

Chapter 11

PREPARING ENVIRONMENTAL DOCUMENTATION

MDT ENVIRONMENTAL MANUAL

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Chapter 11

PREPARING ENVIRONMENTAL DOCUMENTATION

11.1 OVERVIEW

Chapters 12 “Categorical Exclusion,” 13 “Environmental Assessment/FONSI” and 14 “Environmental Impact Statement/ROD” provide specific guidance for preparing and processing the necessary documentation for compliance with the *National Environmental Policy Act* (NEPA) (42 USC 4321, et seq.) and the *Montana Environmental Policy Act* (MEPA) (MCA 75-1-101, et seq.). Chapter 11 supplements the information in Chapters 12, 13 and 14 by providing guidance on the roles and responsibilities associated with preparation of environmental documentation for MDT projects. These roles and responsibilities vary depending upon whether the documentation is being prepared by the Environmental Services Bureau (ESB) or by a Consultant. Chapter 11 also provides guidance on principles for improving the quality, clarity and effectiveness of environmental documentation that should be considered, regardless of the level of documentation or whether it is being prepared by ESB or by a Consultant.

11.2 LAWS, REGULATIONS AND GUIDANCE

11.2.1 Improving the Quality of Environmental Documents

This May 2006 Report was prepared and issued by a joint committee of the American Association of State Highway and Transportation Officials (AASHTO) and the American Council of Engineering Companies (ACEC), in cooperation with Federal Highway Administration (FHWA). It documents the results of an initiative of transportation practitioners nationwide to improve the quality of environmental impact statements (EIS) and environmental assessments (EA) prepared for compliance with NEPA. The report addresses quality and clarity of NEPA documents and offers recommendations on ways to make the documents more effective, engaging and useful. The report also provides guidance on legal sufficiency that is intended to provide a better understanding of the FHWA legal sufficiency review.

11.2.2 FHWA Memorandum “Information: Improving the Quality of Environmental Documents”

This memorandum dated July 31, 2006, documents the support of the FHWA regarding the findings and recommendations in the Report *Improving the Quality of Environmental Documents*. The memorandum notes that FHWA cooperated with AASHTO and ACEC in preparing the Report. It provides a brief overview of the contents of the Report and encourages the use of approaches discussed in the Report to make documents more effective and easier to read.

11.2.3 MDT “Environmental-Environmental Documents” Activity Descriptions

These activity descriptions are for Management Unit 2700 “Environmental – Environmental Documents.” They are a part of MDT’s OPX2 project management system. They describe the various tasks, timeframes and procedures for preparing and processing environmental documentation. The activity descriptions apply to environmental documentation prepared by Consultants or by the ESB.

11.2.4 Reader-Friendly Document Tool Kit

The Washington State Department of Transportation (WSDOT) prepared this publication. It provides tips and tools for creating environmental documents for WSDOT projects that are more “reader-friendly” (i.e., easier for the public and reviewers to read and understand). The *Reader-Friendly Document Tool Kit* is a companion document to WSDOT’s *Environmental Procedures Manual*.

11.3 PROCEDURES

11.3.1 Roles and Responsibilities

MDT's general practice is to assign preparation of EA and EIS documents for MDT projects to Consultants. ESB generally prepares the environmental documentation for projects eligible for a CE.

Preparation of environmental documentation should follow the activity descriptions provided in the current OPX2 Management Unit 2700 "Environmental – Environmental Documents" and the "[Environmental Document Process](#)" located in Appendix C of this *Manual*. Review the activity descriptions and flowcharts for details regarding specific tasks, timeframes and deliverables for the environmental documentation process.

11.3.1.1 Consultant Projects

The Consultant coordinates with the MDT Consultant Design Project Manager as reflected in the activity descriptions. The basic role of the Consultant is to prepare various items of documentation and correspondence as described in the activity descriptions. The Consultant gathers information, performs analyses and prepares documentation for review and approval by ESB and FHWA. ESB serves as the point of contact with FHWA or the Montana Environmental Quality Council (EQC). ESB also serves as the contact with outside resources and review agencies, other governmental offices and other offices within MDT for purposes of obtaining and responding to comments on the environmental documentation prepared by the Consultant. The Consultant drafts recommended correspondence for approval and signature by ESB to transmit documents for review, respond to comments, etc. At each stage of the environmental documentation process, the Consultant is responsible for initiating the work to produce the information required for that stage and for providing the information to MDT. ESB is responsible for accomplishing the necessary review and coordination with the Consultant and Consultant Design Project Manager to address any concerns with the information prior to proceeding with the applicable processing of that information by ESB.

11.3.1.2 In-House Projects

ESB retains the role as point of contact with FHWA, EQC, other outside agencies and other MDT offices. ESB also assumes the responsibilities for gathering information, performing analyses, preparing the environmental documentation and preparing the necessary correspondence for transmitting documentation for review, responding to comments, etc. The Project Development Engineer (PDE) develops the environmental documentation. The PDE is responsible for coordinating the information gathering, analyses and reviews within ESB and MDT and contacts with FHWA, EQC and outside review agencies.

11.3.2 Producing Quality Environmental Documentation

To meet regulatory requirements for NEPA/MEPA, ESB must ensure that the documentation prepared for compliance:

- focuses on issues that are truly important to the proposed action, rather than amassing needless detail;
- is supported by evidence that the necessary environmental analyses have been made; and
- perhaps most importantly, discloses the environmental impacts of the proposed action in a way that is understandable to the public and decision-makers.

The following Sections provide guidance for producing environmental documentation that explains project decisions in simple, concise terms understandable to the public, while clearly demonstrating compliance with regulatory and legal requirements. This skill is important for public disclosure purposes and is key to legal defensibility of the document, as most judges are neither transportation nor environmental experts.

MDT's practice of including a tabulated summary of impacts and mitigation at the beginning of all environmental documents for MDT projects is a good example of the use of techniques for concisely presenting important comparative information to make the documents easier to understand. In addition, MDT's use of Executive Summaries in environmental documents is a good way to meet the needs of readers with differing levels of interest in a proposed project and to help readers identify and understand key issues involved.

11.3.2.1 Key Principles

11.3.2.1.1 Guidance

Research results documented in the Report *Improving the Quality of Environmental Documents* identified the following "core principles" that have received consensus as the basis for quality environmental documentation:

- Tell the story of the project so the reader can easily understand the purpose and need, how each alternative would address the purpose and need, and the strengths and weaknesses of the impacts for each alternative.
- Keep the documentation as brief as practical. Use clear, concise writing, an easy-to-use format and effective graphics and visual elements. Discuss issues and impacts in proportion to their significance for the project.
- Ensure the documentation meets all legal requirements in a way that is easy for regulatory agencies and technical reviewers to follow.

Effective use of the scoping process (see [Chapter 8 "Project Scoping and Early Coordination"](#)) is key to the successful implementation of these principles. Proper application and documentation of the scoping process can support the decision to limit the amount of detail included in environmental documentation. It can also explain why certain issues were either highly developed or only minimally discussed in the documentation.

11.3.2.1.2 Telling the Story of the Project

The environmental documentation should provide the reader a clear understanding of the importance of the problem to be addressed by the project. It also should give the reader a clear picture of the tradeoffs involved with each project alternative, in terms of addressing the problem and creating other environmental effects. The documentation should:

- explain how decisions were reached and/or will be reached,
- answer key questions, and
- discuss relevant findings for each project alternative.

The story of the project should be understandable to a broad audience, including the public and technical document reviewers. The discussion of technical subjects should be integrated based on the common question, “What is the project trying to accomplish and what are its effects?”

The preparer should clearly present the purpose and need, alternatives analysis and impacts in plain language using effective visual elements. Ensure the discussion focuses on information that is relevant to the project decision to keep the document as brief as possible.

The *Reader Friendly Document Tool Kit* developed by WSDOT recommends the use of question-and-answer headings to help direct readers to information they are most interested in. For example, rather than using the heading “Purpose and Need,” the heading could be “Why do we need the project?” Or, instead of using impact categories as headings for discussion of environmental impacts and mitigation (e.g., Land Use Impacts, Noise Impacts, Social Impacts), the headings could be formatted as questions (e.g., How would the project affect the character of land use in the project area? How would the project affect noise levels? How would the project affect neighborhoods and the people who live there?).

Also, consider the option of adjusting traditional formats to provide logical flow of information in telling the story of the project. An example would be presenting the purpose and need, followed by the alternatives for addressing the purpose and need, and then a consolidated discussion of the affected environment, impacts and mitigation for each alternative.

11.3.2.1.3 Keeping the Documentation Brief

The *Council on Environmental Quality (CEQ) Regulations* for implementing NEPA (in Title 40 of the *Code of Federal Regulations (CFR)*, Parts 1500 through 1508) specify in 40 CFR 1502.7 “Page Limits” that the text of an EIS should normally be less than 150 pages (or less than 300 pages for proposals of unusual scope or complexity). FHWA Technical Advisory T 6640.8A indicates that EAs should normally be less than 15 pages. Consider the following guidance to support the goal of keeping environmental documentation as brief as possible while improving its readability:

- use clear, concise writing (i.e., keep paragraphs and sentences short to the extent practical);
- provide effective summaries;
- select an easy-to-use format;

- summarize information and use pictures and effective graphics to communicate complex issues or comparisons;
- place technical information or high-volume materials in appendices or use cross-references, as appropriate; and
- include only the most relevant information and do not discuss effects and issues that do not matter.

Use simple language in the active voice to engage the reader. Avoid technical jargon, minimize abbreviations, define terms and spell out acronyms. Explain technical details in a way that is understandable to non-technical readers and explain what the technical data means in relation to the decision to be made. Capture compelling cross-cutting issues that are important for the project and summarize key issues.

As CEQ indicated in its response to Question 25 in the “40 Most Asked Questions,” if only technically trained persons are likely to understand a particular discussion, place this information in an appendix. Include a simple, plain language summary of the technical analysis and conclusions in the text of the environmental documentation.

11.3.2.1.4 Ensuring the Documentation Meets Legal Requirements in a Way that is Easy to Follow

To be effective, environmental documentation must include sufficient technical detail to ensure compliance with a range of applicable statutory and regulatory requirements. It must also explain complex information in an understandable manner and present information in a way that is easy for agency reviewers, courts and the public to follow. The Report on *Improving the Quality of Environmental Documents* lists the following steps from NCHRP 25-25(01) *Synthesis of Data Needs for EA and EIS Documentation* to achieve these objectives:

1. Identify and Explain Key Assumptions. Technical analyses in environmental documentation are generally based on various assumptions (e.g., traffic forecasts are based on assumptions about future population and employment trends). Underlying assumptions must be credible for the results to be credible. In presenting technical information, specifically identify key assumptions and explain why they were made.
2. Describe Methods Used to Develop Data. Describing the methodologies used to develop data for environmental documentation can enhance the credibility of the documentation. This approach requires explaining in simple terms how the methodology (e.g., model) works, the type of information it provides and any inherent limitations of the methodology. In general, it is preferable to explain the methodology in the same section of the documentation that contains the results. If there are general points that need to be addressed regarding the impact analyses for several impact categories, it may be helpful to include a methodology section at the beginning of the discussion of environmental consequences. Another option is to have a separate chapter early in the documentation that discusses methodology issues for all areas. The level of detail included in the main body of the environmental documentation regarding environmental analysis methodology will vary based on the project and the potential for litigation. In

many cases, it may be preferable to briefly summarize the methodology in the environmental documentation and refer to the applicable technical report for details.

3. Use Effective Visuals to Present Key Results. Visual aids can be helpful for reviewers of environmental documentation and in litigation. The challenge facing attorneys in a case involving environmental documentation is to explain a complex array of information and events as briefly as possible.
4. Do Not Just Summarize Data, Analyze It. Environmental documentation generally presents a large amount of technical information. The most fundamental task of the preparer is to explain what the technical information means. The explanation should identify patterns in the data and explain causal relationships and unexpected results.
5. Document Compliance with Key Regulatory Requirements. It is prudent for the documentation to include a systematic review of other legal and regulatory requirements (e.g., Section 7 of the *Endangered Species Act*, Section 106 of the *National Historic Preservation Act*, Section 4(f) of the *US Department of Transportation Act*). Explain which regulatory requirements are applicable, which are not and how the requirements have been met. Discuss regulatory compliance in the individual section of the documentation that is pertinent to the regulatory requirement or cover it in the summary section of the documentation. Coverage in the summary would include an overview of the major regulatory issues, an indication of whether or not they are applicable and, if applicable, how they have been addressed or will be addressed.
6. Provide Overview of Major Project Issues. For most environmental compliance documentation, a few issues receive a disproportionate amount of attention from regulatory agencies, interest groups and the public. Prepare the documentation to facilitate the task of reviewers and the courts by listing these major issues and briefly explaining concerns raised and how they were addressed. In the summary, reference other locations in the documentation where more detail is provided.
7. Systematically Review Data to Ensure Internal Consistency. The large amount of data often presented in environmental documentation creates opportunities for internal inconsistencies and contradictions. Careful crosschecking enhances the credibility of the documentation for the public, agency reviewers and a reviewing court.

11.3.2.2 Quality Assurance in Documentation Preparation

Quality environmental documentation requires careful management of the preparation process. The individual with the primary responsibility for preparing the documentation must ensure that it meets all legal requirements while telling the project story in a way that is understandable to the public and regulatory and resource agency reviewers. This individual should ensure the documentation meets the highest standards, while achieving budget and schedule objectives.

Edit the documentation to achieve a single voice, to bring together work of multiple authors and to provide quality control. Quality assurance/quality control is vital and should address the following aspects:

- editorial quality (e.g., check grammar, spelling, syntax; verify facts, places, names);

- technical validity (e.g., ensure the editing process has not compromised technical validity);
- legal sufficiency (e.g., ensure lawyers are consulted); and
- overall effectiveness (e.g., ensure the correct message comes through).

11.3.2.3 Alternative Formats

Regulations governing the preparation of environmental documentation do not specify page size or design nor do they impose rigid requirements for format of the documentation. According to the Report *Improving the Quality of Environmental Documents*, various States have experimented with a range of alternative approaches to make their environmental documentation more readable. These include:

- use of larger page size (e.g., 11" x 17" paper in a landscape format);
- extensive use of color graphics and photographs;
- investment in high-end graphic design;
- use of non-traditional chapter organization (e.g., structuring the document around major anticipated questions);
- use of advanced printing techniques; and
- incorporation of simulations (e.g., video or still).

Some States have developed separate summary documents targeted to the general public that incorporate reader-friendly concepts. In some cases, this type of reader-friendly summary could substitute for the environmental documentation executive summary section.

Environmental documentation is often customized to some degree to address project needs and the intended audience. The degree to which alternative formats should be used depends upon the goals for particular projects. For complex projects, it may be worth the additional effort to explore options for making the documentation easier to understand. If using an alternative format, it should add value in some way (e.g., reaching a wider audience, getting media attention, obtaining a wider base of interest in the project). Use of alternative formats for environmental documentation prepared for MDT projects will be evaluated and decided on a case-by-case basis, considering the following factors:

- importance of the project,
- complexity of the issues of concern,
- level of controversy, and
- budget available for the documentation.

MDT will coordinate with FHWA regarding any proposed use of alternative formats for NEPA documentation.