Facilities Development Manual

Chapter 20 Environmental Documents, Reports and Permits

Section 25 Environmental Assessments

FDM 20-25-1 Introduction

March 16, 2018

Environmental Assessments (EA) are the appropriate document type for actions when it is unclear if the environmental impacts will be significant (FDM 20-15-5). Contact the region environmental coordinator (REC) or BTS-EPDS Liaison, as appropriate, if the project team believes an EA is needed. An EA is a process that leads to preparation of a Finding of No Significant Impact (FONSI) or the determination that an Environmental Impact Statement (EIS) needs to be prepared.

FDM 20-25-5 Process March 16, 2018

Defining a project through scoping for an EA should involve the entire design and planning team. Initial scoping is usually done by a planning team before it moves into project development where more detailed scoping of the project is often undertaken. At this time, there is no prescribed form for scoping of EA projects. It is suggested that the scoping of a project follow the PMP as defined in FDM 2-1 and FDM 2-20. The key is to define the full potential scope, or area of potential impacts, of the project prior to beginning any investigative studies. This will help prevent project delays and cost increases due to scope changes later in the process.

5.1 Process Initiation Letter

The Process Initiation Letter (PIL), begins the environmental documentation process for EAs. The PIL template required for use in developing all PILs can be found at:

https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/environment/formsandtools.aspx

Projects that do not involve federal funding or permitting do not require a PIL to initiate an EA.

FDM 20-25-10 Documentation

August 15, 2019

10.1 WisDOT Environmental Basic Sheets and Factor Sheets

WisDOT Environmental Basic Sheets and Factor Sheets are used for documentation of all EA level projects. Guidance documents are available for the Basic Sheets and each Factor Sheet.

https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/environment/formsandtools.aspx

The Basic and Factor Sheets and the guidance language are intended to be self-explanatory. The Basic and Factor Sheets and guidance language are updated frequently so always be sure to use the most recent version.

If the author completely and clearly answers each question on the Basic and Factor Sheets, the document should tell the story of the project decision-making process from the initial needs identification through the selection of the preferred alternative in a way the public can understand. For assistance or questions concerning these templates and the associated guidance contact your REC or BTS-EPDS, as appropriate.

The Basic Sheets contain background information for the project, define the purpose and need and describe all of the alternatives that were studied to address the purpose and need. These sheets also provide information on public involvement, environmental factors, a summary of impacts, and other information pertinent to the EA.

Individual Factor Sheets correspond with specific environmental factors identified in the Environmental Factors Matrix of the Basic Sheets. The Factor Sheets are used to provide more detailed information on environmental factors and issues that may be substantial and require more of an in-depth discussion than is provided in the Basic Sheets. If there is no substantial impact to a specific environmental factor, a Factor Sheet is not completed.

10.5 Purpose and Need

The purpose and need of a project is essential in establishing a basis for the development of the range of reasonable alternatives required in an environmental document and assists with the identification and eventual selection of a preferred alternative. Basic Sheet 3, Question 1 addresses the purpose and need.

The following items may be listed and described in the purpose and need statement for a proposed action. The author should select the needs most appropriate to the project and explain them so the general public can understand them. These are by no means all-inclusive or applicable in every situation. They are intended as a guide. In the document, discuss only the applicable needs in descending order of importance. Do not discuss

the project solutions in the purpose and need statement.

- Project Status Briefly describe the action's history, including measures taken to date, other agencies and governmental units involved, action spending, schedules, etc.
- Capacity Discuss the capacity of the present facility and its ability to meet present and projected traffic demands. Discuss what capacity and levels of service for existing and proposed facilities are needed.
- System Linkage Discuss if the proposed action is a "connecting link" and how it fits into the transportation system.
- Transportation Demand Discuss the action's relationship to any statewide plan or adopted urban transportation plan. In addition, explain any related traffic forecasts that are substantially different from those estimates of the 23 U.S.C. 134 (Section 134) planning process.
- Legislation Explain if there is a federal, state, or local governmental mandate for the action.
- Social Demands or Economic Development Describe how the action will address employment, schools, land use plans, recreation facilities, etc. In addition, describe projected economic development/land use changes that indicate the need to improve or add to the highway capacity.
- Modal Interrelationships Explain how the proposed action will interface with and serve to complement airports, rail and port facilities, mass transit services, pedestrian and bicycle accommodations, etc.
- Safety Explain if the proposed action is necessary to correct an existing or potential safety hazard. In addition, explain if the existing accident rate is excessively high and why, and how the proposed action will improve safety.
- Roadway Deficiencies Explain if and how the proposed action is necessary to correct existing roadway deficiencies (e.g., substandard geometrics, structural sufficiency, load limits on structures, inadequate cross-section, high maintenance costs, etc.)

Consistent with 23 CFR 771.111(f), to ensure meaningful evaluation of alternatives and to avoid commitments to transportation improvements before they are fully evaluated, the action evaluated in the environmental document shall:

- Connect logical termini and be of sufficient length to address environmental matters on a broad scope
- Have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made
- Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

When developing a transportation project, project sponsors should consider how the end points of the action are determined, both for the improvement itself and for the scope of the environmental analysis. Whether the action has "logical termini" or not is also a concern. Logical termini for project development are defined as rational end points for both a transportation improvement and a review of the environmental impacts.

In developing a concept that can be advanced through the stages of planning, environment, design, and construction; the project sponsor needs to consider a whole or integrated action. This action should satisfy the projects purpose statement. In addition, the action should be considered in the context of local socio-economics and topography, future travel demand, and other infrastructure improvements. Without framing an action in this way, project sponsors may only peripherally meet project needs or may cause unexpected side effects that require additional corrective action. Project sponsors should also be aware of the problem of segmentation. Segmentation may occur when a transportation need extends throughout an entire corridor, but project sponsors discuss the environmental issues and transportation need of only a segment of the corridor. Staging construction of various phases of a project due to fiscal availability is not considered segmentation. Further discussion on purpose and need, logical termini and segmentation can be found on the FHWA Environmental Review Toolkit webpage:

https://www.environment.fhwa.dot.gov/projdev/tdmalts.asp

10.10 Agency and Tribal Coordination

WisDOT, in partnership with FHWA (on federally funded projects), is responsible for inviting resource agencies, local units of government and tribes to participate in the NEPA/WEPA process to coordinate among a wide range of stakeholders with diverse interests, resolve conflict and ensure that quality transportation decisions and potential impacts are fully explained in the environmental document. These responsibilities require WisDOT and FHWA to balance transportation needs, costs, environmental resources, safety, and public input to arrive at objective and responsible transportation decisions.

Depending on the potential impacts of the project, agencies with applicable expertise will be involved during the

decision-making process. Contact agencies early and coordinate often to understand resources under their authority and to incorporate their concerns into the project and describe them in the document. At a minimum, all projects must be coordinated with the Wisconsin Department of Natural Resources (WDNR), tribes, and the United States Fish and Wildlife Service.

Although not all inclusive, Table 10.1 highlights the federal, tribal, state, and local agencies and governmental entities that might be involved if the project has potential to impact a resource.

Table 10.1 Environmental Impact and Agencies Possibly Involved

Potential Impacts	Agencies with Possible Involvement*
Wetlands	WDNR, USACE, USFWS, Tribes
Lakes, Streams, Rivers, Water Bodies	USCG, WDNR, USACE, USFWS, Tribes, EPA
Agricultural Impacts	DATCP, NRCS
Archaeological Impacts	ACHP, SHPO/THPO, NPS, Tribes, local historical societies
Historical Impacts	ACHP, SHPO/THPO, NPS, Tribes, local historical societies
Hazardous Materials	WDNR, local units of government
National Forest	USFS, NPS
Threatened, Endangered or Rare Species	USFWS, WDNR, Tribes
Tribal Lands	Tribes, BIA
Parks	WDNR, local units of government
Airports	воа
Structures Over Navigable Waters	USCG, WDNR, USACE, USFWS, potentially others
Substantial Impacts of any Kind	EPA
Air Quality	WDNR, EPA, MPOs/RPCs
Noise	Local units of government
Section 4(f)	DOI, SHPO/THPO, local unit of government or other property owner
Section 6(f) or other special funding	WDNR, USFWS, NPS DOI, USDA, NRCS, potentially others

Definitions of all acronyms can be found in <u>FDM 20-1 Attachment 1.1</u>.

10.15 Public Involvement

Public involvement is an essential component of all levels of the NEPA and WEPA decision-making process during project development. Public involvement must be implemented in accordance with <u>FDM Chapter 6</u> on all projects administered by WisDOT, including those federally funded projects that are developed by local units of government or their consultants. With the EA process, typically a series of public meetings and outreach are required to make decisions and screen alternatives. A public hearing, if planned or requested, must occur following the completion of the draft EA and prior to making a decision on the final appropriate document (FONSI or draft EIS). See <u>FDM 6-15</u> for discussion of notices for availability of environmental documents.

The criteria identified on Basic Sheet 3 can assist in making the decision on when a hearing may be needed.

https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/environment/formsandtools.aspx

10.20 Alternatives Analysis

The identification, consideration, and analysis of alternatives are integral to the NEPA process and the goal of objective decision-making. Serious consideration of alternatives should lead to a solution that satisfies the transportation need and protects environmental and community resources.

Alternatives analysis should:

- Rigorously explore and objectively evaluate a reasonable range of alternatives. For alternatives which were eliminated from detailed study, briefly discuss the reasons for their elimination including how they do or do not address the project purpose and need.
- Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may also evaluate their comparative merits.
- Include reasonable alternatives not within the jurisdiction of the lead agency, if they could contribute to a solution such as modal options (such as bus, bicycle and rail).
- Include the alternative of no action.
- Identify the agency's preferred alternative, and justify the selection based on the information and evidence in the document.

Alternatives analysis should clearly indicate why and how the particular range of project alternatives was developed, including what kind of public and agency input was used. In addition, alternatives analysis should explain why and how alternatives were eliminated from consideration. It must be made clear what criteria were used to eliminate alternatives, at what point in the process the alternatives were removed (screened) and the measures for assessing the alternatives' effectiveness.

During preparation of NEPA documents, project sponsors should be candid about the rationale for generating, evaluating and eliminating alternatives. Being as specific as possible is important. If an alternative is eliminated from further consideration because it does not meet the purpose and need, adequate explanation must be provided.

There are times when an alternative that is not reasonable is included, such as when another agency requests inclusion due to agency requirements or public expectation. In such cases, it should be clearly explained why the alternative is not reasonable, prudent or practicable, why it is being analyzed in detail, and why it will not be selected.

The no-build alternative, which may include measures to continue the function of the facility, must always be included in the analysis. In some cases, the no-build alternative may be a reasonable alternative, especially when the impacts of other alternatives are great and the need is relatively minor, but generally it serves as a baseline against which the other alternatives can be compared.

Transportation System Management (TSM) and Transportation Demand Management (TDM) alternatives may be considered as potential standalone design options or in combination with other build alternatives. Such alternatives may include high-occupancy vehicle lanes, ridesharing, signal synchronization and other actions. Also, where appropriate, mass transit options should be considered even when they are outside FHWA's funding authority.

Beyond the CEQ requirement of evaluating all, or a reasonable number representative of the full spectrum of reasonable alternatives, there are other requirements for analyzing alternatives. These requirements fall under Section 4(f), the Executive Orders on Wetlands and Floodplains, and the Section 404(b)(1) guidelines. To address these requirements and conclusively demonstrate that some alternatives are not prudent or practicable, project sponsors must develop a well-justified purpose and need statement.

The use of land from a Section 4(f) protected property (such as a significant, publicly owned park, recreation area, or wildlife and waterfowl refuge, or any significant historic site) may not be approved unless there is a finding of de minimis impact or a determination is made that there is no feasible and prudent alternative for such use. Many factors exist that could render an alternative not prudent, including cost and environmental impacts. If an alternative does not meet the action's purpose or need, then the alternative is not prudent, provided the purpose and need section can substantiate that unique problems will be caused by not developing the action.

If a proposed action is to be located in a wetland or significantly encroaches upon a floodplain, a finding must be made that there is no practicable alternative to the wetland impact or floodplain encroachment.

Any alternative that does not meet the need for the action is not practical. If the action's purpose and need are not adequately addressed, specifically delineated, and properly justified; resource agencies, interest groups, the public, and others will be able to generate one or possibly several alternatives that avoid or limit the impact and appear practical. A well-described justification of the action's purpose and need may prevent long and involved negotiations or additional analyses demonstrating that an alternative is not practicable.

10.25 Environmental Effects

The definition of the impacts that must be addressed and considered by federal agencies in satisfying the requirements of the NEPA process, which includes direct, indirect and cumulative impacts have been defined by CEQ regulations (40 CFR 1508.7 and 1508.8). Effects include:

- Direct effects, which are caused by the action and occur at the same time and place.
- Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.
- Cumulative impacts, which are caused by incremental impacts from the action when added to other
 past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions. Cumulative impacts can result from individually
 minor but collectively significant actions taking place over a period of time.

Effects and impacts are terms used interchangeably in the regulations and in this chapter. For ease of documentation WisDOT has divided effects into four broad categories and 25 subcategories of factors in considering development of a highway project:

- 1. Economic
 - a. General Economics
 - b. Business
 - c. Agriculture
- 2. Social and Cultural
 - a. Community or Residential
 - b. Indirect Effects
 - c. Cumulative Effects
 - d. Environmental Justice
 - e. Historic Resources
 - f. Archaeological Resources
 - g. Tribal Issues
 - h. Section 4(f), 6(f), or Other Unique Areas
 - i. Aesthetics
- 3. Natural
 - a. Wetlands
 - b. Rivers, Streams and Floodplains
 - c. Lakes or Other Open Water
 - d. Groundwater, Wells or Springs
 - e. Upland Wildlife or Habitat
 - f. Coastal zones
 - g. Threatened or Endangered species
- 4. Physical
 - a. Air Quality
 - b. Construction Stage Sound Quality
 - c. Traffic Noise
 - d. Hazardous Substances or Contamination
 - e. Stormwater
 - f. Erosion Control

WisDOT's Factor Sheets are used to assess these categories.

https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/environment/formsandtools.aspx

Unique factors not called out in specific Factor Sheets may become an issue on a project, such as invasive

species, and will still need to be addressed in the document.

Effects may also include those resulting from actions which may have both beneficial and adverse effects, even if on balance the agency believes that the effect will be beneficial.

10.30 Environmental Commitments

Summarize all agreements to mitigate adverse environmental effects beyond those found in the WisDOT Standard Specifications for Highway and Structure Construction in the Environmental Commitments section of the document on Basic Sheet 8.

https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/environment/formsandtools.aspx

Also include any enhancements in the commitments. It is essential to outline these measures in the document and summarize how adverse environmental effects will be mitigated. Mitigation includes the entire process of avoidance, minimization and compensation for effects. For each potential environmental impact, clearly discuss the avoidance, minimization and compensation of the effects. Completion of all agreements concerning mitigation needs to be documented in the project file prior to construction of the proposed action. Completion of all mitigation measures need to be documented to the project file once they are completed.

10.35 Environmental Assessment Review and Approval Process

10.35.1 Draft and Final EA

FHWA must approve the Draft EA before it is made available to the public. Once the Draft EA has been reviewed and approved the public must be given the opportunity to request a public hearing. WisDOT could also decide to hold a hearing even before a request is made. EAs do not need to be circulated but they must be made available to the public through notices of availability in local, state, or regional clearinghouses, newspapers and other means. See <u>FDM Chapter 6</u> for a full discussion of the environmental document availability and public hearing process

After public comments are received and considered, a determination of the significance of the impacts is made:

- If at any point in the process of preparing an EA it is discovered that the project would result in significant impacts, an Environmental Impact Statement (EIS) must be prepared see <u>FDM 20-30</u>.
- If, after completing the EA, it is evident that there are no significant impacts associated with the project, a Finding of No Significant Impact (FONSI) may be prepared.

10.35.5 Finding of No Significant Impact (FONSI)

If it is determined that there will be no significant impacts a FONSI will be prepared to conclude the EA process and document the decision. A FONSI is issued when environmental analysis and interagency review during the EA process find a project to have no significant impacts on the quality of the environment. The FONSI document utilizes Addendum A as a template to capture public comments and any changes from the Draft EA. The FONSI does not require formal public circulation.

https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/environment/formsandtools.aspx

10.35.10 Environmental Assessment Review and Approval Process

Refer to tables in FDM 20-40-1.

FHWA is the final reviewer and signatory of all EAs involving federal funds or permits. FHWA would also issue a FONSI if appropriate. BTS-EPDS is the final reviewer and signatory of all EAs involving no federal funds or permits. BTS would issue a FONSI for project involving no federal funds if appropriate.