



NEPA - Introduction to Incorporating Climate Change

Preparers

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Background

The National Environmental Policy Act requires federal agencies to analyze the environmental effects of their proposed actions before making decisions. Climate change is one environmental effect that may be considered. Considerations may include both potential effects of a proposed action on climate change and the implications of climate change for the environmental effects of a proposed action. Which effects to analyze, and the depth of analysis, will vary by the nature of the proposal, the needs of the decision-maker, the intensity of the effect(s), scientific uncertainty or controversy, and public interest as determined from scoping or public comment.

The Forest Service has developed guidance (US Forest Service. 2009. [Climate Change considerations in project level NEPA analysis](#)) for climate change considerations under NEPA, which focuses on the dual aspects of climate change 1) the effect of a proposed project on climate change through greenhouse gas emissions, and 2) the effect of climate change on a proposed project. The guidance stresses considerations in Pre-NEPA analyses, including the purpose and need and proposed action, scoping, alternative development, effects analysis, and decision documents. The focus of the guidance is to incorporate climate change into project NEPA that is relevant for the project decision. The Forest Service will revise this guidance as scientific understanding improves and climate change management experience is gained. The following pages provide an overview of potentially appropriate considerations regarding climate change when performing analyses under NEPA.

This topic paper is organized by the three main stages of the NEPA process: **proposal development, environmental analysis**, and **implementation** (including monitoring). Within each section, a discussion of how or when to consider effects related to climate change is provided, along with examples from completed NEPA analyses and resources.

The NEPA Process

NEPA applies to “major Federal actions,” and the NEPA process begins when a Federal agency develops a proposal to take action. In general, the NEPA process includes scoping and involving the public, identifying issues, using an interdisciplinary approach, gathering data, developing alternatives, estimating the effects of the alternatives, and documentation. There are three levels of analysis: categorical exclusion determination (CE); preparation of an environmental assessment (EA); or preparation of an environmental impact statement (EIS). For more detail on the NEPA process see [the federal NEPA regulations](#), [Forest Service NEPA regulations](#), [Forest Service NEPA directives](#) and the EPA’s National Environmental Policy Act Review Process [website](#). The materials included in these topic pages describe climate change considerations that are primarily associated with developing an EIS, with some considerations for EAs and associated documentation.

- **CE:** Categorical exclusion means a category of actions that do not individually or cumulatively have a significant effect on the human environment. A proposed action may be categorically excluded from further analysis and documentation in an EIS or EA only if there are no “extraordinary circumstances” related to the proposed action and if the proposed action fits within one of the categories established by the Secretary of Agriculture, Chief, or Congress. (Refer to [Chapter 30 of the Forest Service NEPA directives](#) for more information.)
- **EA:** An environmental assessment is a concise public document that serves to provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact (FONSI). An EA also provides for compliance with NEPA when no environmental impact statement is necessary. If the responsible official determines that a proposed action may have a significant effect on the environment, NEPA requires preparation of an environmental impact statement (EIS). If an EA and FONSI have been prepared, the responsible official documents the decision to proceed with an action via a decision notice. (Refer to [Chapter 40 of the Forest Service NEPA directives](#) for more information.)
- **EIS:** An environmental impact statement is prepared when the environmental analysis determines there may be significant environmental effects. The process and content requirements for EISs are more extensive than those of CEs and EAs. For example, EISs require publication of a notice of intent, scoping, publication of a draft EIS, a public comment period, and a final EIS. When an EIS has been prepared, the responsible official documents the decision in a “record of decision” or ROD. (Refer to [Chapter 20 of the Forest Service NEPA directives](#) for more information.)

The NEPA process is generally organized into the three main stages described below (see Fig. 1). Note that the process and requirements vary according to whether a CE, EA, or EIS is prepared. (Consult the [Forest Service NEPA directives](#) for additional information.)

1. **Proposal Development.** This stage consists of determining whether NEPA applies, developing a purpose and need for action and determining whether the project’s purpose, objectives, and activities are consistent with the land and resource management plan and applicable laws.
2. **Environmental Analysis.** After the proposal is developed, the proposed action is sent out for scoping to identify the issues for analysis. Alternatives are developed, and their environmental effects are analyzed. The responsible official makes a final decision on the chosen project alternative after completing any applicable administrative review process.
3. **Implementation.** Once a decision is made, a decision document is filed, and the chosen project alternative is implemented, and it may be monitored, evaluated, and adjusted according to adaptive management strategies identified in the proposed action.

The following pages will discuss how climate change may be considered at all stages of the NEPA process.

Types of Climate Change Considerations

There are three ways that climate change could be considered at various stages in the NEPA process (Figure 1):

- The effects of a proposed project on climate change through greenhouse gas (GHG) emissions and sequestration. Examples include short-term GHG emissions and alteration to the carbon cycle caused by hazardous fuels reduction projects; GHG emissions from the extraction of fossil fuels and minerals; or avoiding large GHG emissions pulses and effects to the carbon cycle by thinning overstocked stands to increase forest resilience and decrease the potential for large scale wildfire.
- The effects of climate change on a proposed project. That is, will climate change influence the affected environment in such a way that it will affect the purpose and need of a project? Examples could include current or projected influences of climate change on habitat suitability for target species or ecosystems in restoration projects; effects of increased flooding on site selection for recreation areas; or effects of decreased snowfall on a ski area expansion proposal at a marginal geographic location, such as a southern aspect or low elevation.
- The implications of climate change for the environmental effects of a proposed action. In addition to consideration of emissions and sequestration caused by the project, it may be necessary to consider the effects of a project on a particular resource in combination with those caused by climate change. Will the action and climate change combine to create increased impacts on a resource? Will other reasonably foreseeable actions add further impacts creating cumulative effects? Examples include the potential for climate change and habitat fragmentation caused by the project and outside the project area to lead to jeopardy or listing under the Endangered Species Act for a Regional Forester's species of conservation concern, or the potential for climate change and project activities to foster the spread of non-native invasive species. Some projects may not require detailed analysis of all or any of these effects. Which effects to analyze, and the depth of analysis, will vary by the nature of the proposal, the needs of the decision-maker, the intensity of the effects, scientific uncertainty or controversy, and public interest as determined from scoping.

Figure 1. This diagram indicates where climate change may be considered in the NEPA process. Note that considerations related to the effects of climate change on a project receive greater emphasis in proposal development and monitoring and evaluation, and considerations related to the effects of a project on climate change (i.e., greenhouse gas emissions) and the climate change implications for a project's other effects receive greater emphasis in environmental analysis. However, all areas will likely be considered at each stage, and some projects may vary in the degree of emphasis.

How to cite

Brandt, Leslie; Schultz, Courtney (June, 2016). Climate Change Considerations in National Environmental Policy Act Analysis. U.S. Department of Agriculture, Forest Service, Climate Change Resource Center. www.fs.usda.gov/ccrc/topics/nepa

Recommended Reading

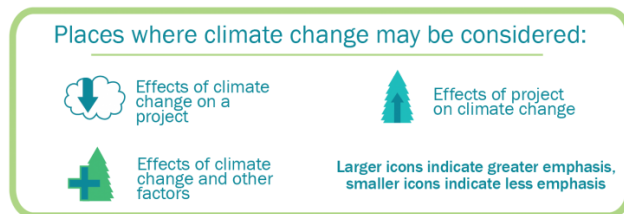
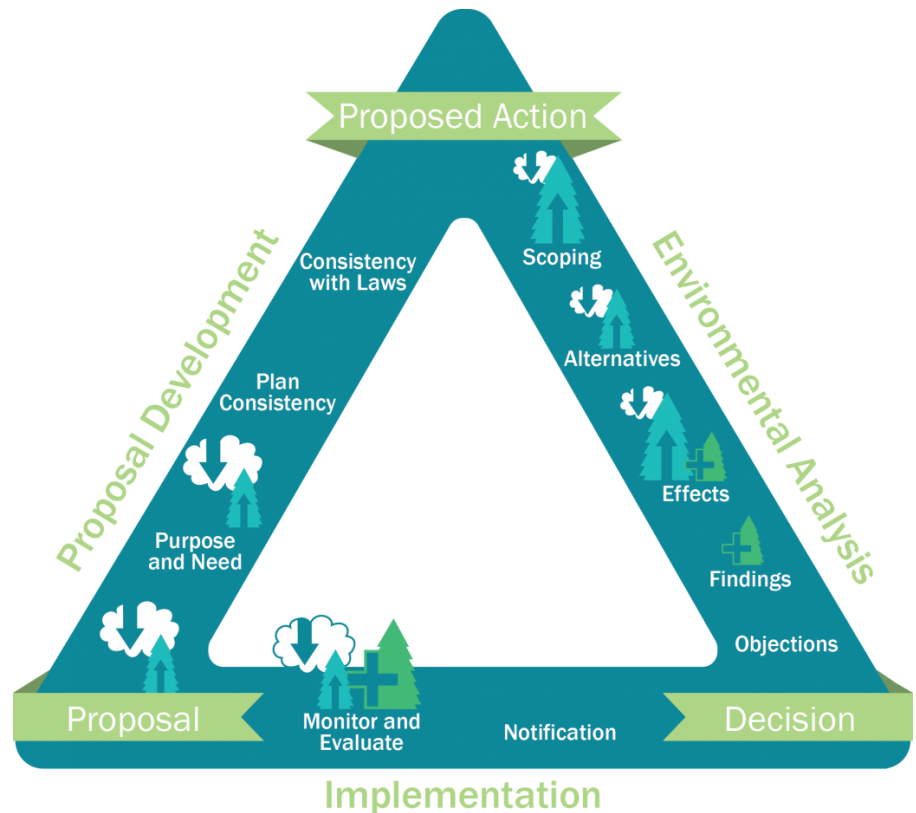
Delach, A.; Matson, N.; Murray, H.; Colegrove, C. 2013. Reasonably foreseeable futures: Climate change adaptation and the National Environmental Policy Act. Defenders of Wildlife white paper, 34 pp.

Squillace, M.S.; Hood, A.N. 2012. NEPA and Climate Change. NEPA Litigation Guide 261 (American Bar Ass'n, 2d ed. 2012); U of Colorado Law Legal Studies Research Paper No. 12-16.

Squillace, M.S.; Hood, A.N. 2011. NEPA, climate change, and public lands decision-making. U of Colorado Law Legal Studies Research Paper No. 11-13.

Stein, A.L. 2010. Climate change under NEPA: avoiding cursory consideration of greenhouse gases. University of Colorado Law Review, Vol. 81, 72 pp.

US Forest Service. 2009. Climate Change considerations in project level NEPA analysis.



Related Links

Columbia University Sabin Center for Climate Change Law (SCCCL) One of SCCCL's major recent projects has been a systematic analysis of how EISs required under NEPA, and under state law NEPA analogs, treat the issue of climate change.

Related Topics

Uso del análisis del inventario forestal para detectar migraciones de árboles en respuesta al cambio climático

NEPA - Decision Documents and Implementation

NEPA - Environmental Analysis

NEPA - Proposal Development

Vegetation Models for Climate Change Impacts

Predicting Changes in Forest Composition and Dynamics

Tree Habitat Shifts

Detecting Tree Migration with Forest Inventory Analysis

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Climate Change in Natural Resource Assessments

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