. Resources that are not expected to have impacts should not be discussed in detail.

Research Standards

This section identifies the standards used to evaluate what, if any, aspects of the streamlined NEPA process, fail to meet NEPA requirements. These topics are taken from case law and streamlining concepts attempting to identify and interpret inadequacies of the NEPA process.

1. Were a reasonable range of alternatives considered?

A reasonable number of alternatives considered for each proposed project is often difficult to assess. A range of alternatives must be rigorously explored and objectively evaluated, as well as other alternatives eliminated from further study (CEQ, 1981). The law requires at least the proposed action and no action
alternatives be considered in the detailed analysis. This thesis will assess whether other feasible alternatives were considered. For instance, public participation often introduces alternatives to the proposed action that should be evaluated. A review of the project record will indicate whether other alternatives were considered and the rationale for not including them in the EA. If there were other alternatives described in the project record that were not included in the EA, the range of alternatives will be considered inadequate.

2. Is there an adequate discussion of cumulative environmental impacts associated with the project in conjunction with other projects?

   Cumulative impact analysis is considered one of the more difficult components in preparing a NEPA document. This requires evaluation of past, present and reasonably foreseeable future actions in combination with the proposed action for determining significant adverse impacts. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR § 1508.7) A determination for an adequate cumulative impacts discussion for this study will be based on the extent to which other projects and the overall geographic area are considered.

3. Was the best available data used?

   Finding the best data is frequently a challenge that faces agencies implementing NEPA. The USFS has access to forest health data from previous projects that evaluated forest conditions. It is assumed that the design criteria for each proposed action follows the most current data available on forest fuel loads.
This paper evaluates whether the most current data on forest fuel is used for the analysis.

4. Does the streamlined document serve as a “stand alone” document?

A stand-alone document contains enough information to support the claims, but is still understood by the public. The streamlined EA will be read without reading the entire project record and supporting documents. If all the information is understood without referring to any of the reference documents, the EA will be considered a stand-alone document. However, the document is not a stand-alone if the conclusions are not convincing.

5. Did the “improved” streamlined NEPA process save time?

The streamlined process is ultimately trying the save the agency time and money, while meeting the objectives of the NEPA process. It is assumed that the timeline for each project would be shorter than a hypothetical traditional EA. Also, it is assumed that the streamlined approach saved the agency money in the short-term and a discussion of the potential long-term cost savings for each project is provided in the conclusions.

Evaluation Criteria

The following criteria will be used to evaluate whether each topic has adequately satisfied NEPA requirements following the streamlined process. The following scale will be applied to each question to determine whether a streamlined EA can be expected to result in litigation.
1. *No difference* in the streamlined EA compared to a traditional EA. The details provided for environmental consequences are similar to that of a traditional EA. Therefore, litigation is not expected and the streamlined process is considered successful.

2. *Superficial difference* in the streamlined EA that is not likely to result in litigation. Differences in the details provided in the streamlined EA may appear lacking on the surface. However, an in depth evaluation of the entire project record provides the necessary supporting information.

3. There are *Notable inadequacies* in the EA that might lead to a lawsuit with an unpredictable outcome. The document and project record are missing pertinent environmental impact analysis data. However, the process has been followed adequately with no major issues raised from the public that would likely result in litigation.

4. *Major inadequacies* in the EA that would likely result in the agency losing a lawsuit on the basis of not meeting NEPA requirements. For instance, environmental impacts are not discussed adequately and the process was not followed according to the law. In addition, the public was not adequately included in the process or given an opportunity to be involved in the process, as required by law.
CHAPTER 4

RESULTS

This section presents the evaluation results from the four streamlined EA’s. A brief discussion of the project and the proposed action is provided for each EA. Following the project description are the results from comparing the environmental resources to a traditional EA.

Example 1: Pine Valley Fuel Break Environmental Assessment May 2003

The Pine Valley Fuel Break is proposing to construct shaded fuel breaks on approximately 516 acres around the communities of Pine Valley and Central, Utah. This fuel break is intended to reduce the risk of wildland fire to Central and Pine Valley and provide public and firefighter safety. The Pine Valley District Ranger proposes a wide shaded fuel break on 253 acres and a scalloped fuel break on approximately 263 acres. The wide shaded fuel break will consist of removing trees creating a minimum spacing of ten feet and removing branches and brush up to five feet off the ground. The scalloped fuel break would be used primarily in pinyon-juniper and brush vegetation within 200-300 feet from the National Forest/private land boundary. All brush within the 30-foot wide area would be cut to two feet and remaining trees would have branches removed to five feet off the ground. Brush piles would be burned or left in place to provide small mammal, bird, and insect habitat. In Central Utah, where access is available, fuel wood
would be stacked for removal by anyone who has a permit. The effects analysis provided in the streamlined EA compared to a hypothetical traditional EA is summarized in Table 1.

The effects summary is intended to provide the necessary information to determine whether to prepare an Environmental Impact Statement. The EA was determined consistent with the National Forest Management Act, 16 U.S.C. 1604(g)(1) and the management direction described in the Dixie National Forest (DNF) Land and Resource Management Plan prepared in 1986. The FONSI issued May 2003 discussed whether the proposed project would have significant adverse environmental effects. Furthermore, the proposed action is a continuation of fuels projects that have occurred for many years on the Pine Valley District of the DNF without significant effects.
<table>
<thead>
<tr>
<th>Environmental Resource</th>
<th>Streamlined EA¹ (Proposed Action)</th>
<th>Traditional EA’s</th>
<th>Difference “missing information”²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Resources, Wetlands, Floodplains</td>
<td>All activities adjacent to intermittent and perennial streams would follow Design Criteria #4 and prevent any effect on perennial stream fish populations, water temperature, sedimentation, nutrient loading and municipal water supplies. Consistent with the wetlands and floodplain direction in the Dixie Forest Plan.</td>
<td>No change.</td>
<td>N/A</td>
</tr>
<tr>
<td>Soil</td>
<td>The disturbed soil amount does not exceed 15% of the watershed. The threshold beyond which disturbance may lead to changes in vegetation, stream channels and sediment loads. Consistent with the management direction in the Dixie Forest Plan.</td>
<td>Explain how the threshold is determined and how that relates to potential impacts to soils.</td>
<td>A “detrimentally disturbed soil” has been compacted or severely burned. Disturbed areas should not exceed 15% of a watershed, which could lead to malfunction of the sponge filter system and may lead to detrimental changes in vegetation health, stream channel integrity, suspended sediments loads and bedload.</td>
</tr>
<tr>
<td>Public Health &amp; Safety</td>
<td>Community safety would be improved Evacuation time would increase for citizens</td>
<td>Provide more detail how community safety would surely be improved.</td>
<td>Increased access points for residents of the impacted communities.</td>
</tr>
<tr>
<td>Heritage Resources</td>
<td>No historical or cultural resources present</td>
<td>Provide more detail on the type of surveys conducted in the proposed project area.</td>
<td>Several cultural resource surveys have been conducted in the area and all historic properties will be avoided</td>
</tr>
</tbody>
</table>

¹ USFS, 2003; Allen, 2003; Butler, No Date; Meier, No Date; Sidles, No Date
² Detail likely found in traditional EA
<table>
<thead>
<tr>
<th>Airshed</th>
<th>No difference between existing and proposed action annual emissions. Smoke from burning slash piles will be minimal and short duration. Consistent with the management direction in the DFP.</th>
<th>Provide more detail on existing airshed and compliance with National Ambient Air Quality Standards.</th>
<th>Pine Valley falls within the Class II airshed. Emission reduction techniques include low fuel moisture, dilution, burning during daylight hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological Resources</td>
<td>In general proposed project does not include critical breeding or nesting habitat for the federally listed and threatened Mexican Spotted Owl. Would add to a loss of nesting habitat for migratory birds. Viable populations would be maintained. Opening the canopy of the forest and leaving brush piles would benefit Management Indicator Species, such as the wild turkey, northern flicker and mule deer. However, this would cumulatively add a minor loss of nesting and foraging habitat. Five sensitive species are potentially affected by the proposed action, the flammulated owl, northern goshawk, spotted bat, Townsend’s big-eared bat, and Pine Valley goldenrush. Overall, the proposed action would not likely contribute to a trend toward federal listing or cause a loss of viability to the population. Consistent with management direction in the DFP.</td>
<td>No change.</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Approximately 50 acres of inventoried roadless area (IRA) within proposed treatment area. No effect on wilderness or IRA characteristics.

Provide detail explaining how the impacted 50 acres will be mitigated or not impacted.

Fuel reduction activities will not affect the character of the IRA and no undeveloped acres would be changed to developed.

The project area does not offer opportunities for adventure, excitement and solitude due to its proximity to residential communities.

Example 2: Pahvant Interagency Fuels Reduction Project Environmental Assessment Healthy Forests Initiative-Fuels Reduction August 2003

The project analysis area is located along the west side of the Pahvant Mountain Range, east of Interstate 15, between Fillmore and Richfield, and extending from Scipio to Meadow, Utah. The district ranger proposes to treat 14,300 acres of fuel accumulations along the Pahvant Range. The purpose of the treatments is to change fire behavior conditions near the communities of Scipio, Holden, Fillmore and Meadow, Utah. The specific fuel condition and fire behavior needs surrounding these communities are: 1) shorter fuel heights, 2) decreased fuel loads, 3) decreased flame length, and 4) decreased fireline intensity.

Treatments would occur in seven treatment units, each ranging from approximately 500 to 4,900 acres in size. Approximately 40-80 percent of the vegetation would be removed in each treatment unit. Treatment methods include cutting vegetation by hand (i.e. chainsaw); piling or scattering cut vegetation; burning cut vegetation by hand or helicopter; and broadcast burning by hand or helicopter.
The effects summary is intended to provide the necessary information to determine whether to prepare an Environmental Impact Statement. The effects analysis provided in the streamlined EA compared to a hypothetical traditional EA is summarized in Table 2. This assessment is designed to be consistent with the management direction contained in the BLM House Range Resource Management Plan. The EA presents a summary of the existing condition and a complete discussion of the existing condition and history of events leading up to the proposed action is contained in the specialist reports. The FONSI was issued August 2003 and an Environmental Impact Statement will not be prepared.
Table 2  Effects analysis for Streamlined EA compared to Traditional EA

<table>
<thead>
<tr>
<th>Environmental Resource</th>
<th>Streamlined EA(^3) (Proposed Action)</th>
<th>Traditional EA’s</th>
<th>Difference “missing information”(^4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventoried Roadless Area (IRA)</td>
<td>No new road construction would occur in IRAs. No effect to roadless characteristics beyond acceptable ranges for wilderness consideration.</td>
<td>No change.</td>
<td>N/A</td>
</tr>
<tr>
<td>Soil Erosion</td>
<td>Low to moderate intensity fire on level to moderately steep terrain would benefit soils by increasing nutrient availability. No BLM designated Critical Erosion Areas occur in project area. Action does not exceed Regional Soil Quality Standards and Guidelines.</td>
<td>Provide more detail on what is required under the Regional Soil Quality Standards and Guidelines.</td>
<td>At least 85% of the total acreage occurring within an activity area must have soil properties that remain in satisfactory condition. Plans for projects where treatments are expected to cause resource damage, exceeding the maximum thresholds listed under the R4 / Soil Quality Standards and Guidelines, must include provisions for mitigation of the ground disturbance.</td>
</tr>
<tr>
<td>Water</td>
<td>Sedimentation would likely be less and peakflow events from storms would be of lower magnitude than from wildfire. Short-term exceedence may occur during large storm and runoff events and could cover cold water organisms with sediment and ash or change water chemistry in areas just below treatments, but would not result in long-term impairment</td>
<td>No Change</td>
<td>N/A</td>
</tr>
</tbody>
</table>

\(^{3}\) USFS, 2003; Anderson, 2003; Barnhurst et al. 2003; Chapell 2003a; Chapell 2003b; Freeman 2003; McCarthy 2003; Smith 2003; Solt 2003; Wright 2003; Zieroth 2003

\(^{4}\) Detail likely found in traditional EA
| Heritage Resources                                                                 | Surveys would be completed for unsurveyed treatment units and State Historic Preservation Office (SHPO) concurrence obtained prior to project implementation on those units.  
Mitigation measures would be applied during project implementation.  
Action consistent with Section 106 of the National Historic Preservation Act | Details regarding all surveys prior to completing final EA. | Results of survey effort and required mitigation measures. |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| Biological Resources                                                              | Threatened, Endangered and Sensitive plants do not occur in the project area.  
May affect, not likely to adversely affect bald eagle and yellow-billed cuckoo.  
May impact individuals or habitat for spotted bat, peregrine falcon, western big-eared bat, northern goshawk, flammulated owl, and three-toed woodpecker but will not likely contribute to a trend towards federal listing or loss of viability to the population or species.  
May affect individual game and migratory bird species but will not adversely affect population numbers or species viability.  
Action is consistent with the National Forest Management Act. | Provide more detail as evidence for determination and rationale for conclusions made for each species potentially impacted. | For example, spotted bats have been found in a variety of habitats including the pinyon-juniper community, which will be affected by the proposed action. Spotted bats are thought to feed mainly on moths, a prescribed burn may remove vegetation that these moths utilize, this reduction in vegetation would be an indirect effect which would be short term (2-5 years) until the area starts to revegetate, once vegetation starts insect populations will increase. |
Air Quality

Lower amount of smoke produced than large, uncharacteristically intense and severe wildfire.

Project is more than 75 miles from non-attainment areas and would not exceed air quality standards

Consistent with the Clean Air Act.

Provide a bit more detail on how smoke will either dissipate or not impact communities.

Smoke is expected to remain at "nuisance" levels rather than at levels that could impair human health. During the day, when units are ignited, smoke is expected to travel on prevailing winds up over the Pahvant front and dissipate across the Scipio and Gunnison Valleys. Most of that smoke would dissipate, but some may surface.

Example 3: Last Chance Fuels Reduction Project Environmental Assessment May 2003

The proposed project would reduce the amount of hazardous fuels on approximately 1,700 acres of the Eldorado National Forest in the wildland urban interface around Grizzly Flat, Leoni Meadow, and Henry’s Diggings in El Dorado County, California. Actual acres typically change slightly, as final project layout is completed, and adjustments are made for site-specific conditions and the total area treated is not likely to fluctuate more than 10 percent. The proposed action would comply with the Eldorado National Forest Land and Resource Management Plan as amended by the Sierra Nevada Forest Plan Amendment EIS.

The Placerville Ranger District of the El Dorado National Forest has identified specific wildfire hazards to the community of Grizzly Flat and outlying residences. In the event of a wildfire originating within or outside the community, threats to both life
and property are anticipated. Grizzly Flat was included in a national list of urban-interface communities that are at high-risk from wildfire. The proposed project is designed to protect the communities from wildland fires, as well as to minimize the spread of fires that originate in urban areas by establishing a system of fuel reduction zones that would strategically connect to existing fuels reduction projects along Caldor Railroad Grade, Plummer Ridge, and Clear Creek.

The effects analysis provided in the streamlined EA compared to a hypothetical traditional EA is summarized in Table 3. Further analysis and conclusions about the potential effects are available in resource specialist reports and other documentation located in the project record. The FONSI was issued August 2003 and an Environmental Impact Statement will not be prepared.
Table 3  Effects analysis for Streamlined EA compared to Traditional EA

<table>
<thead>
<tr>
<th>Environmental Resource</th>
<th>Streamlined EA(^3) (Proposed Action)</th>
<th>Traditional EA’s</th>
<th>Difference “missing information”(^6)</th>
</tr>
</thead>
</table>
| Biological Resources   | Quail, mule deer, cavity nesters, and black bear would benefit from an increase in forage.  
Short-term (<5 years) adverse effect to black bear and mule deer reduced security cover on 560 acres.  
Habitat across mule deer, black bear, cavity nesting birds, and mountain quail maintained through localized improvement.  
No affect to elderberry longhorn beetle, western red bat, Sierra Nevada red fox, California wolverine, American bald eagle, willow flycatcher, American peregrine falcon, great gray owl, and American marten.  
Short-term reduction in habitat for California spotted owl, northern goshawk, pacific fisher, pallid bat, and Townsend’s big-eared bat. Expected to recover within 1-5 years as new litter falls and herbaceous and shrub vegetation returns. Restoration activities would improve habitat by improving movement corridors, reducing road density and removing threat of vegetation alteration by evasive species.  
No measurable affect to the quality or quantity of wildlife habitats and is consistent with the Endangered Species Act. | A more quantified analysis and rationale for determination of impacts. | Detailed analysis provided in terrestrial wildlife report and sensitive plants report.  
Framework prescriptions for each urban zone are described within the matrix table of each specialist report. |

\(^3\) USFS 2003; Ferrell 2003; Jennings et al. 2003; Mulder et al. 2003; Taylor No date; Taylor 2003; Yasuda et al. 2003a; Yasuda 2003b; Yasuda et al. 2003c  
\(^6\) Detail likely found in traditional EA
<table>
<thead>
<tr>
<th></th>
<th>Benefit migratory bird habitat, however could disturb during nesting season (April through July).</th>
<th>Low probability that turtles or their eggs would be crushed by heavy equipment because treatment units are not located near likely nesting sites.</th>
<th>No effects to all three known sensitive plants.</th>
<th>Low-moderate risk for introducing new noxious weed populations.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Air</strong></td>
<td>No significant impact on air quality from burning, adhere to Smoke Management Plan and Burn Plan. Required dust abatement, therefore no significant impact on air quality.</td>
<td>Details describing dust abatement measures and requirements under Smoke Management Plan.</td>
<td>Emission reduction techniques include low fuel moisture, dilution, burning during daylight hours.</td>
<td>Air  No significant impact on air quality from burning, adhere to Smoke Management Plan and Burn Plan. Required dust abatement, therefore no significant impact on air quality.</td>
</tr>
<tr>
<td><strong>Hydrology</strong></td>
<td>Rehabilitation of closed roads, restoration of waterholes, and reduction of roaded acres would improve watershed conditions and reduce sediment into channels and watershed in long-term. Short-term impact from ripping roads and possible sediment transport would not result in lost of productivity or hydrologic function. All five watersheds (Lower Steely, Clear Creek, Upper Steely Fork Consumnes River, Dogtown Creek, Lower Lower Middle Fork Consumnes River) would not contribute to adverse cumulative watershed effects. Consistent with the aquatic Management Strategy for the Sierra Forests.</td>
<td>No change.</td>
<td>N/A</td>
<td>Hydrology  Rehabilitation of closed roads, restoration of waterholes, and reduction of roaded acres would improve watershed conditions and reduce sediment into channels and watershed in long-term. Short-term impact from ripping roads and possible sediment transport would not result in lost of productivity or hydrologic function. All five watersheds (Lower Steely, Clear Creek, Upper Steely Fork Consumnes River, Dogtown Creek, Lower Lower Middle Fork Consumnes River) would not contribute to adverse cumulative watershed effects. Consistent with the aquatic Management Strategy for the Sierra Forests.</td>
</tr>
</tbody>
</table>
Cultural Resources

Design criteria have been developed to protect the known (18) sites identified within or adjacent to proposed ground-disturbing activities. Sites would be flagged and avoided. Flammable sites such as Henry’s Diggings and Arctic Mine Sites, historic logging features would be protected during prescribed burnings.

No change. N/A

| Cultural Resources | Design criteria have been developed to protect the known (18) sites identified within or adjacent to proposed ground-disturbing activities. Sites would be flagged and avoided. Flammable sites such as Henry’s Diggings and Arctic Mine Sites, historic logging features would be protected during prescribed burnings. | No change. | N/A |

Example 4: Boswell Creek Watershed Healthy Forests Initiative Project

Environmental Assessment September 2003

The Boswell Creek Watershed Healthy Forests Initiative Project includes about 8,650 acres of the Sam Houston National Forest about 10 miles northeast of New Waverly, Texas. This EA tiers off the Final EIS for the Revised Land and Revised Resource Management Plan for the National Forests and Grasslands in Texas and implements the management direction in the Plan. The proposed treatments will reduce the threat of catastrophic wildfires to protect communities, firefighters, wildlife and forest health. In addition, the action will reduce the potential for accelerated losses from southern pine beetle infestations to protect habitat for the endangered red-cockaded woodpecker.

The proposed actions consists of prescribed burning on a 2 to 5 year cycle on about 7,420 acres of pine-dominated stands and thinning on about 4,800 acres of upland pine. Thinning and prescribed fire would be instrumental in fuel reduction and the progression of the upland pine-dominated forests toward Condition Class 1 (low risk of losing key ecosystem characteristics due to wildland fire). Reduced understory vegetation, surface fuels and fuel ladders; increased spacing between individual trees and shrubs; and increased grass and herbaceous vegetation reduce the potential for fires to move into or
through the wildland urban interface or to adversely affect the federally endangered red-cockaded woodpecker.

The effects analysis provided in the streamlined EA compared to a hypothetical traditional EA is summarized in Table 4. Further analysis and conclusions about the potential effects are available in resource specialist reports and other documentation located in the project record. The FONSI was issued December 2003 and an Environmental Impact Statement will not be prepared.
Table 4  Effects analysis for Streamlined EA compared to Traditional EA

<table>
<thead>
<tr>
<th>Environmental Resource</th>
<th>Streamlined EA(^7) (Proposed Action)</th>
<th>Traditional EA’s</th>
<th>Difference “missing information”(^8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Resources</td>
<td>Adverse effects from the proposed action is unlikely. Proposed action would follow Design Criteria #4 which has been found to be effective in preventing sedimentation. Ephemeral streams would be protected as specified in Design Criteria #3. Low risk for adverse cumulative impacts to Boswell Creek watershed (15,150 acres).</td>
<td>No change.</td>
<td>N/A</td>
</tr>
<tr>
<td>Soil</td>
<td>Removal of trees creates potential for soil compaction/erosion. Proposed action would reduce fireline intensity below the level that would threaten soil productivity.</td>
<td>More detail describing BehavePlus model, which is used to determine fire impacts on soil productivity.</td>
<td>Fireline intensity is a measure of the heat produced at the flaming front per unit length of fire front. The BehavePlus model is used to generate fire behavior outputs for a various fuels conditions.</td>
</tr>
<tr>
<td>Public Health &amp; Safety</td>
<td>The proposed action would improve safety of surrounding residences and structures. Smoke management would limit exposure to workers and local residents. Limited use of the Lone Star Hiking Trail during prescribed burning and thinning would ensure safety of the public.</td>
<td>More detail describing smoke management used during prescribed burns.</td>
<td>Smoke management guidelines will outline sensitive targets such as health care facilities and airports. Weather considerations such as high winds would dictate when prescribed burns would occur.</td>
</tr>
</tbody>
</table>

\(^7\) USFS 2003a; Bayle 2003; Flue 2003; Floyd 2003; Prewitt 2003

\(^8\) Detail likely found in traditional EA
### Biological Resources

No fragmentation or change in the distribution of vegetation would occur.

No impact to old growth forests.

Proposed action would reduce Southern Pine Beetle hazard from moderate or high to low or moderate.

Federally listed Red-Cockaded Woodpecker would not be directly adversely affected by the proposed action. Improved existing and potential nesting and foraging habitat.

No impact to endangered Houston Toad, American Burying Beetle, and American Chaffseed. No impact to threatened Bald Eagle, Piping Plover, Louisiana Black Bear and American Alligator.

No significant impact to sensitive species (Rafinesque’s Big-eared Bat, Southeastern Myotis, Texas Emerald Dragonfly, Bachman’s Sparrow, Louisiana Pine Snake and Migrant Loggerhead Shrike).

Design Criteria #4 would limit timber harvest within streamside management zones, therefore no impact to sensitive aquatic species.

Temporarily displace and possibly harm management indicator species, however impacts are expected to be negligible.

### Heritage Resources

No impact to historic properties from the proposed action.

No change.  N/A

### Air Quality

Prescribed burning is a minor contributor to ozone air pollution problems in the area.

Similar to public health and safety section regarding smoke from prescribed burns.

See public health & safety.
CHAPTER 5

DISCUSSION

This chapter discusses the four streamlined examples and explanation context of the five research questions. Each research question is evaluated using the 4 criteria described in the methods sections. All four examples exhibited either “no difference” or “superficial differences” compared to what one would expect to find in a traditional EA. Conclusions and potential future research follows the discussion of the research questions.

Example 1

1) Were a reasonable range of alternatives considered?

Finding: Superficial difference

The EA failed to provide any baseline data for the No Action alternative that could be utilized to evaluate associated impacts. The EA does not exhaustively describe the No Action or any other proposed actions. However, each specialist report on the project record website addresses the No Action Alternative in greater depth.

2) Is there an adequate discussion of cumulative environmental impacts associated with the project in conjunction with other projects?

Finding: Superficial difference
Cumulative impacts were considered in each of the specialist reports that may have an impact on the particular resource and not provided in detail for the EA. Each specialist report contains information on the activities (past, present, and reasonable foreseeable) that may have an impact on that particular resource. Cumulative impacts discussion is lacking in the streamlined EA, however the conclusions drawn in the EA is provided in each of the specialist reports.

3) Were the best available data used?

Finding: *No difference*

This proposal focuses on treating the fuel conditions adjacent to local communities that would lead to fire behavior difficult to suppress. However, the actual wildland fire event that could occur adjacent to the Central and Pine Valley communities is unpredictable. No method exists to predict precisely the timing, location, and magnitude of such an event. Furthermore, a few of the environmental resource areas provided no difference in impacts detail. The information was provided in the specialist report for those resources that were different.

4) Does the streamlined EA document serve as a “stand alone” document?

Finding: *Superficial difference*

The EA was not meant to contain all the information for this particular project, only the information necessary to make a finding of no significant impact. People interested in further details regarding baseline conditions were directed to contact the district office or visit the projects website for the available specialist reports. However, this supports CEQ’s regulations that “agencies shall reduce excessive paperwork by preparing analytic rather than encyclopedic documents. Additionally,
the EA was prepared in accordance with the streamlined guidance set forth under the Healthy Forests Initiative.

5) Did the “improved” streamlined NEPA process save time?

Finding: No difference

The project initiation letter was issued in April 2002 followed by a scoping letter to the public October 2002. The specialist reports on affected environment and effects of implementation were issued January 2003. The draft EA was available for public review March 2003 for a 30-day comment period. The Decision Notice and FONSI with a 45-day appeal period were issued May 2003. The NEPA process for a traditional EA would take a similar timeframe to complete, perhaps slightly longer.

This action is a continuation of fuels projects that have occurred for many years in the Pine Valley District of the Dixie National Forest without significant effects. This project is the second part of a four-part project. The proposed change in fire behavior, and existing fuel conditions, provides for public and firefighter safety immediately surrounding the communities of Pine Valley and Central. Furthermore, there were no major inadequacies recognized and the “hard look” was achieved.

Example 2

1) Were a reasonable range of alternatives considered?

Finding: No difference

The USFS initially considered a proposal to reduce fuels on approximately 40,000 acres throughout the analysis area. Concerns about potential impacts to fragile North Horn soils eliminated this proposal. Furthermore, the legal notice proposed 16,000
acres of fuel reduction activities and concerns for potential Mexican spotted owl habitat were raised. This resulted in approximately 14,300 acres proposed for treatment, as described in the EA (Gardner, 2003).

2) Is there an adequate discussion of cumulative environmental impacts associated with the project in conjunction with other projects?

Finding: No difference

The analysis area also provided a logical area to evaluate cumulative effects for most resources. The analysis boundary for disclosing effects at the scale for this project is the west side of the Pahvant Mountain Range, which is approximately 287,500 acres in size and the cumulative effects area for the project is the same as the project analysis area for most resources, except wildlife. The cumulative effects area for wildlife includes the entire Pahvant Mountain Range. The larger cumulative effects area for wildlife is based on the mobile nature of wildlife, particularly wide-ranging species such as the bald eagle, elk and deer.

3) Was the best available data used?

Finding: No difference

The issues evaluated in the EA were based on public scoping and agency specialists. The effects to the following resources were considered in the EA: Inventoried Roadless Areas, soils, water resources, heritage resources, air quality and biological resources (USFS, 2003). There were no major differences in the data that was provided for each of the resources compared to a traditional EA. Additionally, project design specifications were created or modified in order to address all these concerns.
4) Does the streamlined EA document serve as a “stand alone” document?

Finding: *Superficial difference*

The EA was not meant to contain all the information for this particular project, only the information necessary to make a finding of no significant impact. People interested in further details regarding baseline conditions were directed to contact the district office or visit the projects website for the available specialist reports. However, this supports CEQ’s regulations that “agencies shall reduce excessive paperwork by preparing analytic rather than encyclopedic documents (CEQ, 2002). Additionally, the EA was prepared in accordance with the streamlined guidance set forth under the Healthy Forests Initiative.

5) Did the “improved” streamlined NEPA process save time?

Finding: *No difference*

The proposed action decision is subject to appeal in accordance with 36 CFR 215.11. Pursuant to 36 CFR 215.13, individuals or organizations that submitted substantive comments during the comment period may appeal the decision. Appeals must meet the content requirements of 36 CFR 215.14, as published in the Federal Register on June 4, 2003. No appeals were filed. The NEPA process for a traditional EA would take a similar timeframe to complete, perhaps slightly longer.

The proposed project is a continuation of fuels reduction projects that have occurred for many years on lands administered by the Fishlake National Forest and BLM Fillmore Field Office. The Pahvant Interagency Fuels Reduction EA incorporates by reference the detailed discussions and evaluations included in each of the resource specialist reports and other supporting documents. Furthermore, the USFS claims that the EA and the
entirety of the project planning record provided the information that was necessary to
determine that the impacts of the proposed action are not expected to be significant.
Therefore, the EA supports the determination that the proposed action would not have a
significant impact on the quality of the human environment.

Example 3

1) Were a reasonable range of alternatives considered?

Finding: *Superficial difference*

The EA failed to provide any baseline data for the No Action alternative that
could be utilized to evaluate associated impacts. The EA does not exhaustively
describe the No Action or any other proposed actions. Each specialist report on the
project record website addresses the No Action Alternative in greater depth.
Furthermore, no significant issues were raised during public scoping, therefore no
alternatives other than the proposed action and the no action alternative have been
fully developed and analyzed (Hardy, 2003).

2) Is there an adequate discussion of cumulative environmental impacts associated with
the project in conjunction with other projects?

Finding: *Superficial difference*

The Biological Assessments and Biological Evaluations considered potential
cumulative impacts of this proposal on habitat for wildlife and plants. In addition,
cumulative watershed effects analysis was completed for all watersheds within the
project area, which considered past, present and reasonably foreseeable future
activities. These documents and analysis disclosed in the EA support the finding that
this proposal would not cause significant cumulative effects on biological or physical resources, even when considered in relation to other actions (Taylor, No Date).

3) Was the best available data used?

Finding: *No difference*

The Placerville Ranger District has completed 8 environmental documents covering fuels reduction projects over the past 6 years. These projects have exhibited the desired change in wildfire behavior by reducing rate of spread and intensity of the fire. Therefore, the data and project design specifications for this project are not uncertain and would not create significant adverse impacts to the environment (USFS, 2003b).

4) Does the streamlined EA document serve as a “stand alone” document?

Finding: *Superficial difference*

The EA was not meant to contain all the information for this particular project, only the information necessary to make a finding of no significant impact. People interested in further details regarding baseline conditions were directed to contact the district office or visit the projects website for the available specialist reports. However, this supports CEQ’s regulations that “agencies shall reduce excessive paperwork by preparing analytic rather than encyclopedic documents (CEQ, 2002). Additionally, the EA was prepared in accordance with the streamlined guidance set forth under the Healthy Forests Initiative.

5) Did the “improved” streamlined NEPA process save time?

Finding: *No difference*
A brief description of the project was included in the Eldorado National Forest schedule of proposed actions in April 2001. Adjacent property owners, potentially effected businesses, federal, state and local agencies, and local special interest groups were mailed letters and invited to a public meeting February 1, 2003. No significant issues were raised during and the final EA was published in May 2003. The FONSI and Decision Notice were issued in August 2003. The NEPA process for a traditional EA probably would have taken longer. However, early public involvement proves to be an effective means to avoiding costly litigation in the long-term.

The project area has not directly experienced a large wildfire within the last 42 years. The lack of fire has allowed dense vegetation and surface fuels to accumulate. The potential for a wildfire start is high due to residential development, recreational use, and lightning. The direct effects of the proposed action are limited to impacts in the immediate project area. Furthermore, the proposed action is located on ridgetops and mid-slope and not in the proximity to any sensitive environmental resources, such as parklands, prime farmlands, wetlands, wild and scenic rivers, and ecologically critical areas (USFS, 2003a; USFS, 2003b).

Example 4

1) Were a reasonable range of alternatives considered?

Finding: Superficial difference

The potential impacts of the No Action alternative were described in more detail in the specialist reports. In addition to the two alternatives considered in detail in the EA and specialist reports, several alternatives were considered during the public scoping process. For example, the proposed alternative to provide educational,
technical, and grant assistance to adjacent private property owners and in-holders is already available to adjacent property owners through the Firewise program implemented in the National Fire Plan (Bigler, 2003).

2) Is there an adequate discussion of cumulative environmental impacts associated with the project in conjunction with other projects?

Finding: *Superficial difference*

Based on the analysis and disclosure of effects in the EA and the specialist reports in the project file, the project does not represent potential cumulative adverse impacts when considered in combination with other past actions or reasonably foreseeable future actions. The cumulative effects analysis considered activities on national forest land and indicated that implementation of the proposed action may have minor negative short-term cumulative effects on soil and biological resources. However, application of the Standards & Guidelines and Design Criteria would minimize the long-term negative cumulative effects.

3) Were the best available data used?

Finding: *No difference*

The Boswell Creek Watershed Healthy Forests Initiative Project is consistent with National Forest Management Act requirements [36 CFR § 219.27(b)] regarding resource protection, vegetation manipulation, silvicultural practices, even-aged management, riparian areas, soil and water, and diversity. The proposed action will alter vegetation, but comply with the seven requirements of 36 CFR § 219.27 (c)(1). The mitigating measures and standards & guidelines in the Forest Plan provide site-specific design criteria minimizing impacts to less than significant (Bigler, 2003).
4) Does the streamlined EA document serve as a “stand alone” document?

Finding: *Superficial difference*

The EA was not meant to contain all the information for this particular project, only the information necessary to make a finding of no significant impact. People interested in further details regarding baseline conditions were directed to contact the district office or visit the projects website for the available specialist reports. However, this supports CEQ’s regulations that “agencies shall reduce excessive paperwork by preparing analytic rather than encyclopedic documents (CEQ, 2002). Additionally, the EA was prepared in accordance with the streamlined guidance set forth under the Healthy Forests Initiative.

5) Did the “improved” streamlined NEPA process save time?

Finding: *No difference.*

The Boswell Creek Watershed Healthy Forests Initiative EA was completed in September 2003 and the Decision Notice and FONSI were issued in December 2003. Public comments were minimal and none that warranted significant research or further discussion of alternatives. The NEPA process for a traditional EA would take a similar timeframe to complete.

This project has localized implications, concentrating in the immediate treatment areas. The people most affected by the treatments will be local residents. This action is also a continuation of fuels and thinning projects that have occurred for many years on the Sam Houston National Forest. Short-term adverse effects would be mitigated through implementation of the Standards and Guidelines in the Revised Land and Resource
Management Plan, Best Managements Practices, and design criteria developed for the project.

Conclusions

Major federal actions can include building roads, selling public lands, transporting nuclear waste or, in these examples, implementing new forest management policies. The required NEPA documentation for any major federal proposal may include an EIS, EA or CX. However, if the document does not provide sufficient information for the public to understand, the analysis falls short. The necessary details are not always provided in the streamlined EA, but are readily available in the project record.

The “hard look” concept and determination of a reasonable range of alternatives have generated extensive case law. To determine whether the “hard look” concept has been achieved, a reasonable range of alternatives, best available data and adequate discussion on cumulative impacts must be considered. In addition to evaluating the streamlined EA, the decision documents, such as the Finding of No Significant Impact (FONSI) and specialist reports, determined that the USFS had taken a “hard look” at each proposal. The evaluation criteria were used to conclude that all 4 examples exhibited no major inadequacies and the streamlined NEPA process considered a success.

All streamlined EA documents generally contain the same information that is typically seen in a traditional EA. However, none of the EA’s contains enough information to serve as stand-alone documents. Several of the different environmental resource area impacts sections do not provide an adequate discussion on the surface. However, specialist reports contain the necessary information and can be found in the project record.
Public involvement is documented fairly well throughout each example evaluated. All public comments and responses to those comments were documented and part of the project record. However, the volume of public comments is not necessarily the determining factor for deciding whether there are impacts. The comments must contain substantive information that warrants a response and in some cases they did. Opposition to a project does not necessarily indicate that a significant environmental issue is present.

Mitigation measures typically used in EA’s, which reduces anticipated environmental impacts to less than significant, are generally not identified in the streamlined EA. In the future streamlined EA’s and applicable Finding of No Significant Impact should include more detailed descriptions of the required mitigation. The mitigation measures enable the proposal to be implemented and determined to have less than significant impacts. Also, the final decision notice should include whether post project monitoring and enforcement are required when projects are implemented. Finally, the decision should specify how long the mitigation period would last and how success will be measured.

The short-term cost for each pilot project was probably significantly lower than that for traditional EA’s. Short-term cost savings could lead to long-term litigation costs if future HFI documents had major or notable inadequacies. Early public involvement helps to minimize the potential for costly future litigation. The long-term costs of rehabilitating and compensating communities affected by catastrophic wildfires far outweigh the costs of not implementing fuel reduction projects as a result of litigation delays. It would be interesting to evaluate the cost-benefits of implementing the HFI. Producing an adequate EA or not, the long-term costs of catastrophic wildfires would be significant.
Future Research

A Categorical Exclusion (CX) requires the least documentation and is often the most preferred alternative for agencies required to comply with NEPA. Typically, this involves a one-three page letter describing the project and the no impacts the will result from the proposed action. Each agency has their own guidelines and specific categories for projects that qualify as a CX. It is often argued that the categories are too vague and agencies can typically find one that the proposed action falls under to avoid any further documentation.

The Healthy Forests Initiatives introduced two new CX categories creating controversy (USFS, 2004). The potential lack of analysis and use of CX’s negates the intended requirements of the NEPA. This potential loophole in the law is something that should be addressed in further research.

The following two CX’s were introduced as part of the HFI. First, hazardous fuels reduction activities using prescribed fire not to exceed 4,500 acres, and mechanical methods for crushing, piling, thinning, pruning, cutting, chipping, mulching, and mowing, not to exceed 1,000 acres. Second, Post-fire rehabilitation activities not to exceed 4,200 acres (such as tree planting, fence replacement, habitat restoration, heritage site restoration, repair of roads and trails, and repair of damage to minor facilities such as campgrounds) to repair or improve lands unlikely to recover to a management approved condition from wildland fire damage, or to repair or replace minor facilities damaged by fire (USFS, 2003).

In addition, a follow-up in areas that implemented the HFI and required mitigation measures will indicate whether it was a success. Each environmental document implies
that the long-term impacts would not be significant with implementation of mitigation measures. A long-term proposal to follow-up on the examples discussed would confirm that the streamlined environmental documents were adequate.
BIBLIOGRAPHY


and Resolving Disputes between State and Federal Agencies During the Transportation Project Development and Environmental Review Process. In collaboration with the U.S. Institute for Environmental Conflict Resolution, Tucson, AZ.

_____. 2004. Environmental Streamlining (Website)


   Example 1: Pine Valley Fuel Break

Pine Valley Project Website


Example 1: Specialist Reports


Meier, Noelle (USFS). No Date. Report effects wilderness areas and roadless.

Sidles, C. (USFS). No Date. Pine Valley Fuels Corridor Air Quality Existing Conditions and Effects.

Sidles, C. (USFS). No Date. Pine Valley Fuels Corridor Fire and Fuels.

Example 2: Pahvant Interagency Fuels Reduction Project


Pahvant Interagency Fuels Reduction Project Website


Example 2: Specialist Reports


Example 3: Last Chance Fuels Reduction Project


Last Chance Fuels Reduction Project Website


Example 3: Specialist Reports


Jennings, Gregg (USFS) and Jann Williams (USFS). 2003. Aquatic Species Biological Assessment and Evaluation for the Last Chance Fuels Reduction Project. March 10.

Mulder, Cheryl (USFS) and Cynthia Podsiadlo (USFS). 2003. Riparian Conservation Objectives Analysis Last Chance Fuels Reduction Project. February 27.

Taylor, Mike (USFS). No Date. Biological Evaluation for Sensitive Plants.


Yasuda, Susan (USFS) and Jann Williams (USFS). 2003a. Management Indicator Species Report for the Last Chance Fuels Reduction Project.


Example 4: Boswell Creek Watershed Healthy Forests Initiative Project

Boswell Creek Watershed HFI Project Website


Example 4: Specialist Reports


APPENDIX A

COUNCIL ON ENVIRONMENTAL QUALITY GUIDANCE FOR

ENVIRONMENTAL ASSESSMENTS OF

FOREST HEALTH PROJECTS
EXECUTIVE OFFICE OF THE PRESIDENT
COUNCIL ON ENVIRONMENTAL QUALITY
WASHINGTON, D.C. 20503

December 9, 2002

MEMORANDUM

TO: Ann M. Veneman
Secretary of Agriculture

Gale A. Norton
Secretary of the Interior

FROM: James L. Connaughton
Chairman

SUBJECT: Guidance for Environmental Assessments of Forest Health Projects

The President’s Healthy Forests Initiative for Wildfire Prevention and Stronger Communities (August 22, 2002) called for administrative improvements that ensure more timely decisions, greater efficiency, and better results in projects that reduce the risk of catastrophic wildfires and restore forest and rangeland health. Such improvements will help restore threats to community safety and better protect wildlife and ecosystems, as well as improve water and air quality. To this end, the President directed CEQ to develop guidance to ensure consistent procedures under the National Environmental Policy Act (NEPA) for their selection and site-adapted ecosystem restoration projects, including development of a model Environmental Assessment (EA) for such projects. EAs provide valuable information for assessing the environmental impacts of projects. These projects will provide important data for monitoring performance as the agencies’ work to reduce the threat of severe fires and promote healthy forests and rangeland under A Collaborative Approach for Reducing Wildland Fire Risk to Communities and the Environment -- 10-Year Comprehensive Strategy and its Implementation Plan.

The following briefly describes core elements of the EA process and provides an outline for an EA document tailored to forest and rangeland health projects. Field staff, with guidance from senior advisors, will use the EA outline in the field over the next several months to complete EAs for different types of forest and rangeland health projects. Based on this experience, we will provide examples of completed EAs to be used as models and may develop more substantive protocols.
Environmental Assessment (EA) Process for Forest Health Projects

1. Your EA should be "a concise public document" of no more than 10-15 pages that:
   - Describes sufficient information and analyses for determining whether to prepare an environmental impact statement or a finding of no significant impact;
   - Helps you document NEPA compliance when no EIS is needed;
   - Facilitates your preparation of an EIS when one is necessary. 40 CFR 1508.9.

Your EA must address the following four elements:
   - Statement of need for your proposed action;
   - Description of alternatives as required by NEPA section 102(2)(E);
   - Description of the environmental impacts of the proposed action and alternatives;
   - List of the agencies and persons you consulted. 40 CFR 1508.9.

3. Your EA should reference any supporting data, inventories and other documents on which you relied. You may, but are not required to, use the EA to document project compliance with other statutes.

4. You must involve interested agencies and the public in your preparation of the EA to the extent practicable. See 40 CFR 1501.4(b). The 10-Year Implementation Plan calls for a collaborative process to identify and prioritize projects. The EA process provides you flexibility in how you involve interested parties in the most efficient and effective manner to obtain input on the EA.

5. If you prepare a Finding of No Significant Impact (FONSI) you should attach the EA and incorporate it by reference. Note that your draft FONSI must be available for a 30 day public comment: 1) when your proposed action is without precedent, or 2) when your proposed action is similar to one that normally requires an EIS.

6. As the EA and FONSI are ready, you must provide reasonable public notice of their availability.

7. If you determine that an EIS is necessary, you must prepare and publish a Notice of Intent (NOI) that briefly describes: 1) the proposed action and alternatives identified; 2) your proposed scoping process, and 3) your agency contact for further information.
Contents of a Model Forest Health Environmental Assessment

Need for the Proposal

☐ Briefly describe the existing condition, the desired future condition, and how the forest health project will achieve the desired condition.
☐ Briefly describe information that substantiates the need for the project; incorporate by reference information that is reasonably available to the public.

Proposed Action and Alternatives

☐ List and briefly describe your proposed action and any alternatives that meet the project purposes. You have discretion as to the number of alternatives.
☐ When there is consensus about the proposed action based on input from interested parties, you can consider the proposed action and proceed without consideration of additional alternatives. Otherwise, you need to develop reasonable alternatives to meet project needs. (NEPA section 102(2)(E)).

Environmental Impacts of the Proposed Action and Alternatives

☐ Describe the environmental impacts of your proposed action and each alternative. Your alternatives must meet the purpose and need of the forest health project.
☐ Your description should provide enough information to support a determination to either prepare an environmental impact statement or find no significant impact.
☐ Concentrate on whether the action would "significantly" affect the quality of the human environment. You should use CEQ’s definition of "significantly," 40 CFR 1508.27, as a general guide and, where applicable, cite to agency guidance, policies, monitoring and experience, including prior significance determinations documented in related or analogous NEPA decisions.
☐ Tailor the length of your discussion to the complexity of the impacts.
☐ You may discuss the impacts (direct, indirect and cumulative) of each alternative together in a comparative description or discuss each alternative separately.
☐ You may contrast the impacts of the proposed action and alternatives with the current condition and expected future condition in the absence of the project. This would constitute consideration of a no-action alternative.
☐ Incorporate by reference data, inventories, other information and analyses you relied on. The use of hyperlinks in web-based documents is encouraged. This information must be reasonably available to the public.
☐ You should be clear and concise about your conclusions.

Agencies and Persons Consulted

☐ List the agencies and persons consulted.
APPENDIX B

ACRONYM LIST

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<tr>
<th>Acronym</th>
<th>Description</th>
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<tr>
<td>CEQ</td>
<td>Council on Environmental Quality</td>
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<td>CFR</td>
<td>Code of Federal Regulations</td>
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<td>Environmental Impact Statement</td>
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<td>WUI</td>
<td>Wildland Urban Interface</td>
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